

R11i Average Costing

Instructor Guide

Course Code 14614GC10
Edition 1.0
Month September 2000
Part Number MO-12865

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This book was published using:

Oracle[®] Tutor[™]



Table of Contents

Accounting for Inventory Transactions for Average Costing.....	1-1
Average Costing	1-2
Objectives	1-3
Agenda	1-4
Overview	1-5
Agenda.....	1-8
Describing Average Costing	1-9
Review Question.....	1-17
Agenda.....	1-19
Setting Up Average Costing	1-20
Review Question.....	1-34
Agenda.....	1-36
Average Cost Update.....	1-37
Review Question.....	1-48
Agenda.....	1-50
Accounting for Inventory Transactions	1-51
Accounting for Material Transactions	1-52
Transaction Processing	1-60
Viewing Item Cost History	1-64
Item Unit Cost History.....	1-65
Viewing Item Cost History	1-66
Inventory Purchasing Transactions.....	1-67
Transferring Invoice Price Variance	1-76
Review Question.....	1-79
Subinventory Transfers.....	1-81
Miscellaneous Issues and Receipts	1-83
Interorganization Transfers.....	1-89
Direct Interorganization Transfers.....	1-91
Interorganization Transfers Using Intransit FOB Receipt	1-96
Interorganization Transfers Using Intransit FOB Receipt	1-97
Interorganization Transfers Using Intransit FOB Receipt	1-98
Interorganization Transfers Using Intransit FOB Receipt	1-100
Interorganization Transfers Using Intransit FOB Shipment	1-104
Interorganization Transfers Using Intransit FOB Shipment	1-107
Interorganization Transfers Using Intransit FOB Shipment	1-109
Review Question.....	1-110
Customer Shipments and Returns.....	1-112
Inventory Adjustments.....	1-115
Average Cost Variance Account.....	1-116
Internal Requisitions.....	1-122
Review Question.....	1-126
Summary.....	1-128
Practice 1 Overview.....	1-129
Practice 1-1: Describing Average Costing.....	1-130
Practice 1-2: Recording Postings for an Inventory Purchasing Flow	1-131
Practice 1-2 Solution: Recording Postings for an Inventory Purchasing Flow	1-133
Practice 1-2: Recording Postings for an Inventory Purchasing Flow	1-134
Practice 1-2 Solution: Recording Postings for an Inventory Purchasing Flow	1-135
Practice 1-3: Recalculating the Average Unit Cost for Purchase Order Receipts.....	1-136
Practice 1-3 Solution: Recalculating the Average Unit Cost for PO Receipts.....	1-137
Practice 1-4: Transferring Invoice Price Variance (IPV) to Inventory	1-138
Guided Practice 1-4: Defining Items	1-139

Guided Practice 1-4: Creating Purchase Orders	1-140
Guided Practice 1-4: Approving Purchase Orders	1-142
Guided Practice 1-4: Receiving Goods	1-143
Guided Practice 1-4: Creating Invoices	1-144
Guided Practice 1-4: Running the Payables Accounting Process	1-146
Guided Practice 1-4: Running the IPV Report	1-147
Guided Practice 1-4: Transferring IPV to the Item in Inventory	1-148
Guided Practice 1-4: Viewing the Item Cost for the Items	1-149
Accounting for WIP Transactions for Average Costing	2-1
Average Costing	2-2
Objectives	2-3
Agenda	2-4
Overview	2-5
Agenda	2-8
Describing the Relationship Between Oracle WIP Transactions and OCM	2-9
Agenda	2-18
Phantom Costing	2-19
Setting Up Phantom Costing	2-26
Phantom Costing Reports	2-29
Review Question	2-31
Demonstration: Changing Parameters for Phantom Costing	2-33
Review of Manufacturing Cost Setup	2-34
BOM Parameters	2-35
Resource Subelements and Costs	2-36
Defining Resources	2-37
Review Question	2-38
Average Rates Cost Types for Resources	2-40
Unlimited Cost Types for Resources	2-41
Defining Resource Costs	2-43
Review Question	2-44
Overhead Subelements	2-46
Defining Overhead	2-53
Review Question	2-54
Defining Departments and Associating Resources	2-56
Defining Overhead Rates by Department	2-59
Associating Overheads with Resources	2-60
Three-Way Association	2-61
Review Question	2-62
Defining Routings	2-64
Defining Routings and Operation Resources	2-66
Bills of Material	2-67
Defining Bills of Material	2-70
Summary of Review of Manufacturing Cost Setup	2-71
Practice Overview	2-72
Guided Practice: Defining Departments	2-73
Guided Practice: Defining Resources	2-74
Guided Practice: Defining Overheads	2-75
Guided Practice: Associating Departments to Resources to Overheads	2-76
Agenda	2-77
Accounting Flows: Costs Incurred, Components Issued to WIP	2-78
Accounting Flows: Costs Incurred, Material Overhead	2-82
Accounting Flows: Costs Incurred, Resource Charges to WIP	2-87
Accounting Flows: Costs Incurred, Resource Charges to WIP	2-92
Accounting Flows: Costs Incurred, Resource Charges to WIP	2-97
Accounting Flows: Costs Incurred, Overhead Charges to WIP	2-99
Accounting Flows: Costs Incurred, Outside Processing	2-107
Accounting Flows: Costs Incurred, Outside Processing	2-108

Review Question.....	2-112
Accounting Flows: Costs Incurred, Viewing the WIP Value Summary.....	2-114
Accounting Flows: Costs Incurred, Summary.....	2-115
Agenda.....	2-117
Accounting Flows: Costs Relieved, Assembly Completion from WIP.....	2-118
Accounting Flows: Costs Relieved, Performing Completion Transactions.....	2-129
Review Question.....	2-131
Accounting Flows: Costs Relieved, Defining WIP Parameters.....	2-133
Accounting Flows: Costs Relieved, Work Order-less Completions.....	2-137
Accounting Flows: Costs Relieved, Assembly Returns to WIP.....	2-140
Accounting Flows: Costs Relieved, Scrap.....	2-142
Accounting Flows: Costs Relieved, Assembly Scrap.....	2-144
Accounting Flows: Costs Relieved, Scrap Reversals.....	2-145
Accounting Flows: Costs Relieved, Assembly Completion and Scrap.....	2-146
Accounting Flows: Costs Relieved, Summary.....	2-148
Accounting Flows: Variances.....	2-149
Summary.....	2-152
Practice 2 Overview.....	2-153
Practice 2-1: Recording Postings for Average Costing Transactions.....	2-155
Practice 2-1 Solution: Recording Postings for Average Costing Transactions.....	2-158
Practice 2-2: Performing and Analyzing WIP Transactions in Average Costing.....	2-159
Guided Practice 2-2: Checking the Interface Managers.....	2-161
Guided Practice 2-2: Defining Discrete Jobs.....	2-162
Guided Practice 2-2: Checking Material Requirements.....	2-163
Guided Practice 2-2: Issuing Push Material.....	2-164
Guided Practice 2-2: Valuing Push Material.....	2-165
Guided Practice 2-2: Valuing Your Job using the WIP Value Summary.....	2-166
Guided Practice 2-2: Issuing Push Material.....	2-167
Guided Practice 2-2: Valuing Push Material.....	2-168
Guided Practice 2-2: Valuing Your Job using the WIP Value Summary.....	2-169
Guided Practice 2-2: Performing Move Transactions.....	2-170
Guided Practice 2-2: Valuing Your Job using the WIP Value Summary.....	2-171
Guided Practice 2-2: Performing Easy Completions.....	2-172
Guided Practice 2-2: Valuing Easy Completions.....	2-173
Guided Practice 2-2: Valuing Your Job using the WIP Value Summary.....	2-174
Guided Practice 2-2: Verifying Item Costs.....	2-175
Guided Practice 2-2: Performing Move Transactions to Scrap.....	2-176
Guided Practice 2-2: Valuing Your Job using the WIP Value Summary.....	2-177
Guided Practice 2-2: Performing Completion Transactions.....	2-178
Guided Practice 2-2: Valuing Completions.....	2-179
Guided Practice 2-2: Valuing Your Job using the WIP Value Summary.....	2-180
Guided Practice 2-2: Verifying Item Costs.....	2-181
Guided Practice 2-2: Closing Discrete Jobs.....	2-182
Guided Practice 2-2: Reviewing Requests.....	2-183
Guided Practice 2-2: Valuing Your Job using the WIP Value Summary.....	2-184
Guided Practice 2-2: Reviewing the Discrete Job Value Report.....	2-185
Guided Practice 2-2: Reviewing Requests.....	2-186
Guided Practice 2-3: Costing of Assembly Returns to WIP.....	2-187
Guided Practice 2-3: Defining Discrete Jobs.....	2-188
Guided Practice 2-3: Performing Easy Completions.....	2-189
Guided Practice 2-3: Valuing Easy Completions.....	2-190
Guided Practice 2-3: Valuing Your Job using the WIP Value Summary.....	2-191
Guided Practice 2-3: Verifying Item Costs.....	2-192
Guided Practice 2-3: Issuing Push Material.....	2-193
Guided Practice 2-3: Valuing Push Material.....	2-194
Guided Practice 2-3: Valuing Your Job using the WIP Value Summary.....	2-195
Guided Practice 2-3: Performing Easy Completions.....	2-196

Guided Practice 2-3: Valuing Easy Completions	2-197
Guided Practice 2-3: Valuing Your Job using the WIP Value Summary	2-198
Guided Practice 2-3: Viewing Item Cost History	2-199
Guided Practice 2-3: Performing Returns.....	2-200
Guided Practice 2-3: Viewing Item Cost History	2-201

Preface

Profile

Before You Begin This Course

Before you begin this course, you should have the following qualifications:

- Thorough knowledge of basic MRP II and accounting concepts.
- Working experience with cost accounting activities in various different manufacturing environments.

Prerequisites

- Oracle Inventory Release 11
- Oracle Purchasing Release 11
- Oracle Bills of Material and Engineering Release 11 (if products are installed at your site)
- Oracle Work In Process Release 11 (if products are installed at your site)
- Oracle Planning Release 11
- Oracle General Ledger Release 11
- R11i Costing Setup and Implementation
- R11i Cost Information
- R11i Cost Rollup

How This Course Is Organized

R11i Average Costing is an instructor-led course featuring lecture and hands-on exercises. Online demonstrations and written practice sessions reinforce the concepts and skills introduced.

Related Publications

Oracle Publications

Title	Part Number
<i>Oracle Inventory User's Guide Release 11i</i>	<i>A58270-01</i>
<i>Oracle Purchasing User's Guide Release 11i</i>	<i>A82912-01</i>
<i>Oracle Bill of Materials User's Guide Release 11i</i>	<i>A75087-01</i>
<i>Oracle Engineering User's Guide Release 11i</i>	<i>A75090-01</i>
<i>Oracle Work In Process User's Guide Release 11i</i>	<i>A75101-01</i>
<i>Oracle Cost Management User's Guide Release 11i</i>	<i>A75088-01</i>
<i>Oracle General Ledger User's Guide Release 11i</i>	<i>A82850-01</i>

Additional Publications

- System release bulletins
- Installation and user's guides
- *read.me* files
- *Oracle Magazine*

Typographic Conventions

Typographic Conventions in Text

Convention	Element	Example
Bold italic	Glossary term (if there is a glossary)	The <i>algorithm</i> inserts the new key.
Caps and lowercase	Buttons, check boxes, triggers, windows	Click the Executable button. Select the Can't Delete Card check box. Assign a When-Validate-Item trigger to the ORD block. Open the Master Schedule window.
Courier new, case sensitive (default is lowercase)	Code output, directory names, filenames, passwords, pathnames, URLs, user input, usernames	Code output: <code>debug.set ('I', 300);</code> Directory: <code>bin</code> (DOS), <code>\$FMHOME</code> (UNIX) Filename: Locate the <code>init.ora</code> file. Password: User <code>tiger</code> as your password. Pathname: Open <code>c:\my_docs\projects</code> URL: Go to <code>http://www.oracle.com</code> User input: Enter <code>300</code> Username: Log on as <code>scott</code>
Initial cap	Graphics labels (unless the term is a proper noun)	Customer address (<i>but</i> Oracle Payables)
Italic	Emphasized words and phrases, titles of books and courses, variables	Do <i>not</i> save changes to the database. For further information, see <i>Oracle7 Server SQL Language Reference Manual</i> . Enter <code>user_id@us.oracle.com</code> , where <i>user_id</i> is the name of the user.
Quotation marks	Interface elements with long names that have only initial caps; lesson and chapter titles in cross-references	Select "Include a reusable module component" and click Finish. This subject is covered in Unit II, Lesson 3, "Working with Objects."
Uppercase	SQL column names, commands, functions, schemas, table names	Use the SELECT command to view information stored in the LAST_NAME column of the EMP table.

Convention	Element	Example
------------	---------	---------

Arrow	Menu paths	Select File→ Save.
Brackets	Key names	Press [Enter].
Commas	Key sequences	Press and release keys one at a time: [Alternate], [F], [D]
Plus signs	Key combinations	Press and hold these keys simultaneously: [Ctrl]+[Alt]+[Del]

Typographic Conventions in Code

Convention	Element	Example
Caps and lowercase	Oracle Forms triggers	When-Validate-Item
Lowercase	Column names, table names	SELECT last_name FROM s_emp;
	Passwords	DROP USER scott IDENTIFIED BY tiger;
	PL/SQL objects	OG_ACTIVATE_LAYER (OG_GET_LAYER (`prod_pie_layer`))
Lowercase italic	Syntax variables	CREATE ROLE <i>role</i>
Uppercase	SQL commands and functions	SELECT userid FROM emp;

Typographic Conventions in Navigation Paths

This course uses simplified navigation paths, such as the following example, to direct you through Oracle Applications.

(N) Invoice > Entry > Invoice Batches Summary (M) Query > Find (B) Approve

This simplified path translates to the following:

1. (N) From the Navigator window, select Invoice > Entry > Invoice Batches Summary.
2. (M) From the menu, select Query > Find.
3. (B) Click the Approve button.

Notations :

(N) = Navigator

(M) = Menu

(T) = Tab

(I) = Icon

(H) = Hyperlink

(B) = Button

Typographical Conventions in Help System Paths

This course uses a “navigation path” convention to represent actions you perform to find pertinent information in the Oracle Applications Help System.

The following help navigation path, for example—

(Help) General Ledger > Journals > Enter Journals

—represents the following sequence of actions:

1. In the navigation frame of the help system window, expand the General Ledger entry.
2. Under the General Ledger entry, expand Journals.
3. Under Journals, select Enter Journals.
4. Review the Enter Journals topic that appears in the document frame of the help system window.

Getting Help

Oracle Applications provides you with a complete online help facility.

Whenever you need assistance, simply choose an item from the Help menu to pinpoint the type of information you want.

To display help for a current window:

1. Choose Window Help from the Help menu, click the Help button on the toolbar, or hold down the Control key and type 'h'.

A web browser window appears, containing search and navigation frames on the left, and a frame that displays help documents on the right.

The document frame provides information on the window containing the cursor. The navigation frame displays the top-level topics for your responsibility, arranged in a tree control.

2. If the document frame contains a list of topics associated with the window, click on a topic of interest to display more detailed information.
3. You can navigate to other topics of interest in the help system, or choose Close from your web browser's File menu to close help.

Searching for Help

You can perform a search to find the Oracle Applications help information you want. Simply enter your query in the text field located in the top-left frame of the browser window when viewing help, then click the adjacent Find button.

A list of titles, ranked by relevance and linked to the documents in question, is returned from your search in the right-hand document frame. Click on whichever title seems to best answer your needs to display the complete document in this frame. If the document doesn't fully answer your questions, use your browser's Back button to return to the list of titles and try another.

Accounting for Inventory Transactions for Average Costing

Chapter 1

Average Costing

Average Costing

Accounting for Inventory Transactions for Average Costing

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Objectives

Objectives

After completing this lesson, you should be able to do the following:

- **Describe average costing**
- **Set up average costing**
- **Maintain, edit, update and change your average costs**
- **Account for inventory transactions in average costing**

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Agenda

Agenda

- **Overview of Average Costing**
- **Describing Average Costing**
- **Setting Up Average Costing**
- **Using the Average Cost Update**
- **Accounting for Inventory Transactions in Average Costing**

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Overview

Recording Quantity Movements

- The system creates accounting entries that correspond to quantity movements.

Minimizing Accounting Entries

- The system creates accounting entries within an inventory organization. These accounting entries may be summarized by GL account code.



**Quantity
movements**



Audit trail



**Financial
transactions**

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Overview

Subinventory Transfer

- The system records two transactions for the quantity movement, but only one transaction generates accounting entries.

Accounting Information

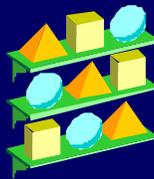
- You can create separate accounting entries for material and material overhead costs.

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Overview

Journal Source

- For both inventory and work-in-process entries, the journal source in Oracle General Ledger is Oracle Inventory.



**Oracle
Inventory**

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Agenda

Agenda

- Overview of Average Costing
- Describing Average Costing
- Setting Up Average Costing
- Using the Average Cost Update
- Accounting for Inventory Transactions in Average Costing

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Describing Average Costing

Defining Average Costing

- You use average costing to perpetually value your inventory at a weighted average cost.
 - For purchased items, this cost is a weighted average of the actual procurement cost of an item.
 - For manufactured items, this cost is a weighted average of the cost of all resources and materials consumed.
- The system uses this same average cost to value transactions. Using this average cost, you can reconcile your inventory balances to your accounting entries.

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Describing Average Costing

Costing Production at a Perpetual Average Cost

- You can use average costing in lieu of standard costing in a manufacturing environment.
- You can value your manufacturing inventory using a costing method based on actual purchase prices, actual components and manufacturing resources used.
- You can hold inventory at average cost.
- You can record and accumulate items in inventory at an average cost and then add to, use, or move these items and have unit costs automatically updated.

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Describing Average Costing

Applying Material Overhead

- The system adds cost to an item or assembly to include material overhead type costs (receiving, stocking, material movement, and handling) in your inventory valuation.
- The system applies predefined material overhead amounts to all items or to a group of items.

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Describing Average Costing

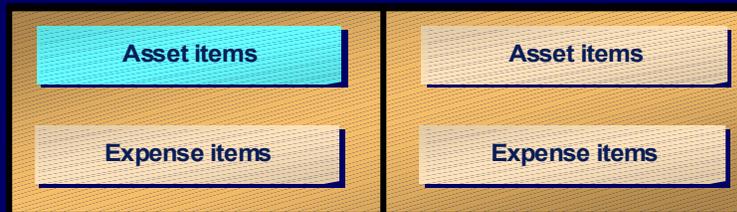
Describing Average Costing

Included in current average cost calculations are:

- Asset items in asset subinventories
- Asset items intransit, where intransit is owned by this organization

Asset subinventory

Expense subinventory



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Describing Average Costing

Recalculating Costs

With average costing, Oracle Cost Management:

- Recalculates unit costs on a transaction-based perpetual basis.
- Provides full visibility and control of costs.
- Tracks and reports costs through various stages as you transact.

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Describing Average Costing

Describing Average Costing

Moving Average Cost Formula

Oracle Cost Management uses the following formula to recalculate the average unit cost of an inventory asset item:

- **New average cost =**
$$\frac{\text{(transaction value + current inventory value)}}{\text{(transaction quantity + current onhand quantity)}}$$

“Current” refers to the quantity and value of the item before the transaction is processed.

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Describing Average Costing

Describing Average Costing

The following transactions use the moving average cost formula to update the average unit cost of an item:

- Purchase order receipt and delivery to inventory
- Return to vendor from inventory
- Interorganization receipt
- Average cost update
- Assembly completion
- Miscellaneous receipt (if user enters a transaction cost)
- Miscellaneous issue (if user enters a transaction cost)
- Invoice price variance (IPV) transfer to inventory

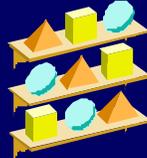
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Describing Average Costing

Describing Average Costing

- In an average cost organization, asset accounts are disabled at the subinventory level.
- For every subinventory in an average cost organization
 - Asset valuation accounts default from organization parameters and cannot be changed.
 - Expense accounts can be changed.



Subinventory

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Review Question

Review Question

Asset items in asset subinventories are included in current average cost calculations as well as asset items intransit, where intransit is owned by this organization.

- 1. True**
- 2. False**

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Instructor Note

Correct answer: 1

Review Question

Review Question

Asset items in asset subinventories are included in current average cost calculations as well as asset items intransit, where intransit is owned by this organization.

1. True
2. False

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Instructor Note

Correct answer: 1

Agenda

Agenda

- Overview of Average Costing
- Describing Average Costing
- **Setting Up Average Costing**
- Using the Average Cost Update
- Accounting for Inventory Transactions in Average Costing

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Setting Up Average Costing

Setting Up Average Costing

Using Oracle Manufacturing, the way you define your inventory organization affects how you are able to collect costs.

If you want to use average costing, you must define the costing method of the inventory organization as average. Once you assign items to the organization, you cannot change the costing method of the organization.

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Setting Up Average Costing

Setting Up Average Costing

Average Rates Cost Type for Average Costing Only

- You initially define resource rates, overhead rates, material overhead rates or amounts, and outside processing rates in an average rates cost type.
- In your inventory organization parameters, you designate one of your user defined cost types as your average rates cost type.
- The system uses those rates to cost transactions from that point in time forward until you change or update them or use a different average rates cost type.

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Note

In your inventory organization parameters, you designate one of your user defined cost types as your average rates cost type or you can leave this field empty.

Setting Up Average Costing

Setting Up Average Costing

Use the Organization Parameters window to enter:

- The costing method as average
- The average rates cost type which is your user defined cost type that holds your average resource and overhead rates and material overhead rates or amounts

(N) INV Setup > Organizations > Parameters (T) Costing Information

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**Help: Oracle Manufacturing Applications >
Oracle Inventory > Setting Up > Inventory Structure >
Defining Organization Parameters > Defining Costing Information
Note**

You can set up many average rates cost types. Only the cost type designated in the Organization Parameters is active.

Setting Up Average Costing

Setting Up Average Costing

Use the Cost Types window to create:

- Your user defined cost type that holds your average resource and overhead rates and material overhead rates or amounts

(N) CST Setup > Cost Types

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**Help: Oracle Manufacturing Applications >
Oracle Cost Management > Setting Up >Steps >
Defining Cost Types**

Setting Up Average Costing

Setting Up Average Costing

Item Cost Controls

- The control level determines how item costs are maintained within an Inventory organization.
- The control must be set to “Org level” as you cannot share costs.



Cost controls

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Setting Up Average Costing

Setting Up Average Costing

Use the Item Attribute Controls window to set:

- The costing group item attributes to “Org level”

(N) INV Setup > Items > Attribute Controls

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**Help: Oracle Manufacturing Applications >
Oracle Inventory > Items > Master Level vs Organization Level**

Setting Up Average Costing

Elemental Costs During Interorganization Transfers

- You can choose to transfer costs from the sending organization to the receiving organization as individual elemental costs or to summarize them into the material element.
- You use the Shipping Network window to set the flag that determines whether costs transfer elementally or as a summary.

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Setting Up Average Costing

Elemental Costs During Interorganization Transfers

- When you select the **Elemental Visibility Enabled** check box for a specific shipping network setup, all the interorganizational transactions from the shipping organization to that specific receiving organization will be stored with elemental cost information.
- When this check box is cleared, all the cost will be summed to this level of material cost.

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Note

The Elemental Visibility Enabled check box is clear when Oracle is installed. The system responds to the setting of this check box when the cost processor values the transaction.

Setting Up Average Costing

Setting Up Average Costing

Elemental Costs During Interorganization Transfers

Use the Shipping Network window to:

- Set the flag that determines whether costs transfer elementally or as a summary

(N) INV Setup > Organizations > Organizations >
Shipping Networks

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**Help: Oracle Manufacturing Applications >
Oracle Inventory > Setting Up > Transaction Setup >
Defining Inter-Organization Shipping Networks**

Setting Up Average Costing

Setting Up Average Costing

Upgrade in Average Costing

- Both manufacturing and nonmanufacturing customers use the same average costing functionality. For example, you can now apply material overhead in inventory-only organizations.



Enhanced
average
costing



MOH in
Inventory-Only
organizations

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Setting Up Average Costing

Transition to the Inventory and WIP Weighted-Average Cost Processor When Upgrading to Release 11i

- You use an update program to upgrade an existing release 11 Inventory-Only manufacturing organization to the new average cost processor.

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Setting Up Average Costing

Upgrade Criteria

You should run the upgrade in average costing program when:

- You are operating in a release 11 inventory-only average costing environment, where WIP is not installed.
- You have costed all inventory transactions.
- You perform all interorganization transactions using the current shipping networks.
- Your system has no activity.

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Setting Up Average Costing

Setting Up Average Costing

Old Inventory-Only Average Costing

1. You have costs that are held in this level material cost element.
2. You cannot earn material overhead.
3. The material processor recalculates costs and the cost processor distributes them.
4. You revalue average costs perpetually in the organization. **Only a single average is maintained in the organization.**

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Setting Up Average Costing

Setting Up Average Costing

New Inventory and WIP Average Costing

1. You have this level and previous level costs. You have elemental (and subelemental) valuation and elemental distribution of item costs.
2. You can earn material overhead.
3. The cost manager reaverages and distributes costs.

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Note

With the new inventory and WIP average costing, you have the following:

4. You reaverage costs within cost groups, introducing layer costing to support project manufacturing with two new entities, CST_QUANTITY_LAYERS and CST_LAYER_COST_DETAILS.
5. To support item cost history, you have two new entities, MTL_CST_ACTUAL_COST_DETAILS and MTL_ACTUAL_COST_SUBELEMENT.

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Review Question

Review Question

For average costing, the control level for item cost controls must be set to “Org level”.

1. True
2. False

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Instructor Note

Correct answer: 1

Review Question

Review Question

For average costing, the control level for item cost controls must be set to “Org level”.

1. True
2. False

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Instructor Note

Correct answer: 1

Agenda

Agenda

- Overview of Average Costing
- Describing Average Costing
- Setting Up Average Costing
- **Using the Average Cost Update**
- Accounting for Inventory Transactions in Average Costing

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Average Cost Update

Average Cost Update

You can use the average cost update to:

- Adjust your average costs easily. You need to have a non-zero onhand quantity for the average cost update to have any effect.
- Enter additional costs, such as freight or invoice price variances, or correct your average costs as required.



**% average
unit costs**



**New average
unit costs**



**Inventory
value**

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Average Cost Update

Average Cost Update

You can update the average cost of an item:

To a new average unit cost:

- You enter the new cost by cost element by level in a single update session, and the new total unit cost will be automatically calculated.
- You enter a new total cost, and the amount of change will automatically be spread across all cost elements and levels in the same proportion as they existed before the update.



New average unit costs

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Average Cost Update

Average Cost Update

You can update the average cost of an item:

By a percentage change:

- You select cost element(s) and level(s) to adjust up or down, and the new total unit cost will be automatically calculated.
- You adjust the total, and the percentage change will automatically be applied to all cost elements and levels.

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Average Cost Update

Average Cost Update

You can update the average cost of an item:

By a change in inventory value:

- **You 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 average cost of the item.**

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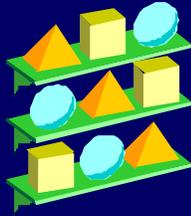
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Average Cost Update

Average Cost Update

The average cost update affects the cost of:

- Items in all asset subinventories in your organization.
- Inventory intransit that is owned by your organization.



Inventory



Intransit

Owned inventory

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Average Cost Update

The average cost update will not revalue:

- Components and assemblies in WIP
- Expense items
- Items in an expense subinventory
- You post the revaluation offset to Average Cost Adjustment Accounts, which you specify when you perform the average cost update.
- In an individual update session, you can make changes by cost element, choosing one, several, or all cost elements.

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Average Cost Update

Average Cost Update

Note

- Under average costing, the system automatically and perpetually keeps unit costs current.
- You use the average cost update to routinely update your costs to include invoice price variances.
- Otherwise, you should use the average cost update feature sparingly for corrections.

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Average Cost Update

Average Cost Update

Use the Update Average Cost window to enter:

- Details about your cost update
- A default to use as the percentage change for individual item costs if you are updating costs using a percentage change
- An item for which to update average cost
- A new average cost
- A new onhand inventory value, performed for the item at a summary level or for individual cost elements by level.

(N) CST Item Costs > Average Cost Update > Update Costs

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**Help: Oracle Manufacturing Applications >
Oracle Cost Management > Average Costing >
Average Cost Update**

Average Cost Update

Adjusting Accounting Entry

- This-level costs and previous-level costs are adjusted in the valuation accounts, and the adjustments are recorded in the average cost adjustment accounts.

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Average Cost Update

Average Cost Update

Example: Adjusting Accounting Entry

Accounting Entries to Valuation and Average Cost Adjustment Accounts					
Material	Material Overhead	Resource	Outside Processing	Overhead	Accounts
500	50	200	200	500	Valuation
500	50	200	200	500	Average cost adjustment

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Average Cost Update

Average Cost Update

Example: Adjusting Accounting Entry

Adjustments Recorded in Valuation Accounts						
	Material	Material Overhead	Resource	Outside Processing	Overhead	Total
This-level			(50)	200	500	650
Prev-level	500	50	(150)	0	0	400
Incr/decr	500	50	(200)	200	500	1050

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Review Question

Review Question

You should use the average cost update feature sparingly:

- To correct a transaction costing error affecting items in subinventory.
- To correct a cost error in WIP by returning the affected quantities to a subinventory, correcting them there, and then reissuing them to WIP after the update has been completed.

1. True
2. False

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Instructor Note

Correct answer: 1

Review Question

Review Question

You should use the average cost update feature sparingly:

- To correct a transaction costing error affecting items in subinventory.
- To correct a cost error in WIP by returning the affected quantities to a subinventory, correcting them there, and then reissuing them to WIP after the update has been completed.

1. True

2. False

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Instructor Note

Correct answer: 1

Agenda

Agenda

- Overview of Average Costing
- Describing Average Costing
- Setting Up Average Costing
- Using the Average Cost Update
- Accounting for Inventory Transactions in Average Costing

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Accounting for Inventory Transactions

Current Unit Costs

This section discusses:

- How transaction cost is determined.
- Transactions that affect the current unit cost.
- The movement of items from expense to asset entities.
- Miscellaneous issues and receipts.

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Accounting for Material Transactions

Accounting for Material Transactions

Average Cost Transactions		
Transaction	Update Average?	Transaction Cost
PO receipt	No	Purchase order cost
PO delivery	Yes	Purchase order cost
PO return	Yes	Purchase order cost
Interorganization direct receipt	Yes	Item cost from sending organization (including freight and transfer charges)
Interorganization intransit receipt	Yes	Item cost from sending organization (including freight and transfer charges)
Miscellaneous issue	Yes	User-entered cost or current average
Miscellaneous receipt	Yes	User-entered cost or current average
Subinventory transfer	No	Current average cost
Sales order shipment	No	Current average cost
Sales order customer return	No	Current average cost
PI/Cycle count adjustment	No	Current average cost
Completions	Yes	User-entered cost or derived average

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Average Cost

Only certain transactions update the average cost.

Transaction: Return to Receiving from subinventory

Accounting Entries: dr. Receiving Inspection PO price
 dr. Material OH Absorption MOH
 cr. Subinventory Valuation PO price +MOH

Average Cost Recalculated? Yes, if MOH had changed since receipt, must use original rate— DOCUMENT.

Transaction: Return to Vendor from Receiving Inspection

Accounting Entries: dr. A/P Accrual PO price
 cr. Receiving Inspection

Average Cost Recalculated? No.

Transaction: Subinventory Transfer—asset subinventory to asset subinventory

Accounting Entries: dr. Subinventory Valuation— receiver Current average
 cr. Subinventory Valuation—sender

Average Cost Recalculated? No, in and out of same accounts.

Transaction: Subinventory Transfer—expense subinventory to expense subinventory

Accounting Entries: No entries

Average Cost Recalculated? Not applicable, only quantities are impacted.

Transaction: Subinventory Transfer—asset to expense or vice versa

Accounting Entries: dr. Subinventory Valuation or Expense—receiver
 cr. Subinventory. Valuation or Expense—sender

Average Cost Recalculated? No.

Transaction: Miscellaneous Receipt

Accounting Entries: dr. Subinventory Valuation Current average or U.S.
 cr. User-specified Account Current average or user-specified (U.S.)

Average Cost Recalculated? Yes, if user overrides, new average is calculated.

Transaction: Miscellaneous Issue

Accounting Entries: dr. User-specified Account Current average or U.S.
 cr. Subinventory Valuation

Average Cost Recalculated? Yes, if user overrides, new average is calculated.

cr. Subinventory Valuation—sender
Average Cost Recalculated? Yes.

Transaction: Shipment to Intransit (Avg) from Avg org—FOB Shipment

Accounting Entries: dr. Intransit Inventory Current average
cr. Interorg Payable (sending organization)
dr. Interorg Receivable
cr. Subinventory Valuation—sender

Average Cost Recalculated? Yes, unit cost recalculated in receiving organization.

Transaction: Inventory Adj— cycle count or physical inv

Accounting Entries: dr./cr. Inventory Adjustments Current average
cr./dr. Subinventory Valuation

Average Cost Recalculated? No, same as current.

Transaction: Sales Order Shipment

Accounting Entries: dr. Cost of Goods Sold Current average
cr. Subinventory Valuation

Average Cost Recalculated? No.

Transaction: Receipt of Vendor Invoice

Accounting Entries: dr. A/P Accrual PO price
cr. Accounts Payable Invoice
dr/cr. IPV

Average Cost Recalculated? Not applicable.

Transaction: Issue to Job from subinventory

Accounting Entries: dr. Work in Process Inv Current average
cr. Subinventory Valuation

Average Cost Recalculated? No, expense subinventory to expense job carries no cost.

Transaction: Component Return to subinventory

Accounting Entries: dr. Subinventory Valuation Current average
cr. Work in Process Inv

Average Cost Recalculated? No.

Transaction: Charge Labor Resource to WIP job

Accounting Entries: dr. Work in Process Inv Actual
cr. Resource Absorption

Average Cost Recalculated? Not applicable. standard rate = No;
charge type = Manual; actual employee rate.

Transaction Processing

Transaction, Cost Processing, and Transaction Backdating

- You set the material transaction processor to run online or periodically for quantities.
- The cost processor always runs in the background at user-defined intervals.
- You can only backdate transactions into an open inventory period.



Inventory and WIP transactions

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Transaction Processing

Sequencing Transactions

- **Accurate calculation of the average cost relies on the sequence of transactions. If transactions are processed out of sequence, incorrect values may result. All transactions should carry an accurate transaction date and time.**
- **To ensure proper sequencing the cost processor should run less often than the material transactions are processed. If material transactions are imported from external devices or systems (for example, from bar code devices), the cost processor should run less often than the material transaction import process.**

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Transaction Processing

Processing Costs

- The transaction processor updates onhand quantities of items. It is set to run either:
 - Periodically (in the background)
 - Or online (quantities are updated immediately and the system does not allow you to proceed until the update finishes).
- The cost processor only processes transactions that have successfully passed through the material transaction processor.

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Transaction Processing

Backdating Transactions

- **You can backdate transactions. All transactions are processed in date and time sequence, based on the date and time recorded on the transaction. Transactions processed previously are not reprocessed to take account of any transactions that are dated earlier but processed later. Therefore the timing and frequency of running the cost processor affects the accuracy of costing.**

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Viewing Item Cost History

Viewing Item Cost History

In an average costing organization, you can view changes in unit cost of an item over a specified time period using the Item Cost History and the Item Cost History Graph.



Item cost
history
graph

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Item Unit Cost History

- In an average cost organization, you need to be able to see how the unit cost of an item changed over time and what caused those changes.
- When you look at the display of the item cost history, you see all the transactions for an item occurring in a user-specified date range. You see:
 - Transaction date.
 - Type of transaction.
 - Prior quantity and cost.
 - Transaction quantity and cost.
 - New quantity and cost.
- You can select to view only the transactions that changed unit costs.

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Viewing Item Cost History

Viewing Item Cost History

Use the Item Cost History window to:

- View changes in unit costs.
- See a visual picture of the history of the cost of an item over a specified period of time.
- See a graphic representation of the history of the cost of an item by clicking the graph button.

(N) Cost > Item Costs > Item Cost History (B) Graph



Item cost
history
graph

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Inventory Purchasing Transactions

Inventory Purchasing Transactions

Recording T Accounts for Inventory Purchasing Transactions (on the following page)

- For requisition and PO approval, there are no accounting entries.
1. PO receipt to receiving 50 units at \$10 (PO cost)
 2. Delivery to inventory 50 units at \$10 (PO cost)
 3. Return to vendor from receiving 5 units at \$10 (PO cost)
 4. Invoice match/approval 45 units at \$15 (Invoice cost)

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Inventory Purchasing Transactions

Inventory Purchasing Transactions

The average unit cost is recalculated for purchase order receipts.

	<u>Receiving</u>	<u>Inv. A/P Accrual</u>	<u>Inventory</u>	<u>Accounts Payable</u>
1	500	500		
2	500		500	
3	50	50		
4		450	225	675

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Inventory Purchasing Transactions

Inventory Purchasing Transactions

Recalculating average unit cost

- Transactions 1, 3, and 4 do not update the average unit cost.
- Transaction 2 updates the average unit cost as follows:

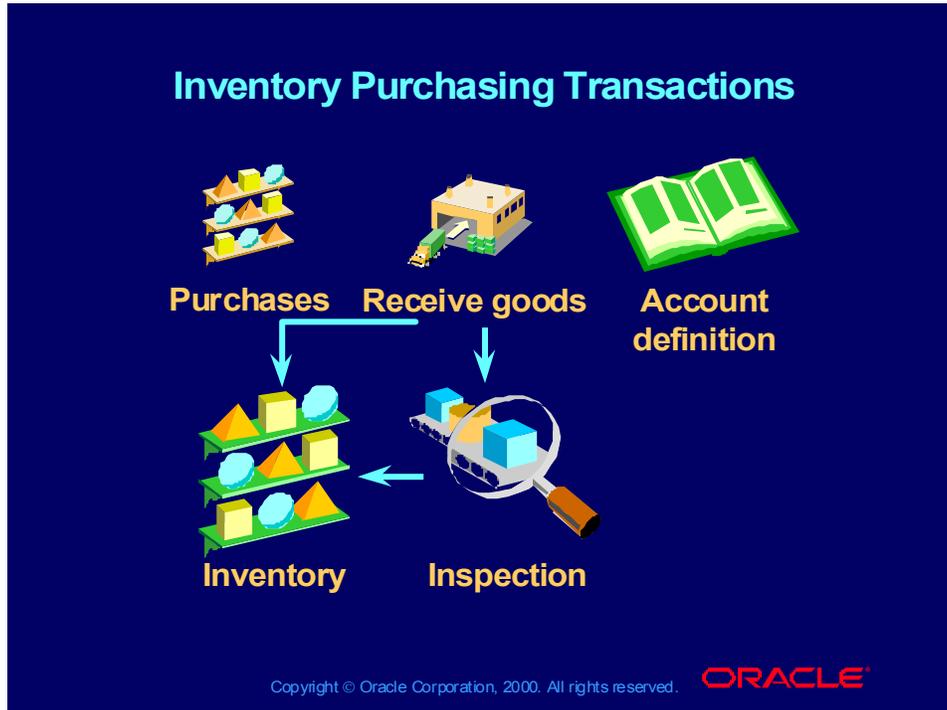
	Inventory/ Transaction Value	Onhand/ Transaction Quantity	Average/ Transaction Unit Cost
Beginning balance	0	0	0
Transaction	450	45	10
Ending balance	450	45	10

You can increase the average unit cost to include the invoice price variance by using the average cost update.

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Inventory Purchasing Transactions



Inventory Purchasing Transactions

One Step Receiving: Dock to stock in one transaction

- **Transaction and entry recorded in purchasing for the receipt (dock) and transaction and entry recorded in inventory for the delivery (stock). There is not an option to inspect and the receipt routing will be derived from the purchase order line as direct.**
- **To receive material from a vendor in one step, you can use the Receipts window to receive directly to inventory.**
- **The resulting transactions are always a receipt and then a delivery.**

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Inventory Purchasing Transactions

Two Step Receiving: Dock in one transaction and stock in a separate transaction.

- **Transaction and entry recorded in purchasing for the receipt. A separate transaction on a separate screen records the transaction and entry in inventory for the delivery. There is not an option to inspect and the receipt routing will be derived from the purchase order line as standard.**
- **To receive material from a vendor in two steps, you use the Receipts window to receive to receiving and the Receiving Transactions window to move material from receiving to inventory.**
- **The resulting transactions are always a receipt and then a delivery.**

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Inventory Purchasing Transactions

Inspection: Dock in one transaction

- Transaction and entry recorded in purchasing for the receipt.
- Inspection is completed next. After the item is inspected, the delivery into stock occurs and the transaction and entry is recorded. The receipt routing on the purchase order line will say inspection.
- There is not an entry recorded during the inspection. It is considered "on the dock".

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Inventory Purchasing Transactions

Receipts to Receiving and Delivery to Inventory

- Oracle Purchasing uses the quantity received and the purchase order price to update the Inventory AP Accrual accounts, Receiving Inspection accounts and Subinventory accounts. These accounting entries always occur, regardless of one- or two-step receiving.
- Oracle Purchasing uses the purchase order cost, converted into functional currency using either the purchase order exchange rate or the receiving exchange rate (depending on the matching option recorded on the purchase order shipment line).

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Inventory Purchasing Transactions

Account Definitions

- You define the Inventory AP Accrual in the Organization Parameters window, using Other Accounts.
- You define the Receiving Inspection account in the Receiving Options window in Oracle Purchasing or in Oracle Inventory.

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Transferring Invoice Price Variance

Transferring Invoice Price Variance

- You can transfer invoice price variance (IPV) directly to inventory rather than to an expense account so that your inventory value will be based on actual costs. Your inventory valuation is based on invoice cost rather than purchase price.



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Transferring Invoice Price Variance

Transferring Invoice Price Variance

Run the Invoice Price Variance (IPV) Report to:

- Review the IPV adjustments suggested by the system for items in inventory.
- View the variance by part number so that you can analyze which items may or may not need adjustment.

(N) Cost > Item Costs > Average Cost Update >
Transfer Invoice Variance

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**Help: Oracle Manufacturing Applications >
Oracle Cost Management > Reports and Processes >
Invoice Transfer to Inventory Report**

Warning

The full IPV amount will be transferred irrespective of the quantity remaining in inventory. If some of the original quantity has been issued out of inventory (for example, to a sales order) transferring the IPV may result in an incorrect average cost being calculated.

Transferring Invoice Price Variance

Transferring Invoice Price Variance

Transfer IPV to Item Cost in Inventory

Use the Transfer Invoice Variance window to:

- Transfer invoice price variance directly to inventory rather than to an expense account.
- If the quantity is zero or negative, you perform an average cost update and move IPV to average cost variance.

(N) Cost > Item Costs > Average Cost Update
(T) Transfer Invoice Variance

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**Help: Oracle Manufacturing Applications >
Oracle Cost Management > Average Costing >
Average Cost Update**

Review Question

Review Question

You can transfer IPV directly to inventory rather than to expense so that your inventory value will be based on invoice price.

- 1. True**
- 2. False**

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Instructor Note

Correct answer: 1

Review Question

Review Question

You can transfer IPV directly to inventory rather than to expense so that your inventory value will be based on invoice price.

1. True
2. False

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Instructor Note

Correct answer: 1

Subinventory Transfers

You use subinventory transfers to move material from one subinventory to another subinventory in the same inventory organization. An entry is recorded but the same cost is used. You can move material from:

Asset Subinventory to Asset Subinventory

- In average costing, there is no accounting impact for such a move because all subinventories in an inventory organization share the same valuation accounts.

Expense Subinventory to Expense Subinventory

- In average costing, there is no accounting impact for such a move.

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Subinventory Transfers

Asset Subinventory to Expense Subinventory

- In average costing, the accounting impact for such a move credits valuation accounts and debits expense accounts, writing off inventory to expense.

Expense Subinventory to Asset Subinventory

- In average costing, the accounting impact for such a move credits expense accounts of the expense subinventory and debits asset accounts at the current average cost of the item. As a result, inventory valuation increases while the current average cost of the item remains unchanged.

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Miscellaneous Issues and Receipts

You use miscellaneous transactions to:

- **Issue material from a subinventory to a general ledger account or to an account alias.**
- **Receive material to a subinventory from a general ledger account or from an account alias.**
- **Transfer onhand quantities into Oracle Applications from legacy systems and establish average costs via the same transactions.**

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Miscellaneous Issues and Receipts

Caution

The system allows you to enter a transaction unit cost when performing a miscellaneous issue.

- Under average costing, you should not allow the transaction unit cost to be entered because entering a cost that is significantly different from the current average cost can cause large swings in the unit cost of remaining onhand inventory.
- Because the form used for entering miscellaneous issues is a folder form, the Unit Cost field is easily hidden, thereby prohibiting its use. If you choose to allow entry of the unit cost, impose tight security on its use for the reason stated above.

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Miscellaneous Issues and Receipts

- Under average costing, you can enter a transaction cost for miscellaneous issues and for miscellaneous receipts.
- A transaction occurring at a cost other than the current average cost results in a recalculation of the item's unit cost.
- A user-entered cost is apportioned to cost elements, based on the elemental breakdown of the current average cost. If no current cost exists, the entire amount goes to the material element (applies to receipts only).

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Miscellaneous Issues and Receipts

Miscellaneous Issues and Receipts

Recording T Accounts for Miscellaneous Issues and Receipts (on the following page)

- | | |
|---|---|
| 1. Subinventory to subinventory transfer | 50 units at \$10
(current average cost) |
| 2. Miscellaneous issue to expense account | 10 units at \$10
(current average cost or entered total unit cost) |
| 3. Miscellaneous receipt from expense account | 20 units at \$10
(current average cost or entered total unit cost) |
| 4. Miscellaneous issue to account alias | 30 units at \$15
(current average cost or entered total unit cost) |
| 5. Miscellaneous receipt from account alias | 40 units at \$20
(current average cost or entered total unit cost) |

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Miscellaneous Issues and Receipts

Miscellaneous Issues and Receipts

Miscellaneous transactions update the average unit cost.

	Subinv 1	Subinv 2	Expense	Account Alias
1	500	500		
2	100		100	
3	200			200
4	450			450
5	800			800

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Miscellaneous Issues and Receipts

Miscellaneous Issues and Receipts

Impact of miscellaneous transactions on current average cost

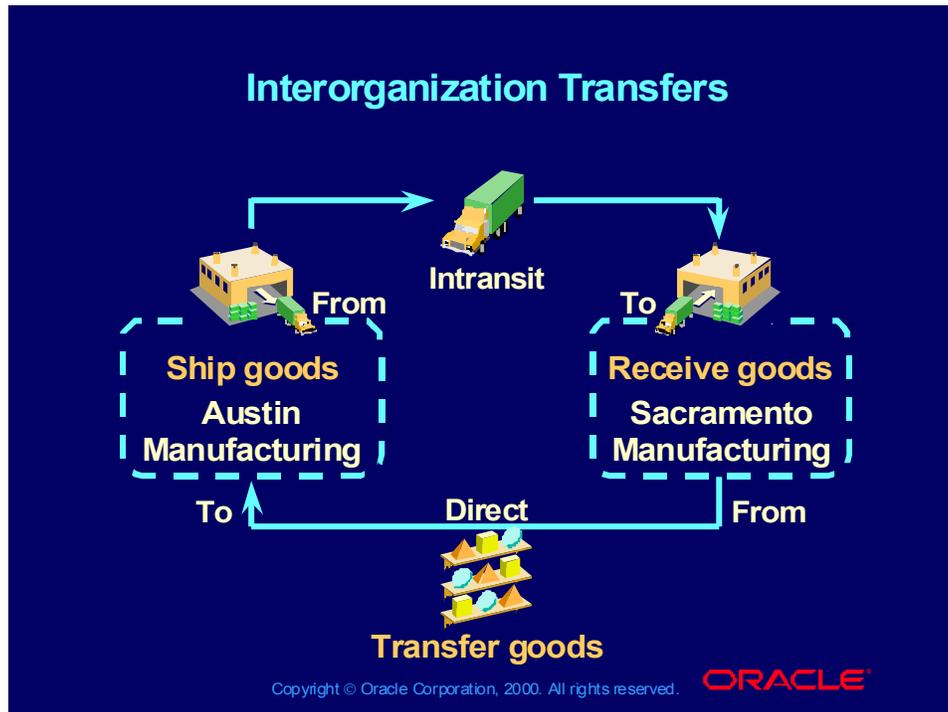
- For miscellaneous transactions, both issues and receipts, you can enter a total unit cost and doing so will cause the current average unit cost to be updated by the system.
- If you do not enter a cost for the transaction, the current average unit cost is used.
- Transactions 4 and 5 in the table below update the average unit cost.

	Inventory/ Transaction Value	Onhand/ Transaction Quantity	Average/ Transaction Unit Cost
Beginning balance	5,000	500	10.00
Transaction 4	-450	-30	15.00
New balance	4,550	470	9.68
Transaction 5	800	40	20.00
New balance	5,350	510	10.49

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Interorganization Transfers



Interorganization Transfers

Shipping Information

- **Accounting flows for interorganization transfers vary depending on whether you transfer material directly from one organization to another or transfer material through intransit inventory.**
- **You use the Shipping Networks window to define the direct or intransit shipment type for each shipping and receiving organization relationship.**

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Direct Interorganization Transfers

Interorganization Transfer Window

- You use the Interorganization Transfer window to move material directly from the shipping organization to the receiving organization.

Transfer and Freight Charges

- Transfer and freight charges are always credited to the shipping organization.

Expense

- No entries are made for direct interorganization transfers of expense items in both standard and average cost organizations.
- There is no recalculation of average cost for direct interorganization transfers received into expense subinventories of average cost organizations.

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Direct Interorganization Transfers

Direct Interorganization Transfers

Recording T Accounts for Direct Interorganization Transfers (on the following page)

- Direct interorganization transfers automatically perform the issue and receipt transactions.

	Sending Organization	Receiving Organization
Average or standard cost	\$10.00	
Transfer credit	10%	
Freight	\$10.00	
Costing method	Average or standard costing	Average costing

Transaction: Transfer 50 units between organizations

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Direct Interorganization Transfers

Direct Interorganization Transfers

Sending organization accounts:

	Elemental Inventory	Interorg Receivable	Transfer Credit	Freight Credit
1	500	560	50	10

Receiving organization accounts:

	Org Material Account	Interorg Payable
1	560	560

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Direct Interorganization Transfers

Direct Interorganization Transfers

Direct interorganization transfers update the current average unit cost.

- For asset items, the total transaction value is used, including transfer and freight charges.
- The current average unit cost is recalculated in the receiving organization, if it is an average cost organization.

	Inventory/ Transaction Value	Onhand/ Transaction Quantity	Average/ Transaction Unit Cost
Beginning balance	5,000	500	10.00
Transaction 1	560	50	11.20
New balance	5,560	550	10.11

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Direct Interorganization Transfers

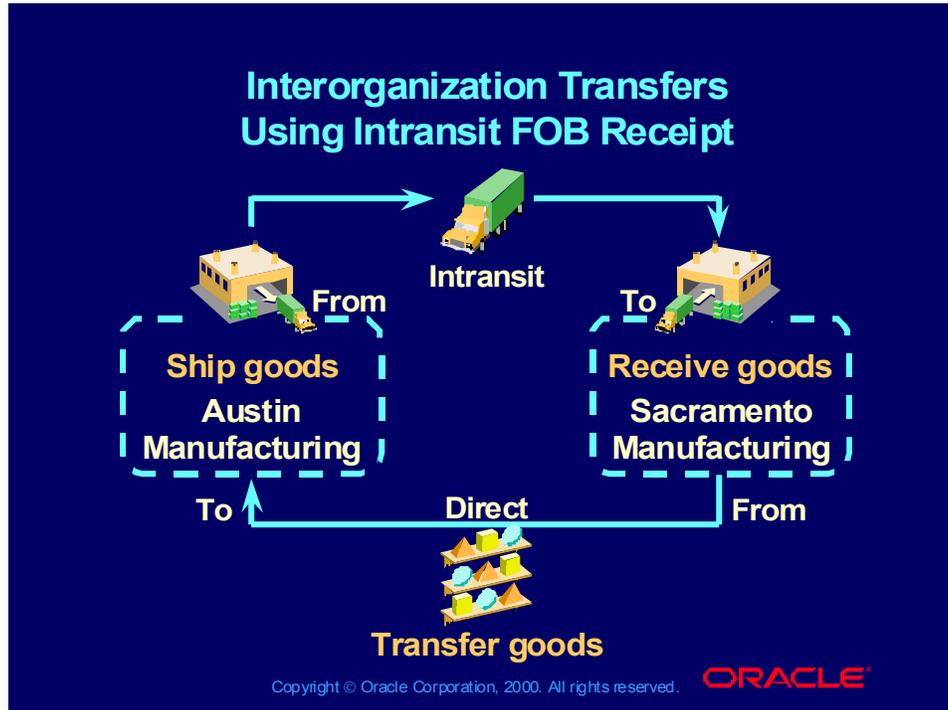
Expense

- No entries are made for direct interorganization transfers of expense items in both standard and average cost organizations.
- There is no recalculation of average cost for direct interorganization transfers received into expense subinventories of average cost organizations.

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Interorganization Transfers Using Intransit FOB Receipt



Interorganization Transfers Using Intransit FOB Receipt

Interorganization Transfers Using Intransit FOB Receipt

FOB Receipt

- **FOB Receipt means that the item belongs to the shipping organization until the receiving organization performs the Receipt transaction. Intransit inventory belongs to the shipping organization.**

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Interorganization Transfers Using Intransit FOB Receipt

Interorganization Transfers Using Intransit FOB Receipt

Intransit Inventory and Inventory Accounts

- **Intransit inventory represents material that has not yet arrived at the receiving organization.**
- **You use the Interorganization Transfer window to move material from the shipping organization to intransit inventory.**
- **You use the Receipts window to move material from intransit inventory to the receiving organization.**

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Interorganization Transfers Using Intransit FOB Receipt

Interorganization Transfers Using Intransit FOB Receipt

Intransit Inventory and Inventory Accounts

- **If the sending organization uses average costing, the inventory and intransit accounts are the same.**
- **All cost elements from the sending organization plus any freight and transfer charges are charged to the material cost element in the receiving organization.**

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Interorganization Transfers Using Intransit FOB Receipt

Interorganization Transfers Using Intransit FOB Receipt

Freight Charges: FOB Receipt

- If the FOB point is Receipt, the freight charges are credited to the shipping organization. Since title has not passed, it is assumed that the shipping organization pays the freight.

Interorganization Transfer Charges

- Transfer charges can be added to the cost of the shipment. The credit for transfer charges always goes to the shipping organization.

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Interorganization Transfers Using Intransit FOB Receipt

Interorganization Transfers Using Intransit FOB Receipt

Recording T Accounts for Interorganization Transfers Using Intransit FOB Receipt (on the following page)

- The total value of the interorganization transfer is used to update the average unit cost.

	Sending Organization	Receiving Organization
Average or standard cost	\$10.00	
Transfer credit	10%	
Freight	\$10.00	
Costing method	Average or standard costing	Average costing

Transactions:

1. Transfer transaction 50 units
2. Receipt transaction 50 units

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Interorganization Transfers Using Intransit FOB Receipt

**Interorganization Transfers
Using Intransit FOB Receipt**

Sending organization accounts:

	Intransit Inventory	Elemental Inventory	Interorg Receivable	Transfer Credit	Freight Credit
1	500	500			
2		500	560	50	10

Receiving organization accounts:

	Org Material Account	Interorg Payable
2	560	560

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Interorganization Transfers Using Intransit FOB Receipt

Interorganization Transfers Using Intransit FOB Receipt

Updating unit cost at time of ownership change for FOB receipt

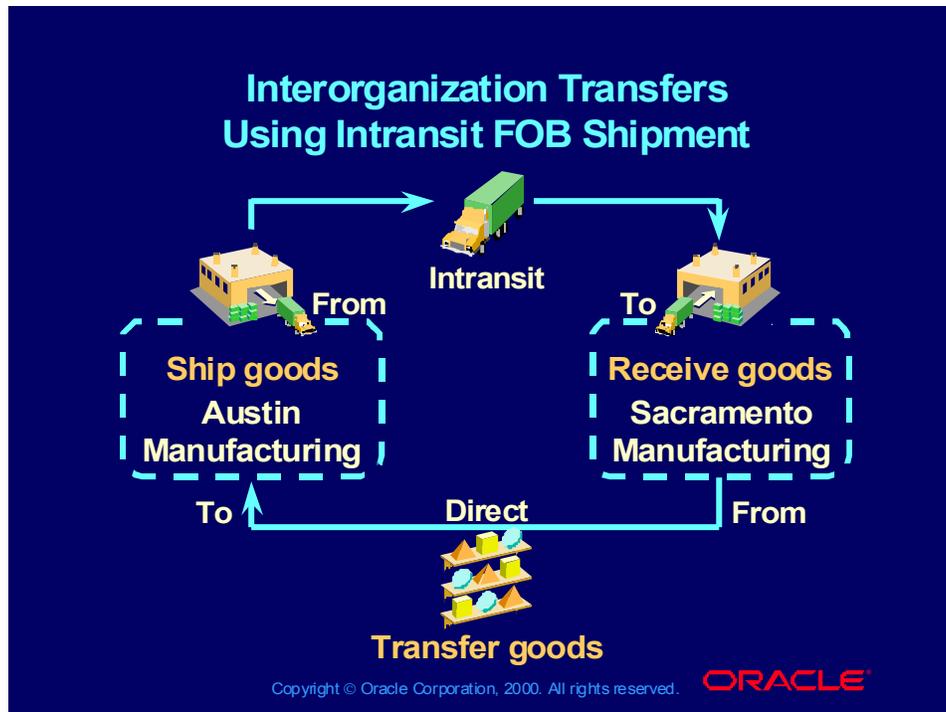
When the receiving organization is under average costing and the FOB point is "receipt," the average unit cost in the receiving organization is updated when the receiving organization performs the Receipt transaction.

	Inventory/ Transaction Value	Onhand/ Transaction Quantity	Average/ Transaction Unit Cost
Beginning balance	5,000	500	10.00
Transaction 2	560	50	11.20
New balance	5,560	550	10.11

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Interorganization Transfers Using Intransit FOB Shipment



Interorganization Transfers Using Intransit FOB Shipment

Interorganization Transfers Using Intransit FOB Shipment

FOB Shipment

- **FOB Shipment means that the item belongs to the receiving organization as soon as the shipping organization performs the Interorganization Transfer transaction. Intransit inventory belongs to the receiving organization.**

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Interorganization Transfers Using Intransit FOB Shipment

Interorganization Transfers Using Intransit FOB Shipment

Freight Charges: FOB Shipment

- If the FOB point is Shipment, the freight charges are credited to the receiving organization. Since title has passed, it is assumed that the receiving organization pays the freight.

Inventory Accounts

- If the receiving organization uses average costing, the inventory and intransit accounts are the same.

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Interorganization Transfers Using Intransit FOB Shipment

Interorganization Transfers Using Intransit FOB Shipment

Recording T Accounts for Interorganization Transfers Using Intransit FOB Shipment (on the following page)

- The total value of the interorganization transfer is used to update the average unit cost.

	Sending Organization	Receiving Organization
Average or standard cost	\$10.00	
Transfer credit	10%	
Freight	\$10.00	
Costing method	Average or standard costing	Average costing

Transactions:

1. Transfer transaction 50 units
2. Receipt transaction 50 units

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Interorganization Transfers Using Intransit FOB Shipment

Interorganization Transfers Using Intransit FOB Shipment

Sending organization accounts:

	Elemental Inventory	Interorg Receivable	Transfer Credit
1	500	550	50

Receiving organization accounts:

	Intransit Inventory	Org Material Account	Interorg Payable	Freight Credit
1	560		550	10
2	560	560		

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Interorganization Transfers Using Intransit FOB Shipment

Interorganization Transfers Using Intransit FOB Shipment

- Updating unit cost at time of ownership change
- When the receiving organization is under average costing and the FOB point is “shipment,” the average unit cost in the receiving organization is updated when the sending organization performs the Interorganization Transfer transaction.

	Inventory/ Transaction Value	Onhand/ Transaction Quantity	Average/ Transaction Unit Cost
Beginning balance	5,000	500	10.00
Transaction 1	560	50	11.20
New balance	5,560	550	10.11

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Review Question

Review Question

Some customers want the option to see elemental cost detail on interorganizational transactions.

1. True
2. False

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Instructor Note

Correct answer: 1

Review Question

Review Question

Some customers want the option to see elemental cost detail on interorganizational transactions.

1. True
2. False

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Instructor Note

Correct answer: 1

Customer Shipments and Returns

Customer Shipments and Returns

Recording T Accounts for Customer Shipments (on the following page)

Customer Shipments

- | | |
|---|---|
| 1. Shipment to customer | 50 units at \$10 (current average cost) |
| 2. Invoice customer | 50 units at \$15 (price) |
| 3. Shipment to customer (same order line) | 50 units at \$12 (current average cost) |
| 4. Return from customer | 10 units at \$12 (current average cost) |
| 5. Issue credit memo to customer | 10 units at \$15 (price) |

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Customer Shipments and Returns

Customer Shipments and Returns

- Customer shipments are valued at the current average unit cost.
- Customer returns do not have to reference a sales order. In this case the return is valued at current average cost.

	Inventory	COGS	Revenue	Accounts receivable
1	500	500		
2			750	750
3	600	600		
4	120	120		
5			150	150

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Customer Shipments and Returns

Return Material Authorizations

When items are returned from a customer, you can select to receive them into a subinventory.

- Currently, this transactions occurs at the current average cost.

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Inventory Adjustments

Inventory Adjustments

- Cycle count and physical inventory transactions are valued at the current average unit cost.
- Both the cycle count transaction and the physical inventory transaction update the inventory valuation accounts of the organization and offset the adjustment account you specify.
- You can use cycle counting and physical inventory to correct your inventory onhand balances.

	<u>Inventory</u>	<u>Inventory Adjustment</u>
1	50	50
2	100	100

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Cycle Count Adjustments and Physical Inventory Adjustments

1. Cycle count adjustment -5 units at \$10 (current average cost)
2. Physical inventory adjustment 10 units at \$10 (current average cost)

Average Cost Variance Account

Average Cost Variance Account

Negative Onhand Quantity Balances

- Oracle Cost Management (OCM) allows negative onhand quantity balances which occur because transactions are processed out of sequence. For costing purposes negative balance is calculated across the whole organization, not per subinventory.
- When your inventory balances become negative and you receive additional material, OCM uses the average cost variance account to balance the entry and minimize the effect of this error in processing.
- This account represents the inventory valuation error caused by issuing your inventory before receiving it.

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Note

The average cost variance account is also used to keep elemental cost by level from going negative.

Average Cost Variance Account

Average Cost Variance Account

Example of Negative Onhand Quantity Balances

Current average unit cost \$10

Current onhand quantity 60

Current inventory value \$600

Receipt quantity 10

Receipt unit cost \$12

Dr. Inventory valuation accounts (10 units @ \$10) \$100

Cr. Receiving inspection account (10 @ \$12) \$(120)

Dr. Average cost variance account (10 units @ \$5) \$20

Note: Average cost unchanged as current onhand remains negative

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Note

The average cost variance account and the inventory valuation accounts are defined in the Organization Parameters window.

Average Cost Variance Account

Average Cost Variance Account

Example of Negative Onhand Quantity Balances (continued)

Current average unit cost \$10

Current onhand quantity -50

Current inventory value -\$500

Receipt quantity 75

Receipt unit cost \$15

First, zero out inventory balance at old average unit cost:

Dr. Inventory valuation accounts (50 units @ \$10) \$500

Now, receive the remaining balance at the new unit cost:

Dr. Inventory valuation accounts (25 units @ \$15) \$375

Cr. Receiving inspection account (75 @ \$15) \$(1,125)

Dr. Average cost variance account (50 units @ \$5) \$250

Note: Average cost now set to \$15

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Note

The average cost variance account and the inventory valuation accounts are defined in the Organization Parameters window.

Average Cost Variance Account

Average Cost Variance Account

Unit Cost Integrity When Inventory Balance Is Negative

You specify at the organization level whether negative quantities are allowed.

- If negative quantities are not allowed, you are not permitted to make a transaction that would result in a negative onhand balance.
- If negative quantities are allowed, when a receipt (or transfer in) transaction occurs for an item with negative onhand inventory, the transaction is valued at the current average unit cost or is valued in two parts.

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Average Cost Variance Account

Unit Cost Integrity When Inventory Balance Is Negative

- If the onhand quantity is negative before the transaction is processed and will be greater than zero afterwards:
 - The transaction is valued at the current average cost.
 - The difference between the transaction valued at the transaction cost and at the current average cost is written to the Average Cost Variance account.

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Average Cost Variance Account

Average Cost Variance Account

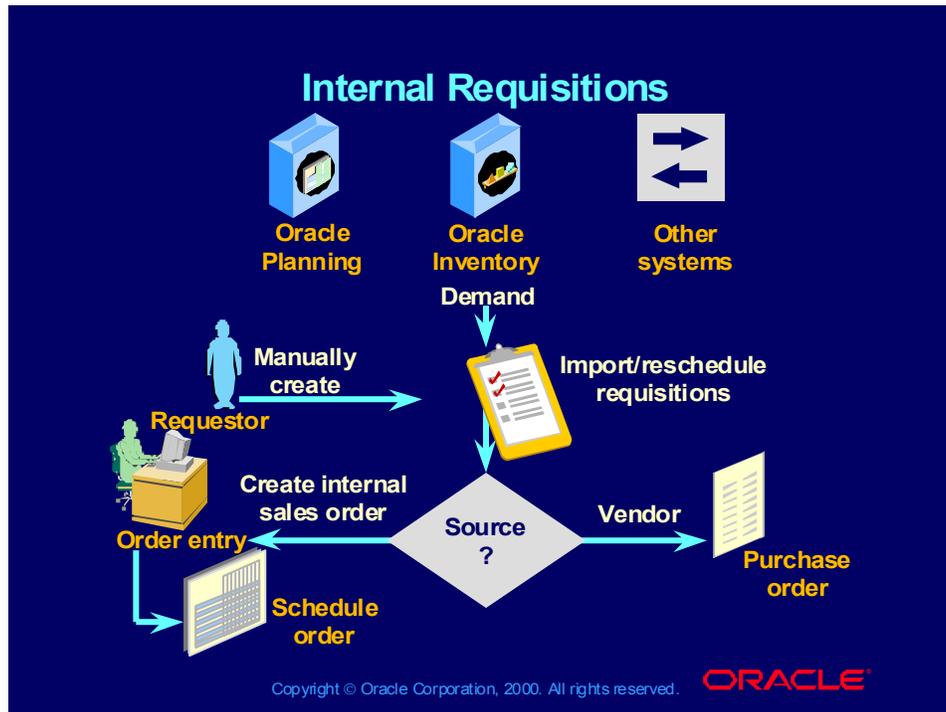
Balance Accounting Entries

- If the onhand quantity is negative before the transaction is processed and will be greater than zero afterwards, the transaction is valued in two parts:
 - The quantity required to bring the onhand balance to zero is valued at the current average cost (as on the previous page)
 - And the remaining quantity is valued at the transaction unit cost.

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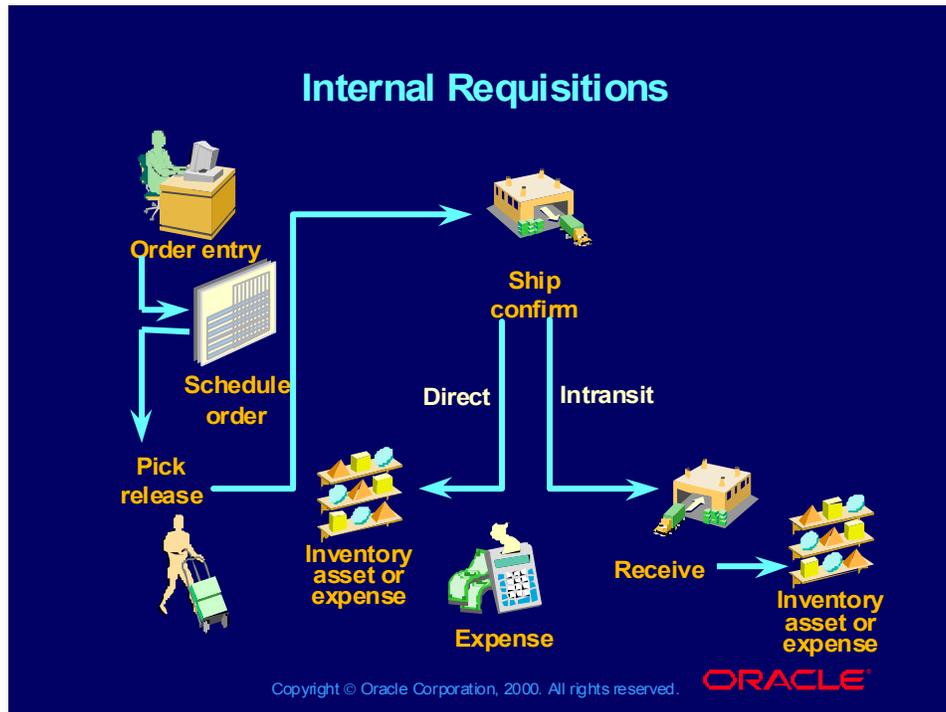
Internal Requisitions



Requesting and Issuing Material

Internal requisitions provide the mechanism for requesting and issuing material from internal stores for delivery to other inventory or expense destinations.

Internal Requisitions



Internal Requisitions

Internal Requisitions		
Direct Interorganization Transfer		
Destinations	Source Subinventory Asset Item	Accounted for as:
Expense subinventory	Charge subinventory expense account	Direct Interorg transfer
Asset subinventory	Charge organization valuation accounts	Direct Interorg transfer
Expense (to a person)	Designated requisition charge account	Miscellaneous issue All accounting done in the issuing organization

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Internal Requisitions

Internal Requisitions		
Intransit Interorganization Transfer		
Destinations	Source Subinventory Asset Item	Accounted for as:
Expense subinventory	Charge subinventory expense account	Intransit Interorg transfer
Asset subinventory	Charge organization valuation accounts	Intransit Interorg transfer
Expense (to a person)	Invalid	Not allowed

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Review Question

Review Question

The average cost variance account is used to balance your accounting entries when your onhand balances go negative. Accounting for negative balances in this manner eliminates the possibility of having inventory value for an item with a zero onhand quantity.

1. True
2. False

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Instructor Note

Correct answer: 1

Review Question

Review Question

The average cost variance account is used to balance your accounting entries when your onhand balances go negative. Accounting for negative balances in this manner eliminates the possibility of having inventory value for an item with a zero onhand quantity.

1. True
2. False

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Instructor Note

Correct answer: 1

Summary

Summary

In this lesson, you should have learned how to:

- Describe average costing
- Set up average costing
- Maintain, edit, update and change your average costs
- Account for inventory transactions in average costing

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Practice 1 Overview

Practice 1 Overview

This practice covers the following topics:

- Describing average costing
- Recording postings for an inventory purchasing flow
- Recalculating the average unit cost for purchase order receipts
- Transferring invoice price variance (IPV) to inventory

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Practice 1-1: Describing Average Costing

Practice 1-1: Describing Average Costing

Which of these transactions use the moving average cost formula to update the average unit cost of an item?

- Purchase order receipt and delivery to inventory
- Return to vendor from inventory
- Interorganization receipt
- Average cost update
- Assembly completion
- Miscellaneous receipt (if user enters a transaction cost)
- Miscellaneous issue (if user enters a transaction cost)

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Practice 1-1 Solution

All of these transactions use the moving average cost formula to update the average unit cost.

Practice 1-2: Recording Postings for an Inventory Purchasing Flow

Practice 1-2: Recording Postings for an Inventory Purchasing Flow

In this practice, you record the postings for two inventory purchasing flows.

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Practice 1-2: Recording Postings for an Inventory Purchasing Flow

Practice 1-2: Recording Postings for an Inventory Purchasing Flow

Purchase Order	Quantity Received	PO Price	Invoice Quantity	Invoice Price
1	10	10.00	10	12.00

	Receiving Inspection	Inventory A/P Accrual	Inventory	Invoice Price Variance	Accounts Payable
Receipt to inspection					
Deliver to inventory					
Invoice Match/ Approval					

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Practice 1-2 Solution: Recording Postings for an Inventory Purchasing Flow

Practice 1-2 Solution: Recording Postings for an Inventory Purchasing Flow

Purchase Order	Quantity Received	PO Price	Invoice Quantity	Invoice Price
1	10	10.00	10	12.00

	Receiving Inspection	Inventory A/P Accrual	Inventory	Invoice Price Variance	Accounts Payable
Receipt to inspection	100	100			
Deliver to inventory	100		100		
Invoice Match/ Approval		100		20	120

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Practice 1-2: Recording Postings for an Inventory Purchasing Flow

Practice 1-2: Recording Postings for an Inventory Purchasing Flow

Purchase Order	Quantity Received	PO Price	Invoice Quantity	Invoice Price
2	10	20.00	10	18.00

	Receiving Inspection	Inventory A/P Accrual	Inventory	Invoice Price Variance	Accounts Payable
Receipt to inspection					
Deliver to inventory					
Invoice Match/ Approval					

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Practice 1-2 Solution: Recording Postings for an Inventory Purchasing Flow

Practice 1-2 Solution: Recording Postings for an Inventory Purchasing Flow

Purchase Order	Quantity Received	PO Price	Invoice Quantity	Invoice Price
2	10	20.00	10	18.00

	Receiving Inspection	Inventory A/P Accrual	Inventory	Invoice Price Variance	Accounts Payable
Receipt to inspection	200	200			
Deliver to inventory	200		200		
Invoice Match/ Approval		200		20	180

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Practice 1-3: Recalculating the Average Unit Cost for Purchase Order Receipts

Practice 1-3: Recalculating the Average Unit Cost for Purchase Order Receipts

In this practice, you recalculate the average unit cost for the purchase order receipts in the prior practice 1-2.

	Inventory/ Transaction Value	Onhand/ Transaction Quantity	Average/ Transaction Unit Cost
Beginning balance	0	0	0
Purchase order 1			
Purchase order 2			
Ending balance			

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Practice 1-3 Solution: Recalculating the Average Unit Cost for PO Receipts

Practice 1-3 Solution: Recalculating the Average Unit Cost for PO Receipts

In this practice, you recalculate the average unit cost for the purchase order receipts in the prior practice 1-2.

	Inventory/ Transaction Value	Onhand/ Transaction Quantity	Average/ Transaction Unit Cost
Beginning balance	0	0	0
Purchase order 1	100	10	10
Purchase order 2	200	10	20
Ending balance	300	20	15

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Practice 1-4: Transferring Invoice Price Variance (IPV) to Inventory

Practice 1-4: Transferring Invoice Price Variance (IPV) to Inventory

In this practice, you do the following:

1. Define one purchased item in Dallas, M3
2. Create a purchase order for your item in Dallas, M3
3. Approve your purchase order and receive goods
4. Create an invoice for the items that you received, using a different invoice price than the price on the PO
5. Run the Payables Accounting Process
6. Run the IPV report to see adjustments for the item
7. Transfer IPV to the part number cost in inventory
8. View the item cost for the item you updated

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Guided Practice 1-4: Defining Items

Guided Practice 1-4: Defining Items

1. Navigate to the Master Item window to set up purchased part, **xxbuypart1**, where **xx** are your initials.
2. Enter Item as **xxbuypart1**.
3. Enter description as **My first buy item**.
4. From the Tools menu, copy from the purchased item template for the purchased part.
5. Under the Work in Process tab, set the supply type for the purchased part as **Push** and save.
6. From the Tools menu, assign your purchased item to **Dallas, M3**.

(N) INV Items > Master Items (M) Tools > Organization Assignment
(B) Assign All (T) Action > Save

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Guided Practice 1-4: Creating Purchase Orders

Guided Practice 1-4: Creating Purchase Orders

1. Navigate to the Purchase Orders window to create a purchase order for each item in the M3 organization.
(N) PURCHASING Purchase Orders > Purchase Orders (B) New
2. Type: Standard Purchase Order
3. Supplier: Advanced Network Devices
4. Site: Santa Clara
5. Ship to: M3, the location for your average cost org
6. Bill to: Accept default
7. Buyer: Accept default
8. Navigate to items.

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Guided Practice 1-4: Creating Purchase Orders

Guided Practice 1-4: Creating Purchase Orders

1. Navigate to items (continued from previous page).

(N) PURCHASING Purchase Orders > Purchase Orders (B) New > Items

2. Number: 1

3. Type: Goods

4. Item: xxbuypart1

5. Quantity: 1000

6. Price: \$10.00

or you decide

7. Promise date: Today

8. Need by date: Today

9. Choose: Shipments

10. Number: 1

11. Org: Your average cost org

12. Ship to: M3, the location for your average cost org

13. Quantity: Will default

14. Save your work.

15. Record your PO number here _____.

(continued on next page)

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Guided Practice 1-4: Approving Purchase Orders

Guided Practice 1-4: Approving Purchase Orders

1. Record your PO number here _____ (continued from previous page).
 2. Choose: Approve.
 3. Submit for approval: X
- You should see a message, “document submitted for approval”.

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Guided Practice 1-4: Receiving Goods

Guided Practice 1-4: Receiving Goods

1. **Navigate to the Receipts window to receive the goods, once your purchase order has been approved.**
(N) PURCHASING Receiving > Receipts
2. **Purchase Order: The one you noted earlier**
3. **Choose: Find**
4. **Enable the box next to the quantity field.**
5. **Save your work. If you are prompted for a subinventory, enter the information and then save your work.**
6. **Change your responsibility to Payables Manager.**

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Guided Practice 1-4: Creating Invoices

Guided Practice 1-4: Creating Invoices

1. Navigate to the Invoices window to create an invoice for the items that you received in the prior step. Use a different invoice price than the price on the purchase order. The invoice must be in the same currency as the PO.

(N) PAYABLES Invoices > Entry > Invoices

- 1. Type: PO default**
- 2. PO Number: The one you received above**
- 3. Supplier: Should default based on PO number**
- 4. Site: Should default based on PO number**
- 5. Invoice date: You decide**
- 6. Invoice number: You decide**
- 7. Invoice amount: You decide (an amount different from the PO and in the same currency as the PO)**
- 8. Choose: Match receipt**

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Guided Practice 1-4: Creating Invoices

Guided Practice 1-4: Creating Invoices

1. Navigate to the Invoices window to match your receipt and approve your invoice.

(N) PAYABLES Invoices > Entry > Invoices (B) Match >

Find your specific purchase order number

2. Action: Query the receipt

3. Quantity invoiced: How many were on your PO?

4. Unit Price: Something different than the PO price

Note: Do this for all parts on the PO.

5. Choose: Match

6. Approve the invoice

7. Choose: Actions

8. Choose: Approve

9. Choose: OK. You should see a message that says no hold placed or released.

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Guided Practice 1-4: Running the Payables Accounting Process

Guided Practice 1-4: Running the Payables Accounting Process

1. Navigate to the Requests window to run the Payables Accounting Process.

(N) PAYABLES Other > Run > Requests

2. Account from date: Yesterday

3. Account to date: Today

4. Document class: Invoices

5. Submit transfer to GL: Yes

6. Submit journal import: Yes

7. Validate accounts: Yes

8. Summarize report: Accept default

9. Choose: OK

10. Choose: Submit

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Guided Practice 1-4: Running the IPV Report

Guided Practice 1-4: Running the IPV Report

1. After the Payables Accounting Process completes, navigate to the Report window to run the IPV report to see what adjustments will be made to the items.
(N) COST Report > Operational Analysis
2. Name: Invoice Price Variance Report
3. Parameters
4. Title: You decide
5. Supplier: The supplier from above
6. Period Name: Current period
7. Choose: OK
8. Choose: Submit request
9. Action: View variances by part number and do up front analysis on items that you may not want adjusted.

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Guided Practice 1-4: Transferring IPV to the Item in Inventory

Guided Practice 1-4: Transferring IPV to the Item in Inventory

1. Navigate to the Transfer Invoice Variance window to transfer the IPV to the part number cost in inventory.
(N) COST Item Costs > Average Cost Update > Transfer Invoice Variance
2. Transfer description: Transfer Invoice Variance to Inventory Valuation
3. Item range: Specific item
4. Specific item: Your item
5. Invoice option: All invoices
6. Adjustment account: You decide
7. Invoice cutoff date: You decide
8. Automatic update: Yes
9. Choose: Submit
10. Verify that the inventory value reflects the difference between the PO price and the invoice price.

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Note

For automatic update, if you choose yes, the inventory is revalued upon completion of the process and if you choose no, then you can review the change before update.

Guided Practice 1-4: Viewing the Item Cost for the Items

Guided Practice 1-4: Viewing the Item Cost for the Items

1. After successful completion of the IPV Transfer and of the the Cost Processor, navigate to the Item Cost History window to view the update in transaction type “average cost update”.

(N) COST Item Costs > Item Cost History (B) Find

2. Item: Your item

3. Choose: Find

3. Choose: Cost history to view the update

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Accounting for WIP Transactions for Average Costing

Chapter 2

Average Costing

Accounting for WIP Transactions for Average Costing

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Objectives

Objectives

After completing this lesson, you should be able to do the following:

- Describe the relationship between Oracle Work in Process (WIP) transactions and Oracle Cost Management (OCM)
- Describe enhanced costing of phantoms
- Describe the manufacturing cost setup
- Account for costs incurred in WIP
- Account for costs relieved from WIP

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Agenda

Agenda

- **Overview of Average Costing in WIP**
- **Describing the relationship between Oracle WIP transactions and Oracle Cost Management**
- **Phantom costing**
- **Review of manufacturing cost setup**
- **Accounting for costs incurred in WIP**
- **Accounting for costs relieved from WIP**

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Overview

If you use average costing in manufacturing, OCM:

- Recalculates unit costs on a transaction-based perpetual basis
- Provides full visibility and control of production costs
- Tracks and reports costs through your various stages of production as you transact



**Quantity
movements**



Audit trail



**Financial
transactions**

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Overview

If you use average costing in manufacturing, Oracle Work in Process:

- Collects all costs
- Reports move, issue, resource, overhead, completion, scrap, period close, and job close transactions



**Quantity
movements**



Audit trail

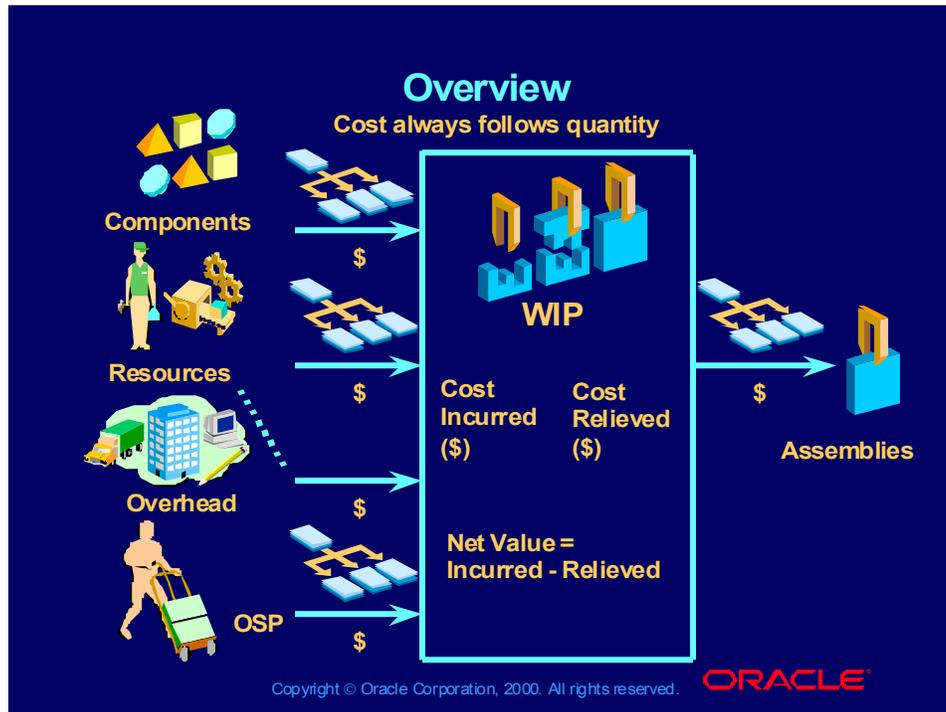


**Financial
transactions**

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Overview



Agenda

Agenda

- Overview of Average Costing in WIP
- Describing the relationship between Oracle WIP transactions and Oracle Cost Management
- Phantom costing
- Review of manufacturing cost setup
- Accounting for costs incurred in WIP
- Accounting for costs relieved from WIP

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Describing the Relationship Between Oracle WIP Transactions and OCM

Describing the Relationship Between Oracle WIP Transactions and OCM

Charging Material Transactions at an Average Cost

- You issue items from inventory to jobs and return components from a job back to inventory at the item's current average cost.

Charging WIP Resource Transactions at an Actual Rate

- You can accumulate multiple transactions for the same resource at different rates to reflect changes over time.
- The system charges outside processing costs to a job at the purchase order unit cost.

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Describing the Relationship Between Oracle WIP Transactions and OCM

Describing the Relationship Between Oracle WIP Transactions and OCM

Applying Material Overhead

- The system adds cost to an item or assembly to include material overhead type costs (receiving, stocking, material movement, and handling) in your inventory valuation.
- The system applies predefined material overhead amounts to items.

Charging Assembly Completions at an Average Cost

- The system calculates the average cost of completed assemblies.
- When you move completed assemblies from WIP to a subinventory, the system reduces WIP and charges inventory for the amount of this average assembly cost.

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Describing the Relationship Between Oracle WIP Transactions and OCM

Describing the Relationship Between Oracle WIP Transactions and OCM

Recalculating Costs

With average costing, Oracle Cost Management:

- Recalculates unit costs on a transaction-based perpetual basis.
- Provides full visibility and control of production costs.
- Tracks and reports costs through your various stages of production as you transact.

With average costing, Oracle WIP:

- Collects all costs.
- Reports move, issue, resource, overhead, completion, scrap, period close, and job close transactions.

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Describing the Relationship Between Oracle WIP Transactions and OCM

Describing the Relationship Between Oracle WIP Transactions and OCM

Moving Average Cost Formula

Oracle Cost Management uses the following formula to recalculate the average unit cost of an inventory asset item:

- New average cost =
$$\frac{(\text{transaction value} + \text{current inventory value})}{(\text{transaction quantity} + \text{current onhand quantity})}$$

“Current” refers to the quantity and value of the item before the transaction is processed.

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Describing the Relationship Between Oracle WIP Transactions and OCM

Describing the Relationship Between Oracle WIP Transactions and OCM

Transactions

The following transactions use the moving average cost formula to update the average unit cost of an item:

- WIP assembly completions
- WIP Assembly returns
- WIP Component returns

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Describing the Relationship Between Oracle WIP Transactions and OCM

Describing the Relationship Between Oracle WIP Transactions and OCM

Cost Control Attributes

- With average costing, Oracle Cost Management uses two item attributes, Costing Enabled and the Inventory Asset Value, as well as the Asset Subinventory designation on the subinventory to determine how to value the transactions.



Cost controls

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Describing the Relationship Between Oracle WIP Transactions and OCM

Describing the Relationship Between Oracle WIP Transactions and OCM

Costing Enabled Attribute

- **Checked** means the item may be costed and is visible on all reports and inquiries.
- **Unchecked** means the item is not used for any costing purpose. It does not appear on any cost inquiry or report, including the following:
 - Inventory Value report
 - Item Cost reports
 - Item Cost inquiries
- **You cannot change this item attribute if there is a quantity onhand.**

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Describing the Relationship Between Oracle WIP Transactions and OCM

Describing the Relationship Between Oracle WIP Transactions and OCM

Inventory Asset Value

- **Checked means the item is an asset and can have a cost.**
- **Unchecked means the item is an inventory expense item and cannot have a cost.**
- **Each item may have a different asset value flag status by cost type.**
- **Do not confuse inventory expense items with expense destination types in Oracle Purchasing.**

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Describing the Relationship Between Oracle WIP Transactions and OCM

Describing the Relationship Between Oracle WIP Transactions and OCM

Asset Inventory

- If checked, and the attributes named above are checked, it means that the item is an asset item and is carried on the balance sheet as an asset.

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Agenda

Agenda

- Overview of Average Costing in WIP
- Describing the relationship between Oracle WIP transactions and Oracle Cost Management
- **Phantom costing**
- Review of manufacturing cost setup
- Accounting for costs incurred in WIP
- Accounting for costs relieved from WIP

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Phantom Costing

Phantom Costing

Phantom items are components in a bill of material that usually represent a nonstocked subassembly. You can create the phantom item in the manufacturing process, but you do not hold the subassembly in inventory to use in a later manufacturing process.

```
graph TD; A1[A] --- B1[B]; A1 --- P[Phantom]; P --- C1[C]; P --- D1[D]; A2[A] --- B2[B]; A2 --- C2[C]; A2 --- D2[D];
```

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Phantom Costing

Phantoms may be used:

- 1. To create component kits for easy data entry.**
- 2. To streamline the production process so that individual work orders are not necessary for each phantom. If phantoms are used as service parts which are stocked, you can create work orders for service parts with phantom routings that can be costed.**

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Phantom Costing

Phantom Costing

With enhanced phantom costing in release 11i , you can include phantom resource and overhead costs as well as material cost in each of the following environments:

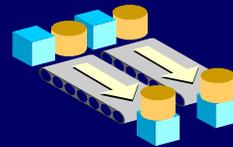
- Average costing or standard costing
- Discrete manufacturing, repetitive manufacturing or flow manufacturing
- Work orderless completion



Average costing or
standard costing



Job costing



Period-based
costing

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Phantom Costing

Just like costs for any assembly, phantom costs can include resource and overhead costs and can be included in cost rollups. However, phantom resources and overheads are rolled up and charged as this level cost.

You can see the behavior of phantoms in discrete jobs, repetitive schedules, flow schedules, new work orders, engineering change orders, or any BOM explosion.

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Phantom Costing

Resources in Phantom Routings

- You can see resources in phantom routings in the WIP Operation Resources window.

Use the View Resource Requirements window to:

- View resource requirements for a specific discrete job or repetitive line and assembly.

(N) CST Operational Analysis > Work in Process > Resource Requirements (T) Main > Quantities > Scheduling > Costing > Job or Schedule > Type, Description

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**(Help) Oracle Manufacturing Applications >
Oracle Work in Process > Resource Management >
Resource Requirements > Viewing Resource Requirements**

Phantom Costing

Resources in phantoms:

- **Keep all original department and overhead costs when charged**
- **Cannot be scheduled because the start date, completion date, and any other data are derived from parent operations in the main routing**
- **Are listed each time they are used in any of the phantom operations to maintain more visibility and are not consolidated**

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Phantom Costing

Transacting Resources

- You can transact resources in phantom routings in WIP and charge the following:
 - Resources and department-based overhead
 - Outside processing resources that are assigned to phantom routing operations

Visibility

- You can view resource charges in the Pending Resource Transactions window and the View Resource Transactions window. You can view phantom resources and overhead on reports but the original department information is not displayed.

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Setting Up Phantom Costing

Defining Bills of Material (BOM) Parameters

- You decide at the organizational level whether to include phantom routings in your cost rollup.
- When you install or upgrade your system, you set the two BOM parameters that control phantom costing, **Use Phantom Routings** and **Inherit Phantom Operation Sequence**, to determine whether or not to include phantom costs.

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Setting Up Phantom Costing

You can use **BOM parameters** to control inheritance of the operation sequence of the parent and the recognition of resources and overheads on phantom routings for costing and for capacity-planning.

- The **Use Phantom Routings** parameter determines whether resources and overheads on phantom routings are recognized.
- The **Inherit Phantom Operation Sequence** parameter determines whether the components on a phantom operation sequence are inherited to the parent routing or maintain their own operation sequence.

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Setting Up Phantom Costing

Setting Up Phantom Costing

Use the Parameters window to check the:

- Use Phantom Routings parameter
- Inherit Phantom Operation Sequence parameter

(N) BOM Setup > Parameters

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**(Help) Oracle Manufacturing Applications >
Oracle Bills of Material > Setting Up >
Defining Bills of Material Parameters**

Phantom Costing Reports

Phantom Costing Reports

Job Value Reports and Performance Reports

- Discrete job value report
- Repetitive schedule value report
- Expense job value report
- Resource performance report



Production reports

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Job Value Reports and Performance Reports

With these reports, you can print detailed cost information including phantom costs.

Discrete Job Value Report

This report prints account information and detailed cost transaction information for discrete and nonstandard asset jobs, including material, resources, resource- and move-based overheads, scrap, completions, and variances.

Repetitive Schedule Value Report

This report prints detailed repetitive schedule information, including material, resources, resource- and move-based overheads, scrap, completions, and variances.

Expense Job Value Report

This report prints detailed cost transaction information for nonstandard expense jobs.

Resource Performance Report

This report compares actual resource units that you charge to a job or schedule to the standard resource units; the report groups information by resource for job and schedules, and by department for resources.

Phantom Costing Reports

Phantom Costing Reports

Data Reports and Routing Sheets

- Discrete job data report
- Repetitive schedule data report
- Discrete job routing sheet report
- Repetitive schedule routing sheet report



Production reports
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Data Reports and Routing Sheets

The following reports list phantom resources, excluding their departments, because department information is shown together with operations.

Discrete Job Data Report

This report prints complete details for each job, including operations, resources, requirements, accounting information, instructions, schedule dates, and quantities.

Repetitive Schedule Data Report

This report includes complete details for each repetitive schedule, such as production line, component information, operation information, and resources.

Discrete Job Routing Sheet Report

This report prints all operations for jobs, as well as operation resources, materials, and attachments.

Repetitive Schedule Routing Sheet Report

This report prints all operations for repetitive schedules, as well as operation resources, materials, and attachments.

Review Question

Review Question

In OCM Release 11*i*, the behavior of phantoms is visible in discrete jobs, repetitive schedules, flow schedules, new work orders, engineering change orders, or any BOM reexplosion.

1. True
2. False

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Review Question

Review Question

In OCM Release 11*i*, the behavior of phantoms is visible in discrete jobs, repetitive schedules, flow schedules, new work orders, engineering change orders, or any BOM reexplosion.

1. True
2. False

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Demonstration: Changing Parameters for Phantom Costing

Demonstration: Changing Parameters for Phantom Costing

In BOM parameters we will demonstrate how to change parameters for phantom costing in Dallas, M3.

1. Navigate to the Parameters window
(N) BOM Setup > Parameters
2. Check Use Phantom Routings and Inherit Phantom Op Sequence and save.
3. Uncheck Use Phantom Routings and uncheck Inherit Phantom Op Sequence and save.
4. Check Use Phantom Routings. A message appears stating that the field is protected against update.
5. Check Inherit Phantom Op Sequence and save.

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Review of Manufacturing Cost Setup

Manufacturing cost setup

- Defining bills-of-material parameters
- Resource subelements and costs
- Overhead subelements
- Defining departments and associate resources
- Defining overhead rates by department
- Associating overheads with resources
- Defining routings
- Defining bills of material

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BOM Parameters

Window Dependencies

- The list of values for subelement on the Item Costs window is automatically reduced to material and material overhead if you do not define BOM parameters. In addition, you can define only material overheads on the Overheads window, not routing-based overheads.

Use the BOM Parameters window to enter:

- Maximum number of levels for your bills
- Your configuration options
- Whether or not to include phantom costs

(N) BOM Setup > Parameters

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(Help) Oracle Manufacturing Applications >
Oracle Bills of Material > Setting Up >
Defining Bills of Material Parameters

Resource Subelements and Costs

Resource Subelements and Costs

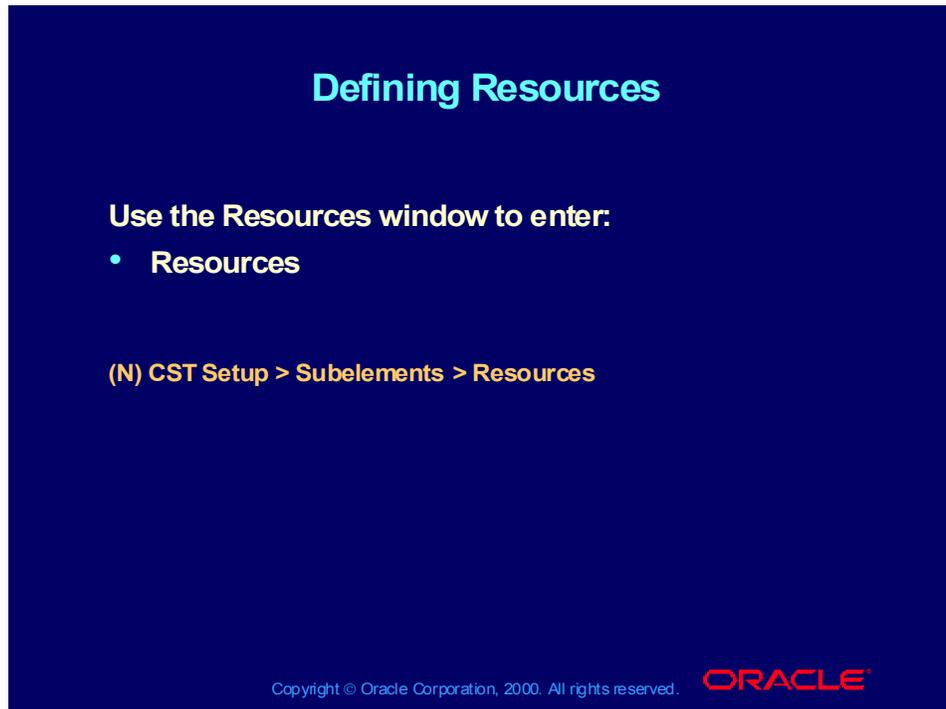
- You define resource costs by creating resources, departments, bills, and routings with Oracle Bills of Material.
- Resources are labor, machines, and other production services used to make products.



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Defining Resources



Defining Resources

Use the Resources window to enter:

- Resources

(N) CST Setup > Subelements > Resources

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**(Help) Oracle Manufacturing Applications >
Oracle Cost Management > Setting Up > Steps > Defining
Subelements > Defining Resources**

Review Question

Review Question

You use the BOM Parameters window to enter the maximum number of levels for your bills.

1. True
2. False

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Instructor Note

Answer: 1

Review Question

Review Question

You use the BOM Parameters window to enter the maximum number of levels for your bills.

1. True
2. False

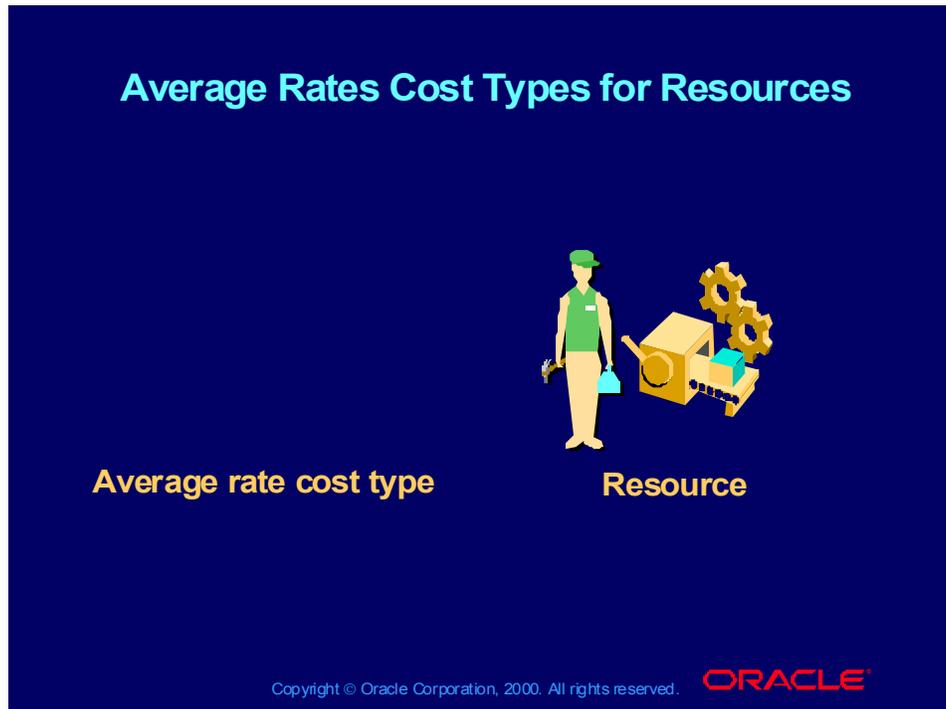
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Instructor Note

Answer: 1

Average Rates Cost Types for Resources



Unlimited Cost Types for Resources

Unlimited Cost Types for Resources

You can enter a fixed resource cost in two ways.

1. Enter a fixed charge on the routing operation.

Use this method when the resource cost varies by item. Set the resource type to currency and the UOM to your set of books currency. Enter 1 for the resource unit cost. Enter the currency amount in the routing operation. If you need to schedule the outside processing step, use another resource in the operation and set it to uncosted.

Fixed charge on routing = Resource unit cost (1) *
Resource amount on routing

Example 1: Item1 = 1 x .10 = .10 per unit

Example 2: Item2 = 1 x .20 = .20 per unit

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Example

The resource is a plating charge that costs .10 to plate item1 but .20 to plate item2 because item2 is larger.

Unlimited Cost Types for Resources

Unlimited Cost Types for Resources

2. Enter a fixed charge for the resource unit cost.

Use this method when the resource cost is always the same, regardless of the item. Set the resource type to a type other than currency. Set the UOM to any UOM (the UOM does not matter). Enter the fixed amount in the resource unit cost. Enter 1 for the resource rate/amount in the routing operation

Fixed charge on resource = Resource unit cost x
Resource amount on routing (1)

Example 1: Item1 = .15 x 1 = .15 per unit

Example 2: Item2 = .15 x 1 = .15 per unit

The plating charge is fixed, regardless of the item being plated.

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Defining Resource Costs

Defining Resource Costs

Use the Resource Costs window to enter:

- Resource costs by cost type

(N) CST Setup > Subelements > Resources (B) Rates

(N) BOM Routings > Resources (B) Rates

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**(Help) Oracle Manufacturing Applications >
Oracle Cost Management > Setting Up > Steps > Defining
Subelements > Defining Resources**

Review Question

Review Question

You can enter a fixed resource cost in the following ways.

1. Enter a fixed charge on the routing operation
2. Enter a fixed charge for the resource unit cost
3. Enter a fixed charge from overhead
4. All of the above
5. 1 and 2

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Instructor Note

Answer: 5

Review Question

Review Question

You can enter a fixed resource cost in the following ways.

1. Enter a fixed charge on the routing operation
2. Enter a fixed charge for the resource unit cost
3. Enter a fixed charge from overhead
4. All of the above
5. 1 and 2

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Instructor Note

Answer: 5

Overhead Subelements

Overhead Subelements

- In average costing, you can use material overhead and overhead cost subelements to add indirect costs to item costs as either a percentage or a fixed amount.
- Each overhead subelement 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.



Overhead

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Overhead Subelements

You can base the overhead charge on the number of resource units or on the 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 the number of resource units or on the percentage of resource value. However, the material overhead charge is not earned in WIP. You can also base material overhead 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.

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Overhead Subelements

Overhead Subelements

You can apply each of these subelements 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 on 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.

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Overhead Subelements

Overhead Subelements

Basis types for move-based (fixed) overheads: Use the Item or Lot basis types for move-based overheads.

- **For Item basis, the overhead amount is charged for each item moved out of an operation**
- **Overhead amount charged to WIP = Overhead amount * Number of items moved out of operation**
- **Example: Item basis, overhead amount: 15.00, items moved: 100**
- **Overhead amount charged to WIP = 15.00 * 100 = 1,500.00**

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Overhead Subelements

Overhead Subelements

Basis types for move-based (fixed) overheads: Use the Item or Lot basis types for move-based overheads.

- **For Lot basis, the overhead amount is charged when the first item is moved into the operation.**
- **Overhead amount charged to WIP = Overhead amount * 1 lot**
- **Example: Lot basis, overhead amount: 15.00, items moved: 100**
- **Overhead amount charged to WIP = 15.00 * 1 = 15.00**

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Overhead Subelements

Overhead Subelements

**Basis types for resource-based (variable) overheads:
Use the Resource Value or Resource Units basis
types for resource-based overheads.**

- **For Resource Value basis, the overhead rate is multiplied by the resource value earned in the operation**
- **Overhead amount charged to WIP = Overhead rate * Resource value**
- **Example: Resource value basis, overhead rate: 1.50, resource value: 50.00**
- **Overhead amount charged to WIP = $1.50 \times 50.00 = 75.00$**

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Overhead Subelements

Overhead Subelements

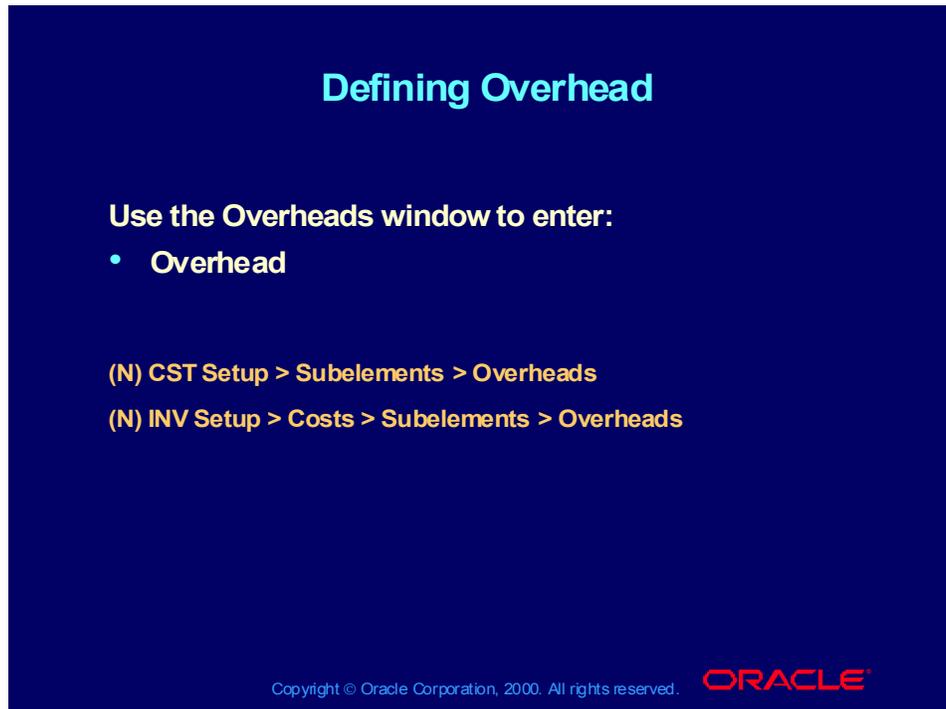
**Basis types for resource-based (variable) overheads:
Use the Resource Value or Resource Units basis
types for resource-based overheads.**

- **For Resource Units basis, the overhead amount is multiplied by the number of resource units earned in the operation**
- **Overhead amount charged to WIP = Overhead amount * Resource units**
- **Example: Resource units basis, overhead amount: 15.00, resource units: 2**
- **Overhead amount charged to WIP = 15.00 x 2 = 30.00**

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Defining Overhead



Defining Overhead

Use the Overheads window to enter:

- Overhead

(N) CST Setup > Subelements > Overheads
(N) INV Setup > Costs > Subelements > Overheads

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**(Help) Oracle Manufacturing Applications >
Oracle Cost Management > Setting Up > Steps >
Defining Subelements > Defining Overheads**

Review Question

Review Question

Each overhead subelement has a default basis, a default activity, and an absorption account.

1. True
2. False

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Instructor Note

Answer: 1

Review Question

Review Question

Each overhead subelement has a default basis, a default activity, and an absorption account.

1. True
2. False

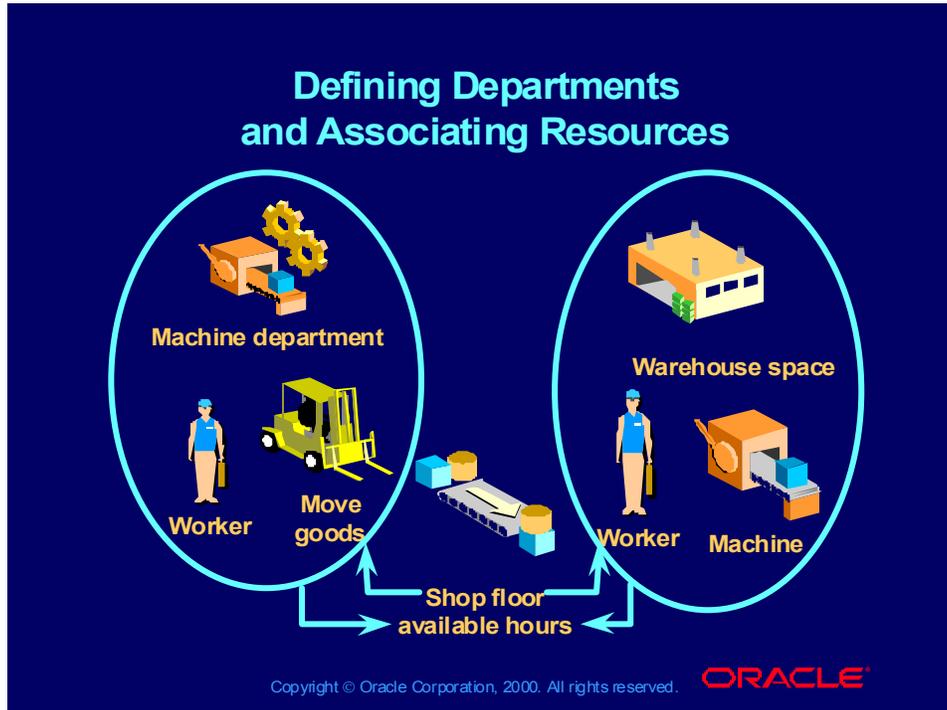
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Instructor Note

Answer: 1

Defining Departments and Associating Resources



Defining Departments and Associating Resources

Resource Association

- Each resource must be associated with a department. Assign each resource to one or more departments.
- The resource has to be associated with a department so it can appear on the routing list of values. In the Routing window, you can go to the Department window and add the resource to the routing list of values.

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Defining Departments and Associating Resources

Defining Departments and Associating Resources

Use the Department window to:

- Create departments and assign resources to each department

(N) BOM Routings > Departments (B) Resources

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(Help) Oracle Manufacturing Applications >
Oracle Bills of Material > Setting Up > Defining a Department

Defining Overhead Rates by Department

Defining Overhead Rates by Department

- Specify, for each cost type, an overhead rate or amount by department. Enter an overhead rate if the basis type is Resource Value.
- For example, an overhead rate of 1.5 equals 150%.
- Enter an overhead amount if the basis type is Item, Lot, or Resource Units.

Use the Overhead Rates window to:

- Associate overhead rates by department with a cost type

(N) CST Setup > Subelements > Overheads (B) Rates

(N) INV Setup > Costs > Subelements > Overheads (B) Rates

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**(Help) Oracle Manufacturing Applications >
Oracle Cost Management > Setting Up > Steps >
Defining Subelements > Defining Overheads**

Associating Overheads with Resources

Associating Overheads with Resources

Use the **Resource Overhead Associations** window to:

- Enter a cost type for which to associate resources to overhead.

(N) CST Setup > Subelements > Overheads (B) Resources

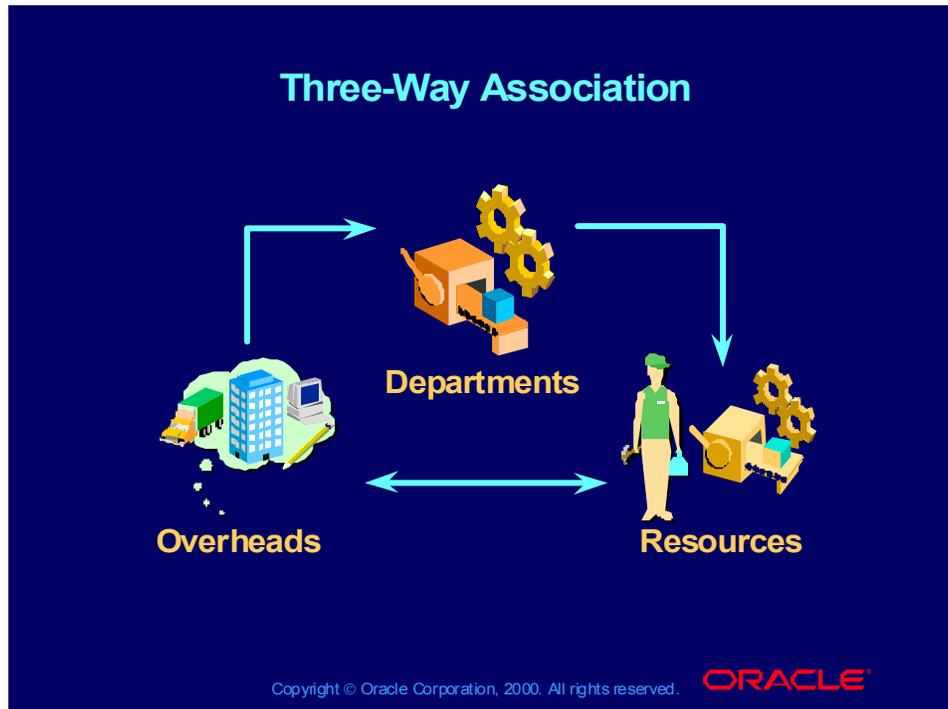
(N) INV Setup > Costs > Subelements > Overheads (B) Resources

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**(Help) Oracle Manufacturing Applications >
Oracle Cost Management > Setting Up > Steps >
Defining Subelements > Defining Overheads**

Three-Way Association



Review Question

Review Question

You must associate your departments, resources, and overheads so that you can earn resources by department and earn overheads associated with resources.

- 1. True**
- 2. False**

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Instructor Note

Answer: 1

Review Question

Review Question

You must associate your departments, resources, and overheads so that you can earn resources by department and earn overheads associated with resources.

- 1. True**
2. False

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Instructor Note

Answer: 1

Defining Routings

Defining Routings

- **A routing represents a sequence of operations that are performed to manufacture an assembly. For each routing, define the operations, the sequence in which to perform them, and the resources required at each operation. You can define either a primary or an alternate routing. You can create a routing manually, copy an existing routing, or reference a common routing.**
- **Note: You cannot create routings for planning or pick-to-order items. Use attachments, such as detailed operation instructions, for routing operations.**

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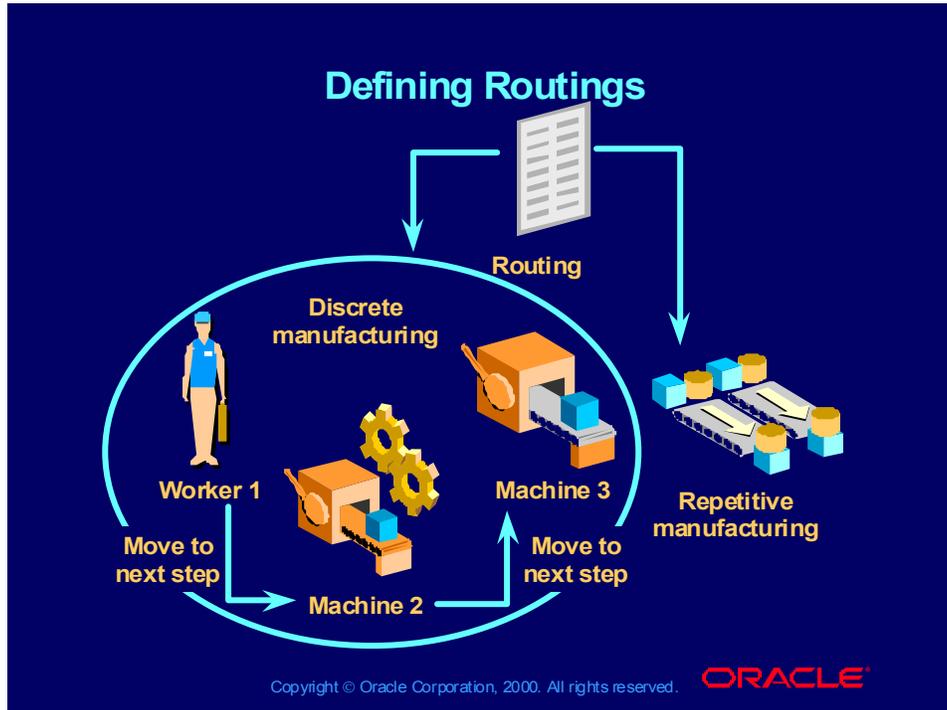
Prerequisites

- You must define at least one department before you can create a routing.
- You must set BOM Allowed to Yes to create a routing for an item.

Instructor Note

Each operation takes place in a department; you assign resources to an operation to perform the task. Multiple resources can perform tasks at a single operation, but in this example one resource performs the operation.

Defining Routings



Defining Routings and Operation Resources

Defining Routings and Operation Resources

Use the Routings window to:

- Enter a routing for your manufacturing item
(N) BOM Routings > Routings

Use the Operation Resources window to:

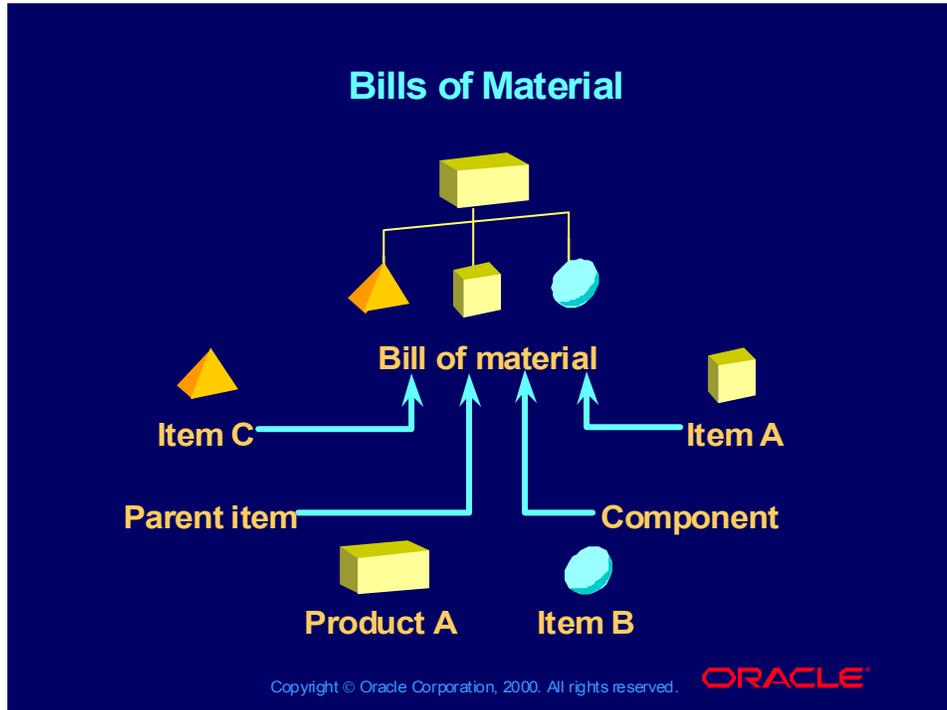
- Enter operation resources on a routing
(N) BOM Routings > Routings (B) Operation Resources

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**(Help) Oracle Manufacturing Applications >
Oracle Bills of Material > Setting Up > Bills of Material > Routings >
Defining a Routing**

Bills of Material



Bills of Material

Physical Structure of a Product

- A bill of material describes the physical structure of a product and identifies the material (and material overhead) cost of the product.
- A bill of material contains information on the parent item, components, attachments, and descriptive elements. Each standard component on a bill can have multiple reference designators and substitute components.
- You can create either an engineering or a manufacturing bill, copy an existing bill, or reference a common bill.

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Bills of Material

Physical Structure of a Product

- When you create a bill, it exists only in the current organization. To use a bill in another organization, you must either copy it or reference it as a common bill.

Prerequisites

- Define the parent item and all components as inventory items and set the BOM Allowed attribute to Yes and the BOM Item Type to model, option class, planning, or standard.

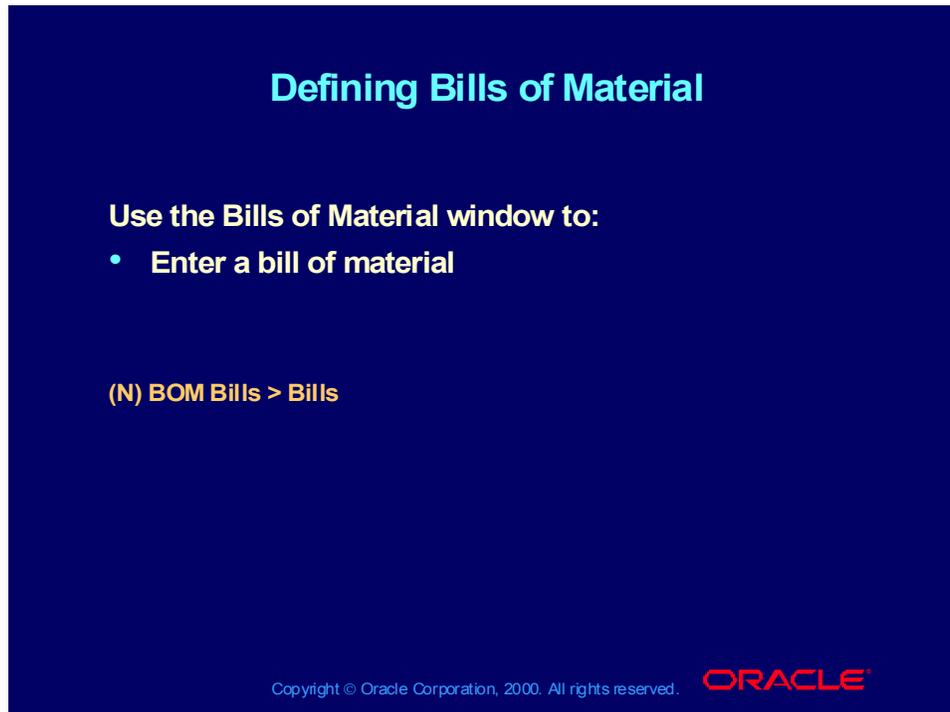
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Instructor Note

Remember that the Include in Rollup check box in the Master Items window can be changed in the Include in Cost Rollup check box on the bill of material (Component Details alternative region). This determines whether the component is included in the cost rollup for the assembly.

Defining Bills of Material



**(Help) Oracle Manufacturing Applications >
Oracle Bills of Material > Setting Up > Bills of Material >
Defining a Bill of Material**

Summary of Review of Manufacturing Cost Setup

Summary of Review of Manufacturing Cost Setup

In this review, you should have learned how to:

- Define bills-of-material parameters
- Define resource and overhead subelements
- Define departments and associate resources
- Associate overheads with departments
- Assign overheads to resources
- Define bills of material
- Define routings

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Practice Overview

This practice covers the following topics:

- **Defining departments**
- **Defining resources**
- **Defining overheads**
- **Associating resources, departments and overheads three ways**

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Guided Practice: Defining Departments

Guided Practice: Defining Departments

In this practice, you will define one department in the Dallas Organization, M3; xx are your initials.

1. Navigate to the Departments window.
(N) BOM Routings > Departments
2. Create a department called xxperdept with the following information by field:

Description: My indirect department

Class: Production

Location: Dallas

Inactive On: blank, and save

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Guided Practice: Defining Resources

Guided Practice: Defining Resources

In this practice, you will define a resource with rates in the Dallas Organization, M3; xx are your initials.

1. Navigate to the Resources window.

(N) CST Setup > Subelements > Resources

2. Create a resource called xxperson1 with the following information by field: Inactive On: blank, Description: My first person, Type: Person, Charge Type: WIP Move, Basis: Item, Costed: X, Standard Rate: X, Absorption Account: 01-520-5360-0000-000, Variance Account: 01-520-5380-0000-000

3. Navigate to the Resource Rates window.

(N) CST Setup > Subelements > Resources (B) Rates

Select xxaveragerates cost type, enter 10.00 as the unit cost, and save.

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Guided Practice: Defining Overheads

Guided Practice: Defining Overheads

In this practice, you will define an overhead with rates in the Dallas Organization, M3; xx are your initials.

1. Navigate to the Overheads window.

(N) CST Setup > Subelements > Overheads

2. Create an overhead called xxpersonoh with the following information by field: Cost Element: Overhead, Description: My first person overhead, Default Basis: Resource Value, Default Activity : Blank, Inactive On: blank, Absorption Account: 01-520-5360-0000-000

3. Navigate to the Overhead Rates window.

(N) CST Setup > Subelements > Overheads (B) Rates

Select xxaveragerates cost type, Department: xxperdept, and enter 0.05 as the rate, and save.

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Guided Practice: Associating Departments to Resources to Overheads

Guided Practice: Associating Departments to Resources to Overheads

In this practice in the Dallas Organization, M3 , you will do a three-way association of your department, resource and overhead, linking them to your cost type.

1. Navigate to the Departments window.

(N) BOM Routings > Departments

2. Select department called xxperdept.

3. Assign your resource to your department.

(N) BOM Routings > Departments (B) Resources

Select Resource xxperson1, Available 24 hours: X, UOM: Ea, Units: 10, and save.

3. Associate your resource to your overhead in your cost type in the Resource Overhead Associations window

(N) CST Setup > Subelements > Overheads (B) Resources

Select xxpersonoh and xxaveragerates cost type, Resource xxperson1, and save.

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Agenda

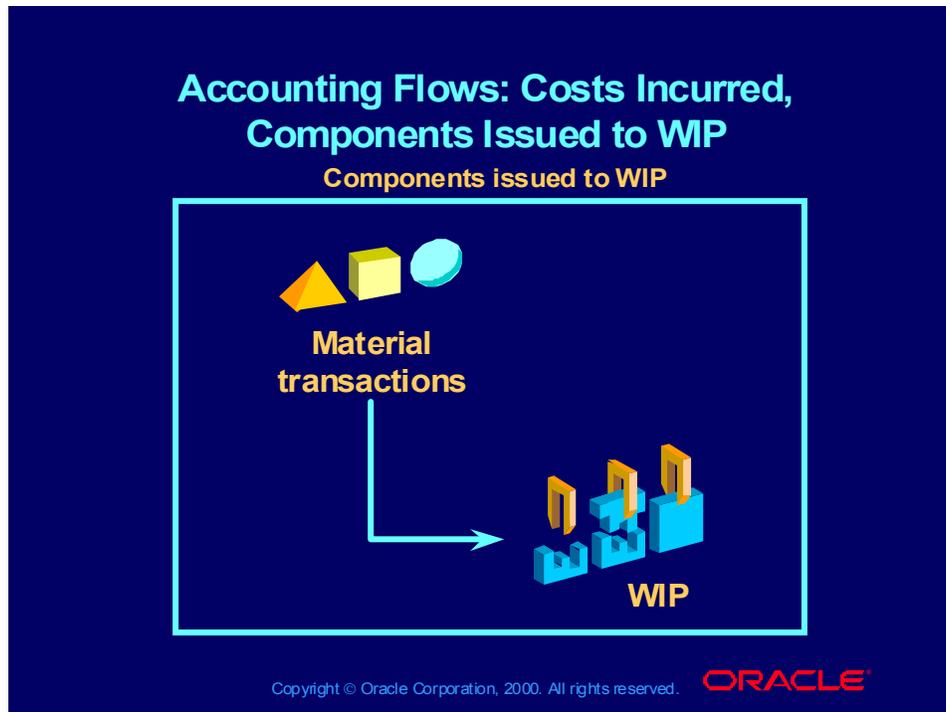
Agenda

- Overview of Average Costing in WIP
- Describing the relationship between Oracle WIP transactions and Oracle Cost Management
- Phantom costing
- Review of manufacturing cost setup
- **Accounting for costs incurred in WIP**
- Accounting for costs relieved from WIP

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Accounting Flows: Costs Incurred, Components Issued to WIP



Accounting Flows: Costs Incurred, Components Issued to WIP

Accounting Flows: Costs Incurred, Components Issued to WIP

Components Issued to WIP

- Components issued to WIP are valued at the inventory average cost in effect at the time of the transaction. A component charged to a job multiple times may have a different unit cost for each transaction.
- When component costs are charged to a job, they retain the elemental detail of the component costs.

Note: Entering transactions in a timely manner is important for correct costing.

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Accounting Flows: Costs Incurred, Components Issued to WIP

Accounting Flows: Costs Incurred, Components Issued to WIP

Recording T Accounts for Transactions (on the next page)

1. WIP material transaction (issue all material)
Push all components into the job.
10 units at current average cost of \$250 = \$2,500.
2. WIP material transaction (return specific component)
Return two defective units of component 2 to inventory.
2 units at current average cost of \$33 = \$66.
3. WIP material transaction (issue specific component)
Replace defective components with substitute items.
2 units at current average cost of \$40 = \$80.

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Accounting Flows: Costs Incurred, Components Issued to WIP

Accounting Flows: Costs Incurred, Components Issued to WIP

Material transactions record the component cost of material used in WIP.

1. WIP material transaction (issue all material)
2. WIP material transaction (return specific component)
3. WIP material transaction (issue specific component)

	Material Transactions	
	Inventory	WIP
	Accounts	Accounts
1	2,500	2,500
2	66	66
3	80	80

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Accounting Flows: Costs Incurred, Material Overhead



Accounting Flows: Costs Incurred, Material Overhead

Material Overhead Application

- Define material overheads under average costing.
- Define as many material overhead subelements as you want and base your charging in a variety of ways: by item, activity, lot, or transaction value.
- In the Item Cost window, associate material overhead(s) to items and define the rate amount manually using the average rates cost type.
- Optionally define as many material overheads as required and have that additional cost be included in the average unit cost.

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Accounting Flows: Costs Incurred, Material Overhead

Accounting Flows: Costs Incurred, Material Overhead

Material Overhead Application

- Associate material overheads to items on an item-by-item basis.
- Define default material overheads to apply to selected categories of items or to all items in your organization.

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Accounting Flows: Costs Incurred, Material Overhead

Accounting Flows: Costs Incurred, Material Overhead

Material Overhead Application

- The system charges 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

The system applies material overhead at the rate or amount in the system at the time of the transaction and does not revalue onhand balances when the rate or amount of a material overhead is redefined.

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Accounting Flows: Costs Incurred, Material Overhead

Accounting Flows: Costs Incurred, Material Overhead

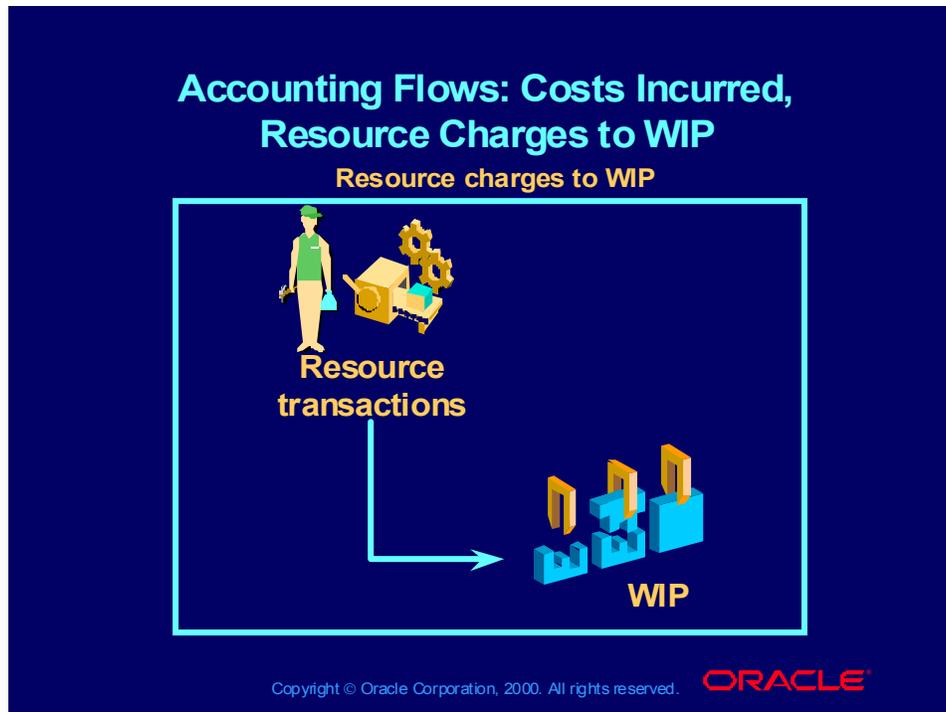
Material Overhead Application

- Once defined, the system applies material overhead whenever you transact the relevant item.
- You can change material overheads at any time that affects future transactions and has no impact on the current unit cost in inventory.
- With PO receipts and transfers between organizations, you earn material overhead that is added to the PO cost/transfer cost of the item (but held as a separate cost element) when it is delivered to inventory.
- With assembly completions, you earn material overhead, which is added to the cost of the completion in inventory. It is never charged to the job.

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Accounting Flows: Costs Incurred, Resource Charges to to WIP



Accounting Flows: Costs Incurred, Resource Charges to WIP

Resource Rates in the Average Rates Cost Type

- You define your resource rates in an Average Rates cost type, depending on the method you select for charging labor and nonlabor resources to WIP.
- The Average Rates cost type is which ever cost type is referenced by the organization parameter field "Average Rates Cost Type".

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Accounting Flows: Costs Incurred, Resource Charges to WIP

Accounting Flows: Costs Incurred, Resource Charges to WIP

- Resources can be charged at a Standard Rate or at an Actual Rate (labor resources only), depending on the resource check box.
- Standard resource rates are derived from the average rates cost type.
- Actual labor rates, entered on the resource transaction, apply only to manually charged resources.

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Accounting Flows: Costs Incurred, Resource Charges to WIP

Accounting Flows: Costs Incurred, Resource Charges to WIP

Resource Transactions

- Charge resources to WIP at an actual amount or at a predefined amount.
- Either you manually charge resources in the shop floor transaction window or the system automatically charges resources during move transactions.

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Accounting Flows: Costs Incurred, Resource Charges to WIP

Accounting Flows: Costs Incurred, Resource Charges to WIP

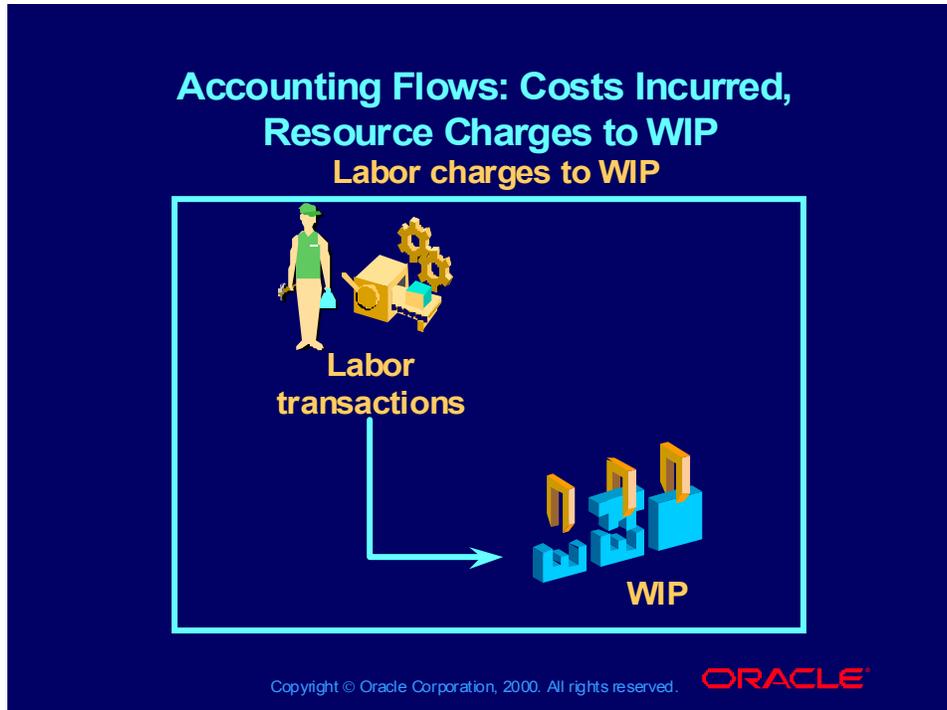
Resource Transactions

- You choose to autocharge the resource, basing the resource amount on the routing, or to manually charge it, entering the amounts manually.
 - If you enter the amounts manually, you can also choose to enter the rates.
 - If you autocharge, then the rate from the average rates cost type is used.

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Accounting Flows: Costs Incurred, Resource Charges to WIP



Accounting Flows: Costs Incurred, Resource Charges to WIP

Accounting Flows: Costs Incurred, Resource Charges to WIP

Labor Charges to WIP

- Choose the method for charging labor to WIP.
- Charge labor to WIP jobs either at actual employee rate or at an average rate for a labor classification.

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Accounting Flows: Costs Incurred, Resource Charges to WIP

Labor Charges to WIP using Average Rate

- If you use an average rate, WIP move transactions automatically charge labor (by including the resource on a routing) at the rate of the resource as defined in the Average Rates cost type.
- Enter predefined labor hours by including the resource on a routing.

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Accounting Flows: Costs Incurred, Resource Charges to WIP

Labor Charges to WIP using Actual Rate

- If you use the actual employee rate, you enter the employee when you perform the move transaction or when you import the resource charges through the WIP open interface.
- Enter actual hours as a manual resource charge in either of the following ways:
 - User-entered directly as part of a shop floor move transaction
 - From a labor collection system through the WIP open interface

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Accounting Flows: Costs Incurred, Resource Charges to WIP

Accounting Flows: Costs Incurred, Resource Charges to WIP

Labor Charges to WIP

- Once you select a labor subelement rate or actual employee rate, your labor transaction is valued at the rate in effect at the time of the transaction.
- As a result, when you charge the same labor subelement or employee to the same job at different times, different rates may be used.

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Accounting Flows: Costs Incurred, Resource Charges to WIP

Accounting Flows: Costs Incurred, Resource Charges to WIP

Recording T Accounts for Transactions (on the next page)

4. Shop floor transaction (labor resource)
Charge resource RS1 at actual for operation 10.
11 hours at \$50 = \$550.
5. Shop floor transaction (reverse resource charge)
Reverse overcharge.
1 hour at \$50 = \$50.
6. Shop floor transaction (nonlabor resource)
Charge resource RS2 at actual for operation 20.
5 units at \$25 = \$125.

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Accounting Flows: Costs Incurred, Resource Charges to WIP

Accounting Flows: Costs Incurred, Resource Charges to WIP

Resource transactions record the internal cost to convert raw material into finished assemblies.

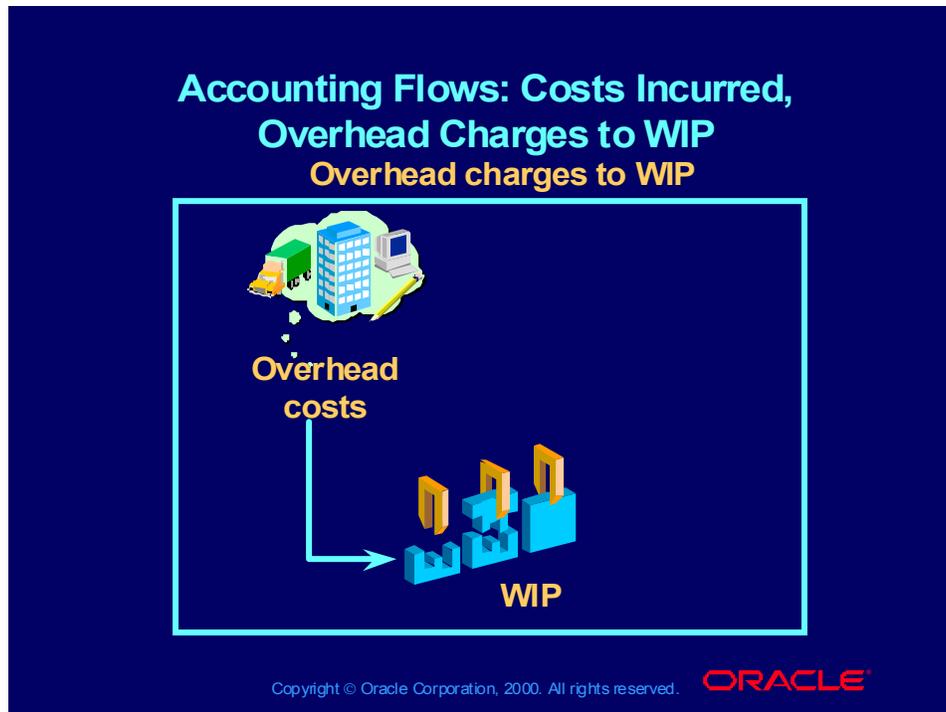
4. Shop floor transaction (resource without rate variance)
5. Shop floor transaction (reverse resource charge)
6. Shop floor transaction (resource with rate variance)

	Resource Transactions	
	WIP	Resource
	Accounts	Absorption
4	550	550
5	50	50
6	125	125

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Accounting Flows: Costs Incurred, Overhead Charges to WIP



Accounting Flows: Costs Incurred, Overhead Charges to WIP

Accounting Flows: Costs Incurred, Overhead Charges to WIP

Overhead Charges to WIP

- Define overheads under average costing
- Define as many overhead subelements as you want and base your charging in a variety of ways: by item or lot, or based on resource units or value.
- For each overhead subelement, you define a rate or amount in the cost type that you have specified as the Average Rates cost type.
- Use the actual transaction resource amount or hours to calculate the overhead amount for overheads with a basis type of Resource Units or Resource Value.

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Accounting Flows: Costs Incurred, Overhead Charges to WIP

Accounting Flows: Costs Incurred, Overhead Charges to WIP

Overhead Charges to WIP

- Charge overhead costs automatically based on the following:
 - A percentage of resource or outside processing value charged
 - Resource units charged
 - A fixed amount per item or lot

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Accounting Flows: Costs Incurred, Overhead Charges to WIP

Accounting Flows: Costs Incurred, Overhead Charges to WIP

Variable Overhead Charging

- Charge overhead as a percent of the resource value earned in WIP.
- The overhead rate is multiplied by the rate on the resource transaction.

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Accounting Flows: Costs Incurred, Overhead Charges to WIP

Accounting Flows: Costs Incurred, Overhead Charges to WIP

Example: Resource-Based Overhead

- Charge overhead for a setup activity.
- To charge a fixed amount for each hour of a setup activity performed, you assign a setup overhead based on resource units to the resource that performs the setup activity.
- Whenever you charge the setup activity, the overhead is charged as well.

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Accounting Flows: Costs Incurred, Overhead Charges to WIP

Accounting Flows: Costs Incurred, Overhead Charges to WIP

Fixed Overhead Charging

- Charge overhead as a fixed amount per item or lot moved through an operation or as a fixed amount per resource unit earned at the operation.

Example: Move-Based Overhead

- Charge overhead for a move operation.
- To charge a fixed amount each time an item is moved from an operation, you assign an overhead based on item to the department that performs the operation.
- Whenever you move the item out of the operation, the overhead is charged.

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Accounting Flows: Costs Incurred, Overhead Charges to WIP

Accounting Flows: Costs Incurred, Overhead Charges to WIP

Recording T Accounts for Transactions (on the next page)

7. **Shop floor transaction (resource-based overhead)**
Charge 250% on the resource charged in step 4.
 $\$550 * 250\% = \$1,375.$
8. **Shop floor transaction (reverse resource-based overhead)**
Reverse overhead for resource reversed in step 5.
 $\$50 * 250\% = \$125.$
9. **Shop floor transaction (item-based overhead)**
Move through operation 20; charge item-based overhead.
10 units at \$20 = \$200.

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Accounting Flows: Costs Incurred, Overhead Charges to WIP

Accounting Flows: Costs Incurred, Overhead Charges to WIP

Overhead transactions record the indirect cost of WIP.

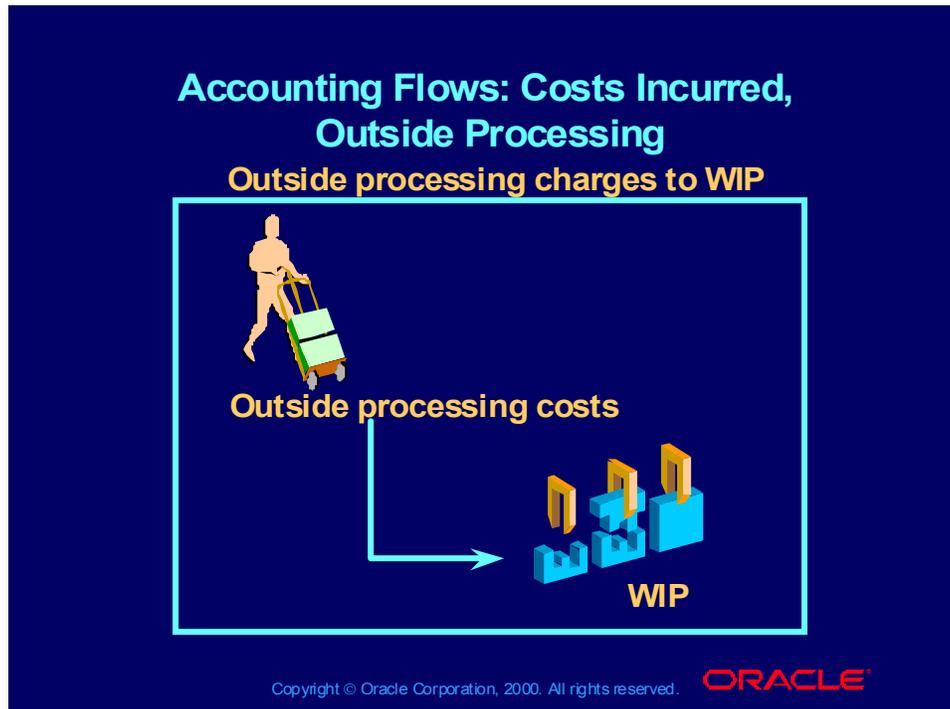
7. Shop floor transaction (resource-based overhead)
8. Shop floor transaction (reverse resource-based overhead)
9. Shop floor transaction (item-based overhead)

Overhead Transactions		
	WIP Accounts	Overhead Absorption
7	1375	1375
8		125
9	200	200

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Accounting Flows: Costs Incurred, Outside Processing



Accounting Flows: Costs Incurred, Outside Processing

Accounting Flows: Costs Incurred, Outside Processing

Outside Processing

- **Charge outside processing (OSP) costs to WIP at actual cost in an average costing organization. When you charge outside processing resources at actual, you charge the purchase order cost to WIP.**
- **Define outside processing resources under average costing.**

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Accounting Flows: Costs Incurred, Outside Processing

Accounting Flows: Costs Incurred, Outside Processing

Outside Processing

- **If you clear the Standard Rate check box, outside processing is charged to WIP at the purchase order unit cost.**
- **Associate an outside processing item to an outside processing resource. When you move assemblies into the Queue step of the routing operation that calls for the related outside processing resource, a purchase requisition for this item is automatically created.**

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Accounting Flows: Costs Incurred, Outside Processing

Accounting Flows: Costs Incurred, Outside Processing

Recording T Accounts for Transactions (on the next page)

- 10. Shop floor transaction (outside processing resource without rate variance)
Charge OSP OS1 at actual for operation 30.
Receive 11 units at \$25 = \$275.**
- 11. Shop floor transaction (reverse OSP charge)
Reverse overcharge.
1 unit at \$25 = \$25.**
- 12. Shop floor transaction (resource overhead on outside processing resource)
Charge overhead at 1 unit at \$20.**

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Accounting Flows: Costs Incurred, Outside Processing

Accounting Flows: Costs Incurred, Outside Processing

Outside processing transactions record the external cost to convert raw material into finished assemblies.

10. Shop floor transaction (OSP)
11. Shop floor transaction (reverse OSP charge)
12. Shop floor transaction (resource overhead on OSP)

	Outside Processing Transactions				Overhead Absorption
	WIP Accounts	Receiving Inspection	Inventory AP Accrual		
10	275	275	275	275	
11		25	25	25	
12	20				20

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Review Question

Review Question

You define your resource rates in the Average Rates cost type, depending on the method you select for charging labor and nonlabor resources to WIP.

1. True
2. False

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Instructor Note

Correct answer: 1

Review Question

Review Question

You define your resource rates in the Average Rates cost type, depending on the method you select for charging labor and nonlabor resources to WIP.

1. True
2. False

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Instructor Note

Correct answer: 1

Accounting Flows: Costs Incurred, Viewing the WIP Value Summary

Accounting Flows: Costs Incurred, Viewing the WIP Value Summary

Use the WIP Value Summary window for a specific job to view charges for:

- Material
- Material overhead
- Resource
- Overhead
- Outside processing

(N) WIP Discrete > WIP Value Summary (B) Find > Value Summary

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**Help: Oracle Manufacturing Applications >
Oracle Work in Process > Windows and Navigations >
Viewing WIP Value Summaries**

Accounting Flows: Costs Incurred, Summary

Accounting Flows: Costs Incurred, Summary

The following table is a summary of all transactions to this point.

Work in Process Value						
Cost Element	Cost Incurred		Cost Relieved		Balance	
	This Level	Previous Level	This Level	Previous Level	This Level	Previous Level
Material		1,514				1,514
Material OH		150				150
Resource	625	450			625	450
Overhead	1,450	400			1450	400
OSP	370	0			370	0
Total	2,445	2,514			2,445	2,514

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Accounting Flows: Costs Incurred, Summary

Elemental Cost Distribution

- **Distribute previous-level costs based on their elemental cost structure and the valuation accounts assigned to the WIP Accounting Class.**
- **Distribute this-level costs based on the cost element being charged and the valuation accounts assigned to the WIP Accounting Class.**
- **Material costs and material overhead costs are always previous-level costs.**

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Agenda

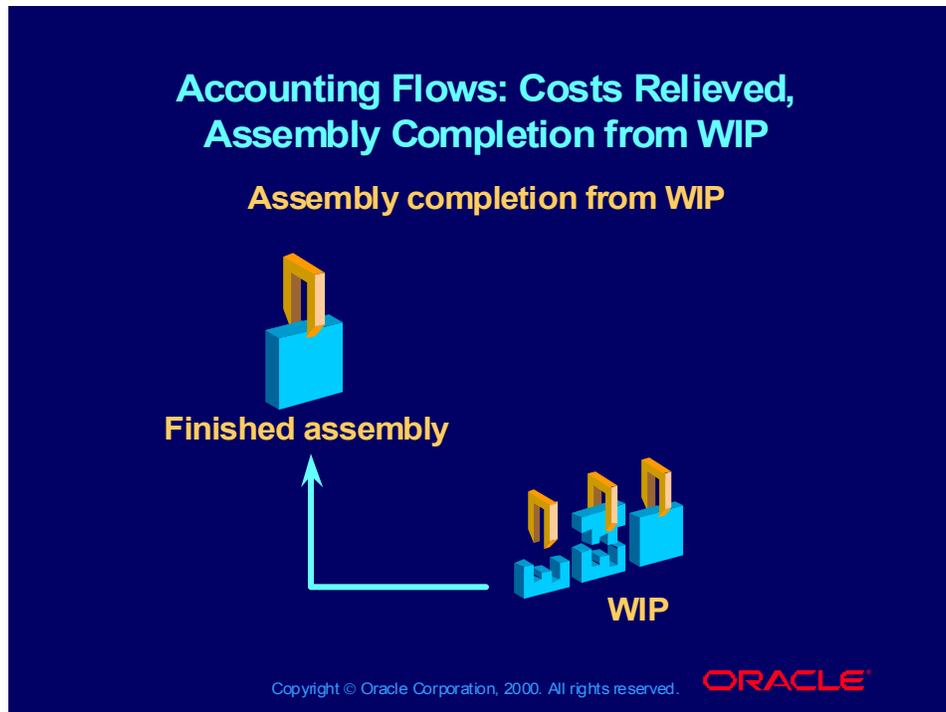
Agenda

- Overview of Average Costing in WIP
- Describing the relationship between Oracle WIP transactions and Oracle Cost Management
- Phantom costing
- Review of manufacturing cost setup
- Accounting for costs incurred in WIP
- **Accounting for costs relieved from WIP**

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Accounting Flows: Costs Relieved, Assembly Completion from WIP



Accounting Flows: Costs Relieved, Assembly Completion from WIP

Accounting Flows: Costs Relieved, Assembly Completion from WIP

Assembly Completions

- When assemblies being built on WIP jobs are complete, you move them into a subinventory using a completion transaction.
- The system assigns the same unit cost to all assemblies completed in the same transaction.
- As part of the completion transaction, the system recalculates the unit cost of the assembly in the completion subinventory when it is different from the unit cost being used in the completion transaction.

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Accounting Flows: Costs Relieved, Assembly Completion from WIP

Accounting Flows: Costs Relieved, Assembly Completion from WIP

Costing Assembly Completions

- You choose to have completed assemblies costed in one of the following two ways:
 - Using a predefined cost in a user-designated cost type
 - Using a system algorithm that, based on actual job charges, calculates the unit cost to be relieved from the job and charged to inventory

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Accounting Flows: Costs Relieved, Assembly Completion from WIP

Accounting Flows: Costs Relieved, Assembly Completion from WIP

Costing Completions Using a User-Defined Method

When you complete finished assemblies from a job to inventory, you can cost them using a user-defined method.

- You can use a predefined cost to value the unit(s) being completed.
- You can use the current average cost of the assembly or some other manually predetermined cost like a target cost.
- Then, you use a final completion to flush all (positive) unrelieved costs at the end of the job and all negative cost to the variance accounts.

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Caution

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.

Accounting Flows: Costs Relieved, Assembly Completion from WIP

Accounting Flows: Costs Relieved, Assembly Completion from WIP

Costing Assembly Completions Using a System Calculated Algorithm

- This algorithm costs completions using material usages from the assembly bill, multiplied by the average unit costs in the job.
- This algorithm costs completions using labor usages from the routing, multiplied by the average unit costs in the job. You select from two options:
 - Use Actual Resources
 - Use Pre-Defined Resources

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Accounting Flows: Costs Relieved, Assembly Completion from WIP

Accounting Flows: Costs Relieved, Assembly Completion from WIP

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.

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.

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Note

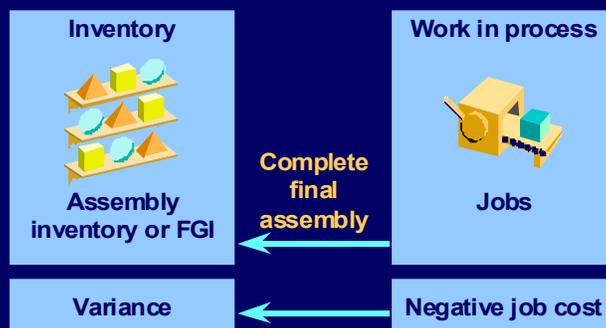
For completions out of a nonstandard job having no routing, this algorithm selects the unit cost from the Average cost type. This method works best for jobs that have resources charged in a timely manner.

Accounting Flows: Costs Relieved, Assembly Completion from WIP

Accounting Flows: Costs Relieved, Assembly Completion from WIP

Final Completion for Negative Cost in WIP Job

- Negative cost in a job is credited to variance at final completion.



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Accounting Flows: Costs Relieved, Assembly Completion from WIP

Accounting Flows: Costs Relieved, Assembly Completion from WIP

Final Completion for Negative Cost in WIP Job

- You can create negative cost, by element by level, by using a partial completion method that relieves more cost than incurred.
- When you finish assemblies as final completions, negative cost in the job is credited to variance.
- For each batch, you can start with zero costs within a job.
- Using final completions in average costing in WIP, you can flush out all residual costs in a job.

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Accounting Flows: Costs Relieved, Assembly Completion from WIP

Accounting Flows: Costs Relieved, Assembly Completion from WIP

Example of Final Completion for Negative Cost in WIP Job

- You can move residual charges in an old job to variances by performing a final completion transaction before you begin additional new assemblies in the job.

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Accounting Flows: Costs Relieved, Assembly Completion from WIP

Accounting Flows: Costs Relieved, Assembly Completion from WIP

Final Completion

- The system defaults the value of the Final Completion option (enabled/disabled) based on the setting of the WIP Autocompute Final Completions parameter.
- 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.

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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 because the system does not invoke the routine for clearing the job balance.

Accounting Flows: Costs Relieved, Assembly Completion from WIP

Accounting Flows: Costs Relieved, Assembly Completion from WIP

Unit Cost Calculation for Completed Assemblies

- When you perform a completion transaction, the system calculates a unit cost for the completed assemblies and creates accounting entries, using this unit cost.

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Accounting Flows: Costs Relieved, Performing Completion Transactions

Accounting Flows: Costs Relieved, Performing Completion Transactions

Completion Transactions

To assist you with moving costs properly as assemblies are completed, you select the final completion check box in the Completion Transactions window to determine what method to use to cost that completion transaction:

- When the check box is not selected, the assemblies being completed are costed based on the completion cost source that you selected at the organization or WIP accounting class.
- When the check box is selected, the assemblies being completed are costed by taking the current balance in the job and spreading it evenly over the units being completed.

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Note

You have a new check box in the Completion Transactions window to assist you with moving costs properly as assemblies are completed.

When you select the check box, it will indicate that the average cost for the assemblies in this completion transaction is to be calculated by spreading all remaining cost in the job evenly over the units being completed. This method of costing completions may be particularly useful when completing the last units in a job, but you will be able to select this check box on any completion transaction if you desire to have completions calculated in this way.

Accounting Flows: Costs Relieved, Performing Completion Transactions

Accounting Flows: Costs Relieved, Performing Completion Transactions

Use the Completion Transactions window to:

- Complete assemblies

**(N) WIP Material Transaction > Completion
Transactions**

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**Help: Oracle Manufacturing Applications >
Oracle Work in Process > Material Control >
Completing and Returning Assemblies**

Review Question

Review Question

When you perform a completion transaction, the system calculates a unit cost for the completed assemblies and creates accounting entries, using this unit cost.

1. True
2. False

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Instructor Note

Correct answer: 1

Review Question

Review Question

When you perform a completion transaction, the system calculates a unit cost for the completed assemblies and creates accounting entries, using this unit cost.

1. True
2. False

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Instructor Note

Correct answer: 1

Accounting Flows: Costs Relieved, Defining WIP Parameters

Accounting Flows: Costs Relieved, Defining WIP Parameters

Select Defaults in the WIP Parameters Window

You select a default way of valuing completions:

- If you want to use a predefined cost, you need to specify the cost type where the system can find these predefined costs. At the WIP accounting class level, you can override these defaults. If you select to define unit costs to be used for valuing completions, you identify the cost type where these predefined costs reside.
- Before performing a completion transaction on an item, you need to ensure that its cost in this cost type rolls up correctly—that is, all component and this-level resource and overhead details have been defined.

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Accounting Flows: Costs Relieved, Defining WIP Parameters

Accounting Flows: Costs Relieved, Defining WIP Parameters

Select Defaults in the WIP Parameters Window

You select a default way of valuing completions:

- In the WIP Parameters window, you indicate whether you want the system to automatically determine when a completion transaction completes the required job quantity.

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Accounting Flows: Costs Relieved, Defining WIP Parameters

Select Defaults in the WIP Parameters Window

- When you select the Auto Compute Final Completion check box, the system automatically determines when a completion transaction completes the required job quantity (that is, when: completed + scrapped units = job quantity) and, for such a transaction, values the units by spreading the job balance over the units being completed.
- You do not need to manually identify the final completion. In this way you can ensure that no residual balance is left in the job after the last completion occurred.

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Accounting Flows: Costs Relieved, Defining WIP Parameters

Accounting Flows: Costs Relieved, Defining WIP Parameters

Use the Work in Process Parameters window to:

- Select a new WIP Parameter for the system
 - To automatically determine when a completion transaction completes the required job quantity.
 - To value the units being completed by spreading the job balance over those units.

(N) WIP Setup > Parameters (T) Average Costing

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**Help: Oracle Manufacturing Applications >
Oracle Work in Process > Setting Up > Defining WIP Parameters**

Accounting Flows: Costs Relieved, Work Order-less Completions

Accounting Flows: Costs Relieved, Work Order-less Completions

Work Order-less Completions

- Work order-less completions can be performed in a manufacturing average costing environment. You can complete assemblies without having to create a job or schedule.

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Accounting Flows: Costs Relieved, Work Order-less Completions

Accounting Flows: Costs Relieved, Work Order-less Completions

Using work order-less completions, the system does all of the following in one step at completion:

- Backflushes pull and push components
- Charges resources and overhead based on the routing
- Completes assemblies to a designated completion subinventory/locator
 - No move transactions are required since the work order-less completion backflushes and charges resources at completion versus at each operation
- Substitutes components by adding, deleting, and substituting components that are not normally associated with the assembly you are building
- Supports Lot/Serial number control

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Note

You cannot manually charge resources using work order-less completions.

Accounting Flows: Costs Relieved, Work Order-less Completions

Accounting Flows: Costs Relieved, Work Order-less Completions

- You cannot charge manual resources using work order-less completions.
- All resources and overheads should be set up with WIP moves.
- Workorderless completions only charge WIP move resources, overheads on WIP move resources, and move based overheads.

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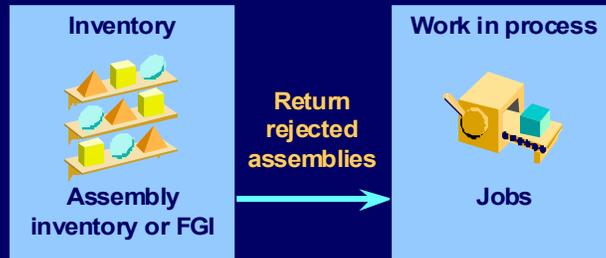
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Accounting Flows: Costs Relieved, Assembly Returns to WIP

Accounting Flows: Costs Relieved, Assembly Returns to WIP

Return of Completed Assemblies

You can return assemblies to WIP at the average cost of completed assemblies from that job, based on a combination of system-calculated or user-defined costs and final completions.



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Accounting Flows: Costs Relieved, Assembly Returns to WIP

Accounting Flows: Costs Relieved, Assembly Returns to WIP

Return of Completed Assemblies

- If the completion cost source is system-calculated, you can return completed assemblies at the average cost of all completions in the job, whether resources are predefined or used at actual cost.
 - If the job uses predefined resources, the return is costed based on the routing usages.
- If the completion cost source is user-defined, you can return completed assemblies at user-defined costs.

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Note

The user-defined method of costing returns is used to correct transactions that may be executed by mistake.

Accounting Flows: Costs Relieved, Scrap

Accounting Flows: Costs Relieved, Scrap



Product assembly scrap

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Accounting Flows: Costs Relieved, Scrap

Scrap Transactions

- Scrap transactions are valued at the cost of the assembly through the operation where the scrap is recorded. The cost is based on actual charges in the job and assumes that all resources and material required through the scrapping operation have been charged to the job.

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Accounting Flows: Costs Relieved, Assembly Scrap

Set the **Require Scrap Account** check box in the **WIP Parameters** window to determine how WIP scrap will be charged:

- If the check box is selected, scrap is costed by an algorithm that calculates the cost of each assembly through the operation at which the scrap occurred, relieves the job for that amount, and charges the user-defined scrap account.
- If the check box is not selected, the units are recorded as having been scrapped, but all amounts remain in the job to be absorbed into the cost of good assemblies when they are completed or written to the variance account(s) when the job is closed.

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Accounting Flows: Costs Relieved, Scrap Reversals

Scrap Reversals

- The system values scrap reversals based on the operation at which the scrap is returned to WIP, and then only if the Require Scrap Account check box is selected.
- The system determines the cost to reverse scrap by valuing the assembly based on the average cost of each required resource, overhead, and component scrapped in the job (net of any prior scrap reversals).

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Accounting Flows: Costs Relieved, Assembly Completion and Scrap

Accounting Flows: Costs Relieved, Assembly Completion and Scrap

Recording T Accounts for Transactions (on the next page)

13. Shop floor transaction
Scrap two assemblies at operation 40.
2 units at \$467 = \$934.
14. Shop floor transaction
Return repaired unit from scrap.
1 unit at \$467.
15. WP completion transaction
Complete nine assemblies from WP to inventory.
9 units at \$467 = \$4203 + 9 units at \$20 for material overhead.

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Accounting Flows: Costs Relieved, Assembly Completion and Scrap

Accounting Flows: Costs Relieved, Assembly Completion and Scrap

- You relieve costs from WIP when you complete assemblies to inventory or scrap assemblies at an operation.
- Completion and scrap transactions relieve costs from WIP on a this-level basis and on a previous-level basis.

Completion and Scrap Transactions

	Subinventory Accounts	WIP Accounts	Material OH Absorption	Scrap Account
13			934	934
14		467		
15	4,383	4,383	180	467

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Accounting Flows: Costs Relieved, Summary

Accounting Flows: Costs Relieved, Summary

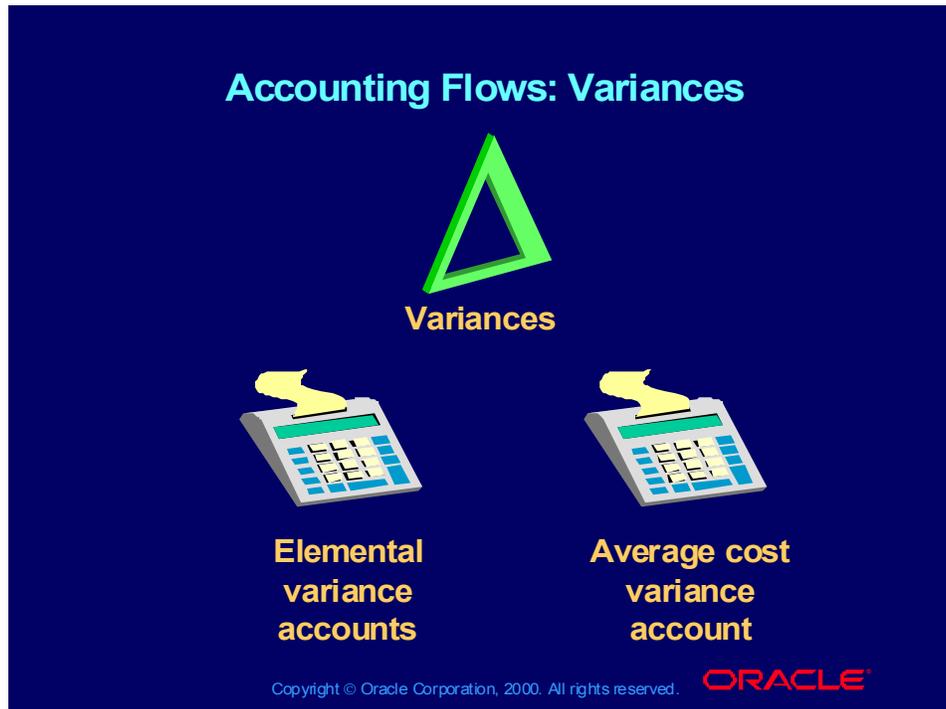
The following table is a summary of all transactions to this point.

Work in Process Value						
Cost Element	Cost Incurred		Cost Relieved		Balance	
	This Level	Previous Level	This Level	Previous Level	This Level	Previous Level
Material		1,514	(1,500)			14
Material OH		150	(150)			0
Resource	625	450	(650)	(450)	(25)	0
OSP	370	0	(320)	0	50	0
Overhead	1,450	400	(1,200)	(400)	250	0
Total	2,445	2,514	(2,170)	(2,500)	275	14

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Accounting Flows: Variances



Accounting Flows: Variances

WIP Job Closures and Cancellations

- The system recognizes variances when you close a job with a balance remaining in the job.
- Define variance accounts for each of your WIP accounting classes. These variance accounts should be different from the Average Cost Variance account.
- Upon closing a WIP job, either all the cost in the job will have already been relieved leaving a zero balance or there will be a balance remaining in the job.
- Any balance remaining in a job after it has been closed is written off elementally to these variance accounts.

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Accounting Flows: Variances

WIP Job Closures and Cancellations

- When you complete a job and all units required have been either rejected/scrapped or completed, and you are using the final completion indicator, there will be no job balance. The final unit(s) completed will have absorbed all remaining job cost into its value.

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Summary

In this lesson, you should have learned how to:

- Describe the relationship between Oracle Work in Process (WIP) transactions and Oracle Cost Management (OCM)
- Describe enhanced costing of phantoms
- Describe the manufacturing cost setup
- Account for costs incurred in WIP
- Account for costs relieved from WIP

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Practice 2 Overview

Practice 2 Overview

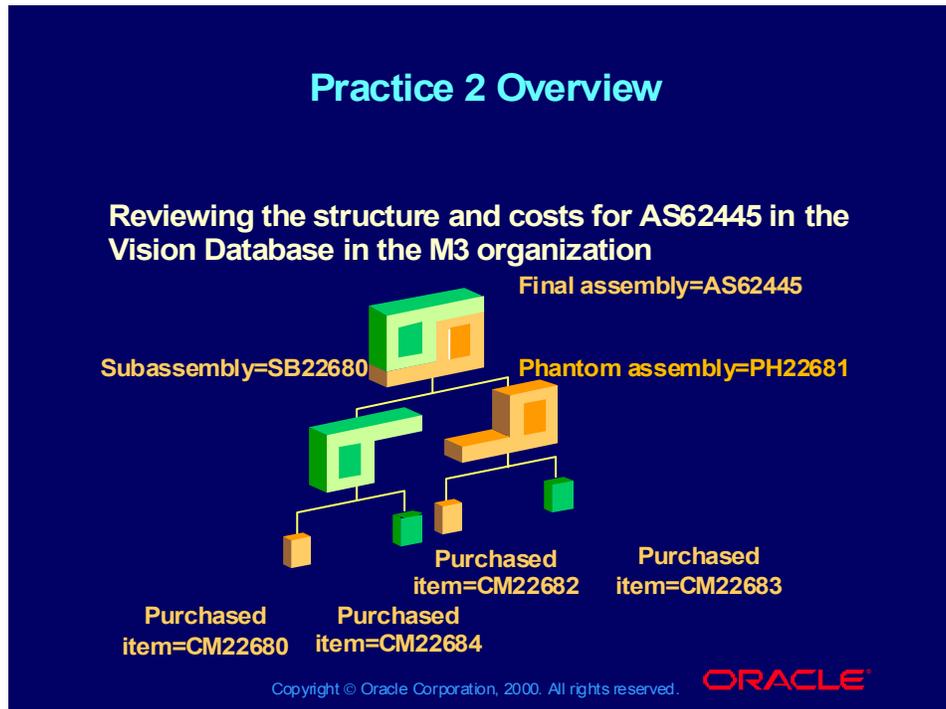
This practice covers the following topics:

- **Recording postings for average costing transactions**
- **Performing and analyzing WIP transactions in an average costing environment**
- **Costing of assembly returns to WIP**

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Practice 2 Overview



Vision Database Data

Data was populated in the Vision database to facilitate practices and demonstrations. In this practice, you will create work orders for AS62445, perform transactions and see their impact in inventory and in WIP.

For average costing, you use the M3 organization, verify that resource and overhead rates exist in the AvgRates cost type, and use the current cost type.

Assumptions

Supply types for components: CM22680, push; CM22682, operation pull; CM22683, assembly pull; SB22680, operation pull.

All resources except lead prep were person type resources having the following: UOM=HR, charge type = WIP move, basis = item and overhead = benefits. The only difference with lead prep was that it was a machine type resource.

Existing departments were used for assembly, test, pack, and upgrade.

Routings were created with operation sequences set to backflush, usage set at 10 units per hour, and completion and supply subinventories from RIP

Existing overheads were used for material handling, equipment/tool, preventative maintenance, benefits, and manufacturing management.

Note: The interface managers need to be up and running.

Practice 2-1: Recording Postings for Average Costing Transactions

Practice 2-1: Recording Postings for Average Costing Transactions

In this practice, you record postings for a variety of manufacturing transactions.

- You are an assembler on a subassembly production line. After performing a variety of manufacturing transactions to complete a workorder to produce ten loaded boards, you look at the postings of these transactions.

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Practice 2-1: Recording Postings for Average Costing Transactions

Practice 2-1: Recording Postings for Average Costing Transactions

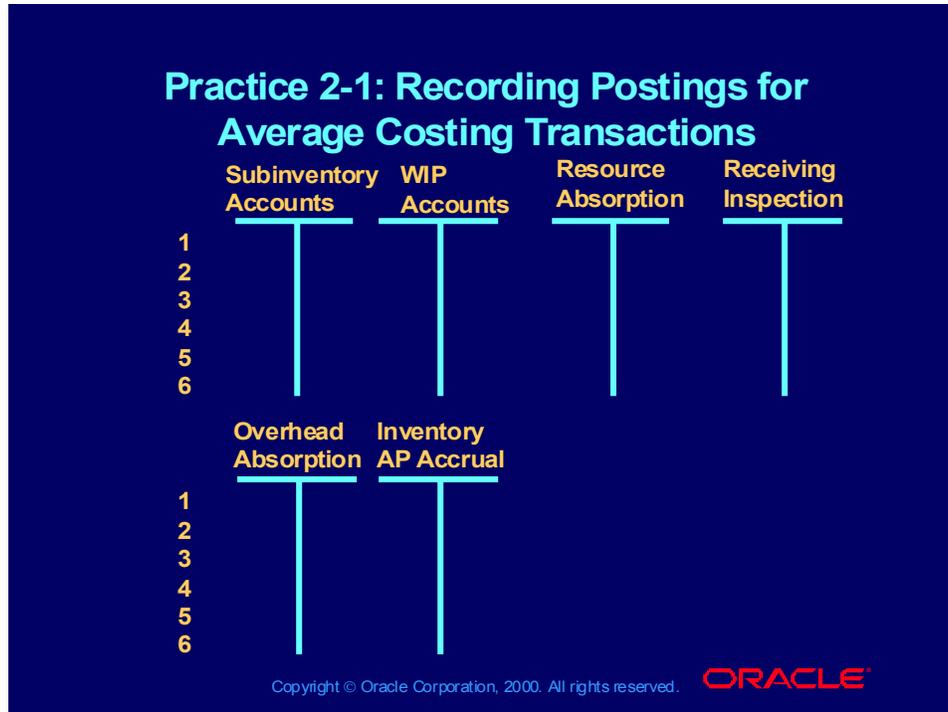
After opening the workorder, you do the following:

1. Issue material (push components) at current average cost into the job; 10 units at \$300 = \$3,000.
2. Charge in-house resources at actual; 10 units at \$20 = \$200.
3. Charge outside processing resources at actual as you convert unloaded boards into finished boards; 10 units at \$10 = \$100.
4. Charge resource-based overhead at 250% on the resource charged in step 2; $200.00 * 250\% = \$50$.
5. Complete the workorder by performing WIP completions to move the finished boards from WIP to Inventory. Complete ten units to inventory; 10 at \$400 = \$4,000.
6. Close the workorder.

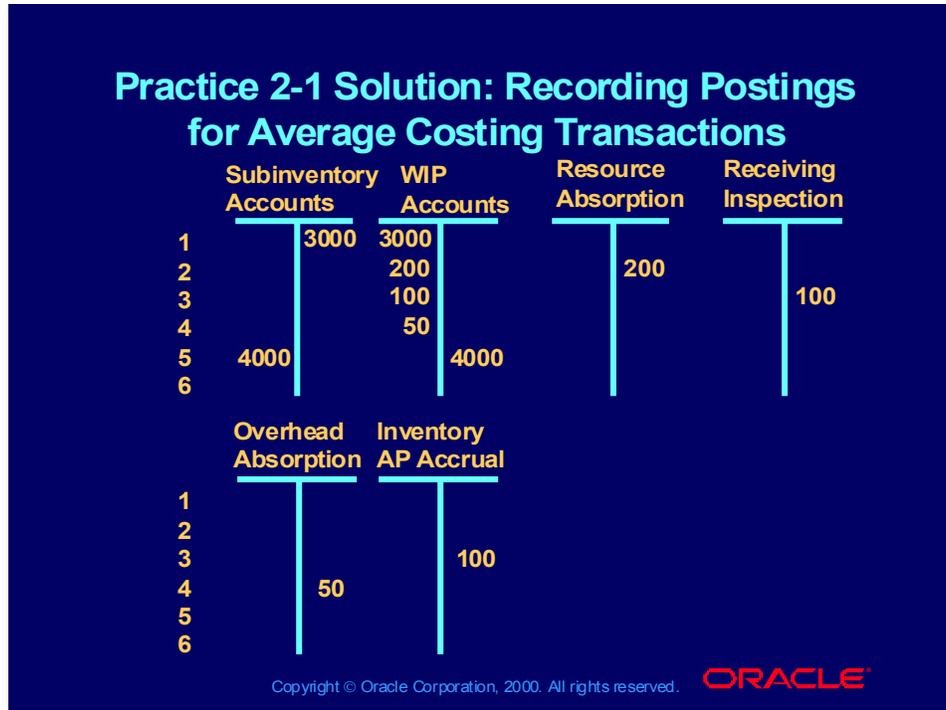
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Practice 2-1: Recording Postings for Average Costing Transactions



Practice 2-1 Solution: Recording Postings for Average Costing Transactions



Practice 2-2: Performing and Analyzing WIP Transactions in Average Costing

Practice 2-2: Performing and Analyzing WIP Transactions in Average Costing

In this practice, you are a cost accountant and you define and process a discrete job from release to completion. After each WIP transaction that you perform, you review the job value using the WIP Value Summary window. This will help you to analyze the impact of each transaction.

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Instructions

1. Check the status of the Material Cost transaction processor. If this processor is not running or is running at an interval greater than 10 minutes, inform the instructor.
2. Define a released, discrete job for AS62445. Set the quantity equal to 10 and the due date equal to Friday of this week.
Record the job number that the system assigns here: _____
3. Issue to the job any push material needed at the start of the job and 5 additional pieces of CM22680.
4. Move the job through its routing. Execute a scrap transaction for a quantity of 2 and verify that the assembly pull components are charged to the job.
5. Receive a partial quantity into the finished goods (FGI) subinventory.
6. Receive the balance of the job into the FGI subinventory.
7. Close the job. Be careful to close only your job, to avoid interfering with other students' jobs.
8. Review material transaction distributions and job costs in the Material Transaction Distributions window and the WIP Value Summary window. View the accounting distributions created by the transactions and item costs.
9. If time permits, run the Discrete Job Value Report for your job, and review the results online.

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Guided Practice 2-2: Checking the Interface Managers

Guided Practice 2-2: Checking the Interface Managers

1. **Navigate to the Interface Managers window to check the status of the Cost Manager. If this manager is not running or is running at an interval greater than 10 minutes, inform the instructor.**
(N) INV Setup > Transactions > Interface Managers

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Guided Practice 2-2: Defining Discrete Jobs

Guided Practice 2-2: Defining Discrete Jobs

1. Navigate to the Discrete Jobs window to define a released, discrete job for AS62445, as follows:
(N) WIP Discrete > Discrete Jobs (B) New
2. Job: xx-job01, where xx are your initials
3. Type: Standard
4. Assembly: AS62445
5. Class: Discrete
6. Status: Released
7. Start quantity: 10
8. MRP Net 10
9. Completion date: Friday of this week as DD-MON-YY
10. Save and record the job number that the system assigns here: _____

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Guided Practice 2-2: Checking Material Requirements

Guided Practice 2-2: Checking Material Requirements

- 1. Navigate to the Material Requirements window to check your material requirements for any push material needed at the start of the job.**
(N) WIP Discrete > Discrete Jobs (F) Enter job number
(B) Components > Supply

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Guided Practice 2-2: Issuing Push Material

Guided Practice 2-2: Issuing Push Material

1. Navigate to the Material Transactions window to issue your push material needed at the start of the job.

(N) WIP Material Transactions > WIP Material Transactions

2. Job: xx-job01, where xx are your initials
3. Date: Today's date
4. Type: WIP component issue
5. Subinventory: Stores
6. Choose: Transact
7. Action: Check that your push components appear
8. Choose: Done

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Guided Practice 2-2: Valuing Push Material

Guided Practice 2-2: Valuing Push Material

1. Navigate to the Material Transaction Distributions window to verify that your push material needed at the start of the job was recorded and valued.
(N) INV Transactions > Material Transactions (B) Distributions
2. Item: CM22680

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Guided Practice 2-2: Valuing Your Job using the WIP Value Summary

Guided Practice 2-2: Valuing Your Job using the WIP Value Summary

1. Navigate to the WIP Value Summary window to verify that your push material needed at the start of the job was recorded and valued.

(N) WIP Discrete > WIP Value Summary (B) Find > Value Summary

2. Job: xx-job01
3. Action: Verify the value of your push components and your job
4. Choose Cost Element: Material
5. Choose: Distributions
6. Action: Verify the distributions of your push components and your job

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Guided Practice 2-2: Issuing Push Material

Guided Practice 2-2: Issuing Push Material

1. Navigate to the Material Transactions window to issue five additional pieces of CM22680 to the job.

(N) WIP Material Transactions > WIP Material Transactions

2. Job: xx-job01
3. Date: Today's date
4. Type: WIP component issue
5. Subinventory: Stores
6. Choose: Specific component
7. Choose: Transact
8. Item: CM22680
9. Subinventory: Stores
10. Operation: 10
11. Choose: Done

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Guided Practice 2-2: Valuing Push Material

Guided Practice 2-2: Valuing Push Material

1. Navigate to the Material Transaction Distributions window to verify that your additional five pieces of CM22680 were recorded and valued.

(N) INV Transactions > Material Transactions (B)
Distributions

2. Item: CM22680

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Guided Practice 2-2: Valuing Your Job using the WIP Value Summary

Guided Practice 2-2: Valuing Your Job using the WIP Value Summary

1. Navigate to the WIP Value Summary window to verify that your additional five pieces of CM22680 were recorded and valued.
(N) WIP Discrete > WIP Value Summary (B) Find > Value Summary
2. Job: xx-job01
3. Action: Verify the value of your push components, your additional components and your job
4. Choose Cost Element: Material
5. Choose: Distributions
6. Action: Verify the distributions of your job.

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Guided Practice 2-2: Performing Move Transactions

Guided Practice 2-2: Performing Move Transactions

1. Move all of the assemblies From Op Seq: 10, Step: Queue to Op Seq: 20, Step: To Move.

(N) WIP Move Transactions > Move Transactions

2. Job: xx-job01
3. From Op Seq: 10, Step Queue
4. Complete: No
5. To: Seq 20, Step: To move
6. Quantity: 10
7. Date: Today's date
8. Choose: Resources
9. Observe how employee information appears
10. Enter employee #
11. Quantity: 10
12. Save

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Guided Practice 2-2: Valuing Your Job using the WIP Value Summary

Guided Practice 2-2: Valuing Your Job using the WIP Value Summary

1. Navigate to the WIP Value Summary window to verify the value of your job.
(N) WIP Discrete > WIP Value Summary (B) Find > Value Summary
2. Job: xx-job01
3. Action: Verify the value of your push components, your additional components, and your moves in your job
4. Choose Cost Element: Material
5. Choose: Distributions
6. Action: Verify the distributions of your job.
7. Choose Cost Element: Resource
8. Choose: Distributions
9. Action: Verify the distributions of your job.

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Guided Practice 2-2: Performing Easy Completions

Guided Practice 2-2: Performing Easy Completions

1. Perform an easy completion for five of the assemblies.

(N) WIP Move Transactions > Move Transactions

2. Job: xx-job01
3. Complete: Yes
4. From Op Seq: 10, Step Queue
5. To: Seq 20, Step: To move
6. Quantity: 5
7. Date: Today's date
8. Choose: Transact

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Guided Practice 2-2: Valuing Easy Completions

Guided Practice 2-2: Valuing Easy Completions

1. Navigate to the Material Transaction Distributions window to verify that your five easy completions were recorded and valued.

(N) INV Transactions > Material Transactions (B)
Distributions > Reason, Reference

2. Item: AS62445

3. Costed: Yes

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Guided Practice 2-2: Valuing Your Job using the WIP Value Summary

Guided Practice 2-2: Valuing Your Job using the WIP Value Summary

1. Navigate to the WIP Value Summary window to verify the value of your job.
- (N) WIP Discrete > WIP Value Summary (B) Find > Value Summary
2. Job: xx-job01
3. Action: Verify the value of your push components, your additional components, your moves and your completions in your job
4. Choose Cost Element: Material
5. Choose: Distributions
6. Action: Verify the distributions of your job.
7. Choose Cost Element: Resource
8. Choose: Distributions
9. Action: Verify the distributions of your job.

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Guided Practice 2-2: Verifying Item Costs

Guided Practice 2-2: Verifying Item Costs

1. Navigate to the Item Cost Details window to verify the recalculated cost of your assembly under Cost Information.

(N) CST Item Costs > Item Costs

2. Item: AS62445
3. Choose: Find
4. Choose: Open
5. Action: Review Cost Information

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Guided Practice 2-2: Performing Move Transactions to Scrap

Guided Practice 2-2: Performing Move Transactions to Scrap

1. Move 2 of the assemblies from Op Seq: 20, Step: To Move to Op Seq: 20, Step: Scrap
(N) WIP Move Transactions > Move Transactions
2. Job: xx-job01
3. From Op Seq: 20, Step: To move
4. Complete: No
5. To: Seq 20, Step: Scrap
6. Quantity: 2
7. Choose: Transact

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Guided Practice 2-2: Valuing Your Job using the WIP Value Summary

Guided Practice 2-2: Valuing Your Job using the WIP Value Summary

1. Navigate to the WIP Value Summary window to verify the value of scrap in your job.
(N) WIP Discrete > WIP Value Summary (B) Find > Value Summary
2. Job: xx-job01
3. Action: Verify the value of scrap in your job
4. Choose Cost Element: Material
5. Choose: Distributions
6. Action: Verify the distributions of your job.

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Guided Practice 2-2: Performing Completion Transactions

Guided Practice 2-2: Performing Completion Transactions

1. Complete the remaining assemblies into the finished goods (FGI) subinventory.
- (N) WIP Material Transactions > Completion Transactions
2. Job: xx-job01
3. Type: WIP assembly completion
4. Date: Today's date
5. Job Quantity: 10
6. Job Complete: 5
7. Available to Complete: 3
8. Choose: Transact
9. Subinventory: Accept default
10. Final completion: X
11. Quantity: 3
12. Choose: Done

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Guided Practice 2-2: Valuing Completions

Guided Practice 2-2: Valuing Completions

1. Navigate to the Material Transaction Distributions window to verify that your five final completions were recorded and valued.

(N) INV Transactions > Material Transactions (B)
Distributions > Reason, Reference

2. Item: AS62445

3. Costed: Yes

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Guided Practice 2-2: Valuing Your Job using the WIP Value Summary

Guided Practice 2-2: Valuing Your Job using the WIP Value Summary

1. Navigate to the WIP Value Summary window to verify the value of your job.
- (N) WIP Discrete > WIP Value Summary (B) Find > Value Summary
2. Job: xx-job01
3. Action: Verify the value of your push components, your additional components, your moves and your completions in your job
4. Choose Cost Element: Material
5. Choose: Distributions
6. Action: Verify the distributions of your job.
7. Choose Cost Element: Resource
8. Choose: Distributions
9. Action: Verify the distributions of your job.

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Guided Practice 2-2: Verifying Item Costs

Guided Practice 2-2: Verifying Item Costs

1. Navigate to the Item Cost Details window to verify the recalculated cost of your assembly under Cost Information.

(N) CST Item Costs > Item Costs

2. Item: AS62445
3. Choose: Find
4. Choose: Open
5. Action: Review Cost Information

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Guided Practice 2-2: Closing Discrete Jobs

Guided Practice 2-2: Closing Discrete Jobs

1. Navigate to the Close Discrete Jobs window to close only your job.
(N) WIP Discrete > Close Discrete Jobs > Close Discrete Job (SRS)
2. Request Name: Close Discrete Jobs
3. Parameters window
4. Class Type: Standard discrete
5. From Job: xx-job01, where xx are your initials
6. To Job: xx-job01, where xx are your initials
7. OK
8. Choose: Submit Request
9. Record your request number here: _____

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Guided Practice 2-2: Reviewing Requests

Guided Practice 2-2: Reviewing Requests

1. Navigate to the Requests window to check to make sure that your close request has completed.

CST (T) Help > Requests (T) Query your request number (B) View Output

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Guided Practice 2-2: Valuing Your Job using the WIP Value Summary

Guided Practice 2-2: Valuing Your Job using the WIP Value Summary

1. Navigate to the WIP Value Summary window to verify the value of your job.
- (N) WIP Discrete > WIP Value Summary (B) Find > Value Summary
2. Job: xx-job01
3. Action: Verify the value of your job
4. Choose Cost Element: Material
5. Choose: Distributions
6. Action: Verify the distributions of your job.
7. Choose Cost Element: Resource
8. Choose: Distributions
9. Action: Verify the accounting distributions of your job created by the transactions.

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Guided Practice 2-2: Reviewing the Discrete Job Value Report

Guided Practice 2-2: Reviewing the Discrete Job Value Report

1. Run the Discrete Job Value Report for your job, and review the results online.
(N) WIP Report (Select) Discrete Job Value Report
2. Request Name: Discrete Job Value Report-Average
3. Parameters window
4. Sort by: Job
5. Report Type: Summary
6. Class Type: Standard Discrete
7. Include Bulk: Yes
8. Include Vendor: Yes
9. From Job: xx-job01, where xx are your initials
10. To Job: xx-job01, where xx are your initials
11. OK and choose: Submit Request
12. Record your request number here: _____

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Guided Practice 2-2: Reviewing Requests

Guided Practice 2-2: Reviewing Requests

1. Navigate to the Requests window to check to make sure that your report has completed.

CST (T) Help > Requests (T) Query your request number (B) View Output

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Guided Practice 2-3: Costing of Assembly Returns to WIP

Guided Practice 2-3: Costing of Assembly Returns to WIP

In this practice, you open a workorder and perform transactions so that you can see the effect of the return at average cost.

After each WIP transaction that you perform, you review the job value using the WIP Value Summary window. This will help you to analyze the impact of each transaction.

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Instructions

1. Create a work order for a quantity of 100 of AS62445.
2. Perform an easy completion for a quantity of 50.
3. View the WIP Value Summary and verify the value of the completion transaction in the costs relieved column.
4. Issue the push material to the job.
5. View the WIP Value Summary and verify that the costs incurred reflect the push material.
6. Perform an easy completion for a quantity of 50.
7. View the WIP Value Summary and verify that the value of the second completion is different than the value of the first completion, reflecting the value of the push material.
8. View the item cost history to verify that the average cost has changed between the two transactions.
9. Return a quantity of 75 back to the work order. Verify that the cost of the return was an average of the two completions times the quantity returned.
10. Verify that the valuation of the return was at job average. You should see that the assembly return was valued at job average.

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Guided Practice 2-3: Defining Discrete Jobs

Guided Practice 2-3: Defining Discrete Jobs

1. Navigate to the Discrete Jobs window to define a released, discrete job for AS62445, as follows:
(N) WIP Discrete > Discrete Jobs (B) New
2. Job: xx-job02, where xx are your initials
3. Type: Standard
4. Assembly: AS62445
5. Class: Discrete
6. Status: Released
7. Start quantity: 100
8. MRP Net quantity: defaults
9. Firm: Clear
9. Start date: Today
10. Save and record the job number that the system assigns here: _____

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Guided Practice 2-3: Performing Easy Completions

Guided Practice 2-3: Performing Easy Completions

1. Perform an easy completion for half of the assemblies.

(N) WIP Move Transactions > Move Transactions

2. Job: xx-job02
3. Complete: Yes
4. From Op Seq: 10, Step Queue
5. Quantity: 50
6. Date: Today's date
7. Choose: Transact

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Guided Practice 2-3: Valuing Easy Completions

Guided Practice 2-3: Valuing Easy Completions

1. Navigate to the Material Transaction Distributions window to verify that your easy completions were recorded and valued.

(N) INV Transactions > Material Transactions (B)
Distributions > Reason, Reference

2. Item: AS62445

3. Costed: Yes

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Guided Practice 2-3: Valuing Your Job using the WIP Value Summary

Guided Practice 2-3: Valuing Your Job using the WIP Value Summary

1. Navigate to the WIP Value Summary window to verify the value of the completion transaction in the costs relieved column.
(N) WIP Discrete > WIP Value Summary (B) Find > Value Summary
2. Job: xx-job02
3. Action: Verify the value of your completions
4. Choose Cost Element: Material
5. Choose: Distributions
6. Action: Verify the distributions of your job.
7. Choose Cost Element: Resource
8. Choose: Distributions
9. Action: Verify the distributions of your job.

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Guided Practice 2-3: Verifying Item Costs

Guided Practice 2-3: Verifying Item Costs

1. Navigate to the Item Cost Details window to verify the recalculated cost of your assembly under Cost Information.

(N) CST Item Costs > Item Costs

2. Item: AS62445
3. Choose: Find
4. Choose: Open
5. Action: Review Cost Information

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Guided Practice 2-3: Issuing Push Material

Guided Practice 2-3: Issuing Push Material

1. Navigate to the Material Transactions window to issue the push material to the job.

(N) WIP Material Transactions > WIP Material Transactions

2. Job: xx-job02
3. Date: Today's date
4. Type: WIP component issue
5. Subinventory: leave blank
6. Include: All material
7. Choose: Continue
8. Accept the default information
9. Choose: Done

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Guided Practice 2-3: Valuing Push Material

Guided Practice 2-3: Valuing Push Material

1. Navigate to the Material Transaction Distributions window to verify that your push material was recorded and valued.

(N) INV Transactions > Material Transactions (B) Distributions

2. Item: CM22680

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Guided Practice 2-3: Valuing Your Job using the WIP Value Summary

Guided Practice 2-3: Valuing Your Job using the WIP Value Summary

1. Navigate to the WIP Value Summary window to verify that the costs incurred reflect the push material.
(N) WIP Discrete > WIP Value Summary (B) Find > Value Summary
2. Job: xx-job02
3. Action: Verify the value of your push components
4. Choose Cost Element: Material
5. Choose: Distributions
6. Action: Verify the distributions of your job.

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Guided Practice 2-3: Performing Easy Completions

Guided Practice 2-3: Performing Easy Completions

1. Perform an easy completion for the remaining assemblies for a quantity of 50.

(N) WIP Move Transactions > Move Transactions

2. Job: xx-job02
3. Complete: Yes
4. From Op Seq: 10, Step Queue
5. Quantity: 50
6. Date: Today's date
7. Choose: Transact

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Guided Practice 2-3: Valuing Easy Completions

Guided Practice 2-3: Valuing Easy Completions

1. Navigate to the Material Transaction Distributions window to verify that your easy completions were recorded and valued.

(N) INV Transactions > Material Transactions (B)
Distributions > Reason, Reference

2. Item: AS62445

3. Costed: Yes

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Guided Practice 2-3: Valuing Your Job using the WIP Value Summary

Guided Practice 2-3: Valuing Your Job using the WIP Value Summary

1. Navigate to the WIP Value Summary window to verify the value of the second completion transaction in the costs relieved column. Notice that the value of the second completion is different that the value of the first completion, reflecting the value of the push material.
(N) WIP Discrete > WIP Value Summary (B) Find > Value Summary
2. Job: xx-job02
3. Action: Verify the value of your completions
4. Choose Cost Element: Material
5. Choose: Distributions
6. Action: Verify the distributions of your job.
7. Choose each cost element and distributions
9. Action: Verify the distributions of your job.

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Guided Practice 2-3: Viewing Item Cost History

Guided Practice 2-3: Viewing Item Cost History

1. Navigate to the Item Cost History window to verify that the average cost has changed between the two transactions.

(N) CST Item Costs > Item Cost History (B) Find

2. Item: AS62445
3. Choose: Cost History
3. Choose: Find (all transactions)

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Guided Practice 2-3: Performing Returns

Guided Practice 2-3: Performing Returns

1. Perform a return for a quantity of 75 assemblies back to the work order.

(N) WIP Move Transactions > Move Transactions

2. Job: xx-job02
3. Return: Yes
4. To Op Seq: 20, Step Queue
5. Quantity: 75
6. Date: Today's date
7. Choose: Transact

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Guided Practice 2-3: Viewing Item Cost History

Guided Practice 2-3: Viewing Item Cost History

1. Navigate to the Item Cost History window to verify that the cost of the return was an average of the two completions times the quantity returned.

(N) CST Item Costs > Item Cost History (B) Find

2. Item: AS62445
3. Choose: Cost History
3. Choose: Find (all transactions)

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