ORACLE
JD EDWARDS ENTERPRISEONE

JD Edwards EnterpriseOne Product Costing and Manufacturing Accounting 9.0 Implementation Guide

September 2008

ORACLE

JD Edwards EnterpriseOne Product Costing and Manufacturing Accounting 9.0 Implementation Guide
SKU e190APM-B 0908

Trademark Notice

Oracle is a registered trademark of Oracle Corporation and/or its affiliates. Other names may be trademarks of their respective owners.

License Restrictions Warranty/Consequential Damages Disclaimer

This software and related documentation are provided under a license agreement containing restrictions on use and disclosure and are protected by intellectual property laws. Except as expressly permitted in your license agreement or allowed by law, you may not use, copy, reproduce, translate, broadcast, modify, license, transmit, distribute, exhibit, perform, publish or display any part, in any form, or by any means. Reverse engineering, disassembly, or decompilation of this software, unless required by law for interoperability, is prohibited.

Subject to patent protection under one or more of the following U.S. patents: 5,781,908; 5,828,376; 5,950,010; 5,960,204; 5,987,497; 5,995,972; 5,987,497; and 6,223,345. Other patents pending.

Warranty Disclaimer

The information contained herein is subject to change without notice and is not warranted to be error-free. If you find any errors, please report them to us in writing.

Restricted Rights Notice

If this software or related documentation is delivered to the U.S. Government or anyone licensing it on behalf of the U.S. Government, the following notice is applicable:

U.S. GOVERNMENT RIGHTS

Programs, software, databases, and related documentation and technical data delivered to U.S. Government customers are "commercial computer software" or "commercial technical data" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, the use, duplication, disclosure, modification, and adaptation shall be subject to the restrictions and license terms set forth in the applicable Government contract, and, to the extent applicable by the terms of the Government contract, the additional rights set forth in FAR 52.227-19, Commercial Computer Software License (December 2007). Oracle USA, Inc., 500 Oracle Parkway, Redwood City, CA 94065.

Hazardous Applications Notice

This software is developed for general use in a variety of information management applications. It is not developed or intended for use in any inherently dangerous applications, including applications which may create a risk of personal injury. If you use this software in dangerous applications, then you shall be responsible to take all appropriate fail-safe, backup, redundancy and other measures to ensure the safe use of this software. Oracle Corporation and its affiliates disclaim any liability for any damages caused by use of this software in dangerous applications.

Third Party Content, Products, and Services Disclaimer

This software and documentation may provide access to or information on content, products and services from third parties. Oracle Corporation and its affiliates are not responsible for and expressly disclaim all warranties of any kind with respect to third party content, products and services. Oracle Corporation and its affiliates will not be responsible for any loss, costs, or damages incurred due to your access to or use of third party content, products or services.

Open Source Disclosure

Oracle takes no responsibility for its use or distribution of any open source or shareware software or documentation and disclaims any and all liability or damages resulting from use of said software or documentation. The following open source software may be used in Oracle's JD Edwards EnterpriseOne products and the following disclaimers are provided:

Contents

About This Documentation Preface

JD Edwards EnterpriseOne implementation guides provide you with the information that you need to implement and use JD Edwards EnterpriseOne applications from Oracle.

This preface discusses:

- JD Edwards EnterpriseOne application prerequisites.
- Application fundamentals.
- Documentation updates and downloading documentation.
- Additional resources.
- Typographical conventions and visual cues.
- Comments and suggestions.
- Common fields in implementation guides.

Note. Implementation guides document only elements, such as fields and check boxes, that require additional explanation. If an element is not documented with the process or task in which it is used, then either it requires no additional explanation or it is documented with common fields for the section, chapter, implementation guide, or product line. Fields that are common to all JD Edwards EnterpriseOne applications are defined in this preface.

JD Edwards EnterpriseOne Application Prerequisites

To benefit fully from the information that is covered in these books, you should have a basic understanding of how to use JD Edwards EnterpriseOne applications.

You might also want to complete at least one introductory training course, if applicable.

You should be familiar with navigating the system and adding, updating, and deleting information by using JD Edwards EnterpriseOne menus, forms, or windows. You should also be comfortable using the World Wide Web and the Microsoft Windows or Windows NT graphical user interface.

These books do not review navigation and other basics. They present the information that you need to use the system and implement your JD Edwards EnterpriseOne applications most effectively.

Application Fundamentals

Each application implementation guide provides implementation and processing information for your JD Edwards EnterpriseOne applications.

For some applications, additional, essential information describing the setup and design of your system appears in a companion volume of documentation called the application fundamentals implementation guide. Most product lines have a version of the application fundamentals implementation guide. The preface of each implementation guide identifies the application fundamentals implementation guides that are associated with that implementation guide.

The application fundamentals implementation guide consists of important topics that apply to many or all JD Edwards EnterpriseOne applications. Whether you are implementing a single application, some combination of applications within the product line, or the entire product line, you should be familiar with the contents of the appropriate application fundamentals implementation guides. They provide the starting points for fundamental implementation tasks.

Documentation Updates and Downloading Documentation

This section discusses how to:

- Obtain documentation updates.
- Download documentation.

Obtaining Documentation Updates

You can find updates and additional documentation for this release, as well as previous releases, on Oracle's PeopleSoft Customer Connection website. Through the Documentation section of Oracle's PeopleSoft Customer Connection, you can download files to add to your Implementation Guides Library. You'll find a variety of useful and timely materials, including updates to the full line of JD Edwards EnterpriseOne documentation that is delivered on your implementation guides CD-ROM.

Important! Before you upgrade, you must check Oracle's PeopleSoft Customer Connection for updates to the upgrade instructions. Oracle continually posts updates as the upgrade process is refined.

See Also

Oracle's PeopleSoft Customer Connection, http://www.oracle.com/support/support_peoplesoft.html

Downloading Documentation

In addition to the complete line of documentation that is delivered on your implementation guide CD-ROM, Oracle makes JD Edwards EnterpriseOne documentation available to you via Oracle's website. You can download PDF versions of JD Edwards EnterpriseOne documentation online via the Oracle Technology Network. Oracle makes these PDF files available online for each major release shortly after the software is shipped.

See Oracle Technology Network, http://www.oracle.com/technology/documentation/psftent.html

Additional Resources

The following resources are located on Oracle's PeopleSoft Customer Connection website:

Resource	Navigation
Application maintenance information	Updates + Fixes
Business process diagrams	Support, Documentation, Business Process Maps

Resource	Navigation
Interactive Services Repository	Support, Documentation, Interactive Services Repository
Hardware and software requirements	Implement, Optimize + Upgrade; Implementation Guide; Implementation Documentation and Software; Hardware and Software Requirements
Installation guides	Implement, Optimize + Upgrade; Implementation Guide; Implementation Documentation and Software; Installation Guides and Notes
Integration information	Implement, Optimize + Upgrade; Implementation Guide; Implementation Documentation and Software; Pre-Built Integrations for PeopleSoft Enterprise and JD Edwards EnterpriseOne Applications
Minimum technical requirements (MTRs)	Implement, Optimize + Upgrade; Implementation Guide; Supported Platforms
Documentation updates	Support, Documentation, Documentation Updates
Implementation guides support policy	Support, Support Policy
Prerelease notes	Support, Documentation, Documentation Updates, Category, Release Notes
Product release roadmap	Support, Roadmaps + Schedules
Release notes	Support, Documentation, Documentation Updates, Category, Release Notes
Release value proposition	Support, Documentation, Documentation Updates, Category, Release Value Proposition
Statement of direction	Support, Documentation, Documentation Updates, Category, Statement of Direction
Troubleshooting information	Support, Troubleshooting
Upgrade documentation	Support, Documentation, Upgrade Documentation and Scripts

Typographical Conventions and Visual Cues

This section discusses:

- Typographical conventions.
- Visual cues.
- Country, region, and industry identifiers.
- Currency codes.

Typographical Conventions

This table contains the typographical conventions that are used in implementation guides:

Typographical Convention or Visual Cue	Description
Bold	Indicates PeopleCode function names, business function names, event names, system function names, method names, language constructs, and PeopleCode reserved words that must be included literally in the function call.
Italics	Indicates field values, emphasis, and JD Edwards EnterpriseOne or other book-length publication titles. In PeopleCode syntax, italic items are placeholders for arguments that your program must supply. We also use italics when we refer to words as words or letters as letters, as in the following: Enter the letter *O*.
KEY+KEY	Indicates a key combination action. For example, a plus sign (+) between keys means that you must hold down the first key while you press the second key. For ALT+W, hold down the ALT key while you press the W key.
`Monospace font`	Indicates a PeopleCode program or other code example.
" " (quotation marks)	Indicate chapter titles in cross-references and words that are used differently from their intended meanings.
. . . (ellipses)	Indicate that the preceding item or series can be repeated any number of times in PeopleCode syntax.
{ } (curly braces)	Indicate a choice between two options in PeopleCode syntax. Options are separated by a pipe (|).
[ ] (square brackets)	Indicate optional items in PeopleCode syntax.
& (ampersand)	When placed before a parameter in PeopleCode syntax, an ampersand indicates that the parameter is an already instantiated object. Ampersands also precede all PeopleCode variables.

Visual Cues

Implementation guides contain the following visual cues.

Notes

Notes indicate information that you should pay particular attention to as you work with the JD Edwards EnterpriseOne system.

Note. Example of a note.

If the note is preceded by *Important!,* the note is crucial and includes information that concerns what you must do for the system to function properly.

Important! Example of an important note.

Warnings

Warnings indicate crucial configuration considerations. Pay close attention to warning messages.

Warning! Example of a warning.

Cross-References

Implementation guides provide cross-references either under the heading "See Also" or on a separate line preceded by the word *See.* Cross-references lead to other documentation that is pertinent to the immediately preceding documentation.

Country, Region, and Industry Identifiers

Information that applies only to a specific country, region, or industry is preceded by a standard identifier in parentheses. This identifier typically appears at the beginning of a section heading, but it may also appear at the beginning of a note or other text.

Example of a country-specific heading: "(FRA) Hiring an Employee"

Example of a region-specific heading: "(Latin America) Setting Up Depreciation"

Country Identifiers

Countries are identified with the International Organization for Standardization (ISO) country code.

Region Identifiers

Regions are identified by the region name. The following region identifiers may appear in implementation guides:

- Asia Pacific
- Europe
- Latin America
- North America

Industry Identifiers

Industries are identified by the industry name or by an abbreviation for that industry. The following industry identifiers may appear in implementation guides:

- USF (U.S. Federal)

- E&G (Education and Government)

Currency Codes

Monetary amounts are identified by the ISO currency code.

Comments and Suggestions

Your comments are important to us. We encourage you to tell us what you like, or what you would like to see changed about implementation guides and other Oracle reference and training materials. Please send your suggestions to your product line documentation manager at Oracle Corporation, 500 Oracle Parkway, Redwood Shores, CA 94065, U.S.A. Or email us at appsdoc@us.oracle.com.

While we cannot guarantee to answer every email message, we will pay careful attention to your comments and suggestions.

Common Fields Used in Implementation Guides

Address Book Number Enter a unique number that identifies the master record for the entity. An address book number can be the identifier for a customer, supplier, company, employee, applicant, participant, tenant, location, and so on. Depending on the application, the field on the form might refer to the address book number as the customer number, supplier number, or company number, employee or applicant ID, participant number, and so on.

As If Currency Code Enter the three-character code to specify the currency that you want to use to view transaction amounts. This code enables you to view the transaction amounts as if they were entered in the specified currency rather than the foreign or domestic currency that was used when the transaction was originally entered.

Batch Number Displays a number that identifies a group of transactions to be processed by the system. On entry forms, you can assign the batch number or the system can assign it through the Next Numbers program (P0002).

Batch Date Enter the date in which a batch is created. If you leave this field blank, the system supplies the system date as the batch date.

Batch Status Displays a code from user-defined code (UDC) table 98/IC that indicates the posting status of a batch. Values are:

Blank: Batch is unposted and pending approval.

A: The batch is approved for posting, has no errors and is in balance, but has not yet been posted.

D: The batch posted successfully.

E: The batch is in error. You must correct the batch before it can post.

P: The system is in the process of posting the batch. The batch is unavailable until the posting process is complete. If errors occur during the post, the batch status changes to *E*.

U: The batch is temporarily unavailable because someone is working with it, or the batch appears to be in use because a power failure occurred while the batch was open.

Branch/Plant Enter a code that identifies a separate entity as a warehouse location, job, project, work center, branch, or plant in which distribution and manufacturing activities occur. In some systems, this is called a business unit.

Business Unit Enter the alphanumeric code that identifies a separate entity within a business for which you want to track costs. In some systems, this is called a branch/plant.

Category Code Enter the code that represents a specific category code. Category codes are user-defined codes that you customize to handle the tracking and reporting requirements of your organization.

Company Enter a code that identifies a specific organization, fund, or other reporting entity. The company code must already exist in the F0010 table and must identify a reporting entity that has a complete balance sheet.

Currency Code Enter the three-character code that represents the currency of the transaction. JD Edwards EnterpriseOne provides currency codes that are recognized by the International Organization for Standardization (ISO). The system stores currency codes in the F0013 table.

Document Company Enter the company number associated with the document. This number, used in conjunction with the document number, document type, and general ledger date, uniquely identifies an original document.

If you assign next numbers by company and fiscal year, the system uses the document company to retrieve the correct next number for that company.

If two or more original documents have the same document number and document type, you can use the document company to display the document that you want.

Document Number Displays a number that identifies the original document, which can be a voucher, invoice, journal entry, or time sheet, and so on. On entry forms, you can assign the original document number or the system can assign it through the Next Numbers program.

Document Type Enter the two-character UDC, from UDC table 00/DT, that identifies the origin and purpose of the transaction, such as a voucher, invoice, journal entry, or time sheet. JD Edwards EnterpriseOne reserves these prefixes for the document types indicated:

P: Accounts payable documents.

R: Accounts receivable documents.

T: Time and pay documents.

I: Inventory documents.

O: Purchase order documents.

S: Sales order documents.

Effective Date	Enter the date on which an address, item, transaction, or record becomes active. The meaning of this field differs, depending on the program. For example, the effective date can represent any of these dates: • The date on which a change of address becomes effective. • The date on which a lease becomes effective. • The date on which a price becomes effective. • The date on which the currency exchange rate becomes effective. • The date on which a tax rate becomes effective.
Fiscal Period and **Fiscal Year**	Enter a number that identifies the general ledger period and year. For many programs, you can leave these fields blank to use the current fiscal period and year defined in the Company Names & Number program (P0010).
G/L Date (general ledger date)	Enter the date that identifies the financial period to which a transaction will be posted. The system compares the date that you enter on the transaction to the fiscal date pattern assigned to the company to retrieve the appropriate fiscal period number and year, as well as to perform date validations.

Oracle's JD Edwards EnterpriseOne Product Costing and Manufacturing Accounting Preface

This preface discusses:

- JD Edwards EnterpriseOne products.
- JD Edwards EnterpriseOne application fundamentals.
- Common fields used in this implementation guide.

JD Edwards EnterpriseOne Products

This implementation guide refers to these JD Edwards EnterpriseOne products from Oracle:

- JD Edwards EnterpriseOne General Accounting.
- JD Edwards EnterpriseOne Inventory Management.
- JD Edwards EnterpriseOne Management - Shop Floor.
- JD Edwards EnterpriseOne Manufacturing - ETO Foundation.
- JD Edwards EnterpriseOne Manufacturing - PDM.
- JD Edwards EnterpriseOne Payroll.
- JD Edwards EnterpriseOne Requirements Planning.
- JD Edwards EnterpriseOne Sales Order Management.

JD Edwards EnterpriseOne Application Fundamentals

Additional, essential information describing the setup and design of your system appears in a companion volume of documentation called *JD Edwards EnterpriseOne Inventory Management 9.0 Implementation Guide.*

Customers must conform to the supported platforms for the release as detailed in the JD Edwards EnterpriseOne minimum technical requirements. In addition, JD Edwards EnterpriseOne may integrate, interface, or work in conjunction with other Oracle products. Refer to the cross-reference material in the Program Documentation at http://oracle.com/contracts/index.html for Program prerequisites and version cross-reference documents to assure compatibility of various Oracle products.

See Also

JD Edwards EnterpriseOne Inventory Management 9.0 Implementation Guide, "JD Edwards EnterpriseOne Inventory Management Preface"

Common Fields Used in This Implementation Guide

Co (company)

Enter a code that identifies a specific organization, fund, or other reporting entity. The company code must already exist in the Company Constants table (F0010) and must identify a reporting entity that has a complete balance sheet. At this level, you can have intercompany transactions.

Note. You can use company 00000 for default values such as dates and automatic accounting instructions (AAIs). You cannot use company 00000 for transaction entries.

Cost Method

Enter the cost method on which to base costing errors (that is, 01, 02, . . .). If you leave this field blank , cost method 07 (standard) will be used.

Do Ty (document type)

Specify a user-defined code (UDC) (00/DT) that identifies the origin and purpose of the transaction. The system reserves several prefixes for document types, such as vouchers, invoices, receipts, and timesheets. The reserved document type prefixes for codes are:

P: Accounts payable documents

R: Accounts receivable documents

T: Time and Pay documents

I: Inventory documents

O: Purchase order documents

S: Sales order documents

Or Ty (order type)

Specify a UDC (00/DT) that identifies the type of document. This code also indicates the origin of the transaction. The JD Edwards EnterpriseOne system from Oracle has reserved document type codes for vouchers, invoices, receipts, and timesheets, which create automatic offset entries during the post program. (These entries are not self-balancing when you originally enter them.) These document types are defined by the JD Edwards EnterpriseOne system and should not be changed:

P: Accounts Payable documents.

R: Accounts Receivable documents.

T: Payroll documents.

I: Inventory documents.

O: Purchase Order Processing documents.

J: General Accounting/Joint Interest Billing documents.

S: Sales Order Processing documents.

Setup Labor

Specify a rate that the system uses with the Setup Labor Hours of the associated routing to calculate the standard setup labor cost.

Work Center

Specify an alphanumeric code that identifies a separate entity within a business for which you want to track costs. For example, a business unit might be a warehouse location, job, project, work center, branch, or plant.

You can assign a business unit to a document, entity, or person for purposes of responsibility reporting. For example, the system provides reports of open accounts payable and accounts receivable by business unit to track equipment by responsible department.

Business unit security might prevent you from viewing information about business units for which you have no authority.

CHAPTER 1

Getting Started with JD Edwards EnterpriseOne Product Costing and Manufacturing Accounting

This chapter provides an overview of JD Edwards EnterpriseOne Product Costing and Manufacturing Accounting and discusses:

- JD Edwards EnterpriseOne Product Costing and Manufacturing Accounting integrations.
- JD Edwards EnterpriseOne Product Costing and Manufacturing Accounting implementation.

JD Edwards EnterpriseOne Product Costing and Manufacturing Accounting Overview

Product costing and manufacturing accounting is an important part of a profitable manufacturing environment. After you have determined whether the company will use standard or actual costing methods, you can set up and implement the manufacturing accounting system.

Oracle's JD Edwards EnterpriseOne Product Costing and Manufacturing Accounting systems in the JD Edwards EnterpriseOne Supply Chain Management suite from Oracle provide the features required to resolve the issues presented by the industry environment and enable a company to control its costs and make them transparent.

With this application, you can:

- Define and maintain an unlimited number of cost components for tracking specific costs, such as freight, taxes, duty, and electricity.
- Define an unlimited number of cost methods to use in cost simulation analysis.
- Assign cost factors and rates to a specific item to be used with cost extras or add-ons to calculate additional costs.
- Print a set of reports to compare old costs with new costs before implementing any changes.
- Calculate the total material cost by retrieving the bill of material for all items and adding the total cost of the components.
- Run a complete simulation of costs before any live data is updated as the frozen cost standard.
- Maintain cost information at the branch/plant and work center level to allow for cost variances at different locations for identical manufactured items.
- Charge amounts to specified accounts.
- Create detailed or summary journal entries for work in process or completions.
- Create detailed or summary journal entries for work order or rate schedule variances.

- Print reports listing detailed costs and variances for work orders or rate schedules.
- Review engineering, planned, actual (material and labor), and other variances.
- Process lean accounting transactions using transaction IDs and production plans rather than work orders.

JD Edwards EnterpriseOne Product Costing and Manufacturing Accounting Integrations

The JD Edwards EnterpriseOne Product Costing and Manufacturing Accounting systems integrate with these JD Edwards EnterpriseOne systems from Oracle:

- JD Edwards EnterpriseOne Product Data Management.
- JD Edwards EnterpriseOne Shop Floor Management.
- JD Edwards EnterpriseOne Engineer to Order.
- JD Edwards EnterpriseOne Time and Labor.
- JD Edwards EnterpriseOne General Accounting.

The JD Edwards EnterpriseOne Product Costing and Manufacturing Accounting systems work with other JD Edwards EnterpriseOne systems to ensure that all product and manufacturing costs are tracked and transacted. We discuss integration considerations in the implementation chapters in this implementation guide.

JD Edwards EnterpriseOne Product Data Management

You set up bills of material in the JD Edwards EnterpriseOne Product Data Management system from Oracle, and review the costing of bills of material. Also, you enter routings in JD Edwards EnterpriseOne Product Data Management, and review them for labor and overhead costs.

JD Edwards EnterpriseOne Shop Floor Management

Many companies who use the JD Edwards EnterpriseOne Shop Floor Management system from Oracle want to capture and track actual or average manufacturing costs. If you use actual costing, the system calculates the cost of the product built on a work order or rate schedule based on the actual hours used and the actual quantity of issued parts.

JD Edwards EnterpriseOne Engineer to Order

You can set up the Manufacturing Accounting Journal Entries program (R31802A) to create duplicate journal entries for end-item manufacturing work orders for engineer to order (ETO) projects in Oracle's JD Edwards EnterpriseOne Engineer to Order system.

JD Edwards EnterpriseOne Payroll

JD Edwards EnterpriseOne Product Costing and Manufacturing Accounting systems have an interface with the Speed Time Entry program so that transaction data from Oracle's JD Edwards EnterpriseOne Time and Labor system can be used in JD Edwards EnterpriseOne Shop Floor Management.

JD Edwards EnterpriseOne General Accounting

You set up manufacturing account numbers using Oracle's JD Edwards EnterpriseOne General Accounting system. Also, transactions such as inventory issues, labor, and work order completions are posted to the general ledger. Additionally, you can enter accrual, adjustment, and reclassification transactions using JD Edwards EnterpriseOne General Accounting. However, none of these transactions appear in manufacturing reports.

JD Edwards EnterpriseOne Product Costing and Manufacturing Accounting Implementation

This section provides an overview of the steps that are required to implement JD Edwards EnterpriseOne Product Costing and Manufacturing Accounting systems.

In the planning phase of the implementation, take advantage of all JD Edwards EnterpriseOne sources of information, including the installation guides and troubleshooting information. A complete list of these resources appears in the preface in *About This Documentation,* with information about where to find the most current version of each.

When determining which electronic software updates (ESUs) to install for JD Edwards EnterpriseOne Product Costing and Manufacturing Accounting, use the EnterpriseOne and World Change Assistant. EnterpriseOne and World Change Assistant, a Java-based tool, reduces the time required to search and download ESUs by 75 percent or more and enables you to install multiple ESUs at one time.

See *JD Edwards EnterpriseOne Tools 8.98 Software Update Guide*

For information about the Oracle Business Accelerator solution for implementation of JD Edwards EnterpriseOne Product Costing and Manufacturing Accounting, review the documentation available.

Global Implementation Steps

This table lists the suggested implementation steps for the JD Edwards EnterpriseOne Product Costing and Manufacturing Accounting systems:

Step	Reference
1. Set up global UDC tables.	*JD Edwards EnterpriseOne Tools 8.98 System Administration Guide*
2. Set up fiscal date patterns.	*JD Edwards EnterpriseOne Financial Management Application Fundamentals 9.0 Implementation Guide*, "Setting Up Organizations," Setting Up Fiscal Date Patterns
3. Set up companies.	*JD Edwards EnterpriseOne Financial Management Application Fundamentals 9.0 Implementation Guide*, "Setting Up Organizations," Setting Up Companies
4. Set up business units.	*JD Edwards EnterpriseOne Financial Management Application Fundamentals 9.0 Implementation Guide*, "Setting Up Organizations," Setting Up Business Units
5. Set up next numbers.	*JD Edwards EnterpriseOne Financial Management Application Fundamentals 9.0 Implementation Guide*, "Setting Up Next Numbers"

Step	Reference
6. Set up accounts and the chart of accounts.	*JD Edwards EnterpriseOne Financial Management Application Fundamentals 9.0 Implementation Guide*, "Creating the Chart of Accounts," Setting Up Accounts
7. Set up the General Accounting constants.	*JD Edwards EnterpriseOne General Accounting 9.0 Implementation Guide*, "Setting Up the General Accounting System," Setting Up Constants for General Accounting
8. Set up multicurrency processing, including currency codes and exchange rates.	*JD Edwards EnterpriseOne Multicurrency Processing 9.0 Implementation Guide*
9. Set up ledger type rules.	*JD Edwards EnterpriseOne General Accounting 9.0 Implementation Guide*, "Setting Up the General Accounting System," Setting Up Ledger Type Rules for General Accounting
10. Set up address book records.	*JD Edwards EnterpriseOne Address Book 9.0 Implementation Guide*, "Entering Address Book Records"
11. Set up default location and printers.	*JD Edwards EnterpriseOne Tools 8.98 Development Tools: Report Printing Administration Technologies Guide*
12. Set up branch/plant constants.	*JD Edwards EnterpriseOne Inventory Management 9.0 Implementation Guide*, "Setting Up the Inventory Management System," Defining Branch/Plant Constants
13. Set up Manufacturing/Distribution AAIs.	*JD Edwards EnterpriseOne Inventory Management 9.0 Implementation Guide*, "Setting Up the Inventory Management System," Setting Up AAIs in Distribution Systems
14. Set up document types.	*JD Edwards EnterpriseOne Inventory Management 9.0 Implementation Guide*, "Setting Up the Inventory Management System," Setting Up Document Type Information
15. Set up shop floor calendars.	*JD Edwards EnterpriseOne Shop Floor Management 9.0 Implementation Guide*, "Setting Up Shop Floor Management," Setting Up Shop Floor Calendars
16. Set up manufacturing constants.	*JD Edwards EnterpriseOne Product Data Management 9.0 Implementation Guide*, "Setting Up Product Data Management," Setting Up Manufacturing Constants

Product Costing and Manufacturing Accounting Implementation Steps

This table lists the suggested application-specific implementation steps for JD Edwards EnterpriseOne Product Costing and Manufacturing Accounting:

Step	Reference
1. Set up manufacturing constants for Product Costing and Manufacturing Accounting.	Chapter 3, "Setting Up Product Costing and Manufacturing Accounting," Setting Up Manufacturing Constants, page 29

Step	Reference
2. Set up UDCs for product costing.	Chapter 3, "Setting Up Product Costing and Manufacturing Accounting," Understanding UDCs for Product Costing, page 17
3. Set up costing information.	Chapter 3, "Setting Up Product Costing and Manufacturing Accounting," Understanding Costing Information Setup, page 21
4. Set up accounting cost quantities for standard costs.	Chapter 3, "Setting Up Product Costing and Manufacturing Accounting," Defining Accounting Cost Quantities for Standard Costing, page 21
5. Set up item cost levels.	Chapter 3, "Setting Up Product Costing and Manufacturing Accounting," Defining Inventory Cost Levels, page 23
6. Set up methods and costs for items.	Chapter 3, "Setting Up Product Costing and Manufacturing Accounting," Defining Cost Methods and Item Costs, page 25
7. Set up standard rate and factor codes.	Chapter 3, "Setting Up Product Costing and Manufacturing Accounting," Setting Up Standard Rate and Factor Codes, page 31
8. Assign values to user-defined cost components.	Chapter 3, "Setting Up Product Costing and Manufacturing Accounting," Assigning Values to User-Defined Cost Components, page 33
9. Set up simulated rates for work centers.	Chapter 3, "Setting Up Product Costing and Manufacturing Accounting," Setting Up Simulated Rates for Work Centers, page 38

CHAPTER 2

Understanding Product Costing and Manufacturing Accounting

This chapter discusses:

- Product costing and manufacturing accounting features.
- Product costing for standard costing.
- Actual costing integration.
- Effective cost management.
- Tables used for product costing and manufacturing accounting.

Product Costing and Manufacturing Accounting Features

The JD Edwards EnterpriseOne Product Costing and Manufacturing Accounting systems provide flexibility to accommodate the manufacturing environment. Maintaining accurate and complete records of the value of inventory is one of the major concerns of most businesses today. Keeping unprofitable stock or using inappropriate costing methods for inventory can quickly deplete profits.

The JD Edwards EnterpriseOne Product Costing system enables you to store and retrieve cost information. It also helps you to manage the costs by providing information to the company's business plan.

With accurate product costing, you can evaluate these manufacturing processes to determine how they affect a company's profitability:

- Manufacturing cost accounting (direct labor, indirect labor, and overhead).
- Product design (design and manufacturing engineering).
- Accounting (gross margin by product line or item).

After you establish costs in the JD Edwards EnterpriseOne Product Costing system, the JD Edwards EnterpriseOne Manufacturing Accounting system tracks the costs, reports variances, and posts manufacturing transactions to the general ledger.

This table describes some of the features and benefits of these systems:

Feature	Description
User-defined cost extras or add-ons	Define and maintain an unlimited number of cost components for tracking specific costs, such as freight, taxes, duty, and electricity.

Feature	Description
User-defined cost rollup methods	Define an unlimited number of cost methods to use in cost simulation analyses.
User-defined cost factors and rates	Allocate cost factors and rates to a specific item. These factors and rates are used with cost extras or add-ons to calculate additional costs.
Cost variances	Print a set of reports to compare old costs with new costs before implementing any changes.
Bill of material rollup	Calculate the total material cost by retrieving the bill of material for all items and adding the total cost of the components.
Cost simulation	Run a complete simulation of costs before any live data is updated as the frozen cost standard.
Multifacility costing	Maintain cost information at the branch/plant level to allow for cost variances at different locations for identical manufactured items.
Variances	Review these kinds of variances: • Engineering. • Planned. • Actual (material and labor). • Other.
Journal entries for variances	Create detailed or summary journal entries for work order or rate schedule variances.
Journal entries for work order or rate schedule transactions	Create detailed or summary journal entries for work in process or completions.
Automatic accounting instruction (AAI) tables	Charge amounts to specified accounts.
Reports	Print reports listing detailed costs and variances for work orders or rate schedules.

Product Costing for Standard Costing

To remain competitive in a changing business environment and to reduce the costs that are passed along to the consumer, companies must be aware of all aspects of their business and look for ways to refine operations to reduce lead times, expedite speed to market, and reduce the cost of operations. All of these processes help the company to be more flexible so that it can respond to changes in customer demands and to maintain or improve its market share.

To reduce costs that you incur as a part of conducting business, you must understand where costs are generated. For production industries, you must break down product costs into each contributing factor that influences the ultimate cost of the manufactured product. You should track not only the cost of the individual item, but also each additive feature or activity that adds cost to the end product or increases the value of the product.

Numerous activities or processes might add costs to the product. You should have processes and tools in place to identify each component of cost. You must also understand how those incurred costs might be passed along to customers.

As the company refines its production processes and automates costing activities, you should create detailed definitions of the costing processes. Ensure that the cost techniques support any manufacturing method that you use. Often, a company wants to decrease the lead time that is required to maintain and monitor product costing information throughout the entire manufacturing process. More accurate costing information enables you to identify wasteful costs and to lower costs that must be passed along to the consumer or that are absorbed. The goal is to increase the company's revenue and improve profit margins.

Product costing plays a significant role in the manufacturing environment. If you use standard costing, you must set up costs for the products that you produce before you can implement the JD Edwards EnterpriseOne Manufacturing Accounting system.

To calculate these costs, you must consider these aspects of the manufacturing environment:

- Product costing (detailed information) for material, labor, and overhead.
- Cost reporting (what does the item really cost to produce).
- Variance reporting (actual versus standard costs).

To use standard costing, you specify cost method 07 for the item and branch. After you calculate the cost component values in a simulated mode and are satisfied with the results, you must establish frozen standard cost components. All shop floor transactions use these frozen standards for cost calculations which, in turn, generate transactions in the general ledger and are the basis of the inventory valuation.

Standard costing is most applicable for a company with stable costs and little cost variance from one manufacturing run to another. Companies with minimal accounting staff often use standard cost accounting.

With standard costing, you estimate costs for each end item assembly and manufactured part on a level-by-level basis before production begins. These cost estimates are based on both past performance and analysis of future conditions.

This table shows the differences between components of net-added cost and total cost:

Net-Added Cost	Total Cost
Costs include: • Labor. • Overhead. • Outside operations. • Extra costs. • Materials (for purchased parts only).	Costs include: • This item's net-added cost. • Total cost of lower-level components.

The net-added cost represents the cost to manufacture an item at a specified level in the bill of material. For manufactured parts, the cost includes labor, outside operations, and extra costs, but not materials (lower-level items). For purchased parts, the net-added cost includes the cost of materials. The total cost of an item represents the sum of the item's net-added cost and the total cost of all components.

By defining and monitoring standard product costs, you can measure the company's current manufacturing performance and compare it to the standard (target) costs. Product costing provides information about the monetary investments in the materials, work in process, and physical inventory. You can use this information to determine pricing for end items and service components.

Actual Costing Integration

Many companies that use the JD Edwards EnterpriseOne Shop Floor Management system want to capture and track actual or average manufacturing costs. If you use actual costing, the system calculates the cost of the product built on a work order or rate schedule based on the actual hours used and the actual quantity of issued parts. The system updates the cost based on the most current information.

The system provides two methods for actual costing:

- Weighted average cost (cost method 02).
- Manufacturing last cost (cost method 09).

You can implement actual costing with the JD Edwards EnterpriseOne Manufacturing Accounting system without using the JD Edwards EnterpriseOne Product Costing system. If you use actual costing, you do not need to set up product costs for each item that you manufacture because product costs are calculated when work orders or rate schedules are completed.

A company can use a combination of actual costed items and standard costed items if the parent item is an actual costed item. Companies using one of the actual costing methods and cost extras should set up and freeze extra costs in the Item Cost Component Add-Ons table (F20026).

When you complete work orders for items that use the weighted average (02) cost method or the manufacturing last (09) cost method, the system:

- Calculates a new unit cost for the item based on shop floor activities.
- Revalues on-hand inventory for items that use cost method 09.
- Calculates and updates the weighted average cost.
- Updates the Item Cost table (F4105) with the new unit cost.

Weighted average costing (02) is useful for companies whose costs change often but not significantly.

Actual costing (09) is useful for companies that:

- Engineer or manufacture to order.
- Have costs that change often and significantly.

Comparing Standard and Actual Costing

A company should decide to use either standard or actual costing depending on its business requirements. This table identifies considerations that affect the decisions of whether to use standard or actual costing:

Consideration	Explanation
Manufacturing	When you use actual costing methods, you should: • Use discrete manufacturing. • Use engineer-to-order or make-to-order practices and oversee the entry of all information on the work orders.
Inventory transfer	When you use the Manufacturing Last Cost method (09), you should: • Be aware that transferring inventory for any purposes other than the cost of goods sold (COGS) might result in incorrect inventory value. • Understand that processing for physical inventory might be more time consuming than with other cost methods.
Costing	When you use actual costing methods, maintain the inventory cost level at the item, branch, and location levels (inventory cost level 3) for best results.

Effective Cost Management

Most of the major areas or departments within the manufacturing company contribute information to the product costing activities and, therefore, affect the overall accuracy of the manufacturing budget.

This table lists examples of departments within a typical company and the aspects of the JD Edwards EnterpriseOne Product Costing and JD Edwards EnterpriseOne Manufacturing Accounting systems that are affected by each department:

Department	Description
Design Engineering	The design engineering group is responsible for ensuring that: • The bill of material is complete. • The make-buy information is accurate. • The engineering change orders (ECOs) have been taken into account.
Sales	The sales force contributes important information regarding target markets, as well as the latest trends in manufacturing. For effective cost management, the sales force must provide timely and reasonable forecasts.

Department	Description
Manufacturing Engineering	The manufacturing engineering group is responsible for identifying: • Correct processes. • Changes to existing processes. • Manufacturing overhead. • Accurate information about work centers.
Purchasing	The purchasing department must provide: • Accurate supplier costs • Accurate transportation costs
Manufacturing	Manufacturing operations provide vital information to the costing effort. For example, they must: • Enter their data in a timely and accurate manner. • Identify any discrepancies in the bills of material and routings.
Cost Accounting	The cost accounting staff must: • Ensure that all items have costs. • Identify general and administrative overhead. • Produce timely variance reports (standard costs versus current costs).

Consider these issues as you define and manage manufacturing costs:

- When (and how often) you change costs.
- How you limit access.
- When the cost of a new item is reflected.
- How you account for labor rates and work center overhead.

You might also encounter these circumstances as you define costs:

- Not all costs are available before the initial cost rollup.
- You have used incorrect units of measure.
- The company reports labor hours and costs inaccurately.
- New products are not updated in a timely manner.
- Standards are updated too frequently.
- Items have been added to or deleted from the bill of material since the last cost update.
- Steps in the routing master have been changed since the last cost update.

Tables Used for Product Costing and Manufacturing Accounting

This is a list of the tables that are used throughout the JD Edwards EnterpriseOne Product Costing and Manufacturing Accounting systems:

Table	Description
Account Balances (F0902)	Contains net postings for each period and prior-year balances (net and cumulative). This table contains one record per account, ledger type, subledger, fiscal year, and transaction currency table.
Account Ledger (F0911)	Contains detailed transactions in the general ledger.
Account Master (F0901)	Contains account definitions, including numbers and descriptions.
Address Book Master (F0101)	Contains information about customers, suppliers, employees, and prospects.
Distribution/Manufacturing - AAI Values (F4095)	Contains account numbers that are used when journal entries are created.
Batch Control Records (F0011)	Contains system-generated batch header information, including the batch number, batch status, and batch entry date.
Bill of Material Master (F3002)	Contains information at the business unit level about bills of material, such as quantities of components. The system uses this information to calculate material costs.
Item Branch (F4102)	Defines and maintains warehouse or plant-level information, such as branch-level category codes.
Business Unit Master (F0006)	Identifies information about business units, such as company names and category codes assigned to the business unit.
Item Cost Component Add-Ons (F30026)	Contains standard costs by cost component.
Item Cost Component Detail (F300261)	Stores item cost components by work center.
Item Cost (F4105)	Contains the summarized item costs and inventory valuation method.
Equipment Rates (F1301)	Contains equipment rates that can be used for actual costing if you select this table as a machine rate source in the Manufacturing Constants program (P3009).

Table	Description
Generic Message/Rates (F00191)	Contains rate and factor tables, including: • Costing Factors (30/CF) • Costing Rates (30/CR) • Employee Rates (31/ER)
Item Ledger (F4111)	Contains transactions that indicate changes in inventory value.
Item Location (F41021)	Determines the GL class code that is used in manufacturing accounting transactions.
Item Master (F4101)	Stores basic information, such as item numbers, descriptions, category codes, and units of measure, about each defined inventory item .
Job Shop Manufacturing Constants (F3009)	Stores variables that indicate which overhead values to use. For actual costing, you can specify the sources for labor and machine rates.
Item Manufacturing Data (F4101M)	Stores the accounting cost quantity, which the system uses as the standard quantity produced to determine the allocation of fixed setup costs for an item.
Work Order Parts List (F3111)	Contains the parts list that is attached to a work order or rate schedule. It contains one record for each part.
Production Cost (F3102)	Contains all costs that are associated with a particular work order.
Purchase Order Detail (F4311)	Contains transactions that are related to a purchase order.
Routing Master (F3003)	Stores routing information, including operation sequence, work center, run time, setup time, and machine time. The system uses this information to calculate labor, machine, and overhead costs.
Sales Flex Accounting (F4096)	Determines the information to use for flex accounting.
User Defined Codes (F0005)	Contains user-defined codes (UDCs) and their descriptions.
Work Center Master (F30006)	Contains detailed data about all defined work centers, including efficiency.
Work Center Rates (F30008)	Contains simulated and frozen rates, such as rates for overhead, labor, and machine time, for each work center.
Work Order Master (F4801)	Contains all work order header information. The data from this table appears on shop floor paperwork. The system updates this table when completion transactions occur for a work order.

Table	Description
Work Order Master Tag (F4801T)	Stores the cost method for the work order, which determines whether a work order is processed as standard or actual costing. Additionally, it includes the unaccounted amount and quantity for scrap units and the unaccounted work order completions.
Work Order Routing (F3112)	Contains the routing steps that are attached to a work order or rate schedule. It contains one record for each operation sequence number and work center.
Work Order Time Transactions (F31122)	Contains labor and machine time transactions by work order.

CHAPTER 3

Setting Up Product Costing and Manufacturing Accounting

This chapter provides overviews of user-defined codes (UDCs) for product costing and costing information setup and discusses how to:

- Define accounting cost quantities for standard costing.
- Define inventory cost levels.
- Define cost methods and item costs.
- Set up manufacturing constants.
- Set up standard rate and factor codes.
- Assign values to user-defined cost components.
- Set up simulated rates for work centers.
- Set up general ledger class codes.
- Define manufacturing automatic accounting instructions (AAIs).

Understanding UDCs for Product Costing

Many fields throughout the JD Edwards EnterpriseOne Product Costing and Manufacturing Accounting systems require UDCs. UDCs enable you to establish and maintain valid codes for various types of information to meet the needs of the organization. Codes are categorized by system and code type.

This table lists the UDCs that are used by the JD Edwards EnterpriseOne Product Costing and Manufacturing Accounting systems:

UDC	Description
Cost Component Add-Ons (30/CA)	Use cost components to identify and track each type of cost for an item. The letter A at the beginning of a cost component is used for material costs, B for labor and machine hours, and C for labor and machine-based overhead. Cost components that begin with A, B, or C are hard-coded and cannot be changed or used for other cost component types. You can define an unlimited number of additional cost components to account for extra costs for an item, such as electricity or research and development. You can assign separate cost components by categories that are applicable to the business. The UDCs for extra cost components can begin with any letter except A, B, or C. Although you might attempt to set up extra cost components that begin with these letters, the Cost Simulation program (R30812) actually deletes these cost components. **Note.** The letter D is used for outside operations in demo data, but any code other than A, B, or C with a special handling code of *1* can be used. When you set up cost components, define a separate UDC value for all the possible cost components that might be used in the cost rollup for an item. Complete the following fields with the information indicated: • Codes: The code for the cost component. • Description 1: What the component represents. • Description 2: Additional text that further clarifies. • Special Handling: Use a value of *1* to define a code as an outside operation. **Important!** You can use a cost component only once for an outside operation in a routing. If you have more than one outside operation, you need to define different cost components, such as D1 and D2.

UDC	Description
Cost Buckets (30/CB)	Use cost buckets to group similar cost components for inquiry and reporting purposes. When you set up cost buckets, complete the following fields with the information indicated: • Codes: Identify the cost components to be grouped. • Description 1: Enter the name that you want to appear as the heading for the cost bucket column on costed bill review programs and reports. You need to enter this title only once for each sequence number (entered in the Description 2 field). If the program finds more than one name for a bucket, it uses the name that is defined for the last cost component that it accumulates into the operation bucket. • Description 2: Specify in which column (bucket) each cost component is grouped.
Costed Operation Buckets (30/CO)	Use operation bucket codes to combine component costs in each step in the routing. That is, you can group operation costs into totals that appear on review programs and reports for costed routings. For example, you might track labor costs by separate cost components that represent setup, run, and overhead labor for an item. When you assign the same sequence number to each cost component, you can combine these cost components into one total cost for labor on the review program for costed routings or report for the item. When you set up operation bucket codes, complete the following fields with the information indicated: • Codes: Identify the cost components to be grouped. • Description 1: Enter the name that you want to appear as the heading for the operation bucket column on costed routing inquiries and reports. You need to enter this title only once for each sequence number (entered in the Description 2 field). If the program finds more than one name for a bucket, it uses the name that is defined for the last cost component that it accumulates into the operation bucket. • Description 2: Specify in which column (bucket) each cost component is grouped. You should reserve buckets 1 and 2 for extra costs. The system cannot calculate cost buckets 1 and 2 based on the routing, because extra costs are not related to a particular operation on the routing. Buckets 1 and 2 appear in the header area of the Costed Routing Inquiry program (P30208), and a processing option controls whether they are included in the calculation of total costs.

UDC	Description
Costing Exceptions Error Messages (30/EM)	Set up the error messages that appear on the Costing Exceptions report (R30801) when any item contains any of the errors that are included in this table. You can change the severity level of an error to one that is appropriate for the company. The severity level is defined in Description 2. The error messages are hard-coded. You cannot add or delete messages. If you change the name of an existing message, you should not change its meaning, but merely adapt the definition to one that is more clearly understood by the company.
Average Cost Calculation (40/AV)	If you want the weighted average cost (cost method 02) to be updated automatically by the system, use this UDC table to enter the program numbers for each of the programs that you want the system to update. Add Work Order Completions (P31114) and Variance Journal Entries (R31804) for actual costing.
Cost Method (40/CM)	Define the cost methods that are used to calculate costs for all items. Codes 01 through 09 are hard-coded and cannot be altered. Codes 10 through 19 are reserved for use by the JD Edwards EnterpriseOne system from Oracle. Codes 02, 07, and 09 are the only cost methods that are supported by manufacturing.

Example: Setting Up Cost Bucket Codes for Costed Bills of Material

You can group similar cost components for review and reporting purposes. For example, you can define A1 and A2 cost components as Purchasing. You do this by assigning them the same sequence number in the Description 2 field. The sequence number also determines in which order the groups appear on costed bill inquiries and reports. You can then use the costed bill inquiries and reports to review the total costs for the group Purchase.

Each cost bucket can contain several defined cost components.

This example illustrates how you might define the buckets and UDCs:

Bucket Number	Description
Bucket 1	Purchase: Includes cost components A1 (material), A2 (scrap), and D1 (outside operations).
Bucket 2	Labor: Includes cost components B1 (direct labor), B2 (setup), and B4 (labor efficiency).
Bucket 3	Machine: Includes cost component B3 (machine run).
Bucket 4	Overhead: Includes cost components C1 (machine variable) and C2 (machine fixed).
Bucket 5	Extras: Includes cost components X1 (taxes) and X2 (electricity).

This example of UDC 30/CB illustrates how you might define the UDCs in the software:

Codes	Description 01	Description 02	Hard-Coded
A1	Purchase	1	Y
A2	Purchase	1	Y
B1	Labor	2	Y
B2	Labor	2	Y
B3	Machine	3	Y
B4	Labor	2	Y
C1	Overhead	4	Y
C2	Overhead	4	Y
C3	Overhead	4	Y
C4	Overhead	4	Y

Understanding Costing Information Setup

You can set up JD Edwards EnterpriseOne Product Costing and Manufacturing Accounting to meet specific manufacturing environment needs. The system uses the values that you define to determine the costs of the items that you manufacture.

Defining Accounting Cost Quantities for Standard Costing

The system uses accounting cost quantities to determine the allocation of fixed costs for an item. Accounting cost quantities represent the standard quantity of a work order or rate schedule for this item. During cost rollup, the system divides the fixed costs by the accounting cost quantity that you specify to determine a per unit fixed cost.

You use the Item Branch/Plant program (P41026) to define accounting cost quantities for standard costing.

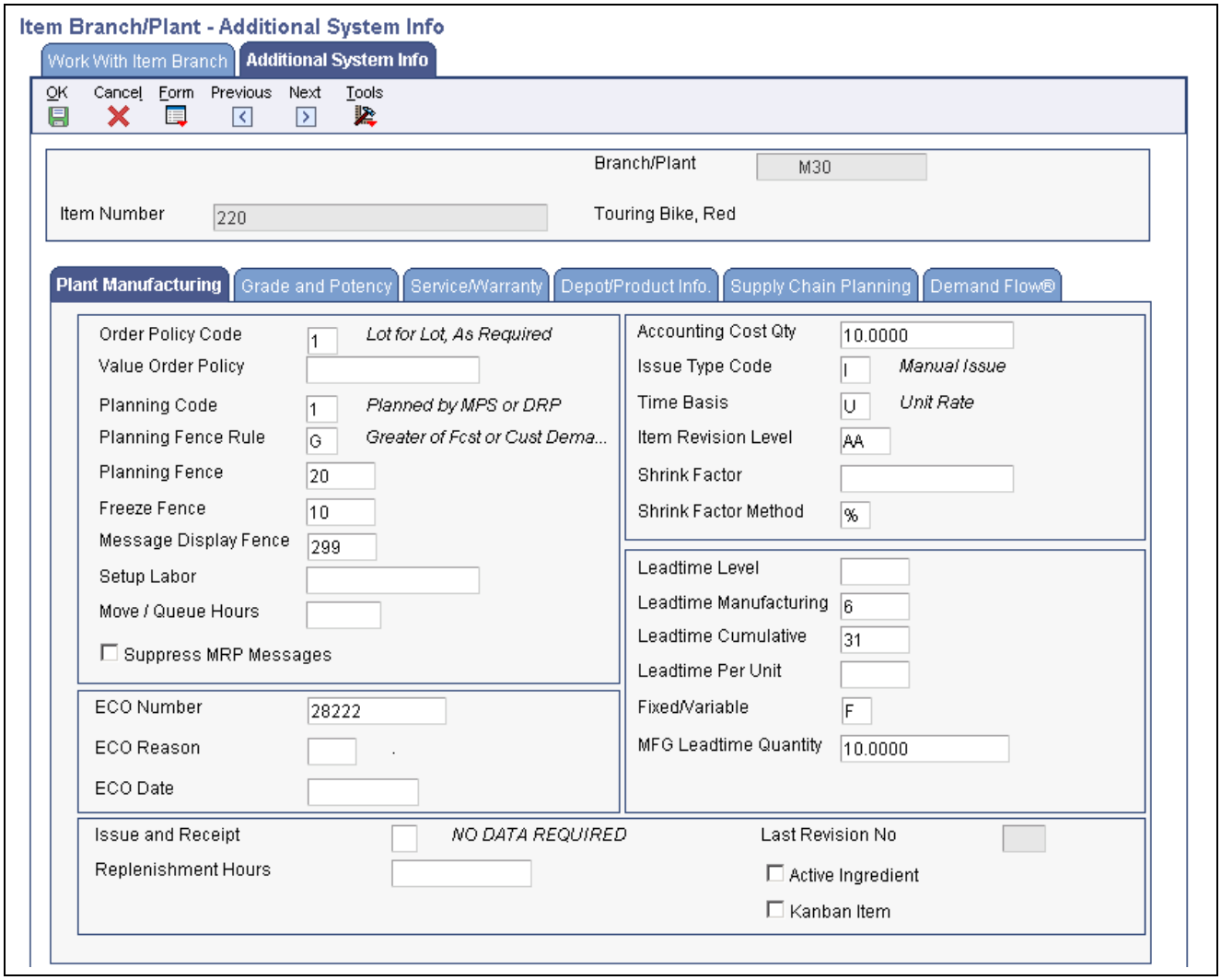
Note. If you use either of the actual cost methods (02 or 09) for an item, you do not need to complete this task.

Form Used to Define Accounting Cost Quantities for Standard Costing

Form Name	FormID	Navigation	Usage
Additional System Info (additional system information)	W41026D	Item Revisions (G4112), Item Branch/Plant Manufacturing Data Retrieve an item number, select a record, and then select Addl System Info (additional system information) from the Row menu.	Define accounting cost quantities for standard costing.

Defining Accounting Cost Quantities for Standard Costing

Access the Additional System Info form.



Additional System Info form: Plant Manufacturing tab

Accounting Cost Qty (accounting cost quantity) Enter the amount that the system uses in cost rollup to determine the allocation of setup costs. The system totals the setup costs and divides the sum by this quantity to determine setup costs per unit. The default value is *1*.

Defining Inventory Cost Levels

This section provides an overview of inventory cost levels and discusses how to define inventory cost levels.

Understanding Inventory Cost Levels

The cost level that you assign to an item indicates the level at which the system maintains costs. You determine whether the system maintains one overall cost for an item (cost level 1) or a different cost for the item in each branch/plant (cost level 2). The system can also maintain a different cost for each location and lot within a branch/plant (cost level 3).

You should assign cost level 3 if you use actual costing. For configured items, you must assign cost level 3. However, the system does not support cost level 3 for standard costing.

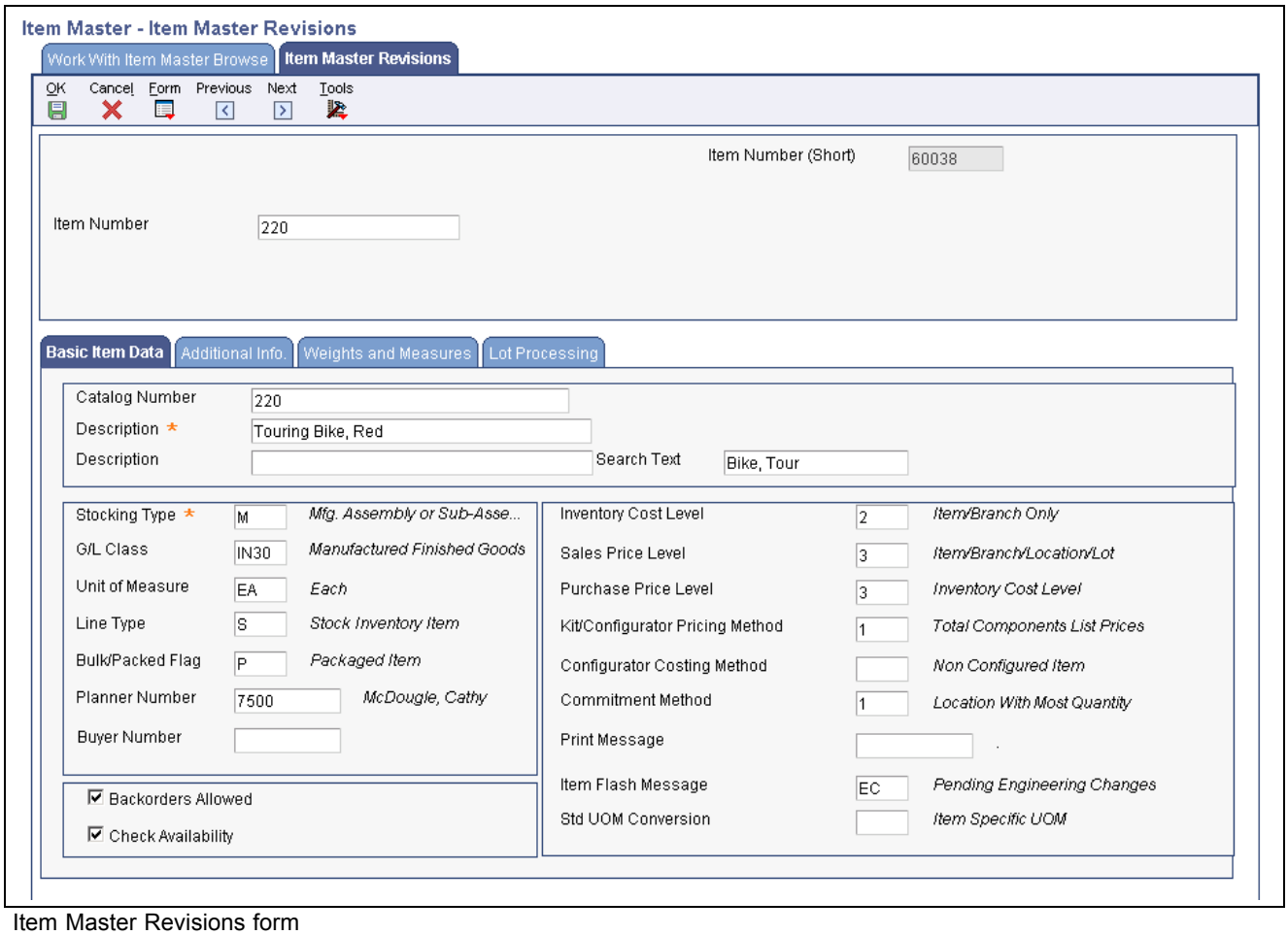
After you have initially assigned an inventory cost level to an item in the Item Master program (P4101), you should not change the cost level manually on the Item Master Revisions form. Instead, use the Item Cost Level Conversion program (R41815) to change the cost level for an item.

Form Used to Define Inventory Cost Levels

Form Name	FormID	Navigation	Usage
Item Master Revisions	W4101A	Inventory Master/Transactions (G4111), Item Master Retrieve an item on the Work With Item Master Browse form. Select the record and click Select.	Define inventory cost levels.

Defining Inventory Cost Levels

Access the Item Master Revisions form.



Item Master Revisions form

Inventory Cost Level

Enter the level at which you want the system to maintain inventory costs. The system stores inventory costs with the inventory cost level in the Item Cost table (F4105). Values are:

1: Item level

2: Item/Branch level

3: Item/Branch/Location level

Lot Process Type

If you use actual costing and selected cost level 3, complete this field.

The lot process type is a code that indicates whether lot or serial number is assigned. Lot and serial number processes use the Lot Master table (F4108). Values are:

0: Lot assignment is optional.

You can assign numbers manually. Quantity can be greater than one. (Default)

1: Lot assignment is required.

The system assigns numbers using the system date in YYMMDD format. Quantity can be greater than one.

2: Lot assignment is required.

The system assigns numbers in ascending order using Next Numbers. Quantity can be greater than one.

3: Lot assignment is required.

You must assign numbers manually. Quantity can be greater than one.

4: Serial number assignment is optional except during shipment confirmation.

Quantity must not exceed one.

5: Serial number assignment is required.

The system assigns numbers using the system date in YYMMDD format. Quantity must not exceed one.

Defining Cost Methods and Item Costs

This section provides an overview of cost methods and item costs, lists a prerequisite, and discusses how to:

- Set processing options for Cost Revisions (P4105).
- Define cost methods and item costs.

Understanding Cost Methods and Item Costs

You must provide cost information for each item that you use so that the system can track inventory costs. When you define an item with cost level 2 or 3, you specify the cost method that the system uses to determine the cost of an item for sales transactions, inventory transactions, and purchase orders in the Branch/Plant Constants program (P41001). You can override the values that you defined in the branch/plant constants for a particular item at the item branch/plant level. For example, you can specify that the system use the weighted average cost method to determine the inventory cost for an item and use the last-in cost method to determine the item's unit cost for purchase orders.

You can set up the JD Edwards EnterpriseOne Manufacturing Accounting system for these costing types:

Costing Type	Description
Standard costing	Use cost method 07 (Standard). This method is useful for items that are manufactured in volume with low variety and have stable costs. When you use cost method 07 for the parent item, the system uses only method 07 for all components, outside operations, and so forth.
Actual costing	Use either cost method 02 (Weighted Average) or cost method 09 (Manufacturing Last Cost). When you assign either cost method 02 or 09 to the parent item, the system uses this value to update the Ledger field (LEDG) in the Work Order Master Tag table (F4801T) when work orders are generated. Therefore, the components on the parts list for the parent item can have any valid cost method (UDC 40/CM). The actual costing methods apply to discrete items only. Cost method 02 is useful for costs that change often. Use this method when you do not want to revalue on-hand inventory when the work orders are completed, but at a different time. Cost method 09 is useful for items that are engineered or manufactured to order and have costs that change often and significantly. Use this method when you want to revalue the inventory each time that you run the work order completion programs. **Important!** Because JD Edwards EnterpriseOne software does not support actual costing for process and configured items, the system issues an error message if you attempt to define an actual cost method for a process item (stocking type R) or a configured item (stocking type C).

For every cost method that you assign to an item, you must specify an item cost. For actual costing methods you can either enter an initial cost or let the system update it with the last manufactured cost.

Note. You can remove a cost method for an item if it is no longer applicable. If you try to remove the sales and inventory or purchasing cost method, the system displays a warning message. The system does not delete the cost method, but updates it to a cost of zero.

Prerequisite

To define cost methods and costs for items, you must first set up the Cost Method UDC table (40/CM).

Form Used to Define Cost Methods and Item Costs

Form Name	FormID	Navigation	Usage
Cost Revisions	W4105A	Product Costing (G3014), Enter/Change Item Costs On the Work With Item Cost form, enter a valid combination of branch/plant and item number and click Add.	Define cost methods and item costs.

Setting Processing Options for Cost Revisions (P4105)

These processing options control default processing for the Cost Revisions program.

Process

This processing option controls whether you can change standard costs.

Process Enter *1* to prevent the standard cost from being changed.

Interop

This processing option controls whether interoperability is enabled.

Transaction type Specify the transaction type for the interoperability transaction. If you leave this processing option blank, outbound interoperability processing is not used.

Flex Acct

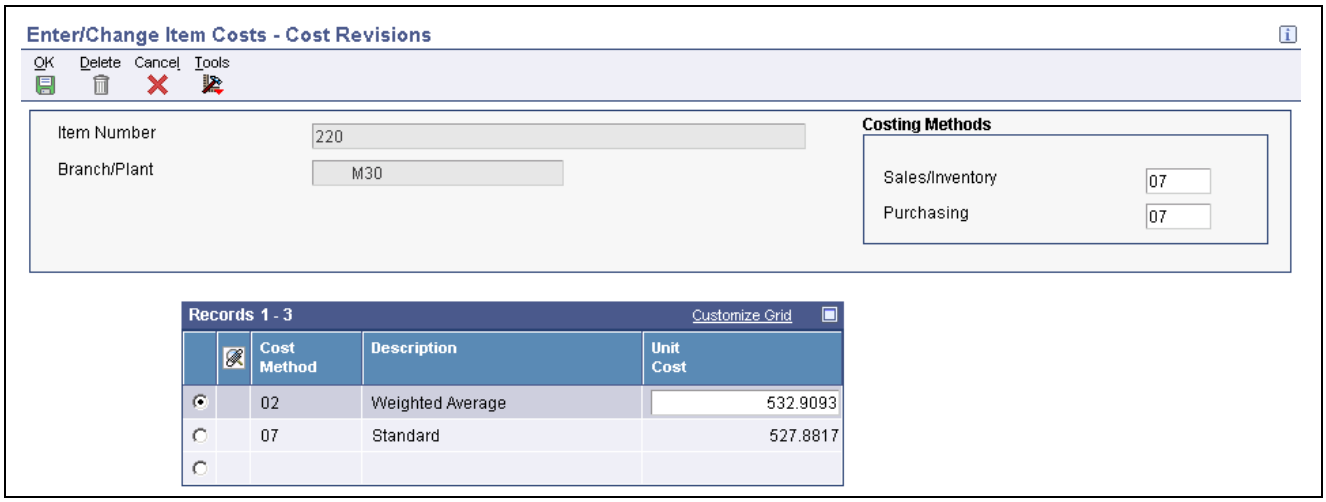
This processing option controls whether flex accounting is enabled.

Flex Accounting Specify whether to enable flex accounting. If you leave this processing option blank, the system does not use flex accounting.

Note. To use this processing option, you must first enable flex accounting for AAIs 4134 and 4136.

Defining Cost Methods and Item Costs

Access the Cost Revisions form.



Cost Revisions form

Sales/Inventory Enter a value from UDC table 40/CM that indicates the cost method that the system uses for the inventory value and to calculate the cost of goods sold (COGS) for the item. Cost methods 01 through 19 are reserved for JD Edwards EnterpriseOne system use.

If you maintain costs at the item level, the system retrieves the default value for this field from the data dictionary. If you maintain costs at the item and branch/plant levels, the system retrieves the default value from branch/plant constants.

Purchasing Enter a value from UDC table 40/CM that indicates the cost method that the system uses for the inventory value and to calculate the cost of goods that are sold for the item. Cost methods 01 through 19 are reserved for JD Edwards EnterpriseOne system use.

If you maintain costs at the item level, the system retrieves the default value for this field from the data dictionary. If you maintain costs at the item and branch/plant level, the system retrieves the default value from branch/plant constants.

Cost Method Enter a value from UDC table 40/CM that specifies the basis for calculating item costs. Cost methods 01 through 19 are reserved for use by the JD Edwards EnterpriseOne system.

Unit Cost Enter the cost for one unit of this item in the primary unit of measure, based on the corresponding cost method.

You can change the monetary amount for any cost method at any time except for cost method 07 (standard). You can prevent standard costs from being changed by setting the processing option.

Best practice for changing standard costs is running the Frozen Update program (R30835). If you change the amount for the cost method that you use to value inventory and to track costs of goods sold, the system applies the new amount to the on-hand quantity of the item and creates journal entries to account for the difference between the old and the new amounts.

Certain programs update the monetary amount for some cost methods. Examples include:

- Last-in method

  The system interactively updates this unit cost based on the last cost of the item at the time of a purchase order receipt or after an inventory adjustment.

- Weighted average method

  The system calculates and updates this amount by adding transaction quantities, adding transaction costs, and dividing the total cost by the total quantity.

- Purchase method

  The system updates cost amounts similarly to the last-in method, but without landed costs.

Note. If you enter a cost method for sales and inventory or purchasing and do not set up a cost amount for that method, a warning message appears. If you do not enter a cost amount for the cost method, the system assigns a cost of zero.

Setting Up Manufacturing Constants

This section provides an overview of manufacturing constants and discusses how to set up manufacturing constants for product costing and manufacturing accounting.

Understanding Manufacturing Constants

You must define product costing and manufacturing accounting information that is unique to the branch/plant.

You use the Manufacturing Constants program (P3009) to specify this cost calculation information:

- Whether to maintain costs at the work center level or the cost component level.
- Which overhead costs to calculate.
- Whether the program considers work center efficiency when calculating direct labor and overhead.
- Whether overhead costs are entered as percentages or rates.

If you use actual costing, you can specify the sources for labor and machine rates that the system uses to calculate labor and machine costs.

Costing by Work Center

You can also use the manufacturing constants to specify the level of detail that you want to use for costing. You can cost items by cost component or you can set up the branch/plant to perform costing separately for each work center.

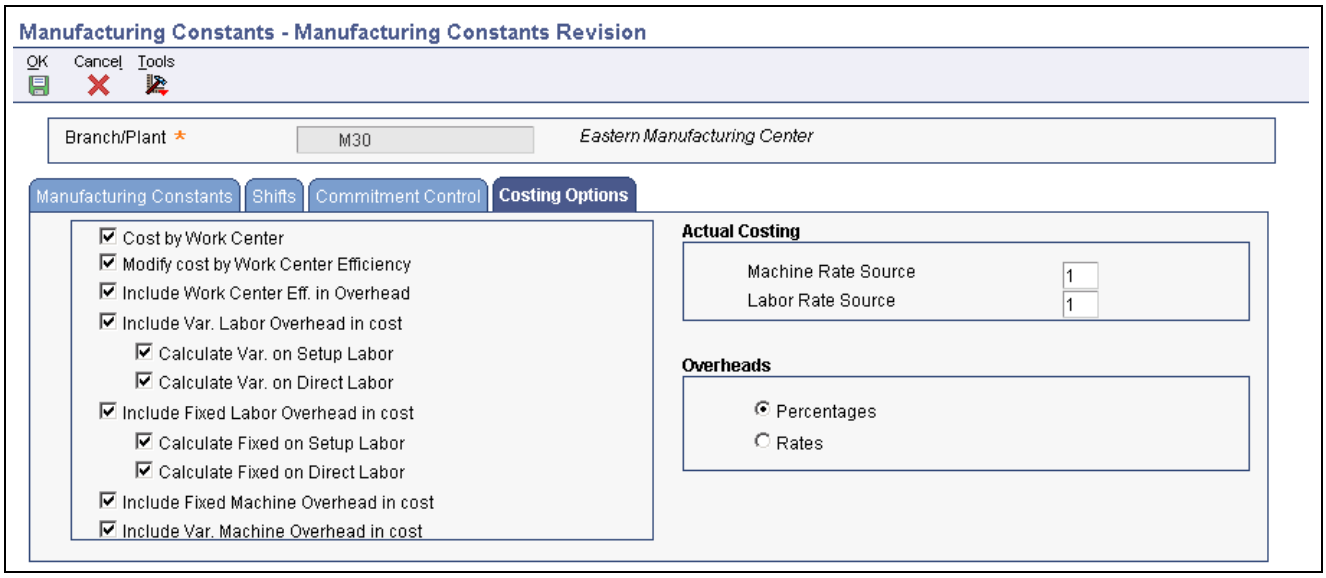
Form Used to Set Up Manufacturing Constants

Form Name	FormID	Navigation	Usage
Manufacturing Constants Revision	W3009B	Product Costing Setup (G3042), Manufacturing Constants Select a branch/plant on the Work with Manufacturing Constants form, and click Select.	Set up manufacturing constants for product costing and manufacturing accounting.

Setting Up Manufacturing Constants

Access the Manufacturing Constants Revision form.

Select the Costing Options tab.



Manufacturing Constants Revision form: Costing Options tab

Cost by Work Center — Select to indicate that the system tracks cost variances for discrete and process items on a summarized level in the Item Cost Component Add-Ons table (F30026) or on a detailed level by cost component and work center in the Item Cost Component Detail table (F300261).

Modify cost by Work Center Efficiency — Select to indicate that the cost rollup creates cost component B4 (for labor efficiency) based on the direct labor value (cost component B1) and the Work Center Efficiency percentage from the Work Center Master table (F30006).

Include Work Center Eff. in Overhead (include work center efficiency in overhead) — Select to indicate that the cost rollup includes work center efficiency when you calculate overhead values if you specified that you want to modify costs by work center efficiency.

Include Var. Labor Overhead in cost (include variable labor overhead in cost) — Select to indicate that the cost rollup creates cost type component C3 (for variable labor overhead) in the Item Cost Component Add-Ons table (F30026).

Calculate Var. on Setup Labor (calculate variable on setup labor)	Select to indicate that the cost rollup includes setup labor expenses (cost component B2) in the total that is used to calculate variable setup overhead (cost component C3).
Calculate Var. on Direct Labor (calculate variable on direct labor)	Select to indicate that the cost rollup includes direct labor expenses (cost component B1) in the total that is used to calculate variable labor overhead (cost component C3).
Include Fixed Labor Overhead in cost	Select to indicate that the cost rollup creates cost component C4 (for fixed labor overhead) in the Item Cost Component Add-Ons table.
Calculate Fixed on Setup Labor	Select to indicate that the cost rollup includes setup labor expenses (cost component B2) in the total that is used to calculate fixed setup overhead (cost component C4).
Calculate Fixed on Direct Labor	Select to indicate that the cost rollup includes direct labor expenses (cost component B1) in the total that is used to calculate fixed labor overhead (cost component C4).
Include Var. Machine Overhead in cost (include variable machine overhead in cost)	Select to indicate that the cost rollup creates cost component C1 (for variable machine overhead) in the Cost Components table (F30026).
Include Fixed Machine Overhead in cost	Select to indicate that the cost rollup creates cost component C2 (for fixed machine overhead) in the Item Cost Component Add-Ons table.
Machine Rate Source	Enter a value that specifies the source for machine rates when the system calculates routing costs in the Production Cost table (F3102). Values are: *1:* Work Center Rates table (F30008) *2:* Equipment Rates table (F1301)
Labor Rate Source	Enter a value that specifies the source for labor rates when the system calculates the routing costs in the Production Cost table (F3102). Values are: *1:* Work Center Rates table (F30008) *2:* Employee Labor Rates table (F00191)
Overheads	Specify whether values for overhead fields (cost components C1 through C4) in the Work Center Rates table are expressed as percentages or rates. To specify whether the system expresses the overhead fields as percentages or rates, click either Percentages or Rates under the Overheads heading.

See Also

JD Edwards EnterpriseOne Product Data Management 9.0 Implementation Guide, "Setting Up Product Data Management," Setting Up Manufacturing Constants

Setting Up Standard Rate and Factor Codes

This section provides an overview of standard rate and factor codes and discusses how to set up standard rate and factor codes.

Understanding Standard Rate and Factor Codes

Standard rate and factor codes represent overhead costs or other indirect costs that you cannot assign directly to a certain production process or operation, but that must be accounted for in the costs of an item. These types of costs include utilities, insurance, research and development costs, rent or lease payments, and other types of operating costs.

Note. Rate and factor codes are user-defined, but you do not use the User Defined Codes program to enter and maintain rate and factor codes. Instead, you use the Generic Message/Rates Records program (P00191) to enter and revise rate and factor codes.

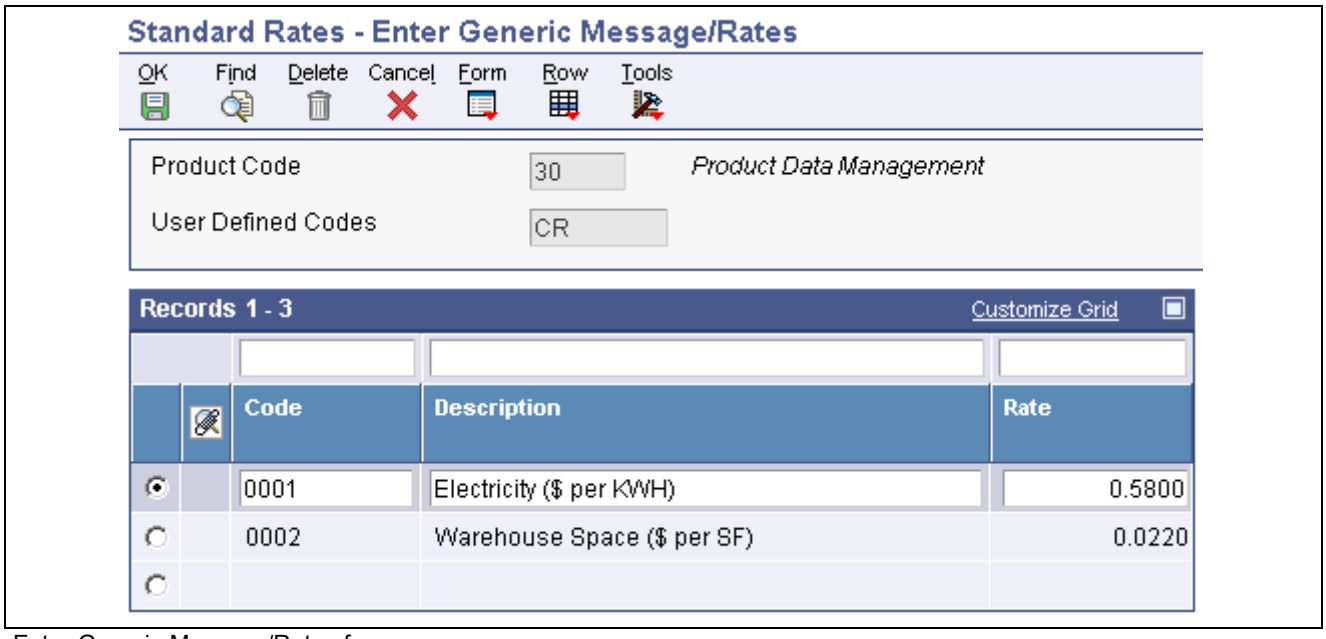
The Cost Simulation program (R30812) uses the rates and factors that you define to calculate the extra costs that appear in the Cost Components program (P30026).

Form Used to Set Up Standard Rate and Factor Codes

Form Name	FormID	Navigation	Usage
Enter Generic Message/Rates	W00191D	• Product Costing Setup (G3042), Standard Rates Click Select. • Product Costing Setup (G3042), Standard Factors Click Select.	Set up standard rate and factor codes.

Setting Up Standard Rate and Factor Codes

Access the Enter Generic Message/Rates form.



Enter Generic Message/Rates form

Code	Place the cursor in the first blank line and enter a code that the Cost Components program uses in conjunction with the factor code to calculate extra costs.
Description	Enter a description of the code.
Rate	Enter a code that is used to define rate information in the General Rate/Message Records table (F00191). The system uses the rate that you set up with up to four decimal places to calculate the extra costs for this code.

Assigning Values to User-Defined Cost Components

This section provides an overview of user-defined cost component values, lists prerequisites, and discusses how to:

- Assign values to user-defined cost components.
- Assign values to cost components by work center.
- Review simulated and frozen costs and rates.
- Review costs by work center.
- Review calculation basis for unit costs at routing operations.

Understanding User-Defined Cost Component Values

After you set up cost components and standard rate and factor codes, you must assign a monetary value to each. The system adds these values to the net amount of each item that you set up. You can assign a net-added value manually, or you can assign a predefined value.

You can also assign a calculated value based on the total value of another cost component. In this case, the system calculates the net-added value based on the total for an existing cost component. In addition, you can assign a calculated value based on the net-added value of another cost component. The system calculates the net-added value based on the net-added value for an existing cost component. In both circumstances, the system calculates this value when you enter information in the Cost Components program. The costs are then rolled up into the cost of the item when you run the Cost Simulation program.

For extra costs, the system can calculate the net-added value by multiplying a rate and factor. If you enter both amounts, the system multiplies the two numbers to calculate the net-added cost for the cost component for that item.

Cost Components by Work Center

To enable you to track variances not only on the cost-component level, but also on the work-center level, you can enter different cost component values for different work centers. This method enables you to track cost variations in each work center even if other inputs to the manufacturing process, for example items, routing, bill of material, work center rates, shop floor transactions, total costs, and total variance are the same.

To identify variances by cost center, you define different values for cost components in the work centers that you use on a routing. You can track and analyze material and labor costs by work center. The system enables you to review the net-added unit cost at each routing operation step on the Work With Work Center Cost form for the cost component that you select. For labor-related costs, you can access the Work With Cost Calculation form to display the calculations that the system uses to derive the net-added unit cost at each routing step; however, this information is not available for material costs.

Prerequisites

Before assigning values to user-defined cost components, you must:

- Set up standard rate and factor codes.
- Set up work centers and select the Cost by Work Center option in the manufacturing constants if you want to track cost information by work center.

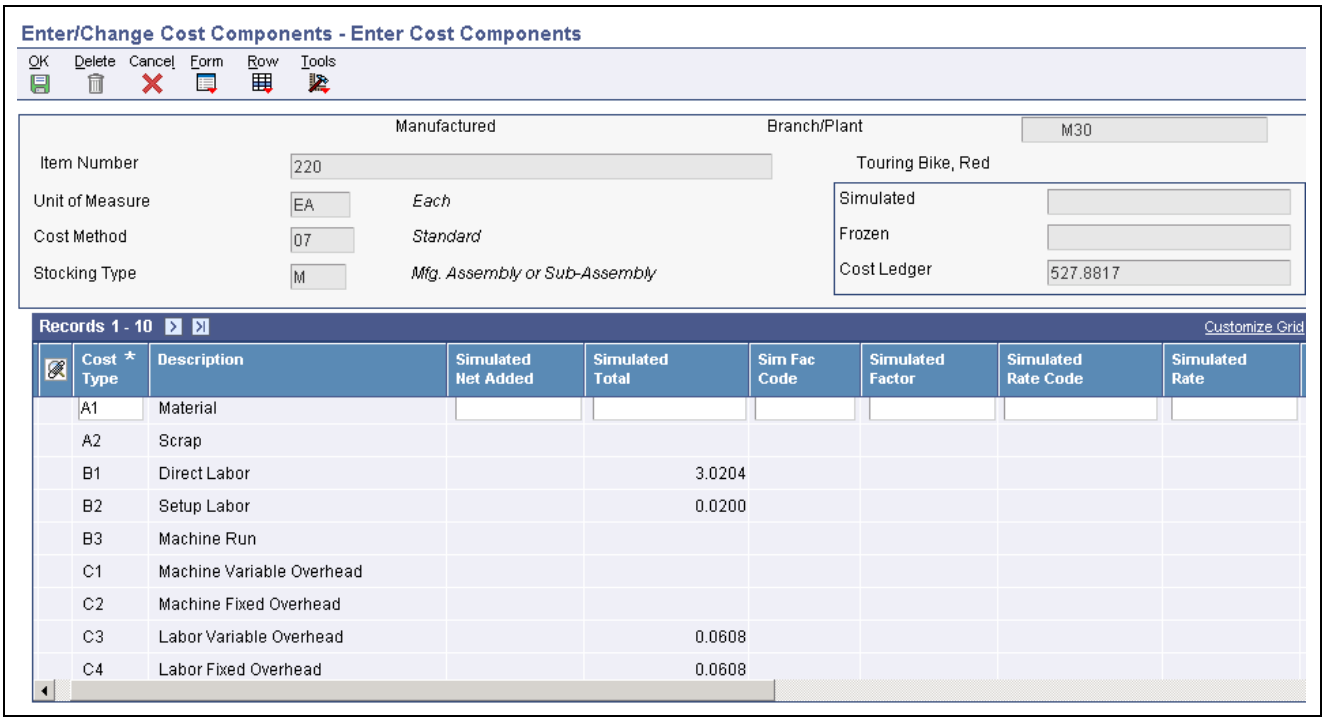
  See *JD Edwards EnterpriseOne Product Data Management 9.0 Implementation Guide*, "Entering Work Centers and Routing Instructions," Creating Work Centers.

Forms Used to Assign Values to User-Defined Cost Components

Form Name	FormID	Navigation	Usage
Enter Cost Components	W30026B	Product Costing (G3014), Enter/Change Cost Components On the Work With Cost Components form, enter a combination of branch/plant and item number, click Find, and then click Select.	Assign values to user-defined cost components.
Enter Cost Components by Work Center	W30026D	On the Work With Cost Components form, enter a combination of branch/plant and item number, click Find, and then select Costs by Workcenter from the Form menu.	Assign values to cost components by work center.
Cost Component Detail	W30026F	On the Enter Cost Components form, select a record and then select Cost Detail from the Row menu	Review simulated and frozen costs and rates.
Work With Work Center Cost	W30026A	On the Enter Cost Component form, select a record and select Cost Calc (cost calculation) from the Row menu.	Review costs by work center.
Work With Cost Calculation	W30026E	On the Work With Work Center Cost form, select Cost Calc (cost calculation) from the Row menu.	Review calculation basis for unit costs at routing operations.

Assigning Values to User-Defined Cost Components

Access the Enter Cost Components form.



Enter Cost Components form

Cost Type

Enter a code that designates each element of cost for an item. Examples of cost component types are:

A1: Purchased raw material.

B1: Direct labor routing rollup.

B2: Setup labor routing rollup.

C1: Variable burden routing rollup.

C2: Fixed burden routing rollup.

Dx: Outside operation routing rollup.

Xx: Extra add-ons, such as electricity and water.

The optional add-on computations usually operate with the type Xx extra add-ons. This cost structure enables you to use an unlimited number of cost components to calculate alternative cost rollups. The system then associates these cost components with one of six user-defined summary cost buckets.

Simulated Net Added and **Frozen Net Added**

If you want to assign a net-added value manually, enter the appropriate value for the cost component. The system uses this value to calculate costs during the simulation process.

This is the cost to build this item at its level in the bill of material. This cost does not include materials (lower-level components).

The program displays costs that you manually enter in the Simulated Total field.

If you have run the Item Cost Component - Frozen Update program (R30835), the system displays frozen net-added costs.

Simulated Total and **Frozen Total**

Enter the sum of the net added cost at this level plus the sum of the total costs of the direct components of the item (which includes lower-level component costs of those items.) The heading above the Net Added and Total columns indicates whether the costs are simulated or frozen values.

The system uses this value to calculate the cost of all the lower levels during the simulation process for the designated cost method.

If you have run the Item Cost Component - Frozen Update program, the system displays frozen total costs.

Sim Fac Code (simulated factor code)

To assign a predefined value to a cost component for extra costs, select one of the values that you defined for the factor code (30/CF) in the Generic Message/Rates table (F00191). The system multiplies the value in this field by the value in the Simulated Rate field.

Note. To review the valid factor codes, use the Search button or select Factors from the Form menu.

To assign a value to a cost component based on the total value of another cost component, select a cost component type and type *&* followed by the cost component code in the Sim Fac Code (simulated factor code) field.

Because of the way in which the system rolls up the costs, the cost component that you reference must come before the cost component that you are defining. For example, to define cost component X2, you can reference cost component X1 by entering *&X1* in this field, but you cannot define cost component X1 by referencing cost component X2.

To assign a calculated value based on the net added value of another cost component, you must enter specific information in this field: * followed by the *based on* cost-component code.

Because of the way in which the system rolls up the costs, the cost component that you reference must come before the cost component that you are defining. For example, to define cost component X2, you can reference cost component X1 by entering **X1* in this field, but you cannot define cost component X1 by referencing cost component X2.

The system retrieves the total value or net-added value for the *based on* cost component and multiplies it by the value in the Simulated Rate Code field or the Simulated Rate field.

Simulated Rate Code

To assign a predefined value to a cost component for extra costs, select one of the values that you defined for the rate code (30/CR) in the Generic Message/Rates table (F00191). The system multiplies the value in this field with the value in the Sim Fac Code field.

Note. To review the valid rate codes, use the Search button or select Rates from the Form menu.

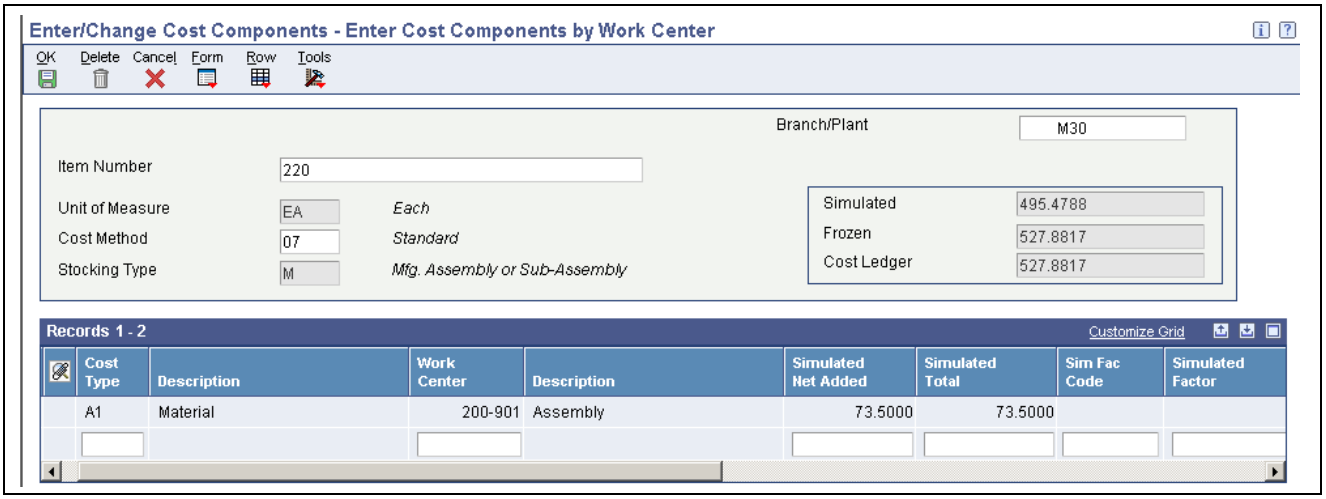
Frozen Net Added

For standard costing, this field displays the net added costs after you run the frozen cost update process.

If you use actual costing (cost method 02 or 09), you enter the actual costs directly into this field.

Assigning Values to Cost Components by Work Center

Access the Enter Cost Components by Work Center form.

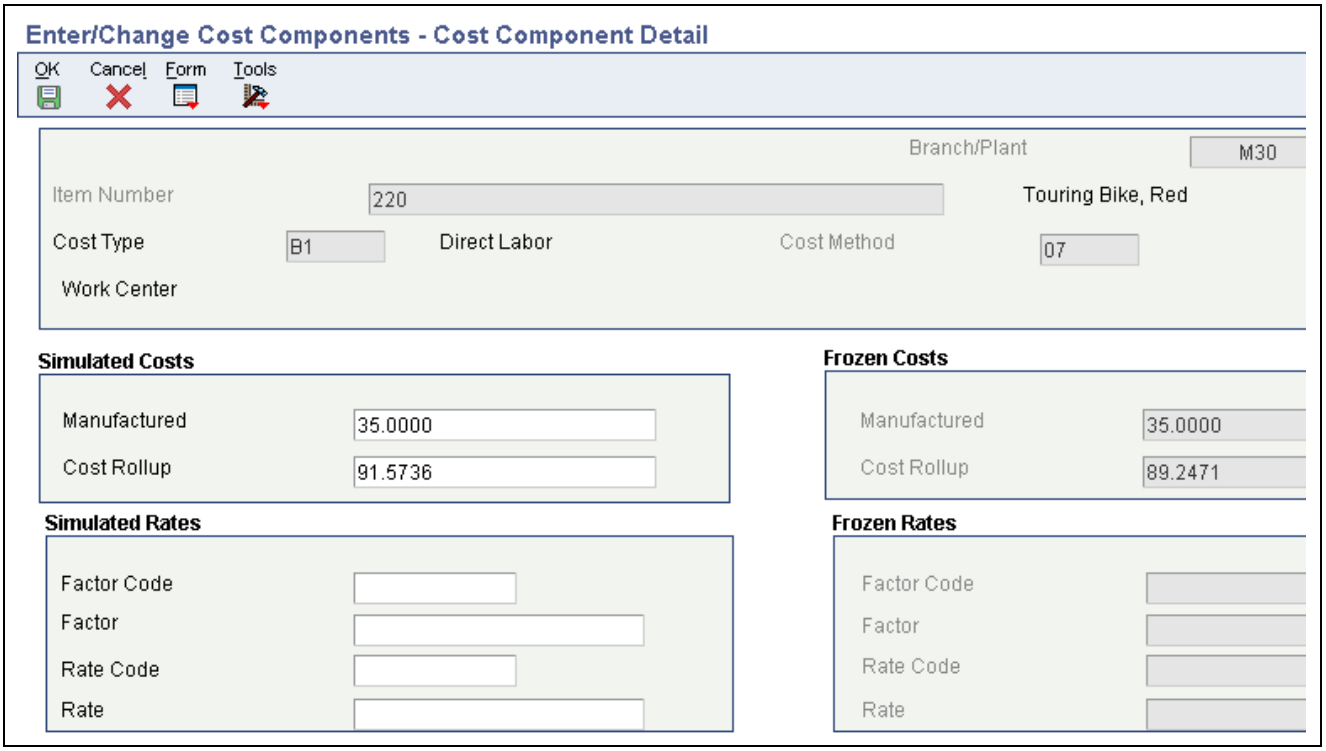


Enter Cost Components by Work Center form

Enter cost component information for each work center to which you want to assign separate costs.

Reviewing Simulated and Frozen Costs and Rates

Access the Cost Component Detail form.



Cost Component Detail form

Review cost component detail information for the selected cost component. If you have set up costing by work center, the system displays the work center to which the simulated and frozen costs and rates for the cost component apply.

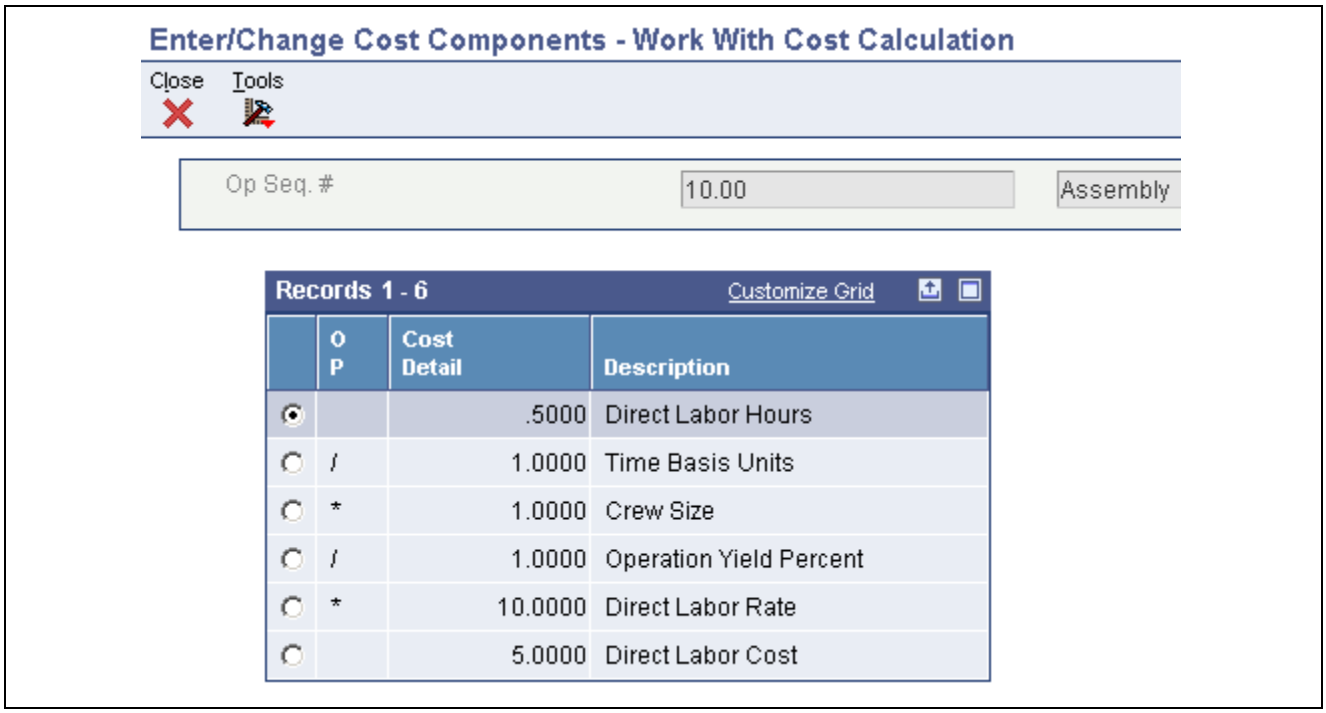
Reviewing Costs by Work Center

Access the Work With Work Center Cost form.

Review the net-added unit costs by cost component at each routing operation step.

Reviewing Calculation Basis for Unit Costs at Routing Operations

Access the Work With Cost Calculation form.



Work With Cost Calculation form

Review the calculations that the system uses to derive the net-added unit costs at each routing step for the selected cost component.

Note. You cannot review the calculation basis for material costs.

Setting Up Simulated Rates for Work Centers

This section provides an overview of simulated rates, lists a prerequisite, and discusses how to create simulated rates for work centers.

Understanding Simulated Rates

You can effectively manage changes to a work center by tracking rates for labor and machine costs. You can update simulated rates for machine and labor hours by work center and cost method. The system uses these values in other manufacturing calculations that are used in costed routings, labor rate variance reports, and direct labor efficiency reports.

If you use standard costing, you must set up the simulated rates for work centers.

If you use actual costing, you can use work center rates for machine and labor costs. You set up the source for machine and labor rates in the manufacturing constants.

You can set up the work center rates even if you have decided to use labor or machine rates. The system uses the work center rate as the default rate if no other rates have been selected.

Prerequisite

Before you set up simulated rates for work centers, you must set up work centers.

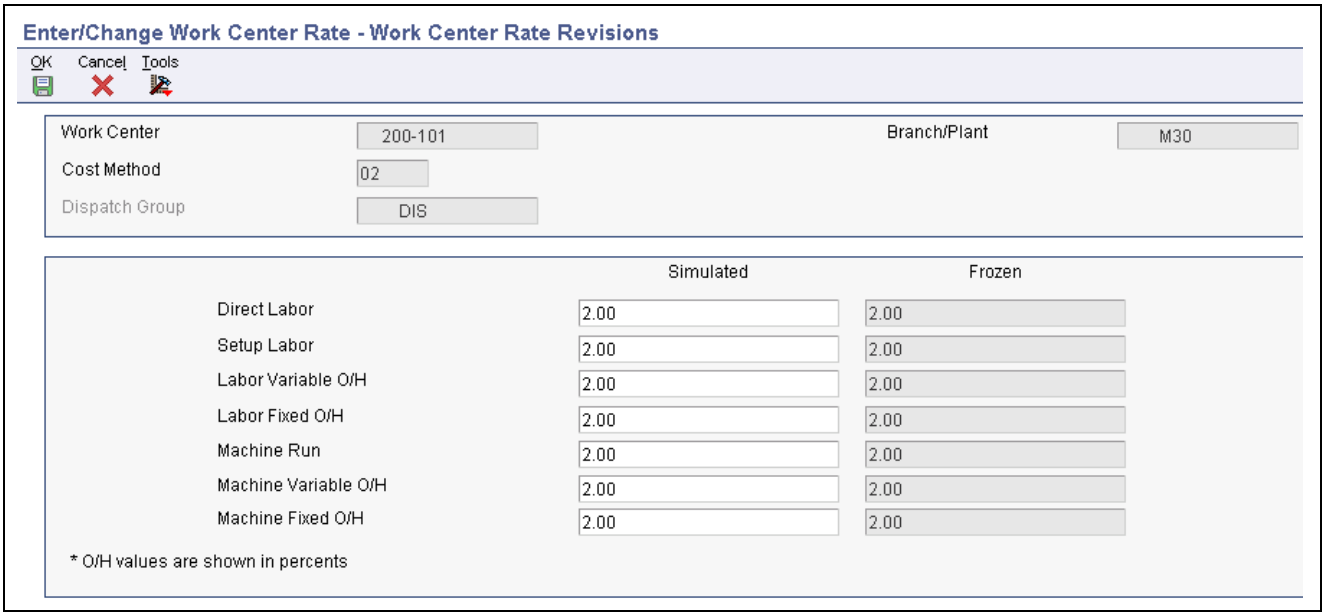
See *JD Edwards EnterpriseOne Product Data Management 9.0 Implementation Guide*, "Entering Work Centers and Routing Instructions," Creating Work Centers.

Form Used to Set Up Simulated Rates for Work Centers

Form Name	FormID	Navigation	Usage
Work Center Rate Revisions	W3006C	Product Costing (G3014), Enter/Change Work Center Rate On the Work With Work Center Rates form, enter a combination of branch/plant and work center, click Find, and then click Select.	Create simulated rates for work centers. Create or change work center rates for labor and machine costs.

Creating Simulated Rates for Work Centers

Access the Work Center Rate Revisions form.



Work Center Rate Revisions form

Work Center Review the number that identifies a branch, plant, work center, or business unit.

Direct Labor	Enter a rate, in cost per person per hour, that the system uses, together with the run labor hours of the associated routing, to calculate the standard run labor cost.
Setup Labor	Enter a rate that the system uses together with the setup labor hours of the associated routing to calculate the standard setup labor cost.
Labor Variable O/H (labor variable overhead)	Enter a rate or percentage, as determined in the manufacturing constants, that the system uses to calculate the standard cost for variable labor overhead. If this field contains a rate, it is the cost per hour. If this field contains a percentage, it is the percentage of direct labor. Enter percentages as whole numbers. For example, enter five percent as 5.00.
Labor Fixed O/H (labor fixed overhead)	Enter a rate or percentage, as determined in the manufacturing constants, that the system uses to calculate the standard cost for fixed labor overhead. If this field contains a rate, it is the cost per hour. If this field contains a percentage, it is the percentage of direct labor. Enter percentages as whole numbers. For example, enter five percent as 5.00.
Machine Run	Enter a rate that the system uses, together with the run machine hours of the associated routing, to calculate the standard machine labor cost.
Machine Variable O/H (machine variable overhead)	Enter a rate or percentage, as determined in the manufacturing constants, that the system uses to calculate the future standard cost for machine overhead. If this field contains a rate, it is the cost per hour. If this field contains a percentage, it is the percentage of machine run. Enter percentages as whole numbers. For example, enter five percent as 5.00.
Machine Fixed O/H (machine fixed overhead)	Enter a rate or percentage, as determined in the manufacturing constants, that the system uses to calculate the standard cost for fixed machine overhead. If this field contains a rate, it is the cost per hour. If this field contains a percentage, it is the percentage of machine run. Enter percentages as whole numbers. For example, enter five percent as 5.00.

See Also

JD Edwards EnterpriseOne Product Data Management 9.0 Implementation Guide, "Entering Work Centers and Routing Instructions," Entering Costing and Accounting Information for Work Centers

Setting Up General Ledger Class Codes

This section provides an overview of general ledger class codes and lists the forms used to set up general ledger class codes.

Understanding General Ledger Class Codes

General ledger (GL) class codes are used by the AAIs to determine which accounts the system posts transactions to for specific items.

You set up the GL class code in the Item Master and the Branch/Plant program (P41026). When you associate the item with the item location, the system copies that value to the Item Location table (F41021). You can revise the GL class code for an item using the Location Revisions program. The AAIs retrieve the appropriate GL class code from the Item Location table.

Because the system generates journal entries based on GL class codes and AAIs, you should set up the class codes carefully and in collaboration with the accounting department.

See Also

JD Edwards EnterpriseOne Inventory Management 9.0 Implementation Guide, "Entering Item Information"

Forms Used to Set Up General Ledger Class Codes

Form Name	FormID	Navigation	Usage
Item/Branch Plant Info	W41026A	Inventory Master/Transactions (G4111), Item Branch/Plant On the Work With Item Branch form, search for an item and branch combination, select the record, and click Select.	Set up general ledger class codes.
Location Revisions	W41024A	On the Work With Item Branch form, select Location Revisions from the Row menu. On the Work With Item Locations form, select a location and click Select.	Make location revisions, such as changing the class code.

Defining Manufacturing AAIs

This section provides an overview of manufacturing AAIs and discusses how to:

- Set processing options for Automatic Accounting Instructions (P40950).
- Define manufacturing AAIs.

Understanding Manufacturing AAIs

Each transaction for which the system creates journal entries requires AAIs that instruct the program to post amounts to specific accounts in the general ledger. User-defined AAIs connect manufacturing accounting, the chart of accounts, and financial reporting. You should create AAIs for each unique combination of company, transaction, document type, general ledger class, and cost component.

AAIs use these five keys to retrieve the object account number to use to create general ledger entries for work order transactions:

- Company number.
- Document type of the transaction (except for AAIs 3120 and 3401)

If no transaction is associated with the activity, for example, in AAI 3120 (Work in Process), the AAI does not specify a document type for the transaction

- General ledger class code.
- Document type.
- Cost component.

To retrieve an AAI, the system searches first for an exact match between company and the general ledger class code. If the system does not find a match, it searches for the default company and the general ledger class code for the item. If it does not find a match, it searches for the company and uses **** (four asterisks) for the general ledger class code.

Each AAI or record type points to a specific object account in the general ledger. Business unit and a subsidiary can also be supplied in the AAI table or supplied by default from other sources.

Manufacturing AAIs are defined at the 3000 level, as illustrated in this table:

AAI	Description
3110 Inventory/Raw Materials	This AAI specifies which balance sheet accounts in the general ledger the system uses when it issues raw materials or parts from inventory to work in process (transaction document type IM). You also use this AAI to issue completed subassemblies from inventory back into work in process. The system uses this AAI when you run the Manufacturing Accounting Journal Entries program (R31802A).
3120 Work in Process	For debit transactions, this AAI increases the value of work in process by issuing raw materials and parts to work orders or rate schedules (document type IM) and recording labor, machine, and overhead costs from the routing (document type IH). For credit transactions, during completion (document type IC), this AAI records the transfer of costs for a work order or a rate schedule from work in process to subassemblies and finished goods inventory. The system uses this AAI when you run the Manufacturing Accounting Journal Entries program.
3130 Sub-Assembly/Finished Goods	This AAI specifies which balance sheet accounts in the general ledger the system uses when it receives subassemblies or finished goods from work in process into inventory (document type IC) or scrap (document type IS). The system uses this AAI when you run the Manufacturing Accounting Journal Entries program (R31802A).
3210 Clear Work in Process	For actual costing, this AAI posts any additional cost of goods sold that were not included when completions were entered. The system uses this AAI when you run the Variance Journal Entries program (R31804).

AAI	Description
3220 Labor	Use this AAI when the actual hours are different from the planned hours that are associated with shop floor activities on document type IV. This is applicable to all cost components except A1 and A2. Variances are posted as positive or negative, depending on whether they are favorable or unfavorable. The system uses this AAI when you run the Variance Journal Entries program.
3240 Material	Use this AAI when the actual costs are different from the planned costs for cost components A1 and A2. The variance results from either over-issues or under-issues. Variances are posted as debits or credits, depending on whether they are favorable or unfavorable. The system uses this AAI when you run the Variance Journal Entries program.
3260 Planned	Use this AAI when the planned costs are different from the current costs that are associated with shop floor activities on document type IV. This variance results from either of the items listed: • A change to the parts list or the routing. • A shrink factor. Variances are posted as positive or negative, depending on whether they are favorable or unfavorable. The system uses this AAI when you run the Variance Journal Entries program.
3270 Engineered	Use this AAI when the current costs are different from the standard (frozen) costs that are associated with shop floor activities on document type IV. This variance results from a change to the standard bill of material or the standard routing. Variances are posted as positive or negative, depending on whether they are favorable or unfavorable. The system uses this AAI when you run the Variance Journal Entries program.

AAI	Description
3280 Other	Use this AAI when the completed cost is different from the standard cost that is associated with shop floor activities on document type IV. This variance results when a cost rollup is performed in the middle of the cycle, or it is generated when the quantity completed plus the quantity scrapped does not equal the work or rate schedule quantity. The variance might also be rounding. Variances are posted as positive or negative, depending on whether they are favorable or unfavorable. The system uses this AAI when you run the Variance Journal Entries program.
3401 Accruals	This AAI specifies the profit-and-loss accounts that offset work-in-process labor, machine, and overhead transactions to work orders or rate schedules (document type IH). The system uses this AAI when you run the Manufacturing Accounting Journal Entries program.

Form Used to Define Manufacturing AAIs

Form Name	FormID	Navigation	Usage
Account Revisions	W40950D	Shop Floor Management Setup (G3141), Automatic Acctg Instructions On the Work With AAIs form, complete the Skip to AAI field, select a record, and then select Details from the Row menu.	Define manufacturing AAIs.

Setting Processing Options for Automatic Accounting Instructions (P40950)

These processing options control default processing for the Automatic Accounting Instructions program.

Defaults

These processing options control default settings for entering and retrieving AAI information.

AAI Table Number Specify the default value for the Skip to AAI field on the Work With AAIs form.

Cost Type Specify whether to define cost types. If you selected the Use Product Cost Detail option in the Branch/Plant Constants program, enter *1* to define cost types for these distribution AAIs:

4122

4124

4134

4136

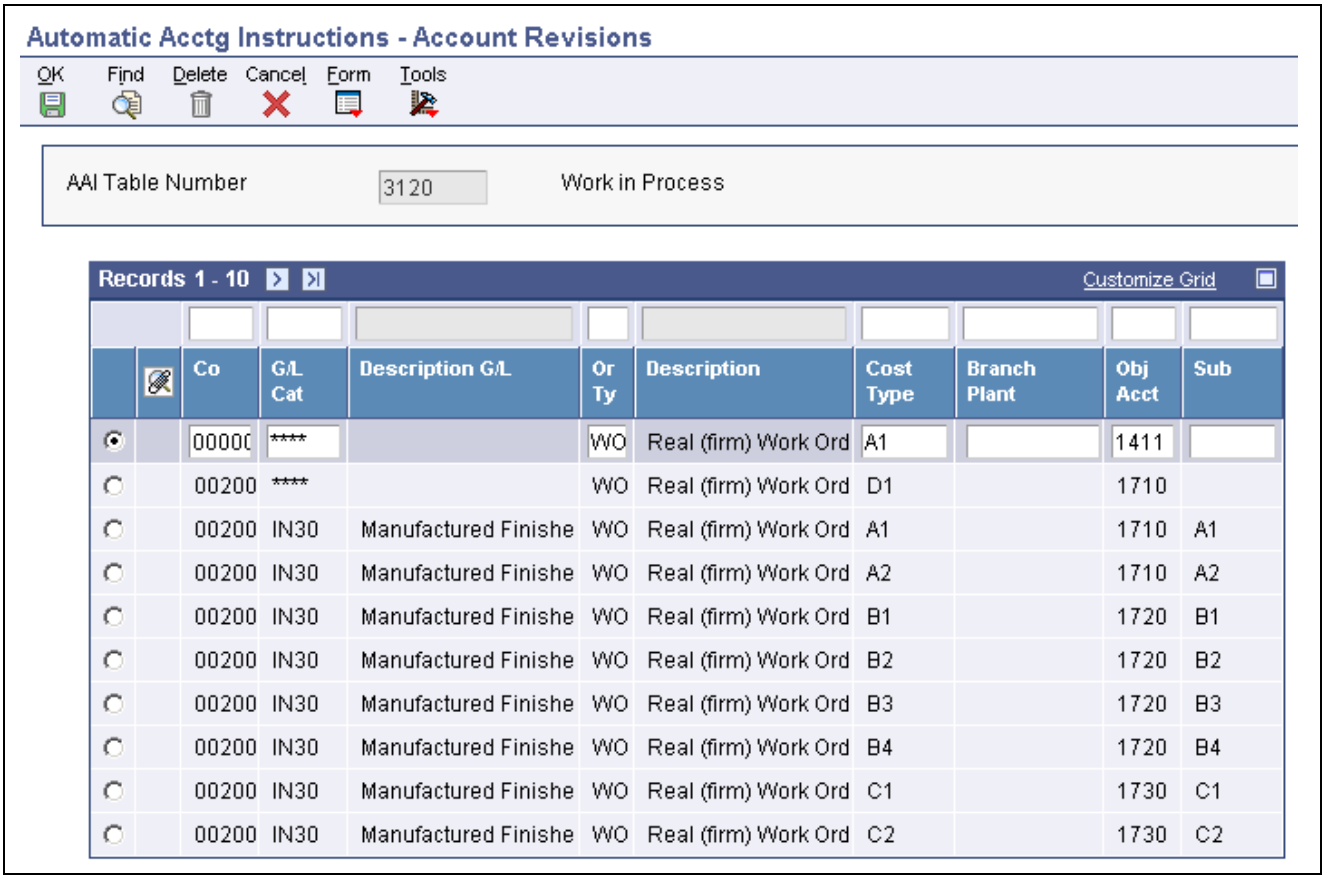
4220

4240

4310

Defining Manufacturing AAIs

Access the Account Revisions form.



Account Revisions form

Co (company) Specify the company. The company code must already exist in the Company Constants table (F0010) and must identify a reporting entity that has a complete balance sheet. At this level, you can have intercompany transactions.

Note. You can use company 00000 for default values such as dates and AAIs. You cannot use company 00000 for transaction entries.

Do Ty (document type) Specify the transaction document type. You select a document type from the Document Type UDC table (00/DT) that identifies the origin and purpose of the transaction. The system reserves several prefixes for document types, such as vouchers, invoices, receipts, and timesheets. The reserved document type prefixes for codes are:

P: Accounts payable documents

R: Accounts receivable documents

T: Time and Pay documents

I: Inventory documents

O: Purchase order documents

S: Sales order documents

Manufacturing transactions use these values:

IM: Material issue

IH: Routing transactions

IC: Completions

IS: Parent scrap

IV: Variance

Or Ty (order type) Specify the document type for the work order. Enter a value from the Document Type UDC table that identifies the type of document. This code also indicates the origin of the transaction.

Cost Type Specify a code that designates each element of cost for an item. Examples of the cost object types are:

A1: Purchased raw material.

B1: Direct labor.

B2: Setup labor.

B3: Machine run.

C1: Machine variable overhead.

Dx: Outside operation routing rollup.

Xx: Extra add-ons, such as electricity and water.

This cost structure enables you to use an unlimited number of cost components to calculate alternative cost rollups. The system then associates these cost components with one of six user-defined summary cost buckets.

Obj Acct (object account) Specify an object account number. The AAI table is the only place where the object account portion of the general ledger account number is defined.

Note. If you use a flexible chart of accounts and the object account is set to six digits, you should use all six digits. For example, entering 000456 is not the same as entering 456 because if you enter 456, the system enters three blank spaces to fill a six-digit object.

Sub (subsidiary) Enter a code that indicates a subsidiary account, which is a subset of an object account. Subsidiary accounts include detailed records of the accounting activity for an object account.

Note. If you are using a flexible chart of accounts and the object account is set to six digits, you must use all six digits. For example, entering 000456 is not the same as entering 456 because, if you enter 456, the system enters three blank spaces to fill a six-digit object.

If you leave this field blank, the system uses the value that you entered on the work order in the Cost Code field.

CHAPTER 4

Working with Product Costing

This chapter provides an overview of product costing and discusses how to:

- Analyze costing inputs.
- Run the Costing Exceptions report.
- Create a cost simulation.
- Review and revise simulated costs.
- Review costed bills of material.
- Review costed routings.
- Update frozen costs.
- Freeze work center rates.
- Review frozen cost components.
- Review the Cost Components report.
- Review the item ledger.

Understanding Product Costing

Product costing enables you to differentiate what types of cost information you want to consider as you establish the total cost of a product that you want to manufacture. You can set up different types of cost components to capture the different types of cost.

Cost components are values in user-defined code (UDC) table 30/CA that represent the individual costs that accrue for an item, such as costs for material, labor, overhead, and extras. The system automatically calculates material, labor, and overhead costs. Extra costs, such as electricity, are manually controlled.

The system provides various sources for cost information. For material costs, the system uses the bill of material to retrieve the cost of manufactured parts, such as labor, outside operations, and extra costs, and the costs of lower-level material. You can use only bills of material of type M to establish standard costs. For labor and machine costs, the routing provides information such as labor, machine, and setup costs.

Based on the cost components that you set up, you can create hypothetical situations for a given cost method. You might want to calculate simulated costs because of changing factors in the business environment. You create cost scenarios by running the Cost Simulation program (R30812).

For example, you can use cost simulations to:

- Simulate an increase in material costs.
- Simulate changes in labor rates.

- Develop strategies for pricing, contractual, or labor negotiation.

You can simulate cost change scenarios (rollups) as many times as needed before you finalize the changes.

In addition, you can:

- Allow for extra costs that are related to the manufacturing of a product, such as costs for electricity, insurance, water, and warehouse space.
- Review specific calculations that determine cost amounts for any item.
- Maintain costs by branch for multifacility processing to account for costs that differ based on regional or business variations.
- Define additional cost factors to include in product costing calculations.

Changes are finalized in the system when you perform a frozen cost update for a given cost method. You use the Item Cost Component - Frozen Update program (R30835) to freeze costs. A frozen update copies the simulated values, freezes them, and updates the Item Cost table (F4105) with the total cost. These costs remain in effect until you overwrite them with the results from another frozen update.

Analyzing Costing Inputs

This section discusses how to:

- Analyze costing inputs from the bill of material.
- Analyze costing inputs from the routing.

Forms Used to Analyze Costing Inputs

Form Name	FormID	Navigation	Usage
Enter Bill of Material Information	W3002A	Daily PDM Discrete (G3011), Enter/Change Bill Enter a branch/plant and item number, and click Find. Select a record on the Work with Bill of Material form, and click Select.	Analyze costing inputs from the bill of material.
Enter Routing Information	W3003B	Daily PDM Discrete (G3011), Enter/Change Routing Enter a branch/plant and item number on the Work with Routing Operations form, and click Find. Select a record, and then select Revision from the Form menu.	Analyze costing inputs from the routing.

Analyzing Costing Inputs from the Bill of Material

Access the Enter Bill of Material Information form.

Quantity

Enter the number of units that you use to manufacture the parent item. A quantity of zero is valid. The default value is *1*.

UM (unit of measure)

Enter the unit of measure that you use for the component quantity. Standard costs are established in the primary unit of measure, which should be the smallest unit of measure.

F V (fixed/variable)

Enter a code that indicates whether the quantity per assembly for an item on the bill of material varies according to the quantity of the parent item produced, or is fixed regardless of the parent quantity. You can also use this value to determine whether the component quantity is a percentage of the parent quantity. Values are:

F: Fixed quantity.

V: Variable quantity (default).

%: Quantities are expressed as a percentage and must total 100 percent.

For fixed-quantity components, the JD Edwards EnterpriseOne Shop Floor Management system and the JD Edwards EnterpriseOne Requirements Planning system from Oracle do not extend the quantity per assembly of the component by the order quantity.

The system calculates the unit cost by dividing the component quantity by the accounting cost quantity that you set up for the item.

Feat Cost % (feature cost percentage)

Enter a percentage that the Cost Simulation program uses to calculate the cost of a feature or option item as a percentage of the total cost of the parent.

Enter the percentage as a whole number, for example, enter 5 percent as 5.0.

Percent Scrap

Enter the percentage of unusable component material that is generated during the manufacture of a parent item. During DRP/MPS/MRP generation, the system increases gross requirements for the component item by this percentage to compensate for the loss. Enter percentages as whole numbers, for example, 5 percent as 5.0.

Note. The system compounds inventory shrinkage and scrap to calculate the total loss in the manufacture of a particular item. Accurate shrinkage and scrap factors support more accurate planning calculations.

Like the JD Edwards EnterpriseOne Requirements Planning system, the JD Edwards EnterpriseOne Shop Floor Management system inflates component requirements by this percentage.

Operation Scrap Percent

Displays the operation scrap percent. The system calculates this value by compounding the yield percentages from the last operation to the first operation in the routing. Use a processing option in the Work With Routing Master program to enable the system to calculate the operation scrap percent.

The system updates this value on the Enter Bill of Material Information form when you run the Planned Yield Update program (R3093).

Product costing inflates component requirements by this percentage when calculating material costs.

See *JD Edwards EnterpriseOne Product Data Management 9.0 Implementation Guide*, "Entering Work Centers and Routing Instructions," Setting Processing Options for Planned Yield Update (R3093).

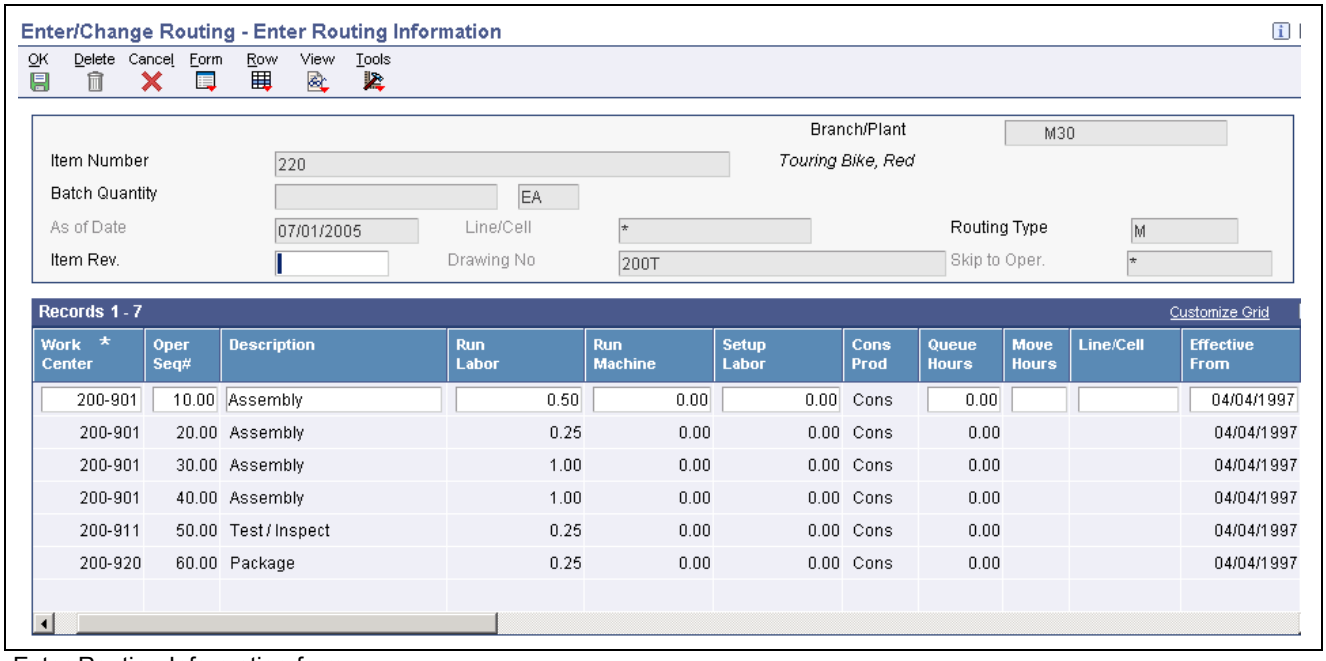
See *JD Edwards EnterpriseOne Product Data Management 9.0 Implementation Guide*, "Entering Work Centers and Routing Instructions," Understanding Routing Instruction Creation.

See Also

JD Edwards EnterpriseOne Product Data Management 9.0 Implementation Guide, "Setting Up Bills of Material"

Analyzing Costing Inputs from the Routing

Access the Enter Routing Information form.



Enter Routing Information form

Work Center

Enter a work center number. Work centers are business units on the shop floor where routing steps take place. Work centers may include people, machines, or both.

You can track costs at the work center level if you have selected the Cost by Work Center option in the manufacturing constants.

Run Labor

Enter the standard labor hours that you expect to incur in the normal production of this item.

The run labor hours in the Routing Master table (F3003) are the total hours that it takes the specified crew size to complete the operation. The hours are multiplied by the crew size during shop floor release and product costing.

Run Machine Enter the standard machine hours that you expect to incur in the normal production of this item.

Setup Labor Enter the standard setup hours that you expect to incur in the normal production of this item. This value is not affected by crew size and is divided by the accounting cost quantity to calculate the setup cost per unit.

Time Basis Enter a value from the Time Basis Code UDC table (30/TB) that indicates the time basis or rate to be used for the machine or labor hours that you enter for every routing step. For example, you can specify 25 hours per 1,000 pieces or 15 hours per 10,000 pieces.

The system uses the values in the Description 02 field on the User Defined Codes form for costing and scheduling calculations.

Crew Size Displays the number of people that is assigned to a work center. The Crew Size field on the Work Order Routing form contains the value that you specified for the work center in the Work Center Revision program (P3006). You can override the value for the routing, but this change does not affect the work center master record.

For product costing, the system multiplies the run labor value in the Routing Master table with the crew size in the specified work center to generate total labor amounts.

If the prime load code is *L* or *B,* the system uses the total labor hours for backscheduling. If the prime load code is *C* or *M,* the system uses the total machine hours for backscheduling without modification by crew size.

Type Oper (type operation) Enter a value from the Type Operation UDC table (30/OT) that indicates the type of operation. Values include:

A: Alternate routing.

TT: Travel time.

IT: Idle time.

T: Text.

For product costing, only operations with an operation type code of blank are costed.

Yield % (yield percent) Enter the yield percentage of the planned output for a step. The Planned Yield Update program uses this value to update the cumulative yield percentage in the routing and the operation scrap percentage in the bill of material. Materials Requirements Planning (MRP) uses the scrap percentage and the existing component scrap percentage to plan component demand.

Cum Yield % (cumulative yield percentage) Enter the cumulative yield percentage of the planned output for a step. The system uses this value to adjust the operation scrap percentage for the components at an operation step. The JD Edwards EnterpriseOne Requirements Planning system uses the operation scrap percentage along with the existing component scrap percentage to plan component demand.

See Also

JD Edwards EnterpriseOne Product Data Management 9.0 Implementation Guide, "Entering Work Centers and Routing Instructions"

Running the Costing Exceptions Report

This section provides an overview of the Costing Exceptions report and discusses how to:

- Create the Costing Exceptions report.
- Set processing options for Costing Exceptions (R30801).

Understanding the Costing Exceptions Report

Before you run a cost simulation, run the Costing Exceptions report (R30801). Costing exceptions are problems that are associated with an item and result in error messages. An example of a problem is an item without a routing.

The report uses the error messages from the Costing Exceptions Error Messages UDC table (30/EM). The error messages are hard-coded; therefore, you cannot add or change these error messages. You can define the severity level for each error message as appropriate for the company, using the Description 02 field in the UDC table. For example, if having labor costs of zero is an important exception in the company, you could assign that error message a high severity level. You can indicate in the processing options the minimum level of error messages that you want included in the report.

This table identifies the changeable, default severity setting for each of the hard-coded error messages:

Severity Level	Description
Severity level 10	• No accounting lot size for setup. • Setup hours are zero. • Machine hours are zero. • Labor hours are zero.
Severity level 20	• Purchase part with bill of material. • Bill of material components with no quantity.
Severity level 30	• No cost component - material cost. • No work center - labor rate. • No work center - setup labor rate. • No work center - labor variable overhead rate. • No work center - labor fixed overhead rate. • No work center - machine run rate. • No work center - machine variable overhead rate. • No work center - machine fixed overhead rate. • Purchased item without purchased cost.
Severity level 40	No rates for work center.
Severity level 50	• Manufactured item with no bill of material. • Manufactured item with no routing.

You should correct the problems and run the Costing Exceptions report again before you create a simulated rollup.

Creating the Costing Exceptions Report

Select Product Costing Reports (G3023), Costing Exceptions.

Setting Processing Options for Costing Exceptions (R30801)

These processing options control default processing for the Costing Exceptions report.

Error Message

This processing option controls the error message display on the report.

Error Message Specify the minimum message level to appear on the report.

Cost Method

These processing options control which cost method the system uses as a basis for determining costing errors.

Cost Method Specify the cost method on which to base costing errors. If you leave this processing option blank, the system uses cost method 07 (standard).

Cost Method Specify the purchasing cost method on which to base costing errors. If you leave this processing option blank, the system uses cost method 07 (standard).

Creating a Cost Simulation

This section provides an overview of the cost simulation, lists prerequisites, and discusses how to:

- Create a cost simulation.
- Set processing options for Cost Simulation (R30812).

Understanding the Cost Simulation

Use the Cost Simulation program (R30812) to calculate costs for discrete and process items based on hypothetical situations. The program updates the Item Cost Component - Add-Ons table (F30026) with the calculated simulated net-added and total costs. To calculate simulated labor, machine, and overhead costs, the Cost Simulation program calls the Cost Simulation - Routing Sheet program (P30818). After calculating all costs, the Cost Simulation program calls the Cost Simulation report (R30825) to print the cost information. You can also review simulated costs in the Cost Components program (P30026).

To retrieve a bill of material and routing, the program searches first for a bill for which batch quantity matches the accounting cost quantity. When the program does not find a matching batch bill, it uses the zero batch bill. The bill of material must have bill type *M* (standard manufacturing bill). Effective dates on components must be valid.

To enable the system to calculate cost components of type B and C:

- The routing must have routing type *M*.

- A routing operation must have a work center with rates in the Work Center Master table (F30006) for the cost component to appear.
- The operation type code on the routing must be blank to indicate a normal manufacturing operation.
- The effective dates on the routing must be valid.

  The default as of date is the current date.

The R30812 program uses two temporary storage mechanisms to store the component item cost information and parent/component relationships of the bill of materials (BOMs) it explodes. The storage mechanisms are cache which uses memory, and temporary work tables which use a database.

The caches are very effective when the number of records is small. The cache becomes inefficient with large data sets, typically when the number of records stored in cache exceeds approximately 10,000 entries. Thus, cache should be used for processing smaller data sets. A temporary work table should be used for processing large data sets to avoid exceeding memory constraints in the system.

The cost simulation is affected by:

- Cumulative yield.
- Operation scrap.
- Master routings.
- Unit of measure conversions.

Cumulative Yield

Cumulative yield, which is defined on the routing, affects labor and machine hours when you run the cost simulation. Enough hours must be expended to obtain 100 percent yield at the last operation. In a series of routings, the hours must be adjusted accordingly.

This example illustrates how the costing of hours is affected by a cumulative yield of 85 percent:

Yield	Labor	Machine	Setup
Without Yield	5	5	5
With Yield	5.88	5.88	5

For each operation, the labor and machine hours are adjusted by dividing the hours by the cumulative yield. Setup hours are not affected.

Operation Scrap

Operation scrap, which is defined on the bill of material, affects material cost calculations when you run the cost simulation. Enough material must be available at each operation to obtain 100 percent yield at the last operation. When material cost is calculated, the quantity of the components is adjusted accordingly.

This example illustrates the effect of operation scrap on costing:

- Parent = A
- Component = B
- Quantity per = 3
- Cost of B = 5.00

- Operation scrap = 8 percent
- Cost of B rolled into parent item A = 3 × 1.08 × 5 = 16.20

Master Routings

The Cost Simulation program uses the master routing for the item from the Routing Master table if all of these conditions are met:

- The Master Routing field in the manufacturing constants form is set to *Y* for the branch.
- You have defined a cross-reference item for the parent item on the master routing.

  You must define the cross-reference item with a cross-reference type of *MR*. The Address field must be blank.
- You have defined an item routing for the cross-reference item.

Unit of Measure Conversions

The Cost Simulation program converts all units of measure to the primary unit of measure for the purpose of the cost simulation.

When one of the units of measure is a potent unit of measure, the conversion equation includes the standard potency value from branch/plant manufacturing data.

This example illustrates a conversion involving a potent unit of measure:

- Component = B
- Quantity per = 3
- Primary unit of measure = GA (physical gallons)
- Component unit of measure = GP (potent gallons)
- Standard potency = 50 percent
- Cost of B = 50.00 (from the Item Cost table
- Cost rolled into parent item = [(3 ÷ .5) × 50] = 300.00

Simulated Product Cost Tables

Simulated costs are generated using multiple tables in the JD Edwards EnterpriseOne system from Oracle. The Cost Simulation program sums the costs of all the components at each level of the bill of material of the parent item to arrive at a total cost for the parent item.

You can set the processing options in any of the cost simulation programs to specify the cost method that you want to use.

The Cost Simulation program uses information from these tables to generate costs:

Table Name	Description
Job Shop Manufacturing Constants (F3009)	Values from this table indicate whether overhead should be included in cost component calculations.
Work Center Rates (F30008)	Values from this table indicate the monetary amounts and percentages for the calculation of labor, machine, and overhead costs.

Table Name	Description
Routing Master (F3003)	This table stores the hours that are required for each operation, crew size, outside operation costs, and cumulative yield values.
Bill of Material Master (F3002)	This table provides information about the material that is required at each level of the bill.
Item Cost (F4105)	This table provides costs for purchased items and outside operations.
Item Cross Reference (F4104)	This table identifies the master routing.
Work Center Master (F30006)	This table provides the work center efficiency factor.
Item Master (F4101)	This table stores the low-level code. Costs are rolled up from the lowest level to the highest level.
Item Branch (F4102)	This table provides the accounting cost quantity.
Generic Message/Rates (F00191)	This table provides rates and factors for extra costs.
Item Cost Components Add-Ons (F30026)	This table provides the calculations for extra costs.

Cost Simulation by Work Center

If you have selected the Cost by Work Center option in the manufacturing constants, you can use the Cost Simulation program and the Cost Simulation - Routing Sheet program to calculate and store simulated total and net-added costs by work center. For cost components that you have set up by work center, the system stores the simulated cost in the Item Cost Component Detail table (F300261).

You can display costs by work center on the Cost Simulation report (R30825).

Prerequisites

Before you run the Cost Simulation program, run the Costing Exceptions report to identify whether error messages exist for the item.

Creating a Cost Simulation

Select Product Costing (G3014), Simulate Standard Rollup.

Setting Processing Options for Cost Simulation (R30812)

These processing options control default processing for the Cost Simulation program.

Default

These processing options control the default as of date and cost method for running this batch program.

1. As Of Date Specify the date that is used to determine which routing and bill of material for each item is used in the rollup, based on their effectivity dates. If you leave this processing option blank, the program uses the current date.

2. Cost Method Specify the cost method that will contain the new simulated costs in the Cost Components table. If you leave this processing option blank, the program calculates costs for cost method 07 (standard costs).

Processing

These processing options control how the batch program processes the data.

1. Single Level Specify whether to simulate costs for a selected item or items, without recosting everything else in the bill of material. For example, you might have a new item that must be costed, but you do not want to recost all components. If you enter *1* and use data selection for the parent item, the program uses the costs of the lower-level components to roll up the cost for the new item, but does not recost the lower-level components themselves.

If you leave this processing option blank, the program does a complete rollup of all the components. Enter only the parent item numbers in the data selection.

If you are costing items in process manufacturing, leave the processing option blank and do a complete rollup to cost the ingredients. Values are:

Blank: Perform a complete rollup.

1: Perform a single-level rollup.

2. Clear and Recalculate Specify how the program calculates routing-related B1 through C4 costs. Values are:

Blank: The program does not overwrite manually entered or previously simulated costs. The system uses the costs that already exist in the Simulated Cost Component Add-Ons table (F30026).

1: The program clears and recalculates labor and overhead for manufactured items. This is the most common option for this program.

2: The program clears and recalculates labor and overhead for all items. Use this option if you have purchased parts with routings and have to recalculate labor costs, for example, inspection steps.

3: The program clears labor and overhead for all items, but recalculates labor and overhead for manufactured items only. Use this option if a part changes from manufactured to purchased. This option ensures that labor and overhead are cleared for the changed items.

3. Cost Method Specify the cost method to be used for retrieving costs for purchased items and outside operations.

a. Purchased Items Specify the cost method to use as the input for the costs of purchased items. If you leave this processing option blank, the program does not retrieve costs from the Item Cost table (F4105). The system uses costs that already exist in the Simulated Cost Component Add-Ons table.

b. Outside Operation Specify the cost method to use as the input for the purchase costs of outside operations. If you leave this processing option blank, the program does not retrieve costs from the Item Cost table (F4105).

Verify these steps before you run this program:

- You have set up an item branch record for the *OP item, either manually or through the Order Processing program (R31410).

• A valid cost exists in the Item Cost table for the method that you specify here.

See Chapter 7, "Understanding Calculations in Cost Rollup," Outside Operation Cost Components, page 114.

4. Use Cache or Work File for Calculations

Specify the type of temporary storage mechanism that the system uses when the program is run. Values are:

Blank: The system uses cache (memory).

1: The system uses a temporary work table (database).

Note. The cache should be used for processing smaller data sets. A temporary work table should be used for processing large data sets to avoid exceeding memory constraints in the system.

Print

This processing option controls which items appear on the Cost Simulation report.

1. Print Items

Specify which items appear on the Cost Simulation report. Values are:

Blank: Do not print

1: Print all items

2: Print changed items

Process Mfg

If you use process manufacturing, these processing options control how the system calculates the costs for co-products and by-products.

1. Calculate Co/By-Products

Specify whether the system calculates costs for co-products and by-products. If you leave this processing option blank, the program calculates costs only for the parent process. Values are:

Blank: Do not calculate costs for co-products and by-products.

1: Calculate costs for co-products and by-products.

2. Calculate And Clear Costs Of Ingredients Used As CoBy In Another Process

Specify whether the system clears and recalculates co-product costs, by-product costs, or both. If an ingredient that you include in data selection is also a co-product or by-product of another process that is not included in data selection, and you do not want the other process added to the rollup, enter *1* for this processing option.

If you leave this processing option blank, the system clears the cost of the co-product or by-product and adds all processes that produce it to the rollup to recalculate it. If you have many interconnected processes or processes that produce a common co-product or by-product, the system includes all of them in the rollup when you set this processing option to blank. You can select one process for rollup and have it include the entire enterprise. Values are:

Blank: Clear and recalculate co-product or by-product costs.

1: Do not clear co-product or by-product costs.

Reviewing and Revising Simulated Costs

This section provides an overview of simulated costs and discusses how to:

- Set processing options for Cost Components (P30026).
- Review and revise simulated costs.

Understanding Simulated Costs

After performing the cost simulation, you can analyze costing information to determine the effects of the current rollup scenario and revise the costing information, as necessary. When costs are correct, run the Frozen Standard Update program (R30835).

You review costing information and set up simulated cost scenarios to help plan for future cost changes. After running the Cost Simulation program, you can review the cost simulation report, which displays the previous cost of the item, the results of the most recent cost simulation, and the variance between the two.

After reviewing the simulated costs, you revise incorrect information and create simulated costs again to include the changes. You can change only simulated costs. You can set a processing option to manually maintain the routing cost components (B and C) and protect them from being overwritten.

If you want to delete costs, you must delete them at the bill of material level at which they occur. For example, you cannot delete costs for lower-level components by locating the parent item. Instead, locate the component item number and remove the costs for the component. The system does not make the corresponding cost change to the higher level components and the parent item until you run the Cost Simulation program. To delete outside processing costs (usually cost component Dx), delete the cost component from the routing. Then delete the cost component and net-added value on the Enter Cost Components form.

If you select the Cost by Work Center option in the Manufacturing Constants program (P3009), you can define cost components by work center, as well. When you use this feature, the amounts for a cost component at multiple work centers in the Item Cost Component Detail table must match the corresponding cost component amounts in the Item Cost Component Add-Ons table (F30026). You can use simulated rate and factor codes either at the work center or the cost component level, but not at both levels.

Forms Used to Review and Revise Simulated Costs

Form Name	FormID	Navigation	Usage
Enter Cost Components	W30026B	Product Costing (G3014), Enter/Change Cost Components Select a record on the Work With Cost Components form, and click Select.	Review and revise simulated costs.
Work With Work Center Cost	W30026A	Select a record on the Enter Cost Components form, and select Cost Calc from the Row menu.	Access forms to work with cost calculation and view real-time costs.
Work With Cost Calculation	W30026E	Select an operation on the Work With Work Center Cost form, and click Select.	Work with cost calculation and view real-time costs.

Setting Processing Options for Cost Components (P30026)

These processing options control default processing for the Cost Components program.

Process

These processing options control whether the system calculates costs from manual input or by running the Cost Simulation - Build Temp program (R30812).

Routing Cost Entry Specify how the system maintains net added cost components B1 through C4. Values are:

Blank: Use the Cost Simulation program to calculate net added component costs.

1: Use manually entered cost components.

Enter *1* to enable input into the Simulated Net Added field for these cost types:

B1: Direct Labor

B2: Setup Labor

B3: Machine Run

B4: Labor Efficiency

C1: Machine Variable Overhead

C2: Machine Fixed Overhead

C3: Labor Variable Overhead

C4: Labor Fixed Overhead

Total Cost Entry Specify how to calculate the net added total cost. Values are:

Blank: Use the Cost Simulation program to calculate net added total cost.

1: Enable simulated total to be calculated manually at the time net added costs are manually entered.

Reviewing and Revising Simulated Costs

Access the Enter Cost Components form.

To review and revise simulated costs:

1. Review these fields:
   - Simulated
   - Frozen
   - Cost Ledger

     The item cost totals represent the total costs of all cost components as of the last cost simulation for simulated values, and as of the last frozen update for frozen values. Simulated and frozen values are from the Item Cost Component Add-Ons table (F30026).

     If a discrepancy exists between the values in the Frozen and the Cost Ledger fields, the system highlights both fields.
   - Cost Method

2. Review or revise these fields in the detail area:
   - Cost Type
   - Simulated Net Added

     The system uses this field to calculate cost during the simulation process.
   - Simulated Total

     For the designated cost method, the system uses this field to calculate the cost of all the lower levels during the simulation process. You can also view frozen costs.
3. Select the record, and then select Cost Calc from the Row menu to access the detail calculations for the net-added value of a routing cost component (B or C).
4. On the Work With Work Center Cost form, select an operation and click Select.

   The Work With Cost Calculation form displays real-time costs. The system calculates these values from work center data, work center rates, and manufacturing constants. They might be different from those on the Enter Cost Components form if you have changed the routing for the item, work center rates, or manufacturing constants since you last ran the Cost Simulation program or the Item Cost Component - Frozen Update program.

See Chapter 7, "Understanding Calculations in Cost Rollup," page 111.

Reviewing Costed Bills of Material

This section provides an overview of the Costed Bill of Material program and discusses how to:

- Set processing options for Costed Bill of Material (P30206).
- Review costed bills of material.
- Review costed bill details.

Understanding the Costed Bill of Material Program

When budgeting resources and planning for the future cost of items, you can use the Costed Bill of Material program (P30206) to review costs for both parent items and components.

The program displays summarized costs for the direct components, net-added costs, and total costs for the parent item from the Item Cost Component Add-Ons table. For each component, the program displays costs that it calculates based on the as of date from the bill of material and the required quantity multiplied by the value from the F30026 table. The program uses the as of date to exclude obsolete component lines in the bill of material.

You can review all costs of manufacturing a parent item, including assembly, subassembly, and component costs in either the simulated or the frozen view. The program displays costs in five user-defined categories:

- Purchase
- Labor
- Machine
- Overhead
- Extras

You can review this information:

- Net-added cost for the parent from the F30026 table at the top of the form.
- Cost breakdown for all next-level components.
- Total costs of the parent item from the F30026 table.
- Total of all costs for the parent item.

The program can accumulate purchase costs for up to 500 components on each bill of material. Components beyond 500 are not included in the costing process.

Note. If you update costs on the bill of material by changing required quantities, components, or simulated or frozen costs of the component, the changes are reflected in the costed bill inquiry. To update the cost values in the F30026 as well, you must run the cost simulation again. Otherwise, any changes that you made to the bill of material appear on the Work With Costed Bill form, but not on the Enter Cost Component form.

The totals are either total costs from the F30026 table or columnar totals that are calculated in real time, depending on how you set the processing option for calculating totals.

Forms Used to Review Costed Bills of Material

Form Name	FormID	Navigation	Usage
Work With Costed Bill	W30206A	Product Costing (G3014), Costed Bill Inquiry	Review costed bills of material.
Costed Bill Detail	W30206C	Select a record on the Work With Costed Bill form, and select Details from the Row menu.	Review costed bill details.
Work With Cost Buckets	W30206B	Select an item on the Work With Costed Bill form, and select Columns from the Form menu.	Work with cost buckets.

Setting Processing Options for Costed Bill of Material (P30206)

These processing options control default processing for the Costed Bill of Material program.

Display

These processing options control the information that appears on the Work With Costed Bill form.

1. Decimal Places (0-4) (Future)

Specify the number of decimal places that the system displays. Values are 0 through 4. If you leave this processing option blank, the system displays four decimals.

2. Totals

Specify whether the system displays the calculated totals or the standard totals. The calculated totals are the columnar totals. The standard totals are the unit costs from the Cost Components table multiplied by the requested quantity. Values are:

Blank: Display standard totals (default).

1: Display calculated totals.

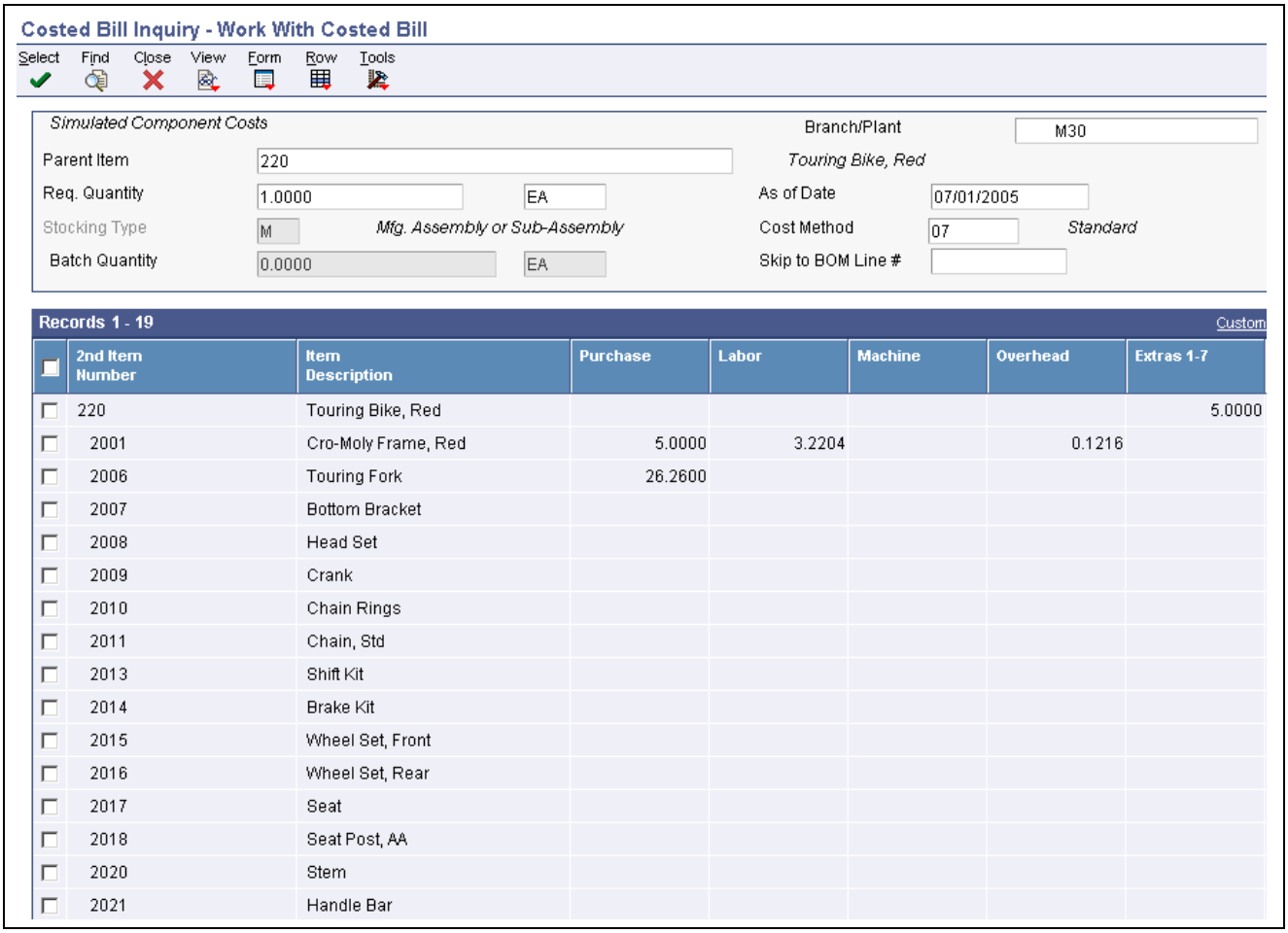
3. Fixed Costs Based On Specify whether the system bases fixed costs on the accounting cost quantity or on the requested quantity. Fixed costs based on accounting cost quantity will have the same fixed cost regardless of the requested quantity. Requested quantity displays the per unit cost multiplied by the requested quantity as if no fixed costs exist. Values are:

Blank: Base fixed costs on the accounting cost quantity (default).

1: Base fixed costs on the requested quantity.

Reviewing Costed Bills of Material

Access the Work With Costed Bill form.



2nd Item Number	Item Description	Purchase	Labor	Machine	Overhead	Extras 1-7
220	Touring Bike, Red					5.0000
2001	Cro-Moly Frame, Red	5.0000	3.2204		0.1216	
2006	Touring Fork	26.2600				
2007	Bottom Bracket					
2008	Head Set					
2009	Crank					
2010	Chain Rings					
2011	Chain, Std					
2013	Shift Kit					
2014	Brake Kit					
2015	Wheel Set, Front					
2016	Wheel Set, Rear					
2017	Seat					
2018	Seat Post, AA					
2020	Stem					
2021	Handle Bar					

Work With Costed Bill form

Complete the Branch/Plant and Parent Item fields to retrieve costs for a specific item.

Note. To toggle between frozen and simulated cost, select Frozen or Simulated from the View menu.

Review the costs for the selected parent item by component in the Purchase, Labor, Machine, Overhead and Extras categories. You can also review the totals.

Req. Quantity (required quantity) Enter the number of parent items that you want to process. The system calculates lower-level values in quantity per the number of parent items requested. For instance, if three components are required per a parent item,

then with a requested quantity of 10, the system would plan and cost for 30 components.

As of Date Enter the date that the system uses for effectivity checking. Enter a specific date to display documents (orders, bills of material, routings, as applicable) that are effective on or after that date. The current system date is the default, but you can enter any future or past date.

Skip to BOM Line #(skip to bill of material line number) Enter a number that specifies how the system displays the sequence of components on a single-level bill of material. The number initially indicates the sequence in which a component was added to the bill of material. You can modify this number to change the sequence in which the components appear.

Reviewing Costed Bill Details

Access the Costed Bill Detail form.

Quantity Per Displays the number of units that the system applies to the transaction.

Effective From and **Effective Thru** (effective through) Display a date range that indicates when a component part goes into effect on a bill of material and when the effectivity expires. The default for the start date is the current system date. The default for the end date is defined in the data dictionary.

You can enter future effective dates so that the system plans for upcoming changes. Items that are no longer effective in the future can still be recorded and recognized in the JD Edwards EnterpriseOne Product Costing system, JD Edwards EnterpriseOne Shop Floor Management system, and Oracle's JD Edwards EnterpriseOne Capacity Planning system. The JD Edwards EnterpriseOne Requirements Planning system determines valid components by effectivity dates, not by the bill of material revision level. Some forms display data based on the effectivity dates that you enter.

Operation Scrap Percent Displays a value that the system uses to increase or decrease the amount of materials to account for loss within the operation. The system updates this value on the Enter Bill of Material Information form when you run the Planned Yield Update program. The system calculates this value by compounding the yield percentages from the last operation to the first operation. Use a processing option in the Enter/Change Routing program to enable the system to calculate the component scrap percent.

Percent of Scrap Displays the percentage of unusable component material that is created during the manufacture of a particular parent item. During Distribution Requirements Planning (DRP), Master Production Schedule (MPS), and MRP generation, the system increases gross requirements for the component item to compensate for the loss. Enter percentages as whole numbers, for example, 5 percent as 5.0.

Note. Inventory shrink and scrap are compounded to calculate the total loss in the manufacture of a particular item. Accurate shrink and scrap factors support more accurate planning calculations.

Reviewing Costed Routings

This section provides an overview of the Costed Routing Inquiry program and discusses how to:

- Set processing options for Costed Routing Inquiry (P30208).
- Review costed routings.
- Review costed routing details.

Understanding the Costed Routing Inquiry Program

Use the Costed Routing/Process Inquiry program (P30208) to review the summarized costs of an item for each operation in the routing.

This information supports effective control of production costs. For example, you can:

- Identify the work center that is responsible for an operation.
- Determine whether a work center performs multiple operations.
- Display simulated or frozen costs for labor values for cost methods.
- Calculate the totals for all costs by cost categories.

This program calculates the cost that is associated with an operation by multiplying the routing hours by the work center rates for those operations with valid effective dates.

The program can accumulate purchase costs for up to 500 components on each bill of material. Components beyond 500 are not included in the costing process.

Note. If you update the routing for an item, the changes are reflected in the Costed Routing/Process Inquiry program. To display changed costs on the Enter Cost Components form as well, you must run the cost simulation again. Otherwise, the values on the Enter Cost Component form might differ from those on the Work with Costed Routing/Process Inquiry form.

The Costed Routing Inquiry program uses the master routing for the item from the Routing Master table (F3003) if the following conditions exist:

- The Master Routings option on the Manufacturing Constants Revisions form (W3009B) is selected for the branch.
- The parent item has a cross-reference item defined for master routing.

  You must define the cross-reference item with a cross-reference type of MR and leave the Address field blank.
- An item routing has been defined for the cross-reference item.

Forms Used to Review Costed Routings

Form Name	FormID	Navigation	Usage
Work With Costed Routing/Process	W30208A	Product Costing (G3014), Costed Routing/Process Inquiry	Review costed routings.
Costed Routing Details	W30208B	Select an operation on the Work With Costed Routing/Process form, and then select Details from the Row menu.	Review costed routing details.
Operation Bucket Key Window	W30COA	On the Work With Costed Routing/Process form, select Op Bucket Window from the Form menu.	Review the operation buckets for an item.

Setting Processing Options for Costed Routing Inquiry (P30208)

These processing options control default processing for the Costed Routing Inquiry program.

Defaults

These processing options control the cost methods that the system uses for subcontracted and purchased items.

Outside Operations Cost Method Specify the cost method to be used for subcontracted items. If you leave this processing option blank, the system uses *01* as the default value.

Purchased Cost Method Specify the cost method to be used for purchased items. If you leave this processing option blank, the system uses cost method 07 (standard cost) as the default value.

Display

This processing option controls the amount of cost information that appears on the Work With Costed Routing/Process form.

Skip to flag Specify *1* to display the costs up to and including the operation sequence that is entered in the Skip to Op. Seq. (skip to operation sequence) field. If you leave this processing option blank, the costs are displayed beginning with the costs for the entered operation.

Process

This processing option controls whether the system includes cost buckets 1 and 2 in the total.

Include 1 and 2 in total Specify *1* to include cost buckets 1 and 2 in the total. If you leave this processing option blank, the total includes only cost buckets 3 through 6.

Reviewing Costed Routings

Access the Work With Costed Routing/Process form.

Use this program to display costs for the operations on the routing based on the selection criteria that you enter.

Note. To toggle between frozen and simulated costs, select Frozen or Simulated from the View menu.

Requested Quantity

Enter the number of parent items that you want to process. The system calculates lower-level values in quantity per the number of parent items that are requested. For instance, if 3 components are required per parent item, then with a requested quantity of 10, the system plans and costs 30 components.

Enter the number of parent items for which to display cost breakdowns. The system calculates costs in quantity per the parent item.

As of Date

Enter the date that is used for effectivity checking. Enter a specific date to display documents (orders, bills of material, routings, as applicable) that are effective on or after that date. The current system date is the default, but you can enter any future or past date.

Cost Method

Enter the UDC (40/CM) that specifies the basis for calculating item costs. Cost methods 01 through 19 are reserved for use by the JD Edwards EnterpriseOne system.

Skip to Op. Seq. (skip to operation sequence) or **Up to Seq.** (up to sequence)

You control this field by setting the Skip to flag processing options.

This field enables you to enter the operation sequence at which you want to begin the display of information. The system displays the total from that operation forward on the Total line.

If you select the Up to Seq option, the system displays operations up to the entered sequence number, and the total for all operations up to and including this operation sequence number.

Extras

Displays extra costs. You can use the Costed Operation Buckets UDC table (30/CO) to define in which buckets the system displays extra costs.

Use the processing option to control whether the system adds cost buckets 1 and 2 to the total of all costs for the parent item.

Labor

Displays labor costs. UDC 30/CO specifies that labor costs are displayed in bucket 3.

The total of this column appears at the bottom of the form in the Totals row. The heading above the columns indicates which costs are displayed: frozen or simulated. You can toggle between simulated and frozen values.

You can also view a detailed breakdown of the cost components that the system adds to determine the total for the work center.

Machine

Displays machine costs. In UDC 30/CO, Costed Operation Bucket No. 4 is defined to display machine costs.

The total of this column appears at the bottom of the screen in the Totals row. The heading above the columns indicates which costs are displayed: frozen or simulated. You can toggle between simulated and frozen values.

You also can view a detailed breakdown of the cost components that were added to arrive at the total for the work center.

Overhead

Displays overhead costs. In UDC 30/CO, Costed Operation Bucket No. 5 is defined to display overhead costs.

The total of this column appears at the bottom of the screen in the Totals row. The heading above the columns indicates which costs are displayed: frozen or simulated. You can toggle between simulated and frozen values.

You can also view a detailed breakdown of the cost components that were added to arrive at the total for the work center.

Components Displays component costs. In UDC 30/CO, Costed Operation Bucket No. 6 is defined to display component costs.

The total of this column appears at the bottom of the screen in the Totals row. The heading above the columns indicates which costs are displayed: frozen or simulated. You can toggle between simulated and frozen values.

You can also view a detailed breakdown of the cost components that were added to arrive at the total for the work center.

Total Displays the total costs. This column contains system-calculated totals for each row of costs that were figured for each operation sequence.

The totals across the bottom of the form are the totals of each cost bucket.

The rightmost bottom total is the total of all costs for the routing for an item.

Reviewing Costed Routing Details

Access the Costed Routing Details form.

Review these fields:

- Category
- Cost Type
- Description
- Cost

Updating Frozen Costs

This section provides an overview of frozen cost update and discusses how to:

- Run the frozen update program.
- Set processing options for Item Cost Component - Frozen Update (R30835).

Understanding Frozen Cost Update

After you perform simulated rollups to determine the effect of any changes, you can update the frozen costs with simulated values by running the Item Cost Component - Frozen Update program. Most companies run this program at the beginning of a new fiscal year to create their manufacturing costs for the next fiscal period.

You can set a processing option to run a work-in-process revaluation automatically when you update frozen costs. In this case, the WIP Revaluation program (R30837) runs for all items that are processed through the Item Cost Component - Frozen Update program. If any item is flagged for cost change in the Item Cost table, any open work order that contains this item is revalued, along with any work orders to which the parent item was issued. This logic is carried through to the highest-level parent item.

Note. This program uses the costs that were generated by the most recent version of the Cost Simulation program. If you have changed information since the last simulated cost rollup, those changes will not be reflected by the frozen update.

The frozen cost update uses the costs that were generated by the Cost Simulation program to perform these actions:

- Update unit costs in the Item Cost table for the cost method selected.
- Update frozen costs in the Item Cost Component Add-Ons table for the cost method selected.
- Update labor and overhead rates in the Work Center Rates table (F30008).
- Print report totals by company, branch/plant, and GL category code.
- For on-hand balances, create an Item Balance (IB) record in the Item Ledger table (F4111) if the cost method selected matches the sales and inventory cost method for an item.
- For on-hand balances, write journal entries to the Account Ledger table (F0911) in either detail or summary format, creating batch type NC (Frozen Cost Update).

  The system creates an item ledger record when the cost method that is selected for update is the sales and inventory cost method. The item ledger record indicates a change in inventory value for the updated items. The number of item ledger records that are written depends on the cost level of the item, which is defined in the Item Master table (F4101). For example, items at cost level 2 have an item ledger record for each branch/plant at which they are defined because costs can differ by branch/plant.

The program creates journal entries in either detail or summary format in amounts that match the item ledger records. Thus, the program maintains integrity between the Item Ledger table and the Account Ledger table. Use the Item Ledger/Account Integrity report (R41543) to verify this integrity.

These steps make up the process flow for updating frozen costs:

1. The program creates a journal entry only if an item ledger record has been written.
2. An item ledger record is written only if an item cost ledger record has been updated.
3. An item cost ledger record is updated only if a cost component record has been updated.

The program accesses these automatic accounting instructions (AAIs) to obtain the object account:

AAI table number	Description	Use
4134	Inventory	• Debit to show increase in item cost. • Credit to show decrease in item cost.
4136	Expense or cost of goods sold (COGS)	• Debit to show expense or loss. • Credit to show income or gain.

This table identifies information about detail and summary journal entries:

Journal Entry Type	Description
Detail journal entry	Select detail format for the program to create matching debit and credit account-ledger records for every item ledger record that is created. Use the detail format when you want a detailed audit trail. However, consider that the potential volume is large and could cause disk space problems. The program can generate several journal entries by cost component for the same item and branch, depending on how you set up the AAIs.
Summary journal entry	Select summary format for the program to create debit and credit records by subtotals of company, general ledger class code, and transaction type. Use the summary format to reduce the amount of detail in the general ledger. You can still run a report to provide a detailed audit trail.

The program produces this output:

Output	Description
Error messages	The program produces error messages if it finds any general ledger errors while formatting the journal entries. Correct any errors and run the Item Cost Component - Frozen Update program (R30835) again. To determine whether error messages exist, review the workflow messages for submitted jobs.
Item Cost Ledger Update report (R30834)	Displays the effect of the inventory revaluation based on the changes that were made to the cost revision records for the inventory items. You can print all items or only those that have a cost change. You can run the report in proof mode or final mode. The report provides this information: • Old and new costs for each updated item. • Variances between old and new costs. • Item quantity on hand. • Net amount of change in cost. • Summary of the amount changed by item general ledger category. • GL exception errors. • Whether GL transactions have been written. • Either GL subtotals by company and GL class code or GL class code only.

Running the Frozen Update Program

Select Product Costing (G3014), Frozen Update.

Setting Processing Options for Item Cost Component - Frozen Update (R30835)

These processing options control default processing for the Item Cost Component - Frozen Update program.

Default

This processing option controls the default value for the cost method.

1. Cost Method Specify the cost method that the system uses to update the Frozen Item Cost Component Add-Ons table (F30026) and the Item Cost table. If you leave this processing option blank, the system uses cost method 07 (standard costs) to calculate costs.

Processing

These processing options control processing criteria.

1. Update Costs Specify whether the system updates costs. If you leave this processing option blank, the system creates exception reports and error messages, but does not update costs. Values are:

Blank: Do not update costs.

1: Update costs.

2. Single Level Specify whether the system performs a complete cost rollup in a bill of material or updates only the cost for a selected item or items without updating the other costs. For example, you might have a new item to cost, although you do not want to recost the other items. After you create simulated costs for the new item, you can update its frozen costs without updating the costs of lower-level components. Values are:

Blank: Perform a complete cost rollup.

1: Perform a single-level cost rollup.

3. Update Work Center Rates Specify whether the system updates work center rates when you run the batch program in final mode. Values are:

Blank: Do not update rates.

1: Update all rates in all work centers across all companies and all branch plants.

2: Update all work centers that are associated with items being frozen.

4. Use Flex Accounting Specify whether to enable flexible accounting. The system looks for the flex accounting rules to determine how to populate cost object, business unit, subsidiary, or subledger fields. Values are:

Blank: Do not use flexible accounting.

1: Use flexible accounting.

5. WIP Revaluation (work in process revaluation) Specify whether the system automatically runs the WIP Revaluation program to update work-in-process costs. Values are:

Blank: Do not run the WIP Revaluation program.

1: Run the WIP Revaluation program.

Process Mfg

If you use process manufacturing, this processing option controls whether the system updates the costs for co-products and by-products.

1. Update Co/By Products Specify whether the system updates the costs of co-products and by-products for process manufacturing. If you leave this processing option blank, the system updates costs for the parent process only. Values are:

Blank: Do not update the costs of co-products and by-products.

1: Update the costs of co-products and by-products.

G/L

These processing options control the GL dates and how the system creates journal entries for the general ledger.

1. G/L Date (general ledger date) Specify the date that appears on Item Ledger transactions and journal entries. If you leave this processing option blank, the program uses the system date.

2. G/L Transactions (general ledger transactions) Specify how the system creates journal entries for the general ledger. Values are:

Blank: Do not create GL journal entries.

1: Create detailed GL journal entries for IB transactions.

2: Create summarized GL entries (one entry for each account).

Versions

This processing option controls which version of this program the system uses when the program is called from the Item Cost Component - Frozen Update program.

1. WIP Revaluation (work in process revaluation) Enter the version of the program that you want the system to use. If you leave this processing option blank, the system uses the default version ZJDE0001.

Print

This processing option controls how much information is included in the printed report.

1. Print Items Specify print output. Values are:

Blank: Print all items.

1: Print all items.

2: Print only changed items.

Freezing Work Center Rates

This section provides an overview of the Freeze Work Center Rates program and discusses how to:

- Freeze work center rates.
- Set processing options for Freeze Work Center Rates (R30860).

Understanding the Freeze Work Center Rates Program

You can use the Freeze Work Center Rates program (R30860) to update frozen work center rates. You run this program when any of the work center rates have changed. You can perform this task using the Frozen Standard Update program (R30835); however, for actual costing, you do not need to simulate costs and perform a rollup. Running the Freeze Work Center Rates program ensures that work centers are updated with changed costs in an actual costing environment.

In addition, the Freeze Work Center Rates program enables you to update frozen costs for selected work centers, as opposed to updating all work center rates in the system.

Freezing Work Center Rates

Select Product Costing (G3014), Freeze Work Center Rates.

Setting Processing Options for Freeze Work Center Rates (R30860)

These processing options control default processing for the Freeze Work Center Rates program.

Processing

This processing option controls whether the system freezes work center rates.

Update Rates Mode Specify whether the system simulates or freezes work center rates when you run the Freeze Work Center Rates program. Values are:

Blank: Simulate work center rates.

1: Freeze work center rates.

Print

This processing option controls the information that is included in the report.

Print Work Centers Specify which records the system includes on the report when you run the Freeze Work Center Rates program (R30860). Values are:

Blank: Do not generate a report.

1: Include all work center records.

2: Include changed work center records only.

Reviewing Frozen Cost Components

This section provides an overview of costing information review and discusses how to review frozen cost components.

Understanding Costing Information Review

After you run the Item Cost Component - Frozen Update program to revalue the inventory, you should review the updated costing information. These costs stay in effect until you run the update again. You can review frozen costs in the Cost Components program. You can also create a report based on the information in this program. The Item Ledger Inquiry program (P4111) provides information about the transactions that have affected the item that you are reviewing, including cost changes. You can review costs by viewing the bill of material and comparing frozen standard costs to the unit costs in the Item Cost table.

Form Used to Review Frozen Cost Components

Form Name	FormID	Navigation	Usage
Work With Cost Components	W30026C	Product Costing (G3014), Enter/Change Cost Components	Review frozen cost components.

Reviewing Frozen Cost Components

Access the Work With Cost Components form.

To review frozen cost components:

1. Complete these fields, and select Find on the Work With Cost Components form:
   - Item Number
   - Branch/Plant
   - Cost Method
2. Review the Frozen field.
3. Select Frozen or Simulated from the View menu to toggle between frozen and simulated costs.
4. Click Close.

Note. The frozen total is the accumulated standard cost rolled up from the lower levels.

Reviewing the Cost Components Report

This section provides an overview of the Cost Components Report and discusses how to:

- Run the Cost Components Report.
- Set processing options for Cost Components Report (R30026P).

Understanding the Cost Components Report

Use the Cost Components Report (R30026P) to review the component costs and total cost for each item. This information comes from the Enter/Change Cost Components program (P30026).

You can customize this report to meet specific needs. For example, you can:

- Process the report using any valid cost method.
- Review the cost type and description by item number.

- Identify items.
- Define the exact information that appears on the report from data selection options.

  For example, you can select specific items and decide whether to include factors or rates for add-on and extra costs.
- Print the report for a single item, several items, or all items.

You can include any of the cost components that you define for an item in the cost bucket that you specify.

Running the Cost Components Report

Select Product Costing Reports (G3023), Cost Components.

Setting Processing Options for Cost Components Report (R30026P)

These processing options control default processing for the Cost Components Report.

Defaults

This processing option controls whether the report prints simulated or frozen costs.

Simulated/Frozen Cost Selection Specify whether to print simulated or frozen costs. Values are:

1: Print simulated costs.

2: Print frozen costs.

If you leave this processing option blank, the report includes only simulated costs.

Reviewing the Item Ledger

This section provides an overview of item ledger review and discusses how to review item ledger information.

Understanding Item Ledger Review

Use the Item Ledger Inquiry (The CARDEX) program (P4111) to view IB transactions for an item.

The Item Cost Component - Frozen Update program transfers IB transactions to the item ledger if all of these statements are true:

- The frozen cost changes in the Item Cost table for a given cost method.
- One cost method is used as the sales and inventory cost method.
- A quantity on-hand exists.

See Also

JD Edwards EnterpriseOne Inventory Management 9.0 Implementation Guide, "Reviewing Item and Quantity Information," Setting Processing Options for Item Ledger Inquiry (CARDEX) (P4111)

Form Used to Review the Item Ledger

Form Name	FormID	Navigation	Usage
Work With Item Ledger	W4111A	Product Costing (G3014), Item Ledger Inquiry (The CARDEX)	Review item ledger information.

Reviewing Item Ledger Information

Access the Work With Item Ledger form.

To review the item ledger:

1. Complete the Item Number field.
2. Type *IB* in the Document Type field, and click Find.
3. Review these fields:
   - Transaction Date

     Displays the date that an order was entered into the system. This date determines which effective level the system uses for inventory pricing.
   - Unit Cost
4. Click Close.

Note. The value in the Quantity field represents the available quantity, which might consist of the on-hand balance minus commitments, reservations, and backorders. You enter this value in the Branch/Plant Constants program.

CHAPTER 5

Working with Additional Product Costing Features

This chapter provides an overview of JD Edwards EnterpriseOne Product Costing features and discusses how to:

- Copy costs.
- Reset simulated costs.
- Update sales order price and cost.
- Update product costs.
- Change item cost levels.
- Revalue work in process.
- Apply extra costs for manufacturing actual costing.

Understanding Product Costing Features

You can use product costing features to work with costing information. These features enable you to update or reset costs to manage fluctuations in the manufacturing environment. The features that are available offer these options:

- You can copy costs for an item from one cost method to another.
- You can reset simulated costs to their frozen values.
- You can update the costs in the sales orders with the most current cost values.
- You can update costs for an item globally, using an amount or a percentage change.
- You can update item cost levels.
- You can run a batch program to revalue work in process inventory for standard and for actual costing.
- You can set up and apply extra costs to the parent item during the actual costing process.

Copying Costs

This section provides an overview of the Copy Cost Values program and discusses how to:

- Run the Copy Cost Values program.
- Set processing options for Copy Cost Values (R30890).

Understanding the Copy Cost Values Program

Use the Copy Cost Values program (R30890) to copy the simulated or frozen costs and work center rates from one cost method to another cost method. You can also copy work center rates between cost methods within the same work center.

Based on the processing option values, the program copies information from the Item Cost Component Add-Ons table (F30026) and the Work Center Rates table (F30008) to update costs and work center rates for the cost method that you specify. You can replace only simulated costs, not frozen costs, in the *copy to* branch. Run the Frozen Update program (R30835) to update frozen costs.

Important! To ensure acceptable results, you should carefully plan which costs and rates you want to copy to which cost methods. Write down the choices and processing option settings before you complete the copy. This program does not generate a report of the updated costs.

Running the Copy Cost Values Program

Select Product Costing Reports (G3023), Copy Cost Values.

Setting Processing Options for Copy Cost Values (R30890)

These processing options control default processing for the Copy Cost Values program.

Process

These processing options control whether the program copies simulated or frozen costs, which branch/plant to copy the information from, and which branch/plant to update.

COPY FROM INFORMATION — Specify the copy from information for costs, branch/plant, and cost method.

1. Simulated or Frozen — Specify whether to copy simulated or frozen costs.

1: Copy simulated costs.

2: Copy frozen costs.

2. Enter the Branch/Plant and Cost Method to copy — Specify the branch/plant and cost method to copy.

Branch/Plant to copy — Specify the branch/plant to copy.

Cost Method to copy — Enter a user-defined code (UDC) (40/CM) that specifies the basis for calculating item costs. Cost methods 01 through 19 are reserved by the JD Edwards EnterpriseOne system from Oracle.

COPY TO INFORMATION — Specify the copy to information for branch/plant and cost method.

3. Enter the Branch/Plant and Cost Method to update — Specify the branch/plant and cost method to update.

Branch/Plant to update — Specify the branch/plant to update.

Cost Method to update — Enter a UDC (40/CM) that indicates the cost method that the system will copy costs into. Cost methods 01–19 are reserved by the JD Edwards EnterpriseOne system.

Resetting Simulated Costs

This section provides an overview of the Cost Simulation Refresh program and discusses how to:

- Copy frozen cost values to simulated cost values.
- Set processing options for Cost Simulation Refresh (R30850).

Understanding the Cost Simulation Refresh Program

For the cost method and branches that you select, use the Cost Simulation Refresh program to reset simulated costs to their frozen values. Resetting costs enables you to begin a simulation again.

Copying Frozen Cost Values to Simulated Cost Values

Select Product Costing Reports (G3023), Reset Simulated Costs.

Setting Processing Options for Cost Simulation Refresh (R30850)

These processing options control default processing for the Cost Simulation Refresh program.

Process

These processing options control the branch/plant for which you want to refresh simulated values and whether to reset work center rates.

Branch Specify the branch/plant for the cost refresh processing, or enter * for all branch/plants.

Reset Rates Specify *1* to reset rates in the Work Center Rates table for the selected cost centers and cost methods.

Updating Sales Order Price and Cost

This section provides an overview of the Update Sales Price/Cost program and discusses how to update sales order price and cost information.

Understanding the Update Sales Price/Cost Program

Use the Update Sales Price/Cost program (R42950) to update the unit and extended cost in sales orders with the most current cost values that are specified in the Item Cost table (F4105). If multicurrency processing is active in the system, the program updates the Foreign Unit and Extended Cost fields, as well. Use data selection to specify the exact information to be processed.

Updating Sales Order Price and Cost Information

Select End of Day Processing (G4213), Update Sales Price/Cost.

Important! When you run this program, the system updates the active sales order detail information. Therefore, you should use extreme caution when you set up data selections.

See Also

JD Edwards EnterpriseOne Sales Order Management 9.0 Implementation Guide, "Updating Prices," Updating Prices for a Customer

Updating Product Costs

This section provides an overview of the Speed Cost Maintenance program and discusses how to update product cost information.

See Also

JD Edwards EnterpriseOne Inventory Management 9.0 Implementation Guide, "Updating Costs," Updating Item Costs

JD Edwards EnterpriseOne Inventory Management 9.0 Implementation Guide, "Updating Costs," Setting Processing Options for Speed Cost Maintenance (P41051)

Understanding the Speed Cost Maintenance Program

Use the Speed Cost Maintenance program (P41051) to update costs for purchased items in the branch/plants, locations, and lots that you select. You can increase or decrease costs by a percentage or monetary amount, or you can specify a new monetary amount. You can also specify the cost method for which you want to update costs.

This program updates costs for purchased items in the Item Cost table (F4105). Run the Frozen Update program (R30835) to update costs in the Item Cost Component Add-Ons table (F30026) for purchased and manufactured items.

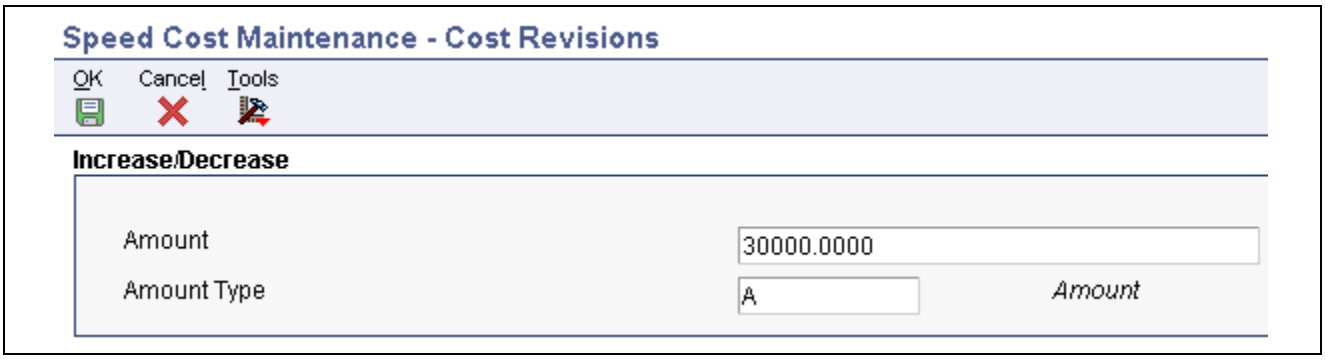
Note. The information that appears on the Work with Location Costs form depends on the cost level for the item. For example, when an item has a cost level of 2, the system displays costs for all branch/plants. When an item has a cost level of 3, the system displays costs for all locations at the branch/plant that you specify.

Form Used to Update Product Costs

Form Name	FormID	Navigation	Usage
Cost Revisions	W41051B	Inventory Price & Cost Updates (G4123), Speed Cost Maintenance Select a branch/plant on the Work With Location Costs form, and click Select.	Update product cost information. Increase or decrease unit cost per item by branch/plant.

Updating Product Cost Information

Access the Cost Revisions form.



Cost Revisions form

Amount Enter the monetary amount or percentage by which you want to increase or decrease unit costs for items. You can also indicate a monetary amount to override current unit costs. The value that you specify in the Amount Type field determines whether you enter a monetary amount or a percentage.

Note. Enter percentages as whole numbers. For example, enter 10 to increase costs by 10 percent. To decrease costs, enter a negative sign before the number. For example, enter –10 to decrease costs by 10 percent.

The system changes all costs for all locations.

Amount Type Enter a code that indicates whether the number in the Increase/Decrease Amount field is a monetary amount or a percentage value. Values are:

A: Amount

%: Percentage

**:* Cost Override Amount

Changing Item Cost Levels

This section provides an overview of the Item Cost Level Conversion program, lists prerequisites, and discusses how to:

- Change item cost level information.
- Set processing options for Item Cost Level Conversion (R41815).

Understanding the Item Cost Level Conversion Program

After you have entered cost information, you might need to change the cost level of an item. To change the cost level after you have entered cost information for the item, you must use the Item Cost Level Conversion program (R41815).

This program deletes all existing cost records for the item in the Item Cost table (F4105) and creates new cost records that correspond to the level. For the item to create the new cost records, the system uses the cost method that you identified for sales and inventory on the Cost Revisions form.

The program does not change the cost valuation of items and does not create journal entries. For example, if you change the cost level of an item from branch/plant and location to branch/plant, all existing cost records for the branch/plant and location must contain the same sales and inventory cost method and cost.

You can run this program in either proof mode or final mode. When you run the program in proof mode, the system generates the Item Cost Level Conversion report, which displays errors that need correction. You should always run the program in proof mode first and correct any discrepancies.

When you run the program in final mode, the system updates:

- The Inventory Cost Level field in the Item Master table (F4101).
- The F4105 table.

Prerequisites

Before you change item cost levels, you must:

- Back up the data tables completely before you begin the data conversion process; if the results of the conversion are unsatisfactory, you can use the backup tables to restore data tables to their original format.
- Verify that no users access the F4101 table or the F4105 table when this program is running in final mode.

Changing Item Cost Level Information

Select Inventory Advanced - Technical Ops (G4131), Item Cost Level Conversion.

Important! When you change the item cost levels, the changes affect data throughout the system. You should restrict access to this program.

Setting Processing Options for Item Cost Level Conversion (R41815)

These processing options control default processing for the Item Cost Level Conversion program.

Process

These processing options control how the system processes the cost information.

Level - Inventory Cost	Specify the Cost Level to update to.
Branch/Plant	Specify the branch that is the source of the default cost values if you update to cost level 1. If you update from cost level 3, the costs come from the primary location.
Update Mode	Enter *1* to run in final mode and update tables. If you leave this processing option blank, the system does not update tables.
Print Mode	Enter *1* to print only exceptions on the edit report. To print all items, leave this field blank.

Revaluing Work in Process

This section provides an overview of the WIP Revaluation program and discusses how to:

- Revalue work in process.
- Set processing options for WIP Revaluation (R30837).

Understanding the WIP Revaluation Program

Whether you use standard costing or an actual costing method, the business must be able to revalue work in process inventory whenever material or labor costs change. Whenever the costs for an item change, the Cost Changed Flag (CCFL) field for this item is set to *1* in the Item Cost table (F4105). This cost change might be caused by a company's decision to update costs to reflect changed circumstances and to maintain realistic pricing.

The WIP Revaluation program (R30837) can be run for standard costed items in discrete, process, and configured work orders. For actual costing, you can run the WIP Revaluation program only for material cost changes in discrete work orders.

The purpose of work in process revaluation is to revalue the production costs for all open work orders in the Production Cost table (F3102), based on the latest item cost, as well as unaccounted completed and scrapped amounts for actual costing. The report displays any differences between the original work-in-process (WIP) values and the new WIP values. You can set a processing option to create WIP Revaluation journal entries in the Account Ledger table (F0911) for differences between the old and the new WIP values. You can let the system supply the default work order number in the Subledger field in the F0911 table. The WIP Revaluation program does not revalue on-hand inventory and cannot be performed for closed work orders. Closed work orders are characterized by a value of *3* for the Variance Flag (PPFG) field in the Work Order Master table (F4801).

If you use standard costing, performing an automated WIP revaluation ensures that work in process inventory always reflects any updates to component and labor costs and eliminates artificial variances that are generated by cost changes in the middle of a work order life-cycle. It also makes manual journal entries for WIP revaluation unnecessary.

For actual costing, WIP revaluation accounts for a situation in which subassembly work order costs are reported after the actual cost subassembly item was already issued to the parent item. Without WIP revaluation, the true costs of the subassembly work order are not reflected in the parent work order.

You can access the WIP Revaluation program in three different ways to revalue work in process. For standard costing, you can call the WIP Revaluation program from the Frozen Update program (R30835) by setting a processing option and specifying the desired program version. In this case, the system runs WIP Revaluation for all items that are processed through the Frozen Update program. If any item is flagged for cost change, any open work order that contains this item is revalued, along with any work orders to which the parent item was issued. This logic is carried through to the highest-level parent item. All cost types in the Production Cost table (F3102) are included in the data selection.

For actual costing, you can call the WIP Revaluation program from either the Work Order Inventory Completion program (P31114) or the Variances program (R31804) by setting the appropriate processing option and specifying the desired program version. Running WIP Revaluation updates the parent item's production cost based on the subassembly item's latest production cost. If you call the WIP Revaluation program from the Work Order Inventory Completion program, the system revalues the work orders with the completed item, as well as their parent work orders. Only the material cost types in the Production Cost table are included in the data selection.

Note. If an actual costed item is defined with a cost level of *3* (item, branch, location, and lot), the costs for this item have to be tracked at the lot or location level to accurately calculate and revalue the costs. Completing work orders to and issuing them from a lot or location enables the system to associate the item unit costs that are calculated for the lot or location at the time of completion to any orders to which the item is issued.

When WIP Revaluation is initiated from the Variances program, it revalues all open work orders with items that are flagged for cost change in the Item Cost table, as well as their parent work orders. When work in process is revalued, the system clears the cost change flag. All cost types in the Production Cost table are included in the data selection for standard costed units. For actual costing, only the material costs are considered.

You can also call the program as a standalone batch program from the menu. This choice enables you to perform WIP revaluation without having to change existing processes. It also enables you to rerun WIP revaluation if the revaluation process was terminated abnormally when another program called it. You can run the program for actual and standard costed items. All cost types in the Production Cost table are included in the data selection.

You can set a processing option to run the WIP Revaluation program in proof or final mode. If you call WIP Revaluation from another program, however, the mode of the calling program overrides this setting.

Revaluing Work in Process

Select Product Costing (G3014), WIP Revaluation.

Setting Processing Options for WIP Revaluation (R30837)

These processing options control default processing for the WIP Revaluation program.

Defaults

These processing options control the default setting for performing WIP revaluations, such as which document type the system uses and what type of general ledger transactions the system writes.

1. Document Type
Specify the document type (UDC 00/DT) that the system uses. If you leave this processing option blank, the system uses IB (item cost changes).

2. G/L Transactions (general ledger transactions)
Specify what type of general ledger transactions are written to the Account Ledger table (F0911) by running the WIP Revaluation program. Values are:

Blank: Do not write any GL transactions.

1: Write detailed GL transactions by document number.

2: Write summarized journal entries by account.

3. Default to Sub-Ledger
Specify whether the system uses the production document number as the default subledger number. Values are:

Blank: Do not use the production document number as the default subledger number.

1: Use the production document number as the default subledger number.

4. Proof Or Final
Specify whether to run the WIP Revaluation program (R30837) in proof or in final mode. In proof mode, the system performs all calculations and displays the results on the report. In final mode, the program also updates

the Production Cost table (F3102) and creates journal entries for changes in work-in-process costs in the Account Ledger table (F0911).

Note. When the WIP Revaluation program is launched from another program, the mode (proof or final) of that program overrides this processing option.

Applying Extra Costs for Manufacturing Actual Costing

This section provides an overview of extra costs and discusses how to apply extra costs for actual costing.

Understanding Extra Costs

When you use actual costing for one or all items, you might want to apply extra costs to the cost of the parent item. To apply the extra costs for actual costing, you follow some of the steps that you complete for standard product costing. The system calculates cost extras based on a template that is stored in the Item Cost Component Add-Ons table (F30026).

Applying Extra Costs for Actual Costing

To apply extra costs for actual costing:

1. Set up cost components in UDC 30/CA for each extra cost.
2. Set up the cost method for each item as either 02 (Weighted Average) or 09 (Actual or Manufacturing Last).
3. Enter cost extras directly in the Frozen Net Added field for the cost component.

CHAPTER 6

Working with Product Costing in Various Supply Chain Environments

This chapter provides an overview of product costing in mixed manufacturing environments and discusses how to:

- Review product costing for batch manufacturing.
- Review product costing for kit items.
- Review product costing for configured items.
- Review product costing for process manufacturing.
- Review product costing for a percent bill of material.

Understanding Product Costing in Mixed Manufacturing Environments

Few manufacturing companies use only one type of operating environment. Often, process manufacturing companies use discrete methodologies when performing packing and shipping activities. Companies that use discrete or job-shop manufacturing methods often adopt more efficient operations using rate-based, or batch processing methods. Any combination of operating methods is possible, depending on the industry and the product mix.

Companies that can use a combination of manufacturing methods must also consider how to account for costs that are incurred from those various methods. Each method has specific strategies for establishing and collecting cost information. In combination, certain adjustments or restrictions might be necessary so that costing information flows from the most basic of cost components through the rolled up or completely costed end products.

As the company refines its production processes and automates costing activities, you should create detailed definitions of the costing processes. Verify that the cost techniques support any manufacturing method that you use. The ultimate goal is to decrease the lead time that is required to maintain and monitor product costing information throughout the entire manufacturing process.

Depending on the environment in which you use the JD Edwards EnterpriseOne Product Costing system, whether it involves using batches, kits, processes, or configured items, or whether you use it in distribution, the system calculates product costs differently.

Note. Cost methods 02 (Weighted Average) and 09 (Manufacturing Last Cost) are not used for processes and configured items.

Reviewing Product Costing for Batch Manufacturing

This section provides an overview of product costing for batch manufacturing. lists a prerequisite, and lists the forms used to:

- Review the accounting cost quantity on item master and item branch record.
- Review the batch quantity on the bill of material.
- Review the batch quantity on the routing.
- Review the batch quantity on the process.

Understanding Product Costing for Batch Manufacturing

Bills of material and routings can specify a batch quantity for products that are normally manufactured in specific batch sizes, such as chemicals, food, or petroleum.

To obtain a correct rollup when you use a batch quantity, the accounting cost quantity, the bill of material batch size, and the routing batch size must match, because the system rolls up:

- Labor and overhead costs only when the accounting cost quantity matches the routing batch size.
- Material costs only when the accounting cost quantity matches the bill of material batch size.

This table illustrates possible scenarios:

Accounting Cost Quantity	Bill Batch Size	Routing Batch Size	Rollup
10,000	10,000	10,000	Complete
5,000	10,000	10,000	None
10,000	5,000	10,000	Labor and Overhead Only
10,000	10,000	5,000	Material Only

If the Cost Simulation program (R30812) does not find a bill of material for which the batch quantity matches the accounting cost quantity, it uses the zero batch bill.

Note. Most cost amounts that appear on the Work with Costed Bill and Enter Cost Components forms are expressed by unit of measure, not by batch quantity. Setup costs are expressed by batch quantity.

See Also

JD Edwards EnterpriseOne Inventory Management 9.0 Implementation Guide, "Entering Item Information," Entering Item Master Information

JD Edwards EnterpriseOne Inventory Management 9.0 Implementation Guide, "Entering Item Information," Entering Branch/Plant Information

JD Edwards EnterpriseOne Product Data Management 9.0 Implementation Guide, "Setting Up Bills of Material"

JD Edwards EnterpriseOne Product Data Management 9.0 Implementation Guide, "Entering Work Centers and Routing Instructions," Creating Routing Instructions

Prerequisite

To be able to review the batch quantity on bills of material and routings, ensure that you have set the Batch Quantity processing option for the Bill of Material Revisions program (P3002) and the Work With Routing Master program (P3003) to display the batch quantity.

Forms Used to Review Product Costing for Batch Manufacturing

Form Name	FormID	Navigation	Usage
Additional System Information	W4101C	Inventory Master/Transactions (G4111), Item Master On the Work With Item Master Browse form, enter the item number, click Find, select a row, and select Addl System Info from the Row menu.	Review the accounting cost quantity on the item master record.
Additional System Info	W41026D	Inventory Master/Transactions (G4111), Item Branch/Plant On the Work With Item Branch form, enter the branch/plant and item number, click Find, select a row, and select Addl System Info. from the Row menu.	Review the accounting cost quantity on the item branch record.
Enter Bill of Material Information	W3002A	Daily PDM Discrete (G3011), Enter/Change Bill On the Work With Bill of Material form, enter the branch/plant and item number, and click Find. Select a batch record and click Select.	Review the batch quantity on the bill of material. Review the Batch Quantity field.
Enter Routing Information	W3003B	Daily PDM Discrete (G3011), Enter/Change Routing On the Work with Routing Operations form, enter the branch/plant and item number and click Find. Select a batch record and click Select.	Review the batch quantity on the routing.
Enter Process Information	W3003B	Daily PDM Process (G3012), Enter/Change Process On the Work with Process form, enter the branch/plant and item number, and click Find. Select a batch record and click Select.	Review the batch quantity on the process. See Chapter 6, "Working with Product Costing in Various Supply Chain Environments," Reviewing Product Costing for Process Manufacturing, page 97.

Reviewing Product Costing for Kit Items

This section provides an overview of product costing for kit items and discusses how to:

- Review the feature cost percentage for kit items.
- Review the feature cost percent for process items.

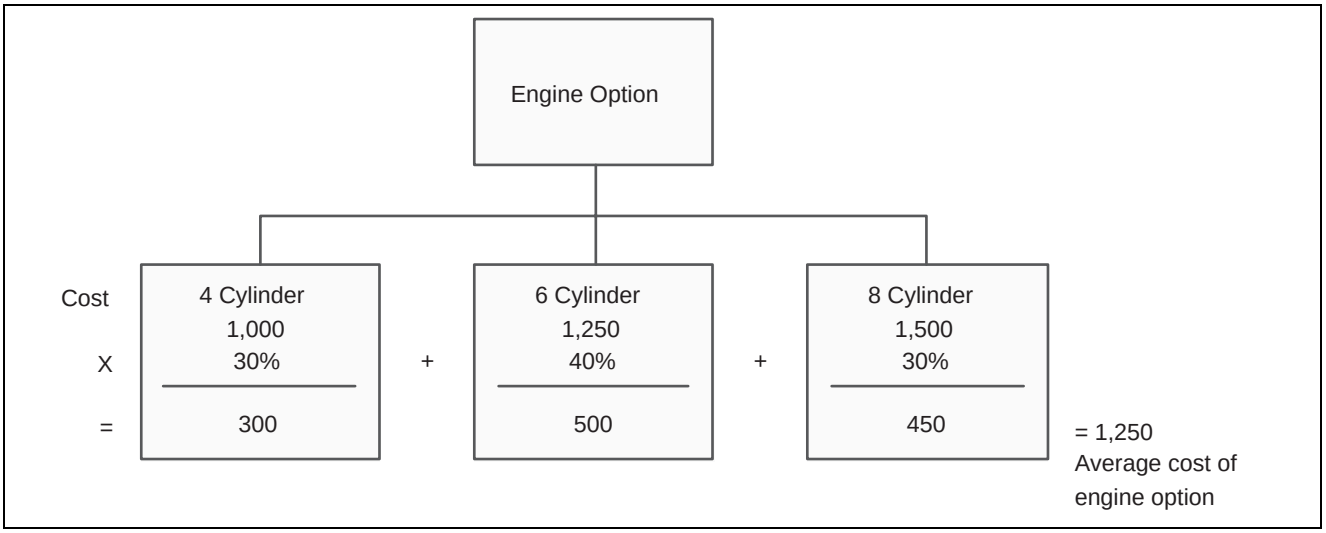
Understanding Product Costing for Kit Items

When you use kit items with options, the Cost Simulation program (R30812) calculates the average cost of the kit parent item, based on the feature cost percentage. The system can calculate the average cost for a kit parent item if:

- The kit parent item has a stocking type of M (manufactured).
- You have entered the feature cost percentage of the components on the bill of material.

The Cost Simulation program multiplies the feature cost percentage with the cost of the option from the Item Cost table (F4105) to determine the option's share of the average cost of the kit parent item. The program then adds monetary amounts for each option to determine the average cost for the kit parent item.

This diagram illustrates product costing for a kit item.



Product costing for a kit item

Forms Used to Review Product Costing for Kit Items

Form Name	FormID	Navigation	Usage
Enter Bill of Material Information	W3002A	Daily PDM Discrete (G3011), Enter/Change Bill On the Work with Bill of Material form, enter a branch/plant and the item number of a kit item. Select the record that you retrieved and click Select.	Review the feature cost percentage for kit items. See *JD Edwards EnterpriseOne Product Data Management 9.0 Implementation Guide*, "Setting Up Bills of Material".
Co/By Product Revision	W3002PA	Daily PDM Process (G3012), Enter/Change Process On the Work with Routing Operations form, enter a branch/plant and the item number of a kit item. Select the record that you retrieved and click Select. On the Enter Process Information form, select Co/By Revision from the Form menu.	Review the feature cost percent for process items. See *JD Edwards EnterpriseOne Product Data Management 9.0 Implementation Guide*, "Working With Process Manufacturing," Entering a Co- and By-Products List.

Reviewing the Feature Cost Percentage for Kit Items

Access the Enter Bill of Material Information form.

Feat Plan % (feature planned percent) Enter the percentage of demand for a specified feature based on projected production. For example, a company might produce 65 percent of their lubricant with high viscosity, and 35 percent with low viscosity, based on customer demand. The JD Edwards EnterpriseOne Requirements Planning system uses this percentage to accurately plan for the co-products and by-products of a process. Enter percentages as whole numbers, for example, enter *5* percent as 5.0. The default value is *0*.

Feat Cost % (feature cost percent) Enter the percentage that the Cost Simulation program uses to calculate the cost of a feature or option item as a percentage of the total cost of the parent. Enter percentages as a whole numbers, for example, enter *5* percent as 5.0.

R (required) Enter a code that specifies whether a component is required. Values are:

Y: The component is required.

N: The component is not a required selection during order processing. The default value is *N*.

DC (default component) Specify an item as a default component. Use this field if you are creating sales orders using the Recurring Orders Edited Creation program (P40211Z). To do so, enter *Y* in this field. When you specify a kit master item, the Recurring Orders Edited Creation program automatically selects all related standard and default components.

Opt (S/O/F) (optional item (standard/optional/feature)) Enter a code that indicates whether a component is standard or optional within a bill of material or for kit processing. Values are:

S: Standard.

The item is always included in any transaction involving the bill of material.

O: Optional.

In order entry, you can specify whether the item will be included in a particular sale.

F: Feature.

The item has features that you must specify at order entry.

The default value is *S.*

Reviewing the Feature Cost Percentage for Process Items

Access the Co/By Product Revision form.

Co By (co-products/by-products/intermediate)

Enter a code that distinguishes standard components or ingredients from co-products, by-products, and intermediates. Co-products are concurrent end items as the result of a process. By-products are items that can be produced at any step of a process, but are not planned. Intermediate products are items that are defined as a result of a step but are automatically consumed in the next step. Generally, intermediate items are nonstock items and are only defined steps with a pay-point for reporting purposes. Standard components (discrete manufacturing) or ingredients (process Manufacturing) are consumed during the production process. Values are:

Blank: Standard components or ingredients.

C: Co-products.

B: By-products.

I: Intermediate products.

Co/By Product

Enter the item number of the co-product or by-product in the process.

Output Quantity

Enter the quantity of finished units that you expect the bill of material or routing to produce. This field enables you to specify varying quantities of components based on the amount of finished goods produced. For example, 1 ounce of solvent is required per unit up to 100 units of finished product. However, if you produce 200 units of finished product, 2 ounces of solvent are required per finished unit. In this example, you would set up batch quantities for 100 and 200 units of finished product specifying the proper amount of solvent per unit.

UM (unit of measure)

Enter a value from the Unit of Measure UDC table (00/UM) that indicates the quantity in which to express an inventory item, for example, CS (case) or BX (box).

Reviewing Product Costing for Configured Items

This section provides an overview of product costing for configured items and lists the form used to set up product costing for configured items.

Understanding Product Costing for Configured Items

Costing for configured items is different from costing for nonconfigured items because configured items do not have a standard bill of material or routing. Because no standard configuration exists, you cannot establish costing before you enter an order. The discrete standard-cost rollup concept does not apply to a configured item, so you do not run the Cost Simulation program (R30812), and no frozen standard costs exist in the Item Cost component Add-Ons table (F30026).

However, standard costs for purchased parts and manufactured parts that are used by configured items must be established and frozen (07 Cost Method) in the F4105 table to be factored into the calculated costs for configured item work orders.

The Order Processing program (R31410) performs a cost rollup when it attaches a parts list and routing to a work order for a configured item. A processing option instructs the program to calculate the costs. The costs are stored in the Column 1 - Frozen Standard field in the Production Cost table (F3102), not in table F30026.

The costs are the accumulation of the standard costs for the components, the labor and overhead values that are defined in manufacturing constants, the attached routing and work center information, and work order values.

For a configured item, the system calculates A1 material cost based on the total cost of its direct components. The components are defined by the P and Q assembly inclusion rules.

The system calculates B1 direct labor cost based on the item routing, which is defined by the R assembly inclusion rule.

Cost defined by the X assembly inclusion rules affects only the sales order and not the work order. Thus, you cannot retrieve associated X assembly inclusion rule costs from the F3102 table.

After the Order Processing program establishes the standard costs for the configured items, journal entries for configured items are created in the same way as journal entries for nonconfigured items.

Sales quotes for configured items are an exception to the standard costing rule for configured items. The standard cost for a configured item on a sales quote is calculated without running the Order Processing program if the Cost Sales Quote functionality is enabled in the Configurator Constants program (P3209).

The sources of cost generation in table F3102 for configured items includes:

- Costing method: standard costing (07).
- Costing method: weighted average (02).
- Costing method: manufacturing last cost (09).
- Standard: R31410.
- Current: Not used.
- Planned: R31802A.
- Actual: R31802A.
- Completed: R31802A.
- Scrapped: R31802A.
- Unaccounted Completed: Not used.

  For costing methods 02 and 09, the system populates the Unaccounted Completed field from the Work Order Completions program (P31114).
- Unaccounted Scrapped: Not used.

For costing methods 02 and 09, the system populates the Unaccounted Scrapped field from the Work Order Completions program (P31114).

See Also

JD Edwards EnterpriseOne Configurator 9.0 Implementation Guide, "Working with Configured Items," Costing and Accounting for Configured Items

Form Used to Review Product Costing for Configured Items

Form Name	FormID	Navigation	Usage
Work With Assembly Inclusion Rules	W3293N	Configurator Setup (G3241), Assembly Inclusion Rules On the Work With Assembly Inclusion Rules form, find and select a configured item by branch/plant.	Review product costing for configured items. Review the various rule types that are used to establish product costing for configured items.

Reviewing Product Costing for Process Manufacturing

This section provides overviews of product costing for process manufacturing, co-products and by-products, and the co/by-products planning table program and discusses how to:

- Review product costing for processes.
- Review product costing for ingredients.
- Review inputs to co-product and by-product costing.
- Review co-product and by-product costs.
- Review costed processes.
- Set up the Co/By-Products Planning table.

Understanding Product Costing for Process Manufacturing

Process manufacturing creates multiple products by mixing, separating, forming, or performing chemical reactions. This is usually a two-step procedure, which consists of a mixing or blending step, followed by a filling or packaging step. This type of manufacturing can also include intermediate steps, such as curing, baking, or fermenting.

Some of the items that process manufacturing companies create include:

- Liquids
- Fibers
- Powders
- Gases

Pharmaceuticals, foods, and beverages are specific examples of industries that often use process manufacturing.

A process includes ingredients (equivalent to parts on a work order) and a process routing or recipe.

Ingredients are the components of a process. You attach an ingredients list to a process (in the same way that you attach a parts list to a routing) as part of setup.

If an ingredient in a process has extra costs built into its cost, the system allocates the extra costs to the co-products and by-products in the same way that the ingredients are allocated. That is, the extra costs are allocated in the same sequence that the ingredients are consumed and at the feature cost of the co-product or by-product.

The output from a process includes:

Process Output	Description
Intermediate	The output from an operation that is used as the input to the next operation. No cost is associated with an intermediate.
By-product	The material that is produced incidental to (or as a residual) of the process.
Co-product	An end item that is produced as a result of the process. Usually, two or more co-products result from a process.

A process is defined in a routing. The process routing defines the work centers and standard hours. The relationships between the ingredients (inputs) and the co/by products (outputs) are also defined in the process routing.

When you run the Cost Simulation - Build Temp program (R30812), you must set the processing option to include the cost for the co-products and by-products. To determine the cost for the co-products and by-products as produced in the process, the system performs this calculation:

Divides the costs for the process into the co-products and by-products according to how the feature cost percentage is set up.

The system then uses the information from the Co-Products Planning/Costing Table (F3404) to allocate the cost from each process and to determine the standard cost for the co-products and by-products.

Understanding Co-Products and By-Products

Co-products are produced, usually together, as a result of a process routing. They are normally the main products (end items) that are sold to customers.

A by-product is a material of value that is produced incidental to or as a residual of the production process. By-products can be recycled, sold as-is, or used for other purposes.

Co-products and by-products are costed using the Feature Cost Percent field. Extra costs for co-products and by-products do not use feature cost percentages.

Example: Feature Cost Percent and Co-Product and By-Product Costing

This list applies to the example of feature cost percent and co-product and by-product costing:

- Cumulative cost = cost of this operation + cost of previous operation − cost of the co-product or by-product produced in the previous operation.
- The total of all percentages at an operation cannot exceed 100 percent.
- The total of all percentages at the last operation must equal 100 percent.

This table shows an example of feature cost percent and co-product and by-product costing:

Operation	Co-/By-Product	Feature Cost Percent	Cost This Operation	Cumulative Cost	Co-/By-Product Cost
10	By 1	10	100.00	100.00	10.00
20	Co 1	30	100.00	100.00 + (100.00 − 10.00) = 190.00	57.00
20	Co 2	20	NA	NA	38.00
30	NA	NA	100.00	100.00 + (190.00 − 95.00) = 195.00	NA
40	Co 3	60	100.00	100.00 + 195.00 = 295.00	177.00
40	Co 4	30	NA	NA	88.50
40	Co 5	10	NA	NA	29.50

This list identifies calculations for feature cost percent and co-product and by-product costing:

- Co-product or by-product cost at an operation = cumulative cost at an operation × the feature cost percent.
- Cumulative cost = cost this operation + cost of previous operation − cost of the co-product or by-product produced in the previous operation.
- The total of all percentages at an operation cannot exceed 100 percent.
- The total of all percentages at the last operation must equal 100 percent.

Example: Extra Costs for Co-Products and By-Products

Extra costs are not associated with a particular step of the process.

Therefore, feature cost percentages are not used for distributing the extra costs. Instead, the system:

- Determines the total of the net-added B1 through C4 costs for all the co-products and by-products.
- Calculates the percentage of this total that each co-product or by-product represents.
- Uses this percentage to allocate the extra costs.

In this simulated rollup of cost components for a process, the cost of extra cost X3 (Outbound Freight) is included for the amount of the process:

Cost Type	Net Added	Total
A1 Material	NA	40.00
B1 Direct Labor	20.00	20.00
B2 Setup Labor	40.00	40.00
B3 Machine Run	20.00	20.00
C1 Machine Variable	20.00	20.00

Cost Type	Net Added	Total
C2 Machine Fixed Overhead	20.00	20.00
C3 Labor Variable	60.00	60.00
C4 Labor Fixed Overhead	60.00	60.00
X# Freight Out	40.00	NA

Simulated, Frozen, and Cost Ledger are each 280.00.

When you run a cost rollup program to include the X3 cost type, the program determines the percentage that each co-product and by-product contributes to the total B1 through C4 costs, as illustrated by this table:

Cost Type	BY 1	BY 2	CO 1	CO 2	Total
B1	NA	10.00	5.00	5.00	20.00
B2	10.00	10.00	10.00	10.00	40.00
B3	10.00	NA	5.00	5.00	20.00
C1	10.00	NA	5.00	5.00	20.00
C2	10.00	NA	5.00	5.00	20.00
C3	10.00	20.00	15.00	15.00	60.00
C4	10.00	20.00	15.00	15.00	60.00
Totals	60.00	60.00	60.00	60.00	240.00
Percent of Total	25 percent	25 percent	25 percent	25 percent	100 percent

Because all four co-products and by-products have the same total costs, each is allocated 25 percent of the extra cost X3 (Freight Out) in the rollup.

When you review the cost for this item after the rollup, the simulated cost appears as this table indicates:

Cost Type	Net Added	Total
A1 Material	NA	10.00
B1 Direct Labor	5.00	5.00
B2 Setup Labor	10.00	10.00
B3 Machine Run	5.00	5.00
C1 Machine Variable	5.00	5.00
C2 Machine Fixed Overhead	5.00	5.00

Cost Type	Net Added	Total
C3 Labor Variable	15.00	15.00
C4 Labor Fixed Overhead	15.00	15.00
X# Freight Out	10.00	10.00

Simulated Cost equals 80; Frozen and Cost Ledger each equals 70.00

Understanding the Co/By-Products Planning Table Program

You use the Co/By Products Planning Table program (P3404) to determine:

- The percentage of the demand for co-products that is satisfied from process work orders.
- The percentage of the manufacture for the item that is satisfied from other sources, such as purchase orders or work orders for the co-products themselves.

You set up the planning table to specify the process that the system uses to calculate the costs of co-products and by-products, as well as the processes that the system uses for demand planning. Because a co-product or by-product can be produced by more than one process, depending on how often a process is used, you can assign a weight to the costs for each process on the planning table.

Normally, all demand for co-products and by-products is satisfied from process work orders. However, you can specify a percentage from the item process and from a bill of material and routing for a discrete co-product. To do so, enter less than 100 percent in the table. For example, you might enter 50 percent for the item process. The remainder is satisfied by discrete work orders for the co-product.

You can also have a co-product that is produced entirely by more than one process. For example, two processes can have a 75 percent to 25 percent relationship between them. Both processes appear on the Co/By-Products Planning Table form when you locate the co-product. In these situations, you must set up the Co/By Products Planning Table with a cost percent equal to 100. This ensures that the rollup program calculates the costs of co-products and by-products correctly.

When more than one process creates the same co-product or by-product, use the planning table to allocate the cost of the co-product or by-product among the processes. You can assign a weight to the costs from each process.

For example, you might have a co-product that is produced by two processes:

- The normal manufacturing process, which you use 90 percent of the time.
- A second process, which you use for rush orders 10 percent of the time, and that has costs that are much higher than the normal.

You can set up the planning table that enables the standard cost of the co-product to reflect the extra costs that you incur 10 percent of the time.

Forms Used to Review Product Costing for Process Manufacturing

Form Name	FormID	Navigation	Usage
Work with Routing Operations	W3003C	Daily PDM Process (G3012), Enter/Change Process	Add and review process information.
Work with Process	W3003C	Complete the Branch/Plant, Item Number, and Batch Quantity fields on the Work with Routing Operations form, and click Find.	Select a process for review. **Note.** When you enter a process item number and click Find, the form name changes from Work with Routing Operations to Work with Process.
Enter Process Information	W3003B	Complete the Branch/Plant and Item Number fields on the Work with Routing Operations form, click Find, and then select Revision from the Form menu.	Review product costing for processes.
Enter Ingredients	W3002A	Select Ingredients from the Form menu on the Enter Process Information form.	Review product costing for ingredients.
Co/By Product Revision	W3002PA	Select Co/By Revision from the Form menu on the Enter Process Information form.	Review inputs to co-product and by-product costing.
Work With Cost Components	W30026C	Product Costing (G3014), Enter/Change Cost Components	Review co-product and by-product costs.
Co/By Product Selection	W30026J	Select an item on the Work With Cost Components form, and then select Co/By Product from the Form menu.	Select a co-product or by product for cost component review.
Work With Costed Routing/Process	W30208A	Product Costing (G3014), Costed Routing/Process Inquiry	Review costed processes.
Operation Bucket Key Window	W30COA	Select an item on the Work With Costed Routing/Process form, and select Op Bucket Window from the Form menu.	Review an item's operation buckets.
Work With Costed Bill	W30206A	Select Costed Bill from the Form menu on the Work With Costed Routing/Process form.	Work with a costed bill.
Costed Routing Details	W30208B	Select a row and select Details from the Row menu on the Work With Costed Routing/Process form.	View costed routing details.

Page Name	Definition Name	Navigation	Usage
Work with Co/By-Products Planning Table	W3404M	Product Costing Setup (G3042), Co/By Products Planning Table	Set up the Co/By-Products Planning table.
Co/By-Products Planning Table Revisions	W3404N	Select a co-product or by-product, select a process, and click Select on the Work with Co/By-Products Planning Table form.	Make changes to the Co/By-Products Planning table.

Reviewing Product Costing for Processes

Access the Enter Process Information form.

Review these fields:

Run Labor Enter the standard hours of labor that you expect to incur in the normal production of this item. The run labor hours in the Routing Master table (F3003) are the total hours that it takes the specified crew size to complete the operation. The hours are multiplied by the crew size during shop floor release and product costing.

Run Machine Enter the standard machine hours that you expect to incur in the normal production of this item.

Setup Labor Enter the standard setup hours that you expect to incur in the normal completion of this item. This value is not affected by crew size.

Crew Size Enter the number of people who work in the specified work center or routing operation. The system multiplies the Run Labor value in the Routing Master table (F3003) by crew size during costing to generate total labor amounts. If the Prime Load Code is L or B, the system uses the total labor hours for backscheduling. If the Prime Load Code is C or M, the system uses the total machine hours for backscheduling without modification by crew size.

For JD Edwards EnterpriseOne Shop Floor Management, the Crew Size field on the Work Order Routing form contains the value that is entered on the Work Center Revision form (P3006). You can override the value by changing this field on the Work Order Routing form. However, the Work Center Revision form will not reflect this change.

Cost Type Enter a code that designates each element of cost for an item. Examples of the cost object types are:

A1: Purchased raw material.

B1: Direct labor routing rollup.

B2: Setup labor routing rollup.

C1: Variable burden routing rollup.

C2: Fixed burden routing rollup.

Dx: Outside operation routing rollup.

Xx: Extra add-ons, such as electricity and water.

The optional add-on computations usually operate with the type Xx, extra add-ons. This cost structure enables you to use an unlimited number of cost components to calculate alternative cost rollups. The system then associates these cost components with one of six user-defined summary cost buckets.

For outside operations, the value that you enter indicates the cost component with which to associate costs. You should not enter the same cost component for more than one operation. If you do, the cost component includes the total cost of all operations. When the material is received from one operation, the system calculates the cost of the operation using the total cost of all operations.

Type Oper (type operation) Enter a UDC (30/OT) that indicates the type of operation. Values are:

A: Alternate routing.

TT: Travel time.

IT: Idle time.

T: Text.

For Product Costing, only operations with a blank type operation code are costed.

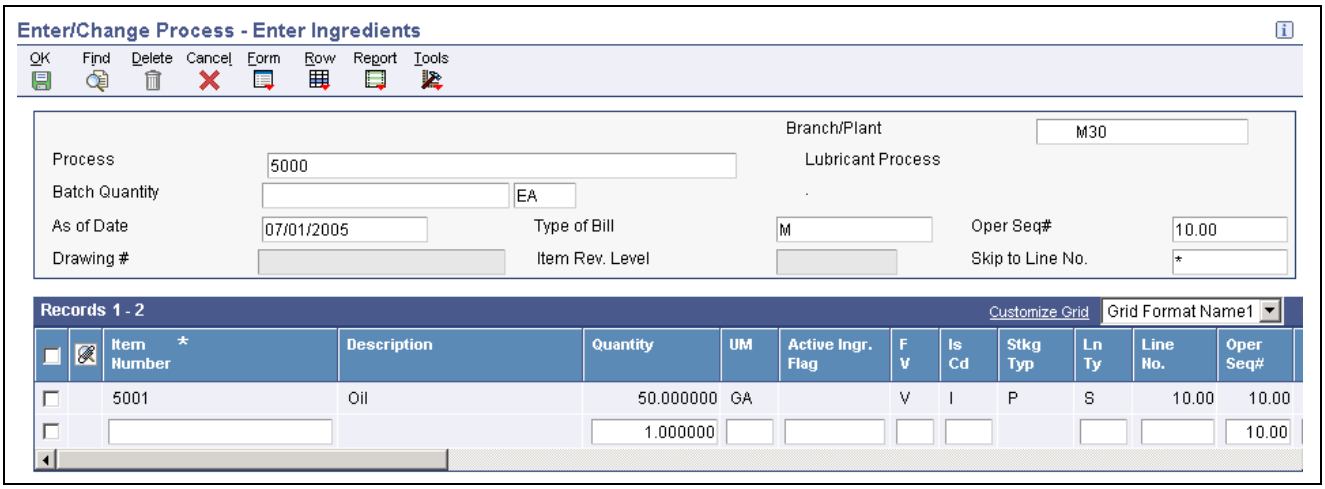
Yield % (yield percent) Enter the planned output yield percent for a step. The Planned Yield Update program uses this value to update the cumulative percent in the routing and the operation scrap percent in the bill of material. Materials Requirements Planning (MRP) uses the step scrap percent and the existing component scrap percent to plan component demand.

Cum Yield % (cumulative yield percent) Enter the cumulative planned-output yield-percent for a step. The system uses this value to adjust the operation step scrap percent for the components at that operation step. This enables MRP to use the operation step scrap percent along with the existing component scrap percent to plan component demand.

Time Basis Enter a (UDC) (30/TB) that indicates how machine or labor hours are expressed for a product. Time basis codes identify the time basis or rate to be used for machine or labor hours entered for every routing step. For example, 25 hours per 1,000 pieces or 15 hours per 10,000 pieces. You can maintain the time basis codes in Time Basis Codes. The system uses the values in the Description-2 field on the User Defined Codes form for costing and scheduling calculations. The description is what the code represents, but is not used in calculations.

Reviewing Product Costing for Ingredients

Access the Enter Ingredients form.



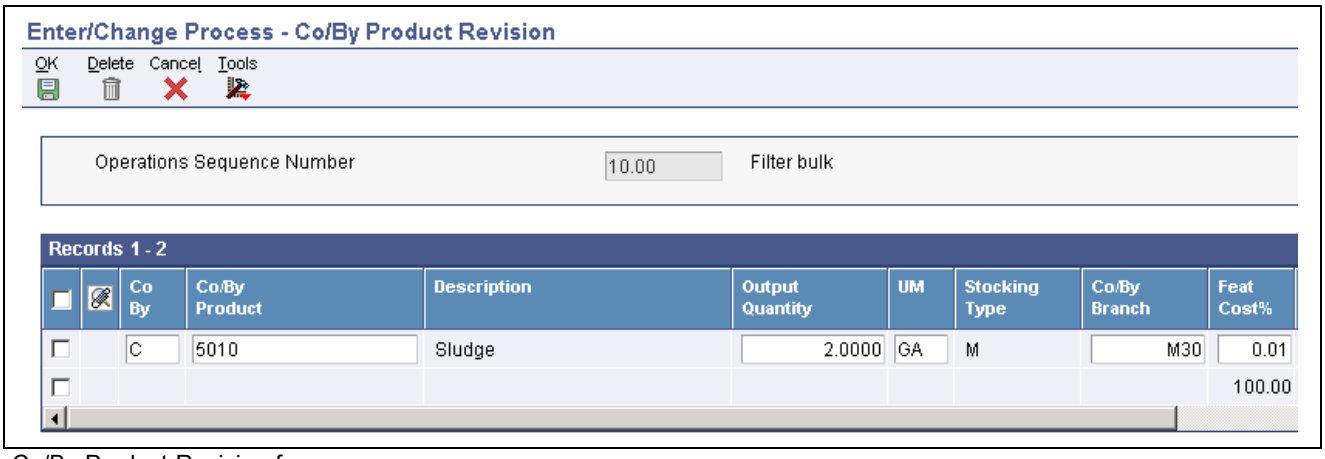
Enter Ingredients form

To review product costing for ingredients, review these fields:

- Item Number.
- Quantity
- UM (unit of measure).
- F V (fixed variable).
- Feat Cost % (feature cost percent).
- Percent Scrap.
- Operation Scrap Percent.

Reviewing Inputs to Co-Product and By-Product Costing

Access the Co/By Product Revision form.



Co/By Product Revision form

To review inputs to co-product and by-product costing:

Review these fields:

Output Quantity Enter the quantity of finished units that you expect this bill of material or routing to produce. This field enables you to specify varying quantities of

components based on the amount of finished goods produced. For example, 1 ounce of solvent is required per unit up to 100 units of finished product. However, if 200 units of finished product are produced, 2 ounces of solvent are required per finished unit. In this example, you would set up batch quantities for 100 and 200 units of finished product specifying the proper amount of solvent per unit.

UM (unit of measure) Enter a value from UDC 00/UM that indicates the quantity in which to express an inventory item, for example, CS (case) or BX (box).

Feat Cost % (feature cost percent) Enter a percentage that the Simulate Cost Rollup program uses to calculate the cost of a feature or option item as a percentage of the total cost of the parent. Enter the percentage as a whole number, for example, enter *5* percent as 5.0.

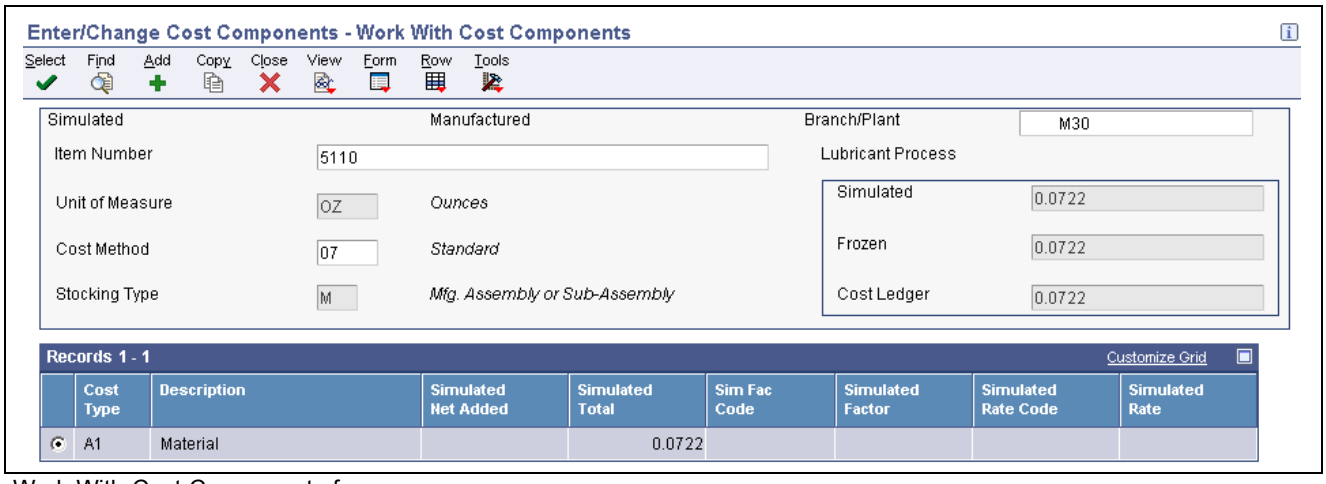
Resource % (resource percent) Enter a number that indicates what percent of the ingredients should be issued separately to co-products and by-products.

This is used to issue ingredients separately to co-products and by-products at work order completion, rather than a total issue for each ingredient.

For co-products and by-products at the final operation, their resource percent must total 100 percent to issue all ingredients.

Reviewing Co-Product and By-Product Costs

Access the Work With Cost Components form.



Work With Cost Components form

To review co-product or by-product costs:

1. Complete these fields and select Find:
   - Branch/Plant
   - Item Number
2. From the Form menu, select Co/By Product.
3. Select a co-product or by-product and click Select on the Co/By Product Selection form.

   The system displays the costs for the co-product or /by-product on the Work With Cost Components form.

Reviewing Costed Processes

Access the Work With Costed Routing/Process form.

To review a costed process:

1. Complete these fields and select Find:
   - Branch/Plant
   - Item Number
2. Review these fields:
   - Requested Quantity

     Enter the number of parent items that you want to process. The system calculates lower-level values in quantity per the number of parent items requested. For instance, if 3 components are required per a parent item, then with a requested quantity of 10, the system would plan and cost for 30 components

     Enter the number of parent items for which you want to see cost breakdowns. Costs are calculated in quantity per the parent item.
   - As of Date.
   - Cost Method.
   - Routing Batch Qty (routing batch quantity).
   - BOM Batch Qty (bill of material batch quantity).
   - Work Center.
   - Oper Seq# (operation sequence number).
   - Labor.
   - Machine.
   - Overhead.

     Displays the Work Amount field for the JD Edwards EnterpriseOne Manufacturing System from Oracle.

     This is cost bucket number 5 as defined for UDC 30/CO (Operation Buckets). The total of this column appears at the bottom of the form in the *Totals* row. The heading above the columns indicates which costs are displayed: frozen or simulated. You can toggle between simulated and frozen values. You can also view a detailed breakdown of the cost components added to arrive at the total for the work center.
   - Components.

     Displays the Work Amount field for the JD Edwards EnterpriseOne Manufacturing system.

     This is cost bucket number 6 as defined for UDC 30/CO (Operation Buckets). The total of this column appears at the bottom of the form in the *Totals* row. The heading above the columns indicates which costs appear: frozen or simulated. You can toggle between simulated and frozen values. You can also view a detailed breakdown of the cost components added to arrive at the total for the work center.
   - Total.

     Displays the Work Amount field for the JD Edwards EnterpriseOne Manufacturing System.

     This column contains system-calculated totals for each row of costs, that is, for each operation sequence. The totals across the bottom of the form are the totals of each cost bucket. The rightmost bottom total is the total of all costs for the routing for an item.

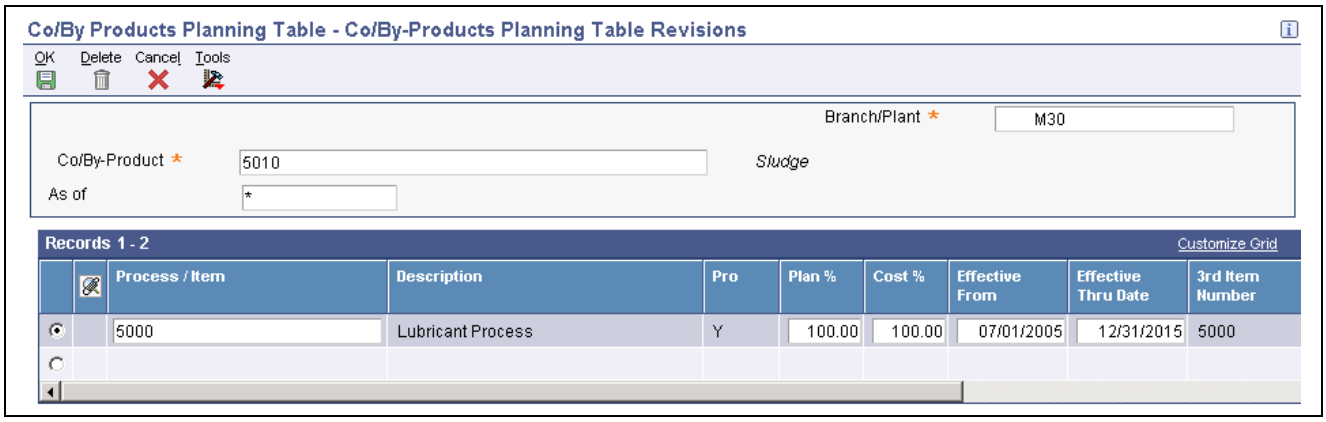
3. Select Frozen or Simulated from the View menu to toggle between frozen and simulated costs.
4. Select Op Bucket Window from the Form menu to review the operation buckets of the item.
5. Review the information and then click Close on the Operation Bucket Key Window form.
6. Select Costed Bill from the Form menu on the Work With Costed Routing/Process form.
7. Review the information on the Work With Costed Bill form.

   You can review the ingredient costs for a single operation or for all ingredients throughout all operations in the process. These costs are from the Cost Components program (P30026) and reflect the last simulated rollup. Thus, the costs might differ from those on Work With Costed Routing/Process if you have changed the process since the last rollup.
8. Click Close.
9. Review all of the costs that are associated with an operation by selecting Details from the Row menu on the Work With Costed Routing/Process form.
10. Review the information on the Costed Routing Details form.

    The cost components are grouped according to cost buckets.
11. Select Close.

Setting Up the Co/By-Products Planning Table

Access the Co/By-Products Planning Table Revisions form.



Co/By-Products Planning Table Revisions

To set up the Co/By Products Planning Table:

1. Complete these fields for each process:
   - Process / Item.

     Enter a number that identifies the parent process item.
   - Plan % (plan percent).

     Enter the percentage of demand for a specified feature based on projected production. For example, a company might produce 65 percent of its lubricant with high viscosity, and 35 percent with low viscosity, based on customer demand. The JD Edwards EnterpriseOne Requirements Planning system uses this percentage to accurately plan for the co-products and by-products of a process. Enter percentages as whole numbers, for example, enter 5 percent as *5.0*. The default value is *0*.

     On this form, the field specifies the percentage of supply from a specific process.

- Cost % (cost percent).

  Enter a percentage that the Simulate Cost Rollup program uses to calculate the cost of a feature or option item as a percentage of the total cost of the parent. Enter the percentage as a whole number, for example, enter 5 percent as *5.0*.

  Use the field to calculate the cost of a co-product or by-product when it can be produced from more than one process, or from a combination of a process and a work order.

  This value determines what percent of the cost of the co-product or by-product is allocated to the selected process.

- Effective From.
- Effective Thru Date (effective through date).

2. Select OK when the information is accurate for all listed processes.

See Also

JD Edwards EnterpriseOne Product Data Management 9.0 Implementation Guide, "Working With Process Manufacturing," Entering a Co- and By-Products List

Reviewing Product Costing for a Percent Bill of Material

This section provides an overview of product costing for a percent bill of material and discusses how to review product costing for a percent bill of material.

Understanding Product Costing for a Percent Bill of Material

In either process or discrete manufacturing environments, you use a percent bill of material to express the parts or ingredients as a percentage of the parent quantity.

If you use percent bills of material, the system calculates costs based on the quantities that are specified in the percent bill. Quantities are expressed in percentages (such as 75 for 75 percent), and the total of the component quantities must equal 100. Components must have a unit of measure that can convert to the parent unit of measure without causing rounding errors. For bills of material with a zero batch quantity, the cost rollup calculates the cost for one primary unit of measure for the parent product.

Note. You must have a multidecimal environment to use percent bills.

Form Used to Review Product Costing for a Percent Bill of Material

Form Name	FormID	Navigation	Usage
Enter Bill of Material Information	W3002A	Daily PDM Discrete (G3011), Enter/Change Bill Enter the branch/plant and item number, and click Find. Select a row and click Select.	Review product costing for a percent bill of material. Review the percent bill of material details.

Reviewing Product Costing for a Percent Bill of Material

Access the Enter Bill of Material Information form.

Quantity

Enter the number of units that the system applies to the transaction.

Enter the number that indicates how many components you use to manufacture the parent item. A quantity of zero is valid. The default value is *1*.

FV (fixed variable)

Enter a code that indicates whether the quantity per assembly for an item on the bill of material varies according to the quantity of the parent item produced or is fixed regardless of the parent quantity. This value also determines whether the component quantity is a percent of the parent quantity. Values are:

F: Fixed Quantity.

V: Variable Quantity (default).

%: Quantities are expressed as a percentage and must total 100 percent.

For fixed-quantity components, the JD Edwards EnterpriseOne Work Order Processing system from Oracle and the JD Edwards EnterpriseOne Requirements Planning system do not extend the component's quantity per assembly value by the order quantity.

CHAPTER 7

Understanding Calculations in Cost Rollup

This chapter provides information on how the system generates hard-coded cost components in the cost rollup process. These calculations can vary according to the settings in the manufacturing constants and processing options.

This chapter discusses:

- Simulated cost rollup.
- Material cost components.
- Routing cost components.
- Outside operation cost components.
- Purchase price variance.

Simulated Cost Rollup

The Cost Simulation program (R30812) adjusts direct labor hours and direct machine hours by time basis, crew size, and cumulative yield, as appropriate. The program adjusts component material quantities by operation scrap and percent scrap.

Material Cost Components

This table illustrates how the material cost components A1 and A2 reflect the cost that is incurred from purchased material and from material scrap:

Cost Component	Description
A1 (Purchased Material)	When you enter a cost method in the Purchased Item processing option in the Cost Simulation program, the program uses that cost method to retrieve the cost from the Item Cost table (F4105).
A2 (Material Scrap)	Use the A2 cost component for items for which you defined a scrap percentage in the bill of material. The net-added cost comes from scrap that is incurred when the components are assembled. Component material scrap cost = percent of scrap from the bill of material × quantity per parent item × total cost of the component.

Routing Cost Components

Routing cost components (cost components B and C) can be controlled manually or through the Simulate Rollup program (R30812).

This section discusses:

- B1 (direct labor).
- B2 (setup labor).
- B3 (machine run).
- B4 (labor efficiency).
- C1, C2 (variable and fixed machine overhead).
- C3, C4 (variable and fixed labor overhead).

B1 (Direct Labor)

B1 costs can be calculated as:

- Parent direct labor costs = sum of direct labor calculations for all operations on the item's routing.
- (Operation direct labor cost) = ((operation direct labor hours ÷ operation time basis) × (operation crew size) ÷ (operation cumulative yield percent ÷ 100)) × (work center direct labor rate)

B2 (Setup Labor)

B2 costs can be calculated as:

- Parent setup labor cost = sum of all setup labor calculations for all operations on the item's routing
- Operation setup labor cost = (operation setup labor hours) × (work center setup labor rate) ÷ (accounting cost quantity)

Note. Divide the work center setup labor rate *only if* the accounting cost quantity is *not* zero.

B3 (Machine Run)

B3 costs can be calculated as:

- Parent machine run cost = sum of machine run calculations for all operations on the item's routing
- (Operation machine run cost) = ((operation machine run hours ÷ operation time basis) ÷ (operation cumulative yield ÷100)) × (work center machine run rate)

B4 (Labor Efficiency)

This cost component increases or decreases the cost of the labor that is required to produce an item. If you have set the manufacturing constants to modify costs by work center efficiency, the program creates a cost component (B4) for labor efficiency when you run the Simulate Rollup program. In addition, if the efficiency for a work center is equal to zero, the system does not perform a calculation for that work center.

The system calculates labor efficiency only for direct labor hours as:

Parent labor efficiency cost = sum of all efficiency calculations for all operations on the item's routing

Calculating the operation labor efficiency cost requires these calculations:

- (Direct labor hours) × (time basis code) ÷ ((crew size) ÷ operation yield percent)) = (factored labor hours)
- (Work center efficiency) ÷ (percentage conversion) × (factored labor hours) = Factored efficiency hours
- Labor efficiency cost = (factored labor hours − (factored efficiency)) × (direct labor rate)

C1, C2 (Variable and Fixed Machine Overhead)

The system calculates C1 and C2 costs only if you have set the manufacturing constants for the branch/plant to include variable and fixed machine overhead in the cost. You must also specify whether you want the system to calculate machine overhead costs from manually entered rates in the Work Center Master table (F30006) or as a percent of machine run costs.

Parent variable and fixed machine overhead cost is the sum of all variable and fixed machine overhead calculations for the item's routing.

Calculating variable machine overhead costs requires these calculations:

- (Machine variable labor overhead percent) ÷ (percentage conversion) × (machine run rate) = (variable machine overhead rate)
- (Machine run hours) ÷ (time basis code ÷ (operation yield percent)) = (variable machine overhead run hours)
- (Machine variable overhead cost) = (variable machine overhead run hours) × (variable machine overhead run rate)

Calculating fixed machine overhead costs requires these calculations:

- (Machine fixed labor overhead percent) ÷ (percentage conversion) × (machine run rate) = (fixed machine overhead rate)
- (Machine run hours) ÷ (time basis code) ÷ (operation yield percent) ÷ (primary UOM conversion factor) = (fixed machine overhead run hours)
- (Machine fixed overhead cost) = (fixed machine overhead run hours) × (fixed machine overhead run rate)

C3, C4 (Variable and Fixed Labor Overhead)

The system displays these calculations as rates. If you indicate on the Work Center Master Revisions form that variable and fixed labor overhead costs should be calculated as a percent of labor costs, multiply the work center labor rate by the percent divided by 100 to obtain the labor overhead rate. For example:

(Operation variable labor overhead rate) = (work center variable labor overhead percent) ÷ (100) × (work center direct labor rate)

These costs are calculated only if you have set the manufacturing constants for the branch/plant to include variable and fixed labor overhead in the cost. In this table, you must also determine whether labor overhead costs are calculated from manually entered rates in the Work Center Master table (F30006) or as a percent of labor costs.

In addition, you can set the manufacturing constants to factor labor overhead by work center efficiency:

- Parent variable and fixed labor overhead cost = sum of all variable and fixed- labor overhead calculations for all operations on the item's routing.
- (Variable and fixed labor overhead cost) = (direct labor overhead cost) + (setup labor overhead cost)

  Direct labor overhead cost by rate:

  - Without labor efficiency: (direct labor hours) × (work center variable and fixed labor overhead rate)
  - With labor efficiency:(direct labor hours + work center efficiency) × work center variable and fixed labor overhead rate
- (Work center efficiency) = (labor hours) − ((work center efficiency percent) ÷ (100)) × (labor hours)
- (Setup labor overhead cost by rate) = (operation setup labor hours ÷ accounting cost quantity) × (work center variable and fixed labor overhead rate)

  Accounting cost quantity is factored if it is not equal to zero.

Outside Operation Cost Components

You can manually enter cost components for outside operations on the Enter Cost Components form (W30026B) or let the system retrieve them from the Item Cost table (F4105) when you run the Simulate Rollup program (R30812).

The Order Processing program (R31410) creates item numbers for outside operations where *Parent* represents the parent item number, and *xx* represents the whole-number portion of the operation sequence number of the outside operation:

*Parent**Op*xx*

For example, for item 333, an outside operation at operation sequence number 30 receives an item number of 333*OP30.

If you enter a cost method in the Outside Operations processing option for the Simulate Rollup program, the program uses that cost method to retrieve the cost from the F4105 table. If the value is zero, and a value previously existed in the Item Cost Component Add-Ons table (F30026), the original value remains. If you leave the processing option blank, the program uses the values that you manually entered on the Enter Cost Components form.

Purchase Price Variance

For purchased items, a purchase price variance (PPV) results when the standard cost differs from the actual purchase price. If you use extra costs on purchased items, the total standard cost might differ from the A1 (material) cost. This difference is the material burden cost.

When you receive a purchase order, the system updates the accounts payable account using the price on the purchase order. The system updates the inventory account with the standard item cost from the F4105 table. Any difference between the two costs is made up of PPV and material burden. PPV is the difference between the frozen A1 cost and the purchase order cost.

Material burden cost is the difference between the total standard cost from the F4105 table and the A1 cost:

- PPV = (A1 cost) − (purchase order unit cost)
- Material burden cost = (total standard cost) − (A1 cost)

Example: Purchase Price Variance and Material Burden

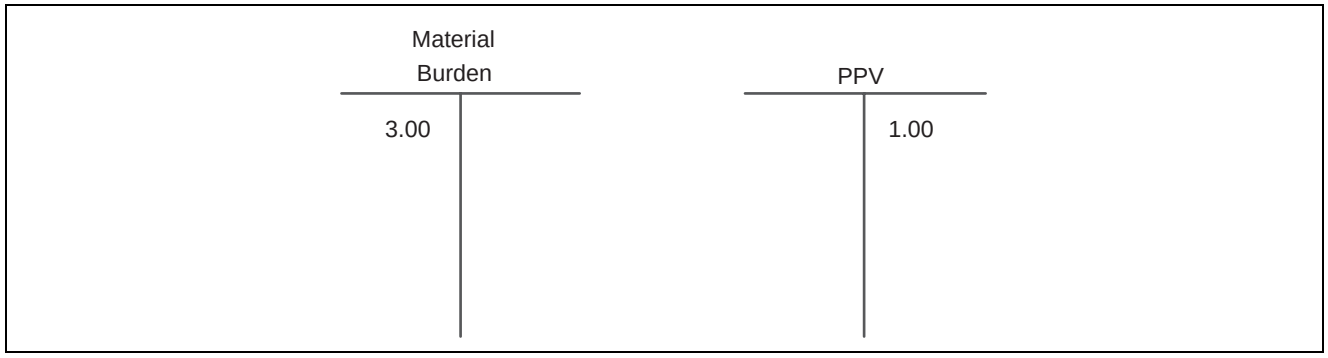
The Item Cost table (F4105) includes this information:

- Average cost = 14.00
- Standard cost = 16.00

The Item Cost Component Add-Ons table (F30026) includes:

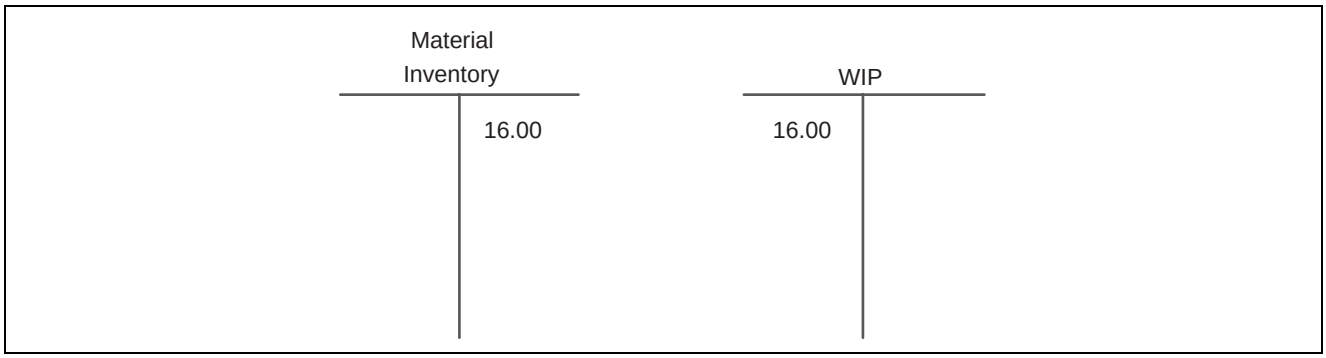
- A1 cost = 13.00
- X1 cost = 3.00

These t-account graphs illustrate the accounting flow for price variance and material burden:



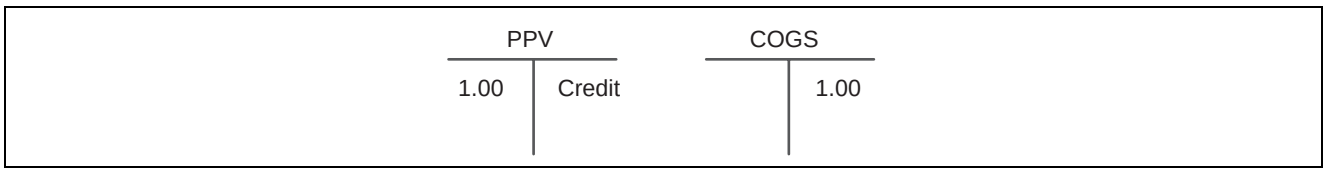
T-account for price variance and material burden

This T-account graph illustrates how material that is issued to the work order relieves the inventory account and posts to the work-in-process (WIP) account with the fully loaded standard cost for the item:



T-account for material inventory and WIP

This t-account graph illustrates that at period end, a manual journal entry closes the PPV to the Cost of Goods Sold account:



T-account for PPV and COGS

AAI table 4337 posts the material overhead. If you have multiple cost extras and you want to post to different accounts for each of them, you must use landed cost.

CHAPTER 8

Working with the Manufacturing Accounting System

This chapter provides overviews of the JD Edwards EnterpriseOne Manufacturing Accounting system, work orders, and journal entries, and discusses how to:

- Create journal entries for work in process or completions.
- Review production costs.
- Create journal entries for variances.
- Review general ledger batches.
- Post manufacturing journal entries to the general ledger.

Understanding the JD Edwards EnterpriseOne Manufacturing Accounting System

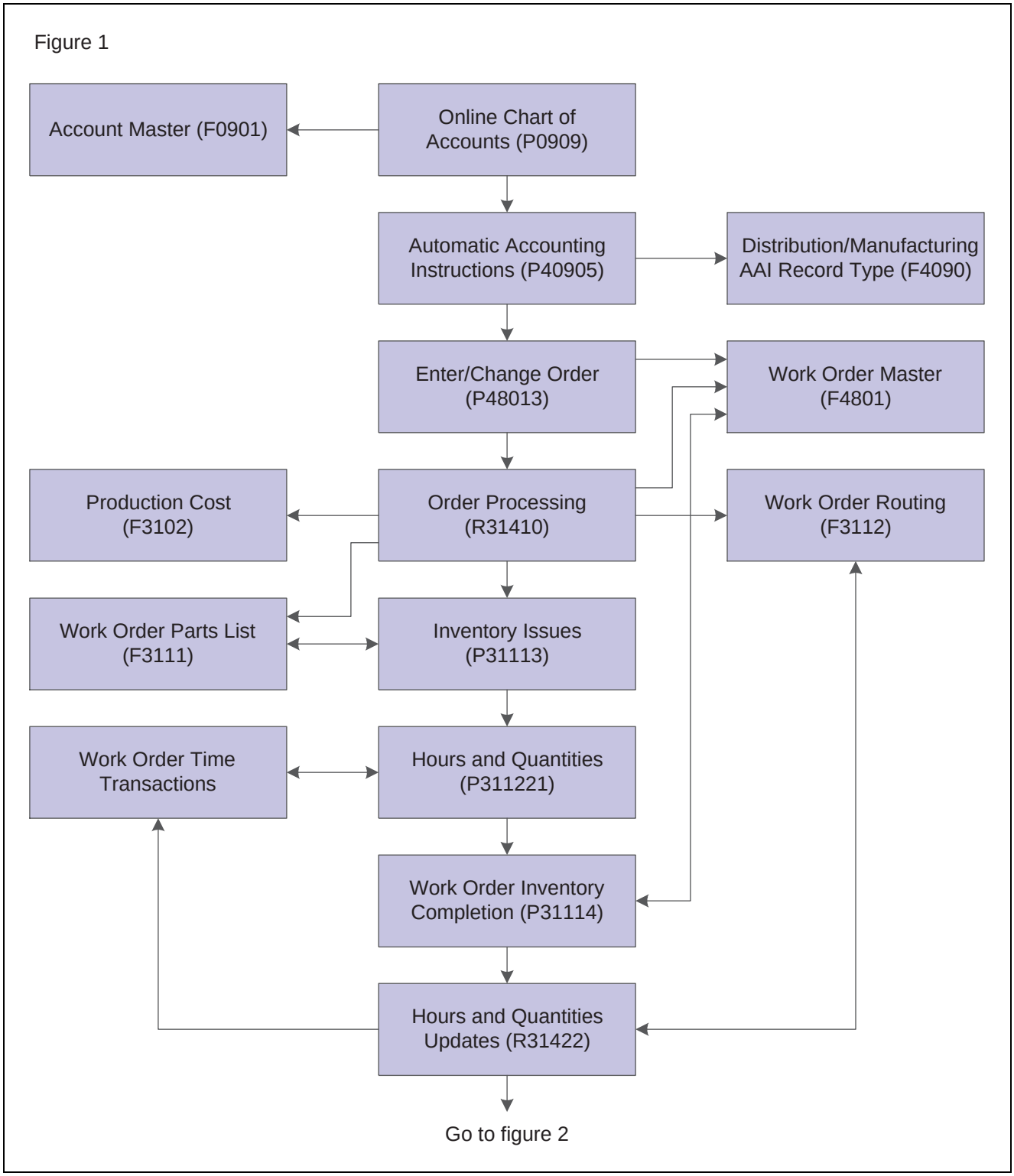
This section discusses:

- Manufacturing accounting process flow.
- Integration with general accounting.
- Manufacturing variances.
- Actual costing.
- Transaction flow for manufacturing accounting.

Manufacturing Accounting Process Flow

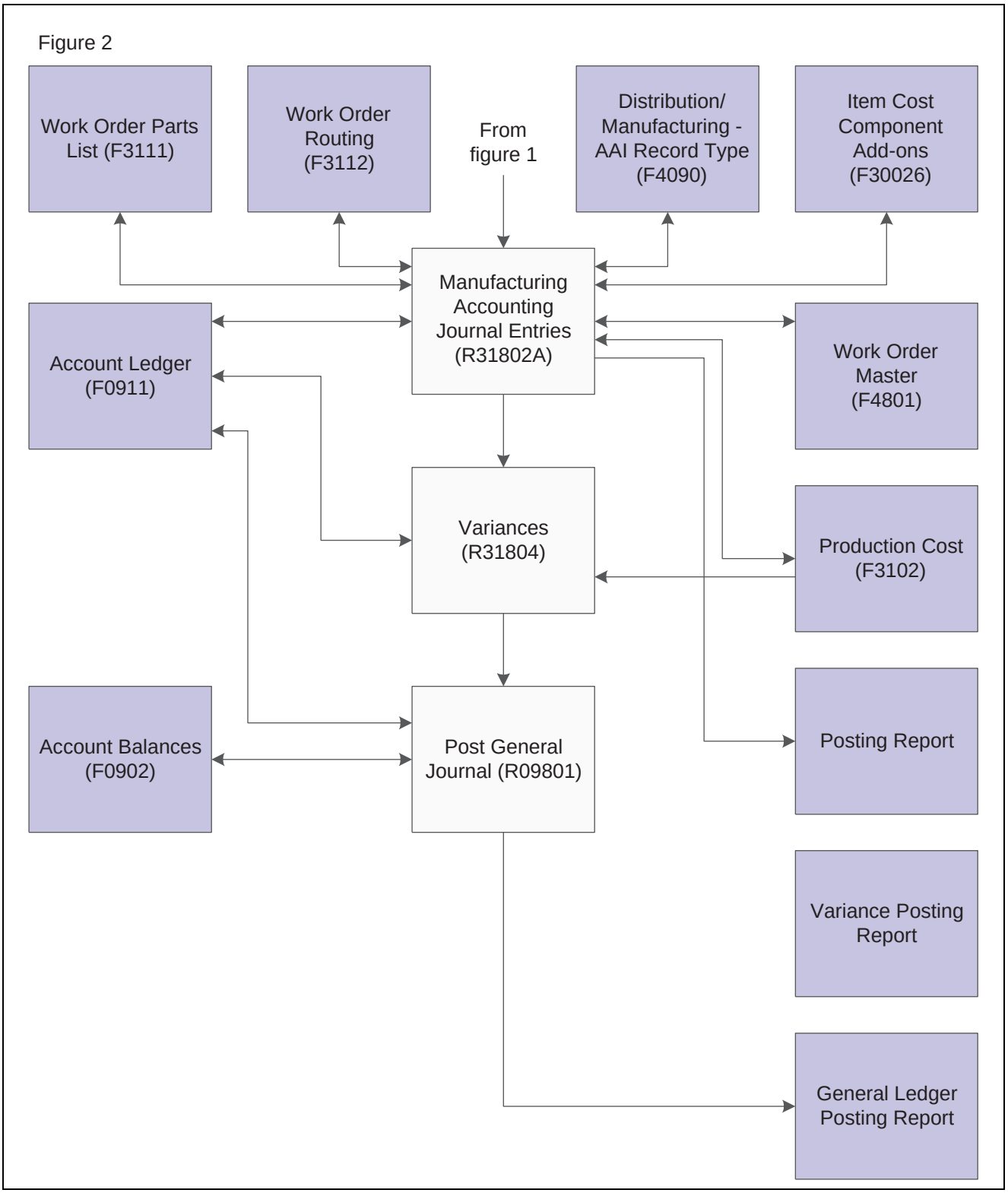
This two-part flowchart illustrates the manufacturing accounting processes:

Figure 1



Manufacturing Accounting process flow (1 of 2)

Figure 2



Manufacturing Accounting process flow (2 of 2)

Integration with General Accounting

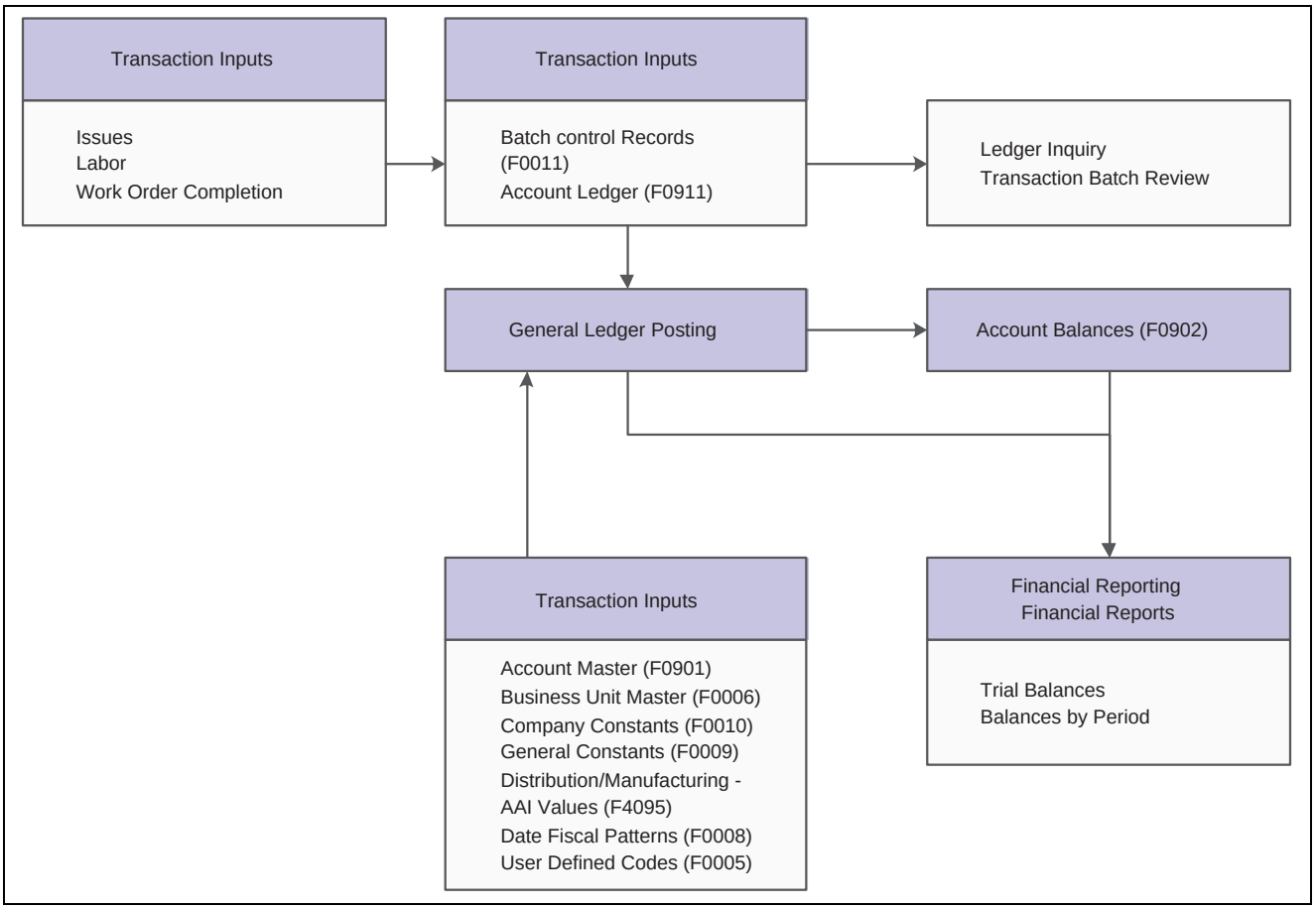
To remain competitive in a changing business environment, companies must integrate all aspects of their operations. This integration includes identifying operations that reduce lead times, expedite speed-to-market, and reduce operating costs. The objective is to reduce costs to remain a competitive market player.

After a company defines item costs and identifies how each cost is derived, it transfers these cost records into the accounting records. Using a manufacturing accounting system enables you to track the costs that are associated with each activity within the manufacturing process. As material is received into inventory, issued to a manufacturing order, and used at various stages of the manufacturing cycle, the company maintains detailed accounting records that reflect debits and credits to predetermined financial accounts. These records can be transferred to the general ledger throughout the manufacturing cycle.

The ability to perform standard costing (comparisons based on frozen costs) or actual costing (comparison of expected cost versus actual cost) enables companies to accurately account for the cost of manufacturing. Comparisons identify specific costs that deviate from the original cost expectations. This information enables managers to make better informed decisions and to implement a course of action that reflects current costs in the ultimate cost of the products. Work in process and on-hand inventory can be revalued to reflect these updated costs.

In volatile and dynamic industries such as electronics and other technologies, changes in technology and customer demand, product configuration, and production processes must be monitored constantly. Changes must be integrated and reflected throughout product life cycles as quickly as possible. Industries remain competitive in the global marketplace only if they minimize the time to market for new products and reduce costs.

This flowchart illustrates the interaction between the JD Edwards EnterpriseOne Manufacturing Accounting system and the JD Edwards EnterpriseOne General Accounting system:



Integration between Manufacturing Accounting and General Accounting systems

See Also

JD Edwards EnterpriseOne General Accounting 9.0 Implementation Guide

Manufacturing Variances

Variances occur when the actual cost differs from the predefined or expected cost. These variances can be due to differences in labor or overhead costs, or changes to the bill of material or routing.

This table discusses each variance type:

Variance Type	Description
Engineering	The difference between the frozen standard costs (material, labor, and overhead) and the current costs that are derived from the bills of material, routings, and overhead rates.
Planned	The difference between the current costs that are derived from the bills of material, routings, and overhead rates at the time that the parts list and routing were attached, and the costs that are based on the work order or rate schedule parts list and routing instructions. Planned variances can occur when you revise a work order or rate schedule.

Variance Type	Description
Actual	The difference between the cost values that are derived from the work order or rate schedule parts list and routing, and the material and labor that were actually reported for that work order or rate schedule. Actual variances can occur when you: • Issue material. • Enter hours and quantities. • Enter completions.
Labor efficiency	The difference between the planned and actual labor costs, based on the work order or rate schedule routing.
Material usage	The difference between the planned and actual material costs, based on the work order or rate schedule parts list.
Other	A variance that results from: • A cost rollup that occurred in the middle of a work order or routing. You can eliminate this type of variance by running the WIP Revaluation program (R30837). • Over-completing or under-completing a work order. You can avoid this variance by setting a processing option for the Variances program (R31804) to restate production costs.

The system calculates variances based on the amounts in the Production Cost table and then stores the different variance amounts in the same table. You can review the different types of variances in the Production Cost Inquiry program (P31022).

Variance Management by Work Center

To support profitability management, you can track variances at the work center level. If you directed the system to perform item cost calculations at the work center level, then the system can display variances for each cost component of the different work centers that are used to produce an item.

Actual Costing

Actual costing captures and records actual manufacturing costs that are associated with shop floor transactions, such as work orders. Actual costing calculates costs by cost component, based on the parts list, routing, and extra costs.

If you are implementing actual costing, you need to thoroughly understand how actual costing flows through the JD Edwards EnterpriseOne systems from Oracle.

Actual costing provides these features:

Feature	Description
Material costs	The system calculates material costs based on the cost method and cost level that you select when you set up the item. You calculate component cost when you issue material to a work order by multiplying the component quantity with the cost that is set up for the chosen cost method in the Item Cost table (F4105).
Labor costs	The system calculates labor costs using: • The rates set up for the work center. • The Employee Rates table (31/ER). • The Employee Master Information table (F060116) if you are using the JD Edwards EnterpriseOne Human Capital Management product suite from Oracle. You must use the Speed Time Entry program (P051121) to retrieve information from the Employee Master Information table. • Costs that you manually enter when you enter the time and quantity completed.
Machine costs	The system calculates machine costs using: • The work center rates for the cost method that you specify. • The work center rates that the system calculates using information in the Equipment Rates table (F1301). • The costs that you manually enter when you enter the time and quantity completed.
Overhead costs	The system calculates overhead costs using rates or percentages from the Work Center Rates table (F30008). You use the Manufacturing Constants program (P3009) to select the type of overhead costs that you want to include.
Extra costs	You define extra costs for an actual cost item in the Cost Components program (P30026) by entering them directly into the frozen cost field.
Outside operations	The system calculates costs for outside operations from the cost method that you specified for the item that is processed by an outside company (*OP item). The system calculates extra costs from the Item Cost Component Add-Ons table.

Transaction Flow for Manufacturing Accounting

This table identifies which tables the manufacturing programs update; unless specified separately, the update applies to both standard and actual costing:

Programs	Work Order Master (F4801) and Work Order Master Tag (F4801T)	Work Order Parts List (F3111)	Work Order Time Transactions (F31122)	Work Order Routing (F3112)	Production Cost (F3102)	Item Ledger (F4111)	Account Ledger (F0911)
Order Processing (R31410)	Work order status and quantity on order Cost method in the tag file	Required quantity and accumulated costs	NA	Required hours and outside operations	Standard costing: standard units and amounts, current units and amounts Actual costing: current units and amounts	NA	NA
Work Order Inventory Issues (P31113)	NA	Quantity issued Unaccounted units and actual cost unaccounted amounts	NA	NA	NA	Creates issue (IM) transactions (no batch number or GL date)	NA
Component Scrap (P31116)	NA	Actual costing: Unaccounted units and amounts	NA	NA	Reclassifies A1 to A2	NA	NA
Hours and Quantities (P311221) and Speed Time Entry (P051121)	NA	NA	Hours reported Actual costing: Rates	NA	NA	NA	NA
Hours and Quantities Update (R31422)	NA	NA	Activates the processed flag	Unaccounted units and amounts	NA	NA	NA

Programs	Work Order Master (F4801) and Work Order Master Tag (F4801T)	Work Order Parts List (F3111)	Work Order Time Transactions (F31122)	Work Order Routing (F3112)	Production Cost (F3102)	Item Ledger (F4111)	Account Ledger (F0911)
Full Completion (P31114)	Work order status, unaccounted units and amounts for completions and scrap	NA	NA	NA	Actual costing: unaccounted units and amount for completions and scrap	Creates completion (IC) and scrap (IS) transactions (no batch number)	NA
Manufacturing Accounting Journal Entries (R31802A)	Work order status Resets unaccounted units to zero	Resets unaccounted units to zero	NA	Resets unaccounted units to zero	Planned, actual completions and scrap units and amounts Actual costing: resets unaccounted units and amounts for completions and scrap to zero	Batch number and GL date for IM, IC, and hours and quantities (IH) transactions	Creates IM, IH, IS, and IC transactions
Variance Journal Entries (R31804)	Work order status, production price variance flag	NA	NA	NA	Records variances and optionally restates standard, current, and planned amounts and units	For cost method 09: Creates journal entry (IB) transactions Actual costing: writes IC transactions	Creates (variance (IV) transactions in the Account Ledger Actual costing: creates IC and IS transactions

The Manufacturing Accounting Journal Entries program updates the W.O. Cross Reference table (F3106) with the work order number, document number, document type, and GL date, and the batch number, type, and date.

The General Journal Post program (R09801) updates all account balances in the Account Balances table (F0902).

Understanding Work Orders

This section discusses:

- Work order creation.
- Parts lists and routings.
- Work order revision.
- Unaccounted units.
- Inventory issue transactions.
- Hours and quantities.
- Outside operations.
- Component scrap.
- Completions.

Work Order Creation

The JD Edwards EnterpriseOne Manufacturing Accounting system tracks costs that are associated with work orders and creates journal entries for all shop floor transactions. Each step in the work order process can affect manufacturing accounting. The principal effect is that, when you complete any step in the process, you create a transaction that can be the source of a variance. The system calculates the variances when you run the Variance Journal Entries program (R31804).

A work order is a request to produce a certain quantity of an item by a given date. A work order consists of:

- A header
- A parts list
- Routing instructions

To create a work order, you identify on the header the item, its branch/plant and quantity, and the requested date for the work order. After you determine what resources are required to produce the item, you can schedule the work order and begin the work.

As you complete the work order, you must track:

- Items completed.
- Materials used.
- Quantities scrapped.
- Hours of machine and personnel time used.

See Also

JD Edwards EnterpriseOne Work Orders 9.0 Implementation Guide, "Creating Work Orders"

Parts Lists and Routings

After you create a work order header, you must attach a work order parts list and work order routing to indicate the parts, personnel, machinery, and time required to make the items.

You can attach the parts list and routing instructions in one of these ways:

- Manually, by entering the required parts on the Work Order Parts List form.
- Interactively, from the Manufacturing Work Order Processing program (P48013).

  This method uses the data from the item's bill of material or routing as the default data for the parts list or routing instructions. You can modify the data.
- Automatically, through the Order Processing program (R31410).

  This method makes copies of the item's bill of material and routing, and uses them for the initial parts list and routing instructions. You can modify the data. This method also enables you to attach the parts lists and routing instructions in a batch. You also use this method to generate a purchase order for outside operations.

Standard Costing

When you attach the parts list and routing either interactively or in batch, the system compares the frozen standard costs and the current costs, and updates the Production Cost table. The frozen standard costs come from the Item Cost Component Add-Ons table; they are based on the original bill of material and routing. The current costs are calculated from the values in the Item Cost Component Add-Ons; they are based on the current bill of material and routing instructions.

If a discrepancy exists between the frozen standard costs and the current costs, the amount of the discrepancy becomes the engineering variance. You can view engineering variances after you attach a parts list and routing instructions to a work order.

Actual Costing

For actual costing, the system calculates current costs and updates the Production Cost table. The system retrieves costs from the Item Cost table using the component's inventory cost method.

For current routing costs, the system retrieves labor and machine rates based on the manufacturing constants. The system retrieves machine rates from the Equipment Rates table and labor rates from the Employee Rates table (31/ER), which is set up in the Generic Message/Rates Records program (P00191). If you select the Employee Rates table as a source of labor costs and the Equipment Rates table as a source of machine costs in the manufacturing constants, but you do not enter them on the routing, then the system issues a warning message and uses the rates from the Work Center Rates table.

See Also

JD Edwards EnterpriseOne Shop Floor Management 9.0 Implementation Guide, "Working with Work Orders and Rate Schedules"

Work Order Revision

After you create a work order and attach a parts list and routing, you might need to make revisions. If you revise the quantity requested, the parts list, or the routing, you might also revise the cost of the work order. These revised costs are called planned costs.

When you run the Manufacturing Accounting Journal Entries program (R31802A), the system calculates the planned costs from the values in the parts list and routing instructions and updates the Production Cost table. The system compares the current costs to these revised planned costs. When a discrepancy exists between the current costs and the planned costs, the amount of the discrepancy becomes the planned variance.

See Also

JD Edwards EnterpriseOne Work Orders 9.0 Implementation Guide, "Processing Work Orders," Revising Work Orders

Unaccounted Units

Unaccounted units represent the quantities and amounts of transactions that occur for a work order when you issue parts or you record labor or completions. You can use the Data Browser to review unaccounted units in the appropriate tables. The tables are stored by the system until you run Manufacturing Accounting Journal Entries (R31802A) for work in process or completions. This program creates journal entries for the unaccounted units and then purges the unaccounted units from the tables.

For standard costing, the Work Order Parts List table (F3111) stores unaccounted units that are updated by work order issues. For actual costing, the Work Order Parts List table stores unaccounted units and amounts that are updated by work order issues.

The Work Order Routing table (F3112) stores unaccounted labor units and amounts. These values are updated when you report labor and machine hours in the Work Order Time Entry program and run the Hours and Quantities Update program (R31422).

For standard costing, the Work Order Master table (F4801) stores unaccounted units that are updated by work order completions. For actual costing, the Production Cost table stores unaccounted units and amounts that are updated by work order completions.

Inventory Issue Transactions

You must send the required materials (parts) to the shop floor for production. You use the Work Order Inventory Issues program (P31113) to deduct from inventory the quantities issued to the shop floor through an issue transaction. This transaction reports the actual quantities and cost of materials that were used in the production process to the JD Edwards EnterpriseOne Inventory Management and JD Edwards EnterpriseOne Manufacturing Accounting systems.

Inventory issue transactions do not have to occur at the same time that the physical transfer of inventory takes place. You can determine the point in the production process when you want the inventory records to reflect the issue of the parts to the work order.

This table identifies the four ways to issue material:

Issue Method	Description
Manual issue	The system deducts materials from inventory when you enter the issue transactions on the Inventory Issue Revisions form.
Preflushing	You set a processing option for the Order Processing program (R31410) to deduct materials from inventory automatically when you process a work order.

Issue Method	Description
Backflushing	The system deducts materials from inventory when items on the work order are reported as complete. This deduction method might occur when you report partial completions throughout the production process or when you report full completions at the last routing operation.
Super backflushing	The system deducts materials from inventory automatically at operations that are defined as pay points throughout the routing when the pay points are reported as complete or partially complete. The Super Backflush program (P31123) enables you to simultaneously backflush materials and labor hours, and report items that are complete at an operation.

When you issue parts to a work order, the system immediately relieves parts from inventory and writes a material issue (IM) transaction to the Item Ledger table (F4111). The unaccounted units and amounts are updated in the Work Order Parts List table until you run the Manufacturing Accounting Journal Entries program (R31802A) for work in process or completions.

Regardless of the method that you use to issue materials to a work order, when you run the Variance Journal Entries program (R31804), the system compares the cost of materials issued to the cost of materials specified on the parts list. The program calculates an actual variance for any discrepancy.

Depending on the costing method that you are using, the system performs these calculations when you issue materials:

Calculation	Description
Standard costing (method 07)	Records unaccounted units.
Actual costing (method 02 or 09)	Records unaccounted units, calculates the amounts using the value in the Item Cost table for the component's inventory cost method, and records unaccounted amounts.

See Also

JD Edwards EnterpriseOne Shop Floor Management 9.0 Implementation Guide, "Working with Issues, Material Movement, and Kanbans," Understanding Inventory Issue

Hours and Quantities

As you produce items on a work order, you record the hours spent on production and the number of items completed during that time.

You can enter hours and quantities data in one of these programs:

- Speed Time Entry (P051121).
- Work Order Time Entry (P311221).

The JD Edwards EnterpriseOne Shop Floor Management system interacts with the Speed Time Entry program so that transaction data is usable in both the JD Edwards EnterpriseOne Shop Floor Management system and the JD Edwards EnterpriseOne Time and Labor system from Oracle. You can record hours and quantities per work order or per employee. The information that is entered in payroll can update tables in the JD Edwards EnterpriseOne Manufacturing systems, but hours and quantities information that you enter through the manufacturing programs does not update the tables in the JD Edwards EnterpriseOne Time and Labor system.

Use the Work Order Time Entry program (P311221) to charge actual hours and quantities to a work order. The header information is retrieved from the Work Order Master table. The information that you enter is stored in the Work Order Time Transactions table (F31122).

Review programs and reports enable you to review and revise the hours and quantities that are reported by employee and by work order. After you enter hours and quantities transactions, you update the Work Order Routing table with these transactions. You can perform the update interactively when you record the hours and quantities, or you can run the Work Order Hours and Quantities Update program (R31422). The update uses the hours and quantities that you recorded for work order operations from the Work Order Time Transactions table to update the corresponding fields in the Work Order Routing table. The transaction data is then available for use by the Manufacturing Accounting Journal Entries program (R31802A) for work in process or completions.

Standard Costing

When you update labor and machine hours, the system multiplies the hours by the frozen work center rates to calculate the amounts. The units and amounts are stored as unaccounted units and unaccounted amounts in the Work Order Routing table. The Manufacturing Accounting Journal Entries program uses this information to generate IH journal entries.

When you run the Variance Journal Entries program (R31804), the program compares the reported cost of materials and labor to the cost of materials and labor that is specified on the work order parts list and routing instructions. If a discrepancy exists, the program updates the actual variance in the Production Cost table.

Actual Costing

Depending on how you set up manufacturing constants, the system retrieves rates from one of the sources in this table:

Rate Type	Sources
Labor rates	• Work Center Rates table. • Employee rates from the Generic Message/Rates table (F00191). • Manually entered rates.
Machine rates	• Work Center Rates table. • Equipment Rates table. • Manually entered rates.

See Also

JD Edwards EnterpriseOne Shop Floor Management 9.0 Implementation Guide, "Working with Hours and Quantities"

Outside Operations

When you receive a purchase order for outside operations, you enter the quantity received and the system displays the Routing Quantities and Status Window program (P3103) so that you can complete the transaction. When you receive the purchase order, the system creates a receipt (OV) transaction to the Item Ledger table to increase the on-hand inventory by the item quantity that you received. When you complete the routing information, the system updates the Item Ledger table with an offsetting IM transaction. The net effect on the Item Ledger table is a zero on-hand balance.

The receipt also updates the unaccounted units in the Work Order Routing table. The following table describes the cost information that the system uses for the update by cost method:

Cost Method	Description
Standard costing (method 07)	Uses the frozen standard cost for the outside operations amount.
Actual costing (method 02 or 09)	Updates the amounts from the purchase order costs in the Work Order Routing table.

See Also

JD Edwards EnterpriseOne Product Data Management 9.0 Implementation Guide, "Entering Work Centers and Routing Instructions," Entering Outside Operations

Component Scrap

After you issue parts to a work order, you might need to report some of them as *scrapped.* Scrap is unusable material that results from the production process. You use the Component Scrap program (P31116) to specify the amount of material to be scrapped and the reason.

When you report the quantity of component material that you had to scrap, you create a memo-only item scrap transaction (IO) in the Item Ledger table. When you run the Manufacturing Accounting Journal Entries program (R31802A) for work in process or completions, the program calculates the new A2 cost value for the parent entry in the Production Cost table, but it does not write a journal entry. If the amount of the scrapped material differs from the scrap percentage on the bill of material, the system uses this difference to update the amount of the actual variance.

The Work Order Parts List table stores unaccounted scrap amounts and units.

Completions

When you finish producing a work order on the shop floor, you must record the completions to the finished goods inventory. These transactions update records in the JD Edwards EnterpriseOne Inventory Management and the JD Edwards EnterpriseOne Manufacturing Accounting system.

The JD Edwards EnterpriseOne Shop Floor Management system provides several ways to move completed products into inventory:

- Super backflush
- Partial completion
- Full completion
- Backflush at completion

When you record completions and parent item scrap, the system updates unaccounted units and amounts in the Work Order Master table. For actual costing, the system also updates units and amounts for completions and parent item scrap in the Production Cost table. IC transactions are written to the Item Ledger table. IS transactions are written to the Item Ledger table as memo-only transactions.

The system calculates a new unit cost and recalculates and updates the item cost record in the Item Cost table if the cost method is 09. The system updates the item cost record with the new unit cost and revalues on-hand inventory every time you complete an item. On-hand quantity is revalued at all lots and locations where the completion occurred. To revalue the completed quantity, you can set a processing option to automatically call the WIP Revaluation program (R30837) when you run the Work Order Completions program (P31114). The system revalues the work orders with the completed item, as well as their parent work orders.

For process manufacturing, you report and account for completions of co- and by-products, not the parent process. However, variances are reported for the process. You set a processing option to enable completions of unplanned co-products and by-products.

See Also

JD Edwards EnterpriseOne Shop Floor Management 9.0 Implementation Guide, "Working with Completions"

Understanding Journal Entries

Before you post transactions to the general ledger, you create journal entries for work in process (issues, labor, and machine run time), completions, and manufacturing variances. If you have extra costs on purchased items and you want to calculate their costs separately, you must understand purchase price variance and material burden cost.

This section discusses:

- Journal entries and the three-tier process.
- Detail and summary journal entries.

Journal Entries and the Three-Tier Process

When you enter daily journal entries, you are performing the first of three steps in a three-tier process.

This process is used throughout all JD Edwards EnterpriseOne journal entry programs and consists of these steps:

1. Entering journal entries into a batch.
2. Reviewing and approving the batch for posting.
3. Posting the batch transactions.

In the JD Edwards EnterpriseOne Manufacturing Accounting system, you create journal entries for various types of shop floor activities, including:

- Material issues.
- Labor and machine reporting.
- Completions.
- Scrap.

- Variances, including:
  - Engineering.
  - Planned.
  - Actual (material usage, reported hours).
  - Other.

Detail and Summary Journal Entries

You can create detail or summary entries for both debit and credit journal entry transactions. You can use the object portion of the account number to control the level of detail of the journal entries.

Detail Journal Entries

To enter detail journal entries for a work order or rate schedule by cost component, enter a different object or subsidiary account number for each cost component, for example:

Cost Component	Business Unit	Account Number
A1	M30	1341
B1	M30	1342
B2	M30	1343

Summary Journal Entries

To summarize the cost components for an item on a work order into a single journal entry, enter the costs with the same object and subsidiary account number, for example:

Cost Component	Business Unit	Account Number
A1	M30	1340
B1	M30	1340
B2	M30	1340

In addition, you can set processing options for the Manufacturing Accounting Journal Entries program (R31802A) to:

- Summarize material issues (document type IM) by account number within a work order.

  Each unique combination of account number and work order number has one journal entry.
- Summarize all journal entries by account number across work orders.

  The summary has one entry for the batch for each account. The entry is the sum of all work order transactions for each account by document type.
- Print a summarized accounting transaction report.

Creating Journal Entries for Work in Process or Completions

This section provides an overview of journal entry creation and discusses how to:

- Create Manufacturing Accounting journal entries.
- Set processing options for Manufacturing Accounting Journal Entries (R31802A).

Understanding Journal Entry Creation

You create journal entries for unaccounted shop floor activity to report transactions for material issues, completions, and labor and machine hours for a work order or rate schedule.

For standard costing, you can use processing options to specify whether the general ledger class code for inventory issue transactions is retrieved from the issue location or from the item branch record for the item. You can do so if the item has a valid record in the Item Location table (F41021). Defining accounts for inventory cost enables you to more specifically track customer inventory, for example, as opposed to single-owner inventory.

If you use project accounting, you complete top-level items to project inventory accounts. However, when you need inventory for sales orders, the system searches general inventory accounts, not project accounts. To enable the JD Edwards EnterpriseOne Sales Order Management system to access the items that a project produces, you can set a processing option to create duplicate journal entries that credit a contra account and debit the general inventory account.

The program produces error messages if it finds any general ledger errors while formatting the journal entries. To read these error messages, review the workflow messages.

Automatic Accounting Instructions

This program uses these automatic accounting instruction (AAI) tables to match inventory and cost transactions to general ledger accounts:

Table	Description
3110 Credit inventory, raw materials, and subassemblies	Moves inventory cost from inventory during issue reporting. This AAI is not used for variance accounting.
3120 Debit or credit work in process	Moves inventory cost to work in process during inventory issue and shop hours reporting. This AAI also moves inventory from work in process during inventory completion reporting.
3130 Debit inventory, subassemblies, and finished goods	Moves inventory cost to inventory when completions are reported. This AAI is not used for variance accounting. For Engineer to Order (ETO) projects, you set up the general inventory account using this AAI.

Table	Description
3140 Project Inventory Contra Account	Debits and credits the contra account that enables the JD Edwards EnterpriseOne Sales Order Management system to access inventory that a project produces.
3401 Credit accruals	Moves shop hour cost to accruals during shop hours reporting. This AAI is not used for variance accounting.

The system uses this data to match the transaction to an object account in the AAI table:

- Work order type for the AAI.
- Company number that is associated with the work order or component branch/plant. If the system does not find a match, it uses 00000.
- Document type that is associated with the transaction.
- General ledger category code for the transaction item. If the system does not find a match, it uses **** (four asterisks).
- Cost component.

Standard Cost Accounting

When you create journal entries, the program locates unaccounted units in the Work Order Parts List table, the Work Order Routing table, and the Work Order Master table, and creates journal entries for them. The program then purges the unaccounted units from the tables.

The program also updates actual, planned, completed, and scrapped costs in the Production Cost table. This information is used by the Variances program (R31804) to create journal entries for transactions with variances.

Note. After the Order Processing program (R31410) establishes standard costs for configured items, journal entries for configured items are created in the same way as for nonconfigured items.

Actual Accounting

For actual accounting, the program calculates costs. This table describes the cost types:

Cost Type	Description
Material Costs (Ax)	The program retrieves the unaccounted units and amounts from the Work Order Parts List table.
Routing Labor Costs (Bx)	The program retrieves the unaccounted units and amounts from the Work Order Routing table.
Routing Overhead Costs (Cx)	Depending on theOverhead option that you selected in the Manufacturing Constants program (P3009), the program calculates overhead costs based on labor and machine costs. To retrieve work center rates, the program uses the item's inventory cost method.

Cost Type	Description
Outside Operations (usually Dx)	The program retrieves outside operations costs from the unaccounted amount in the Work Order Routing table. When you receive the purchase order for the outside operation, the system updates the Work Order Routing table with the actual purchase order cost.
Extras (usually Xx)	The program calculates extra costs based on the item cost component record for the parent item in the Item Cost Component Add-Ons table.

The program updates the Production Cost table with the new actual, planned, completed, and scrapped costs.

Journal Entries by Work Center

If you select the Cost by Work Center option in the Manufacturing Constants program (P3009), the system updates the Production Cost table by work center when you generate journal entries. You can set a processing option to generate accrual journal entries by work center instead of by cost type.

Creating Manufacturing Accounting Journal Entries

Select Manufacturing Accounting (G3116), Work in Process.

Alternatively, select Manufacturing Accounting (G3116), Completions.

Setting Processing Options for Manufacturing Accounting Journal Entries (R31802A)

These processing options control default processing for the Manufacturing Accounting Journal Entries program.

Default

These processing options control default values for the journal entries.

1. General Ledger Date Specify the date that appears on journal entries. If you leave this processing option blank, the program uses the system date.

2. Document Type for Scrapped Transactions Specify which document type (00/DT) to assign to scrap transactions. If you leave this processing option blank, the program uses document type IS.

3. Document Type for Shop Floor Activity Specify the document type (00/DT) for journal entries on extra cost components if you do not use routings. If you use routings, the program automatically assigns a document type of IH. If you leave this processing option blank, the program uses document type IH.

4. Status Code for Work Order Specify a new work order status code (UDC 00/SS). If you leave this processing option blank, the system does not update the work order status.

5. Subledger field Specify whether to supply the work order number as the default value in the Subledger field. This option does not apply when you use summarized journal entries. Values are:

Blank: Do not supply a default value.

1: Use the work order number as the default value.

Process

These processing options control how the information for the journal entries is processed.

1. Journal Entries Mode

Specify whether the program runs in proof mode or final mode.

Regardless of which method you select, the status code on the work order is updated according to the value that you enter in the Status Code for Work Order processing option. Values are:

Blank: Proof mode. The program performs all calculations and edits, and prints them in the reports.

1: Final mode. The program creates journal entries and clears unaccounted units.

2. Summarize Material Issues WITHIN Work Order

Specify whether to summarize material issue journal entries by account within a work order. The program creates one journal entry for each unique combination of account number and work order number.

If you summarize, you will not be able to post detail journal entries using JD Edwards EnterpriseOne Advanced Cost Accounting from Oracle. Values are:

Blank: Do not summarize by account.

1: Summarize by account.

3. Summarize by Account ACROSS Work Orders

Specify whether to summarize all journal entries by account across work orders. Values are:

Blank: Do not summarize.

1: Summarize all journal entries. This value will reduce the number of journal entries.

4. Flex Accounting

Specify whether this program searches for flex accounting rules to populate cost objects in the Account Ledger table.

Flex accounting is required to attach cost objects to the journal entries. Values are:

Blank: Do not use flex accounting.

1: Use flex accounting.

5. Issues of Material credit - Business Unit

Specify which branch/plant the program uses as the business unit for the credit side of material issue (IM) transactions. Values are:

Blank: Use the component branch/plant.

1: Use the branch/plant from the Charge to Cost Center field on the work order.

6. Journal Entries by Work Center

Specify whether the system writes accrual journal entries by work center or cost type for shop floor activity. If you leave this processing option blank, accrual journal entries are written by cost type. Values are:

Blank: Write accrual journal entries by cost type.

1: Write accrual journal entries by work center.

7. Create Duplicate Journal Entries for Projects

Specify whether the system generates a duplicate set of journal entries when you transfer amounts from a project-specific work-in-process (WIP) account to a project-specific inventory account. The duplicate set of journal entries debits the general inventory account and credits the contra account. This processing option applies to end-item manufacturing work orders for ETO projects. If this processing option is blank, the system creates journal entries to debit only the project-specific WIP account and credit the project-specific inventory account. You must create manual journal entries to transfer amounts from the project-specific inventory account to the general inventory account. Values are:

Blank: Do not generate duplicate journal entries.

1: Generate duplicate journal entries.

8. G/L Class Code for Material Issues (general ledger class code for material issues)

Specify which general ledger class code the system applies to the credit side of IM transactions when you use standard costing. Values are:

Blank: Use the general ledger class code that is associated with the item branch record for the material.

1: Use the general ledger class code that is associated with the location from which the material was issued.

Print

These processing options control print criteria.

1. Accounting Journal

Specify whether to print a report. Values are:

Blank: Do not print a report.

1: Print a report.

2. Subtotals

Specify whether to print subtotals by document type and document number. Values are:

Blank: Do not print subtotals by document type and document number.

1: Print subtotals by document type and document number.

3. Summarize Material Issues WITHIN Work Order for Report

Specify whether to summarize journal entries for material issues (IM transactions) by account number within a work order on the report. This processing option does not affect the number of journal entries that the program creates. You can summarize the journal entries on the report regardless of whether you summarize the actual journal entries. Values are:

Blank: Do not summarize journal entries for material issues on the report.

1: Summarize journal entries for material issues on the report.

4. Summarize ACROSS Work Orders for Report

Specify whether to summarize all journal entries by account across work orders on the report. This processing option does not affect the number of journal entries that the program creates. You can summarize the journal entries on the report regardless of whether you summarize the actual journal entries. Values are:

Blank: Do not summarize all journal entries on the report.

1: Summarize all journal entries on the report.

Reviewing Production Costs

This section provides an overview of production cost inquiries and discusses how to:

- Set processing options for Production Cost Inquiry (P31022).
- Review production costs.

Understanding Production Cost Inquiries

The Production Cost Inquiry program (P31022) displays the costs and variances that are associated with a work order or rate schedule. When you select the Cost by Work Center option in the Manufacturing Constants program (P3009) and define cost components by work center, the Production Cost Inquiry program displays cost information by work center. It also displays subtotals by cost components for the work centers in which they occur.

You can review variances by comparing amounts that the system calculated in one mode to amounts that the system calculated in another mode. Modes include:

- Standard
- Current
- Planned
- Actual
- Completed
- Scrapped

The system updates the standard amount fields with information when you create a work order header. The amounts represent the work order quantity multiplied by the frozen standard costs of the parent.

The system updates the current amounts from the current bill of material and routing at the time when you attach the parts list and routing to the work order. The current amount represents the work order quantity multiplied by the frozen standard component costs and the current routing values multiplied by the frozen work center rates.

To generate the planned amounts, run the Manufacturing Accounting Journal Entries program (R31802A) in proof or final mode. These amounts represent the current parts list quantity multiplied by the frozen standard component costs and the current routing values multiplied by the frozen work-center rates.

When you run the Manufacturing Accounting Journal Entries program in final mode, the system generates these amounts:

- Actual amounts, which represent the actual quantity multiplied by the frozen standard costs and the actual reported hours multiplied by the frozen work center rates.
- The completed and scrapped amounts, which represent the quantities completed and scrapped multiplied by the frozen standard costs of the parent item for each cost type.

For standard costing, review variances to identify errors before you run the Variance Journal Entries program (R31804). For example, if you did not issue parts to a work order or rate schedule, an actual variance appears. You can issue the parts, run the Manufacturing Accounting Journal Entries program, and review the variances again. After you correct any errors, run the Variance Journal Entries program.

Note. You must use standard costing for configured items. If you manufacture configured items, no bill of material exists, so no engineering variance exists.

Form Used to Review Production Costs

Form Name	FormID	Navigation	Usage
Production Cost Inquiry	W31022A	Manufacturing Accounting (G3116), Production Cost Inquiry	Review production costs.

Setting Processing Options for Production Cost Inquiry (P31022)

These processing options control default processing for the Production Cost Inquiry program.

Display

These processing options control default display settings for the inquiry.

1. Enter default level

Specify the level of detail that you want to view on the Production Cost Inquiry form. Values are:

Blank: Default value will be Parent.

1: Parent.

2: Component.

3: Co/By Product.

2. Enter 1 to display Amounts

Specify whether to display the Standard Amount and Current Amount columns on the Production Cost Inquiry form. Values are:

Blank: Do not display the amount columns.

1: Display the amount columns.

3. Enter 1 to display Units

Specify whether to display the various unit columns on the Production Cost Inquiry form. Values are:

Blank: Do not display the unit columns.

1: Display the unit columns.

4. Enter 1 to display the Variances

Specify whether to display the Variance Amount column on the Production Cost Inquiry form. If you decide to display the Variance Amount column, you should display the amount columns as well by entering *1* for processing option 2. Values are:

Blank: Do not display the Variance Amount column.

1: Display the Variance Amount column.

Columns

1. Enter amount type to be displayed in column 1

Specify the default cost option on the Columns tab for column 1. Values are:

1: Standard

2: Current

3: Planned

4: Actual

5: Completed

6: Scrapped

2. Enter amount type to be displayed in column 2 Specify the default cost option on the Columns tab for column 2. Values are:

1: Standard

2: Current

3: Planned

4: Actual

5: Completed

6: Scrapped

Versions

These processing options specify the version that the system uses when calling other programs from the Production Cost Inquiry program.

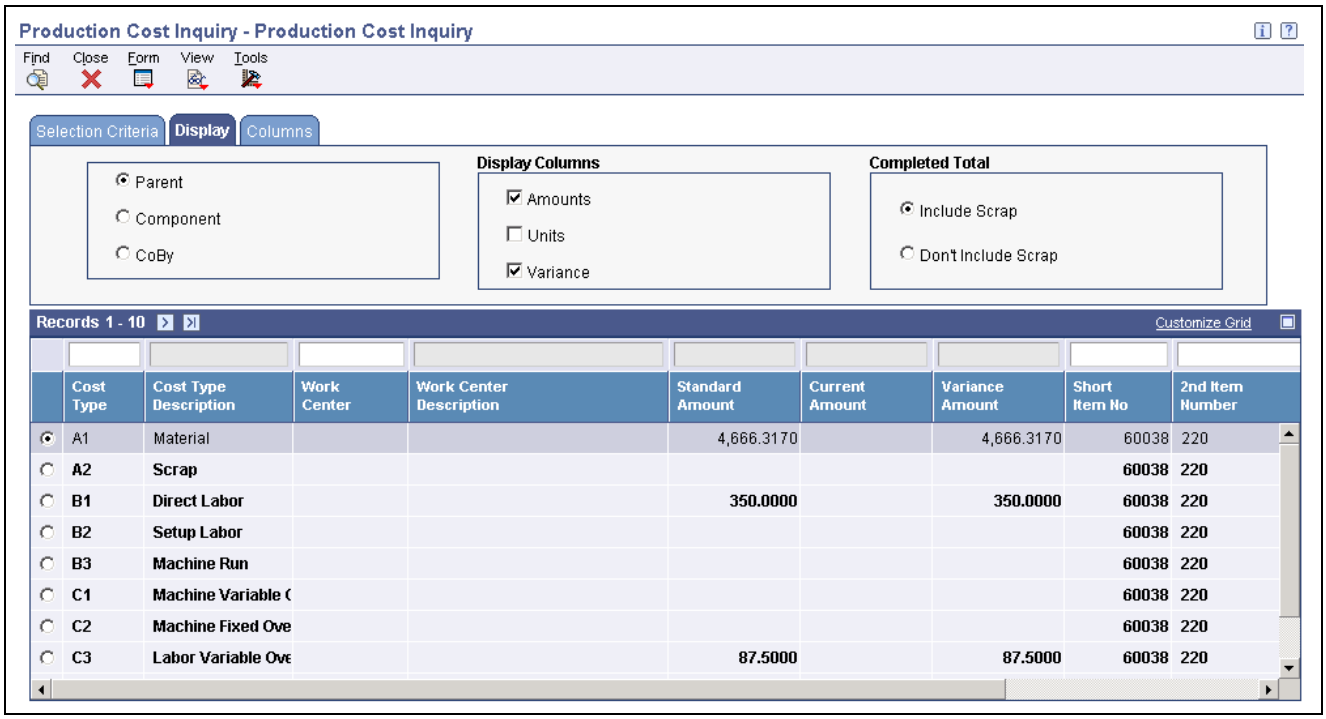
Inventory Issues Specify the version that the system uses when calling the Work Order Inventory Issues (P31113) program.

Work Order Entry Specify the version that the system uses when calling the Work Order Entry (P48013) program.

Production Status Specify the version that the system uses when calling the Production Status (P31226) program.

Reviewing Production Costs

Access the Production Cost Inquiry form.



Production Cost Inquiry form

To review production costs:

1. Select the Selection Criteria tab and complete the Order Number field on the Production Cost Inquiry form.
2. Select the Display tab.
3. Specify whether the system displays costs for the parent, component, or the co-product or by-product by selecting one of these options:
   - Parent
   - Component
   - CoBy
4. Specify what information the system displays by selecting any or all of these options under the Display Columns heading:
   - Amounts
   - Units
   - Variance
5. Specify whether the system displays scrap amounts or units by selecting one of these options:
   - Include Scrap
   - Don’t Include Scrap
6. Select Columns.
7. Specify the mode that the system displays in column 1 and 2 by selecting one of these options:
   - Standard
   - Current

- Planned
- Actual
- Completed
- Scrapped

8. Click Find.

   The program displays the production cost information in the detail area, based on the selection.

   Note. If you use the Cost by Work Center option, the system displays the costs by work center.

Creating Journal Entries for Variances

This section provides overviews of journal entries for variances and Manufacturing Accounting reports and discusses how to:

- Create variance journal entries.
- Set processing options for Variance Journal Entries (R31804).

Understanding Journal Entries for Variances

When you create journal entries for variances, the program generates error messages if it finds any general ledger errors while formatting the journal entries. You can review these error messages by reviewing the workflow messages.

You can set a processing option to call the WIP Revaluation program (R30837) and to determine which version of this program the system uses. You use this program to revalue all open actual cost work orders with items that are marked for cost change in the Item Cost table, as well as their parent work orders. After work in process is revalued, the system clears the Cost Changed Flag field in the table. All cost types in the Production Cost table are included in the data selection.

When you run this program in final mode, the system creates a batch of journal entries for posting to the general ledger.

Variances by Work Center

If you select the Cost by Work Center option in the Manufacturing Constants program (P3009), the system generates variance journal entries for each cost component for the work center based on the information in the Production Cost table. At the work center level, you can generate only debits or credits to the variance accounts (AAIs 3220, 3240, 3260, 3270, 3280); debits or credits to the WIP account are not affected. They are still generated by branch/plant.

Variances for Standard Costing

In standard cost accounting, the Variance Journal Entries program (R31804) creates detail or summary journal entries for work order or rate schedule variances.

These journal entries include engineering, planned, actual, and other variance transactions:

- Material costs
- Routing-related costs
- Cost extras

Variances for Actual Costing

When the cost method in the work order header for the end product is 02 or 09, the system applies actual costing logic. Actual costing uses variance accounting when additional work order costs are entered after completions have been done. The system retrieves the correct account number from AAI table 3210 for scrap and completions, and clears WIP.

When you run the Variance Journal Entries program (R31804) and the system discovers no unaccounted amounts, the system clears work in process and creates a new unit cost based on this calculation:

$$\text{New Unit Cost} = \frac{\text{Total Actual Amount}}{\text{Completed Units} + \text{Scrapped Units}}$$

If any unaccounted amounts exist, the Variances program creates an error message. You must run the Manufacturing Journal Entries program (R31802A) to complete manufacturing accounting to clear unaccounted units and run R31804 again.

For cost method 02 (Weighted Average Cost), the system:

- Updates the weighted average cost.
- Creates IC or IS journal entries to clear work in process to finished goods.
- Creates a record in the Item Ledger table for unaccounted amounts using this calculation:

  (Actual) − (Completed) + (Scrap)

For cost method 09 (Actual or Manufacturing Last), the system:

- Creates IV journal entries to clear work in process.
- Transfers all work in process to finished goods by creating journal entries for completion (IC) and scrap (IS).
- Revalues on-hand inventory based on the new unit cost (according to cost level item; item and branch; or item, branch, lot, and location).
- Creates a record in the Item Ledger table for inventory revaluation.
- Updates the Item Cost table.
- Creates additional sales order lines to reflect the latest cost changes.

  The system creates these sales order lines only if the work order is closed and the 09 work order was created by the sales order. It creates additional sales order detail lines for sales order lines that contain sales from locations or lots to which the work order was completed. The Cost of Goods Sold Update program (R31805) generates a report that lists the new sales order lines by lot and location. This information is then included when you print the Update Customer Sales report (R42800).

Creating Variance Journal Entries

Select Manufacturing Accounting (G3116), Variances.

Setting Processing Options for Variance Journal Entries (R31804)

These processing options control default processing for the Variance Journal Entries program.

Defaults

These processing options control default values that the system uses for creating variance journal entries.

1. General Ledger Date Specify the date that appears on journal entries. If you leave this processing option blank, the program uses the system date.

2. Document Type - For Manufacturing Variance Specify the user-defined code (UDC) (00/DT) that identifies the purpose of the document. The program assigns this document type to variance journal entries. Typically, the document type is IV (variance calculated for work orders). If you leave this processing option blank, the system uses *IV.*

3. Sub Ledger Value Specify whether to use the work order number as the default value in the Subledger field. Values are:

Blank: Do not use work order number as default value.

1: Use the work order number as the default value in the Subledger field.

4. Work Order Status Code Specify the new status code (00/SS) for the work order. The program updates the work order status regardless of whether you run the program in proof mode or in final mode. Enter the new status code or select it from the Select User Define Code form. If you leave this processing option blank, the status of the work order does not change.

5. Closed Work Order Status Specify the status to use to close a work order. Closed work orders do not generate additional journal entries. If you leave this processing option blank, a status code of 99 is used for a closed work order.

6. Actual Costing Document Types Specify the document types to use for scrap and completions.

For scrap, specify the document type that the system uses to retrieve information from AAI 3210. The account that is debited relieves the scrap portion of Work in Process. If you leave this processing option blank, the system uses document type IS.

For completions, specify the document type that the system uses to retrieve information from AAI 3210. The account that is debited relieves the completed portion of Work in Process. If you leave this processing option blank, the system uses document type IC.

Process

These processing options control how the system processes journal entries.

1. Journal Entries Mode Specify whether the program runs in proof mode or final mode. Regardless of which method you select, the status code on the work order is updated according to the value that you enter in the Work Order Status Code processing option. Values are:

Blank: Proof mode

The program performs all calculations and edits, and prints them in the reports.

1: Final mode

The program creates journal entries and clears unaccounted units.

2. Summarize ACROSS Work Orders Specify whether to summarize all journal entries by account across work orders. Values are:

Blank: Do not summarize across work orders.

1: Summarize across work orders.

3. Flex Accounting Specify whether this program searches for flex accounting rules to populate cost objects or flex business unit, subsidiary, or subledger from flex rules in the Account Ledger table. Values are:

Blank: Flex accounting not used.

1: Use flex accounting.

4. WIP Revaluation (work-in-process revaluation) Specify whether the system uses the WIP Revaluation program (R30837) to adjust WIP when you make cost changes to an actual cost work order. Values are:

Blank: Do not invoke WIP Revaluation.

1: Invoke WIP Revaluation.

Note. This processing option is not intended for standard cost.

Print

These processing options control which information the system includes in the report.

1. Accounting Journal Specify whether to print an Accounting Journal report. Values are:

Blank: Do not print journal report.

1: Print journal report.

2. Subtotals Specify whether to print the subtotals by document number. Values are:

Blank: Do not print subtotals.

1: Print subtotals by document.

3. Summarize Report ACROSS Work Orders Specify whether to summarize all journal entries by account across work orders on the report. This processing option does not affect the number of journal entries that the program creates. You can summarize the journal entries on the report regardless of whether you summarize the actual journal entries. Values are:

Blank: Do not summarize report by account.

1: Summarize report by account.

OverUnderComp

This processing option controls whether the system restates production costs.

1. Restate Production Costs Specify whether to restate the costs in the Production Cost table. This processing option eliminates variances that are caused by over- or under-completions or scrapped end items by restating the standard, current, and planned costs as if the work order were completed for the completed quantity. Values are:

Blank: Do not restate costs.

1: Restate the standard, current, and planned production costs based on completed and scrapped quantities.

Versions

This processing option controls which version the system uses when calling additional programs.

1. WIP Revaluation (work-in-process revaluation) — Specify which version of the WIP Revaluation program (R30837) the system uses to revalue actual cost work orders. If you leave this processing option blank, the system uses version ZJDE0001.

Sales Order

These processing options control information that is related to sales orders in the variance report.

Line Type — Specify a nonstock line type. This line type will be used as the default line type for new sales order lines that are written by the Variance Journal Entries program (R31804). Enter the line type to be used as the default value. The line type that you enter is validated against the Line Type Search program (P4203).

Status Code - Next — Specify how the system generates the next status for new sales order lines that are written by the Variance Journal Entries program (R31804). Enter the value of the next status. If you leave this processing option blank, the system uses both the nonstock line type and the next status from the original sales order line.

Note. You can change the next status and nonstock line type in the Order Activity Rules program (P40204). When you leave this processing option blank, the changed values are used.

Reviewing General Ledger Batches

This section provides an overview of general ledger batches, lists a prerequisite, and discusses how to review general ledger batch information.

Understanding General Ledger Batches

After you generate journal entries, you review and approve them before posting them to the general ledger. This review is the second step in the three-tier process. In addition, you can review manufacturing journal entries for summarized work orders.

Prerequisite

Set the approval route code in the Branch/Plant Constants program (P41001) for approving journal entries for posting.

Forms Used to Review General Ledger Batches

Form Name	FormID	Navigation	Usage
Work With G/L Review - by WO Number	W3106IA	Manufacturing Accounting (G3116), G/L Review - by W.O. Number	Review general ledger batches. Select posting batches by work order number.
General Journal Review	W0911BA	Select a record on the Work With G/L Review - by WO Number form, and select G/L Batch Review from the Row menu.	Review journal transactions.
Journal Entry	W0911A	Select a transaction on the General Journal Review form, and click Select.	Review general ledger batch information. Make or modify journal entries.

Reviewing General Ledger Batch Information

Access the Work With G/L Review - by WO Number form.

1. Complete the User ID field and any of these fields to locate a batch of journal entries, and then click Find:
   - Document Number From
   - Document Number To
   - Work Order Number
   - G/L Date From
   - G/L Date To
2. Select a record and click Select.
3. Select a transaction and click Select on the General Journal Review form.
4. Enter any necessary changes, and click OK.

See Also

JD Edwards EnterpriseOne Financial Management Application Fundamentals 9.0 Implementation Guide, "Working with Batches," Approving Batches

Posting Manufacturing Journal Entries to the General Ledger

This section provides an overview of posting manufacturing journal entries to the general ledger, lists prerequisites, and discusses how to post journal entries to the general ledger.

Understanding Posting Manufacturing Journal Entries to the General Ledger

After you enter, review, and approve journal entries, use the General Journal Post program (R09801) to post the journal entries to the general ledger. Posting represents the third step in the three-tier process. Posting the journal entries to the general ledger updates account balances with the amounts from journal entries. After posting, the system provides several reports that you can use to review the posted journal entries.

You can run only one post at a time. You must ensure that all post menu selections are routed to the same job queue and that the job queue allows only one job to be processed at a time.

Important! You should not customize the post program.

The General Ledger Post Report program (R09801) posts only batches for which no errors are found in the pre-post process. In general, the program:

- Posts transactions to the Account Balances table and marks each transaction and the batch header as posted in the Account Ledger table and the Batch Control Records table (F0011).
- Changes the batch status for the Batch Control Records table to D.
- Marks each transaction with a status of P (posted).
- Performs intercompany settlements for ledger types AA, XA, YA, CA, AZ, and ZA, if requested.
- Creates reversing entries, if requested.

The General Ledger Post Report program produces these reports:

- Posting Edit report
- Posting Journal report

Posting Edit Report

This report lists errors that are detected during the posting process. If the program finds errors, it does not post the batch. You must correct all errors before you can post the batch.

This table lists common posting errors and their causes:

Error	Description
Batch not approved for posting	This error message is caused by a batch with a pending or error status.

Error	Description
Account not set up in Account Master table (F0901)	This error message is caused by one of these errors: • An undefined account number (designated as # during journal entry) was entered. To correct this error, locate the document number and line number on the Journal Entry form (W0911A), and change the number (#) on the detail line to the valid account number. • No account number was set up before posting or the account number does not meet the model account criteria to be automatically created by the system. Add the general ledger account number in the Review and Revise Accounts program (P0901).
Batch journal entries out-of-balance	This error message occurs when debits do not equal credits. If the out-of-balance journal entry was entered in error, correct the error and post the batch again. Other situations can cause a journal entry to be out-of-balance: • A power failure might have occurred during entry or posting. • A valid, one-sided journal entry might have been entered to correct a conversion error that was made during setup.

Posting Journal Report

This report lists the transactions that the system posted to the Account Balances table and to the Account Ledger table.

See Also

JD Edwards EnterpriseOne Financial Management Application Fundamentals 9.0 Implementation Guide

JD Edwards EnterpriseOne Inventory Management 9.0 Implementation Guide, "Inventory Management Reports," Reviewing the Item Ledger/Account Integrity Report

Prerequisites

To post journal entries to the general ledger, you must:

- Verify that the batch has an approved status.
- Verify that the post is submitted to a single-threaded job queue.

Posting Journal Entries to the General Ledger

Select Manufacturing Accounting (G3116), Post General Journal.

See Also

JD Edwards EnterpriseOne Financial Management Application Fundamentals 9.0 Implementation Guide, "Posting Financial Transactions," Setting Processing Options for General Ledger Post (R09801)

CHAPTER 9

Working with Lean Accounting

This chapter provides overviews of lean manufacturing accounting and lean manufacturing accounting setup and discusses how to:

- Run lean manufacturing accounting.
- Process lean manufacturing variance accounting.
- Run and review the Lean Production Cost Inquiry program.
- Run the lean work-in-process (WIP) revaluation program.
- Run the Item Ledger/Account Integrity report.
- Review general ledger information.

Understanding Lean Manufacturing Accounting

In orderless accounting just as in manufacturing accounting you use a variety of tools to monitor costs that are generated during various manufacturing activities. The resulting information enables management to compare actual results to expected results. These are the differences between the two accounting methods:

- Orderless accounting uses transaction IDs and production plans rather than work orders, as in manufacturing accounting.
- The orderless solution is available for Standard Costing only.

Understanding Lean Manufacturing Accounting Setup

This section discusses:

- Automatic accounting instructions (AAIs).
- Document types.
- Transaction progress.

AAIs

Orderless accounting can use all of the AAIs that are used by standard manufacturing accounting.

See Chapter 3, "Setting Up Product Costing and Manufacturing Accounting," Defining Manufacturing AAIs, page 41.

Document Types

Orderless accounting uses these document types that you set up in user-defined code (UDC) table 00/DT:

- LM - Lean Material Issue.
- LL - Lean Shop Floor.
- LC - Lean Completion.
- LP - Lean Scrap.
- LO - Lean Component Scrap.
- LV - Lean Variances.

Transaction Progress

The JD Edwards EnterpriseOne system from Oracle automatically tracks the progress of transactions with variances.

The system assigns values to each transaction, depending on the transaction's status:

- Transaction has been created.
- Lean Manufacturing Accounting has been run.
- Lean Manufacturing Variance has been run and the transaction is kept open for further activities.
- Lean Manufacturing Variance has been run and the transaction is closed from any further activities.

When you run programs such as the Lean Accounting - Manufacturing Accounting program (RF31200) or Lean Variance Journal Entries program (RF31210), the system verifies that the transaction is not closed. If the transaction has been closed, you cannot perform any kind of additional accounting activities on the transaction.

Note. Setting up lean accounting requires no steps in addition to those that are already required in setting up manufacturing accounting.

Running Lean Manufacturing Accounting

This section provides an overview of the Lean Accounting - Manufacturing Accounting program and discusses how to:

- Run lean manufacturing accounting.
- Set processing options for Lean Accounting - Manufacturing Accounting (RF31200).

Understanding the Lean Accounting - Manufacturing Accounting Program

The Lean Accounting - Manufacturing Accounting program creates journal entries for material, labor, overhead, and extra costs for transactions.

Tables Used by the Lean Accounting - Manufacturing Accounting Program

The Lean Accounting - Manufacturing Accounting program extracts data from these tables:

- Lean Transaction Master (FF31011).

- Lean Transaction Parts List (FF31111).
- Lean Transaction Routing (FF31112).
- Lean Transaction Labor Detail (FF31113).
- Lean Transaction Production Costs (FF31200).

The Lean Accounting - Manufacturing Accounting program writes to these tables:

- All of the tables in the previous list.
- Lean Transaction G/L Cross Reference (FF31201).
- Item Ledger (CARDEX) (F4111).
- General Ledger (F0911).

Canceling Transactions

If you want to cancel transactions in lean manufacturing accounting, the following conditions apply:

- Canceled transactions are transactions that have been written to the F0911 table, and then reversed back out again. These ransactions are reversed at the current standard cost for the item.
- You cannot cancel transactions if you have run the Lean Manufacturing Variance Accounting program with the Further processing option set to close the transaction.

Running Lean Manufacturing Accounting

Select Orderless Manufacturing Accounting (GF3116), Lean Manufacturing Accounting.

Setting Processing Options for Lean Accounting - Manufacturing Accounting (RF31200)

These processing options control default processing for the Lean Accounting - Manufacturing Accounting program.

Default

These processing options control the default general date and the document types that are used for lean manufacturing accounting.

1. General Ledger Date	Specify the general ledger date that appears on journal entries. If you leave this processing option blank, the system uses the current system date for the general ledger date.
2. Document Type for Material Issue	Specify the document type (UDC 00/DT) to assign to material issue transactions. If you leave this processing option blank, the program uses LM as the document type.
3. Document Type for Shop Floor Labor	Specify the document type (UDC 00/DT) to assign to shop floor labor transactions. If you leave this processing option blank, the program uses LL as the document type.
4. Document Type for Completion	Specify the document type (UDC 00/DT) to assign to completion transactions. If you leave this processing option blank, the program uses LC as the document type.

5. Document Type for Scrap Specify the document type (UDC 00/DT) to assign to Scrap transactions. If you leave this processing option blank, the program uses LP as the document type.

Process

These processing options control how the system processes lean accounting information.

1. Journal Entry Mode Specify whether the program runs in proof or final mode. Values are:

Blank: Proof mode. Performs all calculations and edits, but does not create journal entries.

1: Final mode. Performs all calculations and edits and creates journal entries.

2. Material Issues summarized WITHIN Production Plan and Transaction ID Specify that journal entries for material issue are summarized by account within a production plan and transaction ID. The program creates one journal entry for each unique combination of account number and production plan and transaction ID only for material issue transactions. Values are:

Blank: Do not summarize journal entries for material issue by account.

1: Summarize all journal entries for material issue by account. This option reduces the number of journal entries.

3. Accounts summarized ACROSS Production Plans and Transaction IDs Specify that the journal entries are summarized by account across production plans and transaction IDs. The program creates one journal entry for each unique combination of account number and production plan and transaction ID for all types of transactions. Values are:

Blank: Do not summarize journal entries by account.

1: Summarize all journal entries by account. This option reduces the number of journal entries.

4. Flex Accounting Specify whether the program should search for Flex Accounting rules to populate cost objects in the F0911 table. Flex Accounting rules are required to attach cost objects to the journal entries. Values are:

Blank: Do not use Flex Accounting.

1: Use Flex Accounting.

5. G/L Class Code for Material Issues (general ledger class code for material issues) Specify the GL class code that the system should apply to the credit side of Material Issue transactions (LM) when Standard Costing method is used. Values are:

Blank: Use the GL Class Code that is associated with the Item Branch record for the material.

1: Use the GL class code that is associated with the location from which the material was issued.

Print

These processing options control which information appears on the report.

1. Journal Entry Report Specify whether the system prints a Journal Entry Report. Values are:

Blank: Do not print a Journal Entry Report.

1: Print a Journal Entry Report.

2. Sub-totals by Production Plan and Transaction ID and Document Type

Specify whether the system prints subtotals by production plan, transaction ID, and document type. Values are:

Blank: Do not print subtotals.

1: Print subtotals.

3. Material Issues summarized WITHIN Production Plan and Transaction ID for Report

Specify whether journal entries for material issue have to be summarized by account within a production plan and transaction ID on the report. The program prints one journal entry for each unique combination of account number and production plan and transaction ID only for Material Issue transactions.

This processing option does not affect the number of journal entries that the program creates. The journal entries on the report can be summarized irrespective of whether the actual journal entries are summarized. Values are:

Blank: Do not summarize journal entries for material issue by account on the report.

1: Summarize journal entries for material issue by account on the report.

4. Accounts summarized ACROSS Production Plans and Transaction IDs for Report

Specify whether journal entries are summarized by account across production plans and transaction IDs on the report. The program prints one journal entry for each unique combination of account number, production plan, and transaction ID for all types of transactions.

This processing option does not affect the number of journal entries that the program creates. The journal entries on the report can be summarized irrespective of whether the actual journal entries are summarized. Values are:

Blank: Do not summarize journal entries by account on the report.

1: Summarize all journal entries by account on the report.

Processing Lean Manufacturing Variance Accounting

This section provides an overview of the Lean Variance Journal Entries program and discusses how to:

- Run Lean Variance Journal Entries.
- Set processing options for Lean Variance Journal Entries (RF31210).

Understanding the Lean Variance Journal Entries Program

The business purpose for orderless accounting is essentially the same as it is for manufacturing accounting: to process differences that occur between the predefined or expected costs and the actual costs. The main difference is that instead of tracking costs that are associated with work orders, for orderless accounting you track costs that are associated with a transaction or groups of transactions.

Tables Used by the Lean Variance Journal Entries Program

The Lean Variance Journal Entries program extracts data from these tables:

- Lean Transaction Master (FF31011).
- Lean Transaction Parts List (FF31111).
- Lean Transaction Labor Detail (FF31113).

- Lean Transaction Production Costs (FF31200).

The Lean Variance Journal Entries program writes to these tables:

- Lean Transaction Master (FF31011).
- Lean Transaction Production Costs (FF31200).
- Lean Transaction G/L Cross Reference (FF31201).
- General Ledger (F0911).

See Also

Chapter 8, "Working with the Manufacturing Accounting System," Creating Journal Entries for Variances, page 143

Running Lean Variance Journal Entries

Select Orderless Manufacturing Accounting (GF3116), Lean Manufacturing Variance Accounting.

Setting Processing Options for Lean Variance Journal Entries (RF31210)

These processing options control default processing for the Lean Variance Journal Entries program.

Defaults

These processing options control default values that the system uses for lean variance journal entries.

1. General Ledger Date Specify the general ledger date that appears on journal entries. If you leave this processing option blank, the system uses the current system date for the general ledger date.

2. Document Type for Variance Specify the document type (UDC: 00/DT) that is to be assigned to variance transactions. If you leave this processing option blank, the program uses *LV* as the document type.

Process

These processing options control how the system processes lean accounting variances.

1. Journal Entries Mode Specify whether the program runs in proof mode or final mode. Values are:

Blank: Proof mode. The program performs all calculations and edits, but does not create journal entries.

1: Final mode. The program performs all calculations and edits and creates journal entries.

2. Accounts summarized ACROSS Production Plans and Transaction IDs Specify whether the journal entries are summarized by account across production plans and transaction IDs. The program creates one journal entry for each unique combination of account number, production plan, and transaction ID for all types of transactions. Values are:

Blank: Do not summarize journal entries by account.

1: Summarize all journal entries by account. This option reduces the number of journal entries.

3. Flex Accounting Specify whether the program searches for Flex Accounting rules to populate cost objects in the Account Ledger table (F0911). Flex Accounting rules are required to attach cost objects to the journal entries. Values are:

Blank: Do not use Flex Accounting.

1: Use Flex Accounting.

4. Further Processing Specify whether the system allows any further processing on the transaction ID. Values are:

Blank: Allow further processing.

1: Do not allow further processing.

Print

These processing options control which information the system includes in the report.

1. Journal Entry Report Specify whether the system should print a Journal Entry Report. Values are:

Blank: Do not print a Journal Entry Report.

1: Print a Journal Entry Report.

2. Sub-totals by Production Plan and Transaction ID Specify whether the system should print subtotals by production plan, transaction ID, and document type. Values are:

Blank: Do not print subtotals by production plan, transaction ID, and document type.

1: Print subtotals by production plan, transaction ID, and document type.

3. Accounts summarized ACROSS Production Plans and Transaction IDs for Report Specify whether journal entries are summarized by account across production plans and transaction IDs on the report. The program prints one journal entry for each unique combination of account number, production plan, and transaction ID for all types of transactions.

This processing option does not affect the number of journal entries that the program creates. The journal entries on the report can be summarized irrespective of whether the actual journal entries are summarized. Values are:

Blank: Do not summarize journal entries by account on the report.

1: Summarize all journal entries by account on the report.

Running and Reviewing the Lean Production Cost Inquiry Program

This section provides an overview of the Lean Production Cost Inquiry program and discusses how to review costs and variances.

Understanding the Lean Production Cost Inquiry Program

The Production Cost Inquiry program displays the costs and variances that are associated with transactions. Orderless-production cost inquiries track costs and variances that are the same as manufacturing accounting.

Processes use this sequence:

1. Run the Items Completions program (PF31011).
2. Run the Transaction Management program (PF31014).
3. On the Review or Reverse Transaction form, find and select a record, and click the Production Cost Inquiry button.

   The Product Cost Inquiry program enables you to review standard and current costs from the completion.
4. Run the Lean Accounting - Manufacturing Accounting program (RF31200), which enables you to review the planned, actual, completed, and scrapped costs.
5. Run the Product Cost Inquiry program again, and the system displays costs, units, and variances corresponding to the data that you entered in the previous steps.
6. If at this point you run the Lean Variances Journal Entries program (RF31210), and then the Product Cost Inquiry program, the variances do not appear on the Product Cost Inquiry form.

   The absence of variances indicates that the variances have been run, and no new transactions have been added.

   The system retains the variances in the Lean Transaction Production Costs table (FF31200) so that if you need to reverse a transaction, the variance values are available for the reversal journal entries.

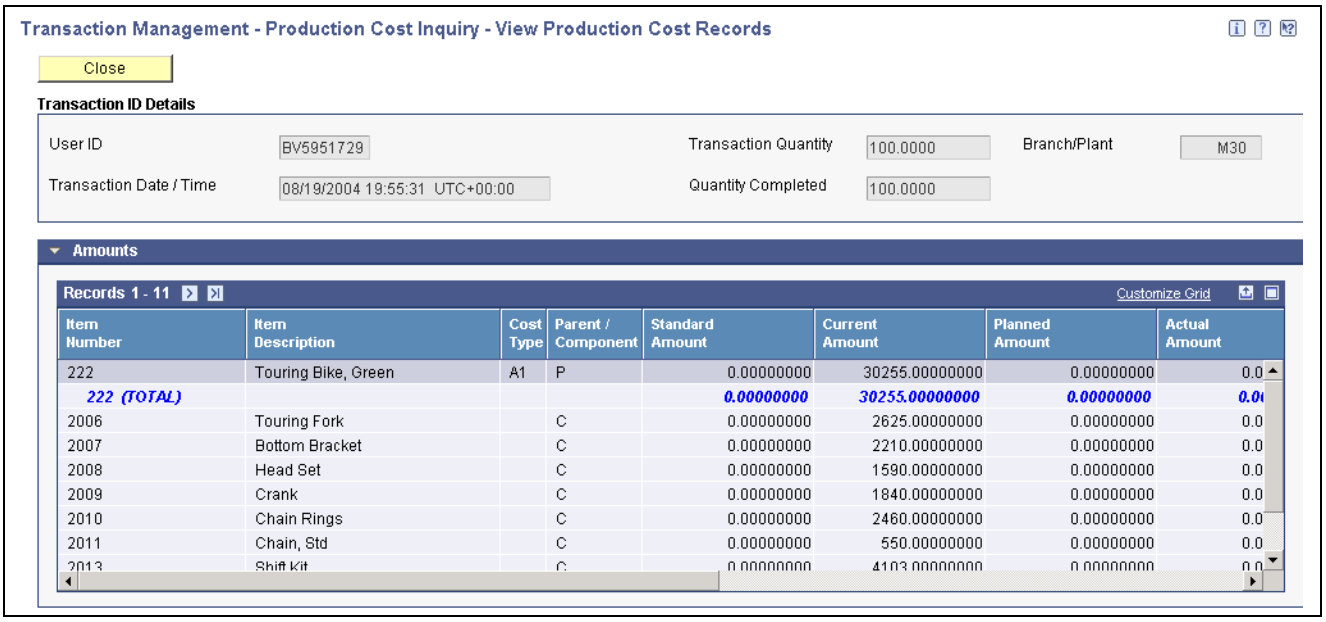
See Chapter 8, "Working with the Manufacturing Accounting System," Reviewing Production Costs, page 139.

Forms Used to Run and Review the Lean Production Cost Inquiry Program

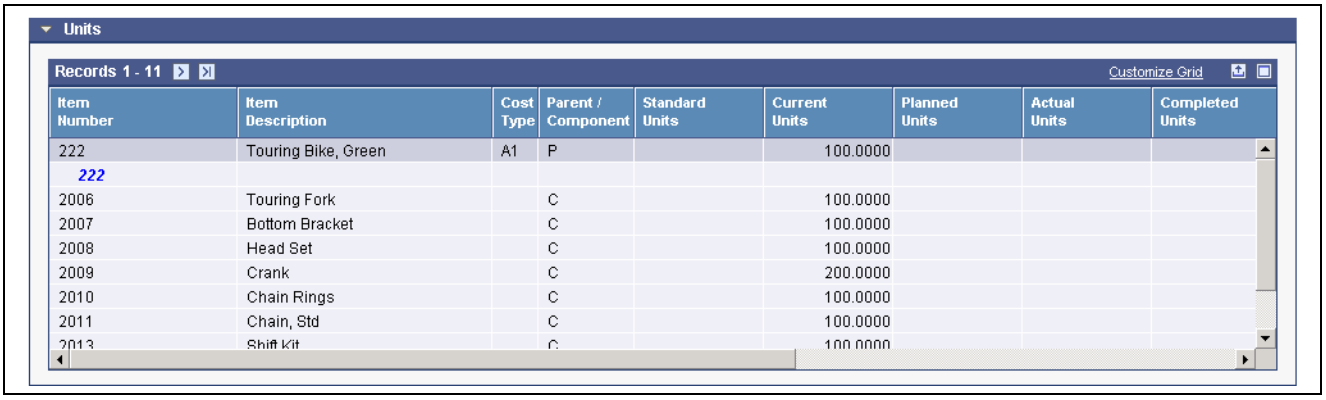
Form Name	FormID	Navigation	Usage
Review or Reverse Transaction	WF31014A	Orderless Manufacturing Accounting (GF3116), Transaction Management	Access the View Production Cost Records form.
Production Cost Inquiry - View Production Cost Records	WF31200A	Select a record and click the Production Cost Inquiry button on the Review or Reverse Transaction form.	Review costs and variances that are associated with a transaction.

Reviewing Costs and Variances

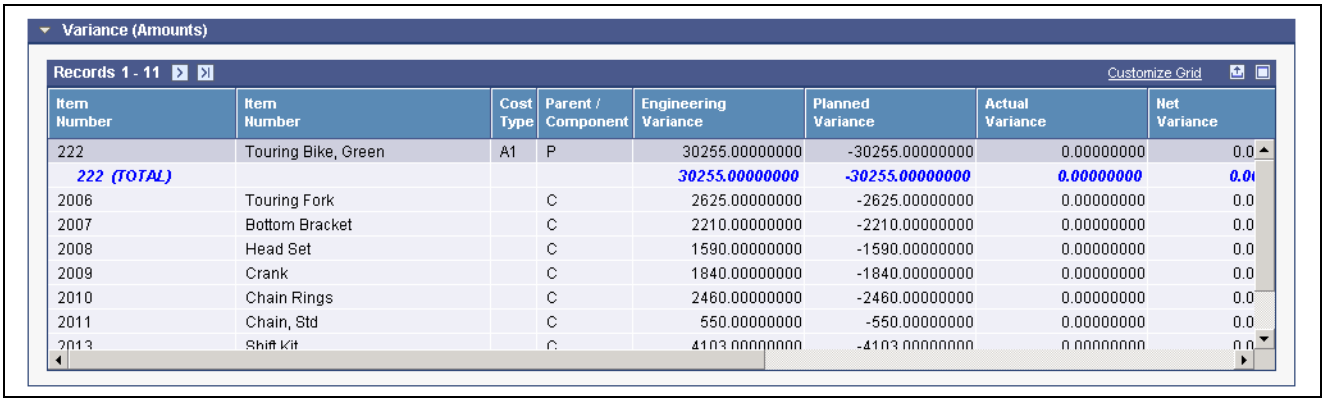
Access the Production Cost Inquiry - View Production Cost Records form.



Production Cost Inquiry - View Production Cost Records form (1 of 3)



Production Cost Inquiry - View Production Cost Records form (2 of 3)



Production Cost Inquiry - View Production Cost Records form (3 of 3)

Running the Lean WIP Revaluation Program

This section provides an overview of the Lean WIP Revaluation program and discusses how to:

- Run the Lean WIP Revaluation program.
- Set processing options for Lean WIP Revaluation (RF31220).

Understanding the Lean WIP Revaluation Program

The business purpose for orderless work-in-process (WIP) revaluation is essentially the same as it is for revaluing costs using work orders. The main difference is that instead of revaluing costs in work orders, for orderless manufacturing you revalue costs in transactions.

You run the Lean WIP Revaluation program using processing options for the Standard Frozen Update program (R30835). You must enter *2* (Invoke WIP Revaluation for Lean Manufacturing) for the WIP Revaluation option on the Processing tab, and enter the version number on the Versions tab.

Tables Used by the Lean WIP Revaluation Program

The Lean WIP Revaluation program extracts data from these tables:

- Lean Transaction Master (FF31011).
- Lean Transaction Parts List (FF31111).
- Lean Transaction Routing (FF31112).
- Lean Transaction Labor Detail (FF31113).
- Lean Transaction Production Costs (FF31200).

The Lean WIP Revaluation program writes to these tables:

- All of the tables in the previous list.
- Lean Transaction G/L Cross Reference (FF31201) .
- Item Ledger (CARDEX) (F4111).
- General Ledger (F0911).

See Also

Chapter 5, "Working with Additional Product Costing Features," Revaluing Work in Process, page 85

Running the Lean WIP Revaluation Program

Select Product Costing (G3014), Frozen Standard Update.

Note. The Lean WIP Revaluation (RF31220) processing options must be set up in batch versions before you set the processing options to run the Standard Frozen Update program.

Setting Processing Options for Lean WIP Revaluation (RF31220)

These processing options control default processing for the Lean WIP Revaluation program.

Defaults

This processing option controls which document type the system uses for WIP revaluation.

1. Document Type Specify the document type (UDC 00/DT) that the system uses. If you leave this processing option blank, the system uses *IB* (item cost changes).

Process

This processing option controls how the Lean WIP Revaluation program writes GL transactions.

1. G/L Transactions (general ledger transactions)
Specify whether no general ledger transactions are written, detailed general ledger transactions are written by document number, or summarized journal entries by account are written to the F0911 table. Values are:

Blank: No general ledger transactions are written to the F0911 table.

1: Detailed general ledger transactions are written by document number to the F0911 table.

2: Summarized journal entries by account are written to the F0911 table.

Running the Item Ledger/Account Integrity Report

This section provides an overview of the Item Ledger/Account Integrity report and discusses how to:

- Run the Item Ledger/Account Integrity report.
- Set processing options for Item Ledger/Account Integrity (R41543).

Understanding the Item Ledger/Account Integrity Report

You run the Item Ledger/Account Integrity report (R41543) for orderless manufacturing systems for the same reason as you do for manufacturing accounting systems. The report displays certain kinds of discrepancies between the Item Ledger (CARDEX) table (F4111) and the General Ledger table (F0911).

Tables Used by the Item Ledger/Account Integrity Report

The Item Ledger/Account Integrity report extracts data from these tables:

- Item Ledger (CARDEX) (F4111).
- Work Order G/L Cross Reference (F3106).
- Lean Transaction G/L Cross Reference (FF31201).
- General Ledger (F0911).

The Item Ledger/Account Integrity report:

- Creates a report in standard PDF.
- Does not update any tables.

See Also

JD Edwards EnterpriseOne Inventory Management 9.0 Implementation Guide, "Inventory Management Reports," JD Edwards EnterpriseOne Inventory Management Reports: A to Z

Running the Item Ledger/Account Integrity Report

Select Inventory Reports (G41111), Item Ledger/Account Integrity Report.

Setting Processing Options for Item Ledger/Account Integrity (R41543)

These processing options control default processing for the Item Ledger/Account Integrity report.

Report Display

These processing options control how the program presents the data.

1. Enter From G/L Date (enter from general ledger date)

Specify a date that identifies the financial period to which the transaction is to be posted.

The company constants specify the date range for each financial period. You can have as many as 14 periods. Generally, period 13 or 14 is used for audit adjustments. The system validates this field for PBCO (posted before cutoff), PYEB (prior year ending balance), PACO (post after cutoff), and WACO (post way after cutoff) messages.

2. Enter Thru G/L Date (enter through general ledger date)

Specify a date that identifies the financial period to which the transaction is to be posted.

The company constants specify the date range for each financial period. You can have as many as 14 periods. Generally, period 13 or 14 is used for audit adjustments. The system validates this field for PBCO (posted before cutoff), PYEB (prior year ending balance), PACO (post after cutoff), and WACO (post way after cutoff) messages.

If you leave this processing option blank, the system uses today's date.

3. Enter Work Order Completion Document Type

Specify a UDC (00/DT) value that identifies the origin and purpose of the transaction. The JD Edwards EnterpriseOne system reserves several prefixes for document types, such as vouchers, invoices, receipts, and timesheets.

If you leave this processing option blank, the system uses the default value of document type *IC* (Completed W.O.s to Inventory).

4. Enter Work Order Issue Document Type

Specify a UDC (00/DT) value that identifies the origin and purpose of the transaction. The JD Edwards EnterpriseOne system reserves several prefixes for document types, such as vouchers, invoices, receipts, and timesheets.

If you leave this processing option blank, the system uses the default value of document type *IM* (Material Charged to W.O.s).

5. Enter Lean Transaction Completion Document Type

Specify a UDC (00/DT) value that identifies the origin and purpose of the transaction. The JD Edwards EnterpriseOne system reserves several prefixes for document types, such as vouchers, invoices, receipts, and timesheets.

If you leave this processing option blank, the system uses the default value of document type *LC* (Lean Completion).

6. Enter Lean Transaction Issue Document Type

Specify a UDC (00/DT) value that identifies the origin and purpose of the transaction. The JD Edwards EnterpriseOne system reserves several prefixes for document types, such as vouchers, invoices, receipts, and timesheets.

If you leave this processing option blank, the system uses the default value of document type *LM* (Lean Material Issue).

7. Show Item Level Detail

Specify whether you want the report to display item level details. Values are:

Blank: Do not display item level details.

1: Display item level details.

Reviewing General Ledger Information

This section provides an overview of the Lean Accounting - G/L Review program and lists the forms used to review general ledger information.

Understanding the Lean Accounting - G/L Review Program

Use the Lean Accounting - G/L Review program (PF31201) to locate information that is contained in the general ledger. You can search by production ID, transaction ID, or batch number. For example, you can enter a transaction ID to discover the general ledger batch to which you actually wrote. You can also use this program to ascertain whether a transaction has been posted.

The program extracts data from the Lean Transaction G/L Cross Reference table (FF31201).

Forms Used to Review General Ledger Information

Form Name	FormID	Navigation	Usage
Transaction / G/L Cross Reference - Select Cross Reference records	WF31201B	Orderless Manufacturing Accounting (GF3116), Lean Accounting - G/L Review	Find general ledger information by production ID, transaction ID, or batch number.
General Journal Review	W0911BA	Select a record and click the General Journal Review button on the Transaction / G/L Cross Reference - Select Cross Reference records form.	Review lean accounting journal entries.

APPENDIX A

JD Edwards EnterpriseOne Product Costing and Manufacturing Accounting Reports

This appendix provides an overview of JD Edwards EnterpriseOne Product Costing and Manufacturing Accounting reports and enables you to:

- View summary tables of all reports.
- View report details for selected reports.

JD Edwards EnterpriseOne Product Costing and Manufacturing Accounting Reports

JD Edwards EnterpriseOne Product Costing and Manufacturing Accounting reports provide a way for you to monitor product costs; verify the integrity of cost components; review standard, current, planned, actual, and completed amounts of work orders; assess labor efficiency; and review variance between standard or estimated costs against actual costs.

You can print reports to verify accuracy and track changes to product costing and manufacturing accounting data.

JD Edwards EnterpriseOne Product Costing and Manufacturing Accounting Reports: A to Z

This table lists the JD Edwards EnterpriseOne Product Costing and Manufacturing Accounting reports, sorted alphanumerically by report ID.

Report ID and Report Name	Description	Navigation
R30440 Costed Bill of Material Report	Reviews the total cost of parent items detailed by component costs. Use this information to develop more accurate financial plans by monitoring product costs.	Product Costing Reports (G3023), Costed Bill

Report ID and Report Name	Description	Navigation
R30445A Multi-Level Costed Bill Report	Reviews lists of the total cost of parent items detailed by component costs. Use this information to develop more accurate financial plans by monitoring product costs.	Product Costing Reports (G3023), Multi Level Costed Bill
R30543 Cost Component/Ledger Integrity	Compares the sum of the frozen standard cost components for an item on the Enter Cost Components form (W30026B) and the unit cost in the Item Cost table (F4105) and reviews the variances.	Product Costing Reports (G3023), Cost Integrity
R31401 Accounting Summary (Closed Work Orders)	Lists completed work orders and their accumulated costs. This report lists the total standard and actual costs and the variance between the two. Actual costs are detailed by material, labor, and overhead.	• Manufacturing Acctg Reports (G3123), Discrete Summary of Costs by Order • Manufacturing Acctg Reports (G3123), Process Summary of Costs by Order
R31425 Purchase Price Variance Report	Lists the actual price paid for an item, the standard price that you estimated for the item, and the variance between the two. It also lists a percent of variance for each item and the total costs by item for the entire report.	• Manufacturing Acctg Reports (G3123), Discrete Material Price Variance • Manufacturing Acctg Reports (G3123), Discrete Material Price Variance
R31426 Material Usage Variances Report	Lists the standard costs on a work order parts list and the actual costs recorded for the parts issued.	• Manufacturing Acctg Reports (G3123), Discrete Material Usage Variance - Std. • Manufacturing Acctg Reports (G3123), Process Material Usage Variance - Std.
R314271 Labor Rate Variance Report	Lists current and standard labor rates, and hours or amounts. It details labor rate variances between the standard rates that you estimated and the actual rates that you charged, and lists the percentage of variance.	• Manufacturing Acctg Reports (G3123), Discrete Labor Rate Variance • Manufacturing Acctg Reports (G3123), Process Labor Rate Variance
R31428 Work Order Labor Efficiency Report	Provides a detailed analysis of direct labor efficiency hours accumulated for a work order. It lists standard and actual hours, and calculates the cost of the variance between them based on standard labor rates.	• Manufacturing Acctg Reports (G3123), Discrete Labor Efficiency • Manufacturing Acctg Reports (G3123), Process Labor Efficiency

Report ID and Report Name	Description	Navigation
R31811 Completed Work Order Valuation	Displays the standard, actual, completed, and outstanding balance amounts by cost component and item for completed work orders. The Manufacturing Journal Entries program (R31802A) and the Variances program (R31804) have already been run for these work orders. The report displays the total for each type of cost by work order and a grand total of each cost for all of the work orders listed.	Manufacturing Acctg Reports (G3123), Discrete Completed Order Valuation
R31812A Work Order Activity - Amounts	Lists standard, current, planned, actual, and completed amounts of work orders. The report lists the costs of the components first, and then the costs of the parents.	Manufacturing Accounting (G3116), Work Order Activity - Amounts
R31812B Work Order Activity - Units	Lists the standard, current, planned, actual, and completed units of work orders. The report lists the costs of components first, and then the costs of the parents.	Manufacturing Accounting (G3116), Work Order Activity - Units
R31813 Engineering Variance	Lists work orders, their standard and current amounts, and their engineering variances.	Manufacturing Acctg Reports (G3123), Discrete Engineering Variance
R31814 Planned Variance	Lists all work orders and their planned variances. The purpose of the report is to compare the current amounts to planned amounts.	Manufacturing Acctg Reports (G3123), Discrete Planned Variance
R31816 Labor Efficiency Variances	Displays planned and actual labor hours (all cost components except A1), extended by standard rates, and the monetary amount of variance by work order and item number.	Manufacturing Acctg Reports (G3123), Discrete Labor Efficiency Variances
R31817 Total/WIP and Other Variances	Displays the standard, actual, and completed amounts, as well as total and other variances by cost component and item for work orders.	Manufacturing Acctg Reports (G3123), Discrete Total/WIP and Other Variances
R31818 Work Order Variances - Amounts	Displays detailed production costs and variance amounts for work orders.	Manufacturing Acctg Reports (G3123), Discrete Completed Order Variances

JD Edwards EnterpriseOne Product Costing and Manufacturing Accounting: Selected Reports

This section provides detailed information, including processing options, for individual reports. The reports are listed alphanumerically by report ID.

R30440 - Costed Bill of Material Report

You can customize this report to help you in the analysis; for example, you can:

- Process the report using any valid cost method.
- Process the report for simulated or frozen costs.
- Specify a date in the processing options from which the information is retrieved if you do not want to use the current date.
- Print all product costs and user-defined categories on the report.
- Print the report for one branch, selected branches, or all branches.

This report presents the component costs in five user-defined cost buckets. In addition, the report displays totals of the cost buckets for each item. Each cost bucket can contain several cost components, depending on how you set up user-defined codes (UDCs).

Processing Options for Costed Bill of Material Report (R30440)

These processing options control default processing for the Costed Bill of Material report.

Defaults

This processing option controls default values that the system uses when generating the report.

As of Date Specify the as of date for the bill of material. If you leave this option blank, the system uses the current date as the default value.

Display

These processing options control which information is displayed on the report.

Cost Method Specify the cost method to be used, for example *01, 02,* and *03.* If you leave this option blank, the system uses cost method *07* (standard cost) as the default value.

Simulated/Frozen Specify the costs to be printed. Values are:

1: Simulated

2: Frozen

Quantity - Requested Quantity Specify the number of units to cost (for example, 10,000).

R30445A - Multi-Level Costed Bill Report

You can customize this report to help you in the analysis; for example, you can:

- Specify the number of units that the program costs when you run the report.
- Process the report using any valid cost method.
- Process the report for simulated or frozen costs.
- Specify a date for the program to use as a criterion when accessing information.
- Print all product costs and user-defined categories on the report.
- Print the report for one branch, selected branches, or all branches.

This report presents the component costs in five user-defined cost buckets. In addition, the program totals the cost buckets for each item. Each cost bucket can contain several cost components, depending on how you set up UDCs.

Processing Options for Multi-Level Costed Bill Report (R30445A)

These processing options control default processing for the Multi-Level Costed Bill report.

Defaults

This processing option controls default values that the system uses when generating the report.

As of Date Specify the as of date for the bill of material. If you leave the field blank, the system uses the current date.

Display

These processing options control which information is displayed on the report.

Cost Method Specify the cost method to be used. If you leave this option blank, the system uses cost method 07 (standard cost) as the default value.

Simulated / Frozen Specify the costs to be printed. Values are:

1: Simulated

2: Frozen

Quantity - Requested Quantity Specify the units to cost (that is, 10,000).

Print

These processing options control the print format of the report.

Indented Report Switch Specify *1* to print an indented Costed Bill of Material Report.

Unit Cost Detail Specify *1* to print a unit cost line of detail. If left blank, only one line of detail will be printed for each item.

R30543 - Cost Component/Ledger Integrity

For cost level 3 items, the program uses the unit cost for the primary location of the item in the Item Cost table.

Note. If you use actual costing, do not run this report because it does not produce accurate and relevant information about the company's costs.

Processing Options for Cost Component/Ledger Integrity (R30543)

This processing option controls default processing for the Cost Component/Ledger Integrity report.

Report Option

This processing option controls which information is included in the report.

Selection value Specify *1* to see report detail for all items processed. If left blank, only items with cost discrepancies will be printed.

R31401 - Accounting Summary - Closed Work Orders

The system retrieves this information when you run the report:

- Labor and miscellaneous costs come from values in the Work Order Time Transactions table (F31122) for the work order.
- Overhead costs are the machine hours in the Work Order Time Transactions table multiplied by the overhead rates entered for the work center in the Work Center Rates table (F30008).
- The total actual cost is the accumulated detail for labor, overhead, material, and miscellaneous costs.
- The total standard cost is the number of items completed on the work order multiplied by the parent item's frozen standard cost from the Item Cost table (F4105).

R31425 - Purchase Price Variance Report

The system retrieves this information when you run the report:

- Standard costs from the Item Cost table (F4105).
- Actual costs from the Purchase Order Receiver table (F43121).

R31426 - Material Usage Variances Report

The report contains these elements:

- The standard units required on a work order.
- The actual units consumed.
- The variance between the two in both units and cost.

The system performs these calculations:

- The standard units are the parent quantity specified on the work order or the quantity of the component specified on the work order parts list.

  When the work order is completed (status 99), the report lists the work order quantity completed, rather than the original parent quantity ordered.
- The variance percentage results from the actual units or amounts divided by the standard units or amounts.

  The variance percentage provides an accuracy value. For example, an accuracy value of 100.00 indicates that the planned quantity or amount was the same as the actual quantity or amount used.

Processing Options for Material Usage Variances Report (R31426)

This processing option controls default processing for the Material Usage Variance report.

Option

This processing option controls the data selection for the report.

Selection value Specify the data selection value. You can select multiple specific values.

1: The primary sequence is by component item number.

**VALUES:* Display a special display screen allowing the entry of up to 45 specific values. If you specify *VALUES in multiple selections of the original display, you will be prompted for multiple values lists.

**BLANKS:* Search on a blank value. You cannot leave the values field blank to search on blanks. In this case *ALL is the default value.

**ZEROS:* Search for amounts equal to zero.

**RANGE:* Display a special display screen which allows the entry of a range of values (that is, from 1 to 50). The first value MUST be LESS than the second value. If it is equal or greater than, it will not work.

**ALL:* Select all values for a field.

R314271 - Labor Rate Variance Report

The system performs the calculations based on this information:

- The standard rates come from the Work Center Rates table (F30008).
- The standard hours come from the Work Order Routing table (F3112).
- The actual amounts are the actual hours from the Work Order Time Transactions table (F31122) multiplied by the standard rate.

Processing Options for Labor Rate Variance Report (R314271)

These processing options control default processing for the Labor Rate Variance report.

Document Type

This processing option controls the document type that you want to associate with labor variances.

Document Type Specify the origin and purpose of the transaction. The system reserves several prefixes for document types, such as vouchers, invoices, receipts, and timesheets.

R31428 - Work Order Labor Efficiency Report

The system retrieves this information:

- The actual values, which are the values from the Work Order Time Transactions table (F31122) for the operation sequence and employee.
- The frozen standard hours, which are from the Work Order Routing table (F3112).

- The frozen standard labor rates, which are from the Work Center Rates table (F30008), based on the type code for the operation sequence.

Processing Options for Work Order Labor Efficiency Report (R31428)

These processing options control default processing for the Work Order Labor Efficiency report.

WO Status

These processing options specify the status range for work orders that you want to include in the report.

Work Order Status Range (Optional) Specify the range of work order statuses to be selected for processing.

From Work Order Status Enter a user-defined code (00/SS) that describes the status of a work order, rate schedule, or engineering change order. Any status change from 90 through 99 triggers the system to automatically update the completion date.

To Work Order Status Enter the next status for a work order, according to the work order activity rules, as the work order moves through the approval route. You must define a status code as a work order status in the Work Order Activity Rules table before you can use it as a next status.

Glossary of JD Edwards EnterpriseOne Terms

Accessor Methods/Assessors Java methods to "get" and "set" the elements of a value object or other source file.

activity rule The criteria by which an object progresses from one given point to the next in a flow.

add mode A condition of a form that enables users to input data.

Advanced Planning Agent (APAg) A JD Edwards EnterpriseOne tool that can be used to extract, transform, and load enterprise data. APAg supports access to data sources in the form of rational databases, flat file format, and other data or message encoding, such as XML.

alternate currency A currency that is different from the domestic currency (when dealing with a domestic-only transaction) or the domestic and foreign currency of a transaction.

In JD Edwards EnterpriseOne Financial Management, alternate currency processing enables you to enter receipts and payments in a currency other than the one in which they were issued.

Application Server Software that provides the business logic for an application program in a distributed environment. The servers can be Oracle Application Server (OAS) or WebSphere Application Server (WAS).

as if processing A process that enables you to view currency amounts as if they were entered in a currency different from the domestic and foreign currency of the transaction.

as of processing A process that is run as of a specific point in time to summarize transactions up to that date. For example, you can run various JD Edwards EnterpriseOne reports as of a specific date to determine balances and amounts of accounts, units, and so on as of that date.

Auto Commit Transaction A database connection through which all database operations are immediately written to the database.

back-to-back process A process in JD Edwards EnterpriseOne Supply Management that contains the same keys that are used in another process.

batch processing A process of transferring records from a third-party system to JD Edwards EnterpriseOne.

In JD Edwards EnterpriseOne Financial Management, batch processing enables you to transfer invoices and vouchers that are entered in a system other than JD Edwards EnterpriseOne to JD Edwards EnterpriseOne Accounts Receivable and JD Edwards EnterpriseOne Accounts Payable, respectively. In addition, you can transfer address book information, including customer and supplier records, to JD Edwards EnterpriseOne.

batch server A server that is designated for running batch processing requests. A batch server typically does not contain a database nor does it run interactive applications.

batch-of-one immediate A transaction method that enables a client application to perform work on a client workstation, then submit the work all at once to a server application for further processing. As a batch process is running on the server, the client application can continue performing other tasks.

See also direct connect and store-and-forward.

best practices Non-mandatory guidelines that help the developer make better design decisions.

BPEL Abbreviation for *Business Process Execution Language*, a standard web services orchestration language, which enables you to assemble discrete services into an end-to-end process flow.

BPEL PM Abbreviation for *Business Process Execution Language Process Manager*, a comprehensive infrastructure for creating, deploying, and managing BPEL business processes.

Build Configuration File Configurable settings in a text file that are used by a build program to generate ANT scripts. ANT is a software tool used for automating build processes. These scripts build published business services.

build engineer An actor that is responsible for building, mastering, and packaging artifacts. Some build engineers are responsible for building application artifacts, and some are responsible for building foundation artifacts.

Build Program A WIN32 executable that reads build configuration files and generates an ANT script for building published business services.

business analyst An actor that determines if and why an EnterpriseOne business service needs to be developed.

business function A named set of user-created, reusable business rules and logs that can be called through event rules. Business functions can run a transaction or a subset of a transaction (check inventory, issue work orders, and so on). Business functions also contain the application programming interfaces (APIs) that enable them to be called from a form, a database trigger, or a non-JD Edwards EnterpriseOne application. Business functions can be combined with other business functions, forms, event rules, and other components to make up an application. Business functions can be created through event rules or third-generation languages, such as C. Examples of business functions include Credit Check and Item Availability.

business function event rule See named event rule (NER).

business service EnterpriseOne business logic written in Java. A business service is a collection of one or more artifacts. Unless specified otherwise, a business service implies both a published business service and business service.

business service artifacts Source files, descriptors, and so on that are managed for business service development and are needed for the business service build process.

business service class method A method that accesses resources provided by the business service framework.

business service configuration files Configuration files include, but are not limited to, interop.ini, JDBj.ini, and jdelog.properties.

business service cross reference A key and value data pair used during orchestration. Collectively refers to both the code and the key cross reference in the WSG/XPI based system.

business service cross-reference utilities Utility services installed in a BPEL/ESB environment that are used to access JD Edwards EnterpriseOne orchestration cross-reference data.

business service development environment A framework needed by an integration developer to develop and manage business services.

business services development tool Otherwise known as JDeveloper.

business service EnterpriseOne object A collection of artifacts managed by EnterpriseOne LCM tools. Named and represented within EnterpriseOne LCM similarly to other EnterpriseOne objects like tables, views, forms, and so on.

business service framework Parts of the business service foundation that are specifically for supporting business service development.

business service payload An object that is passed between an enterprise server and a business services server. The business service payload contains the input to the business service when passed to the business services server. The business service payload contains the results from the business service when passed to the Enterprise Server. In the case of notifications, the return business service payload contains the acknowledgement.

business service property Key value data pairs used to control the behavior or functionality of business services.

Business Service Property Admin Tool An EnterpriseOne application for developers and administrators to manage business service property records.

business service property business service group A classification for business service property at the business service level. This is generally a business service name. A business service level contains one or more business service property groups. Each business service property group may contain zero or more business service property records.

business service property categorization A way to categorize business service properties. These properties are categorized by business service.

business service property key A unique name that identifies the business service property globally in the system.

business service property utilities A utility API used in business service development to access EnterpriseOne business service property data.

business service property value A value for a business service property.

business service repository A source management system, for example ClearCase, where business service artifacts and build files are stored. Or, a physical directory in network.

business services server The physical machine where the business services are located. Business services are run on an application server instance.

business services source file or business service class One type of business service artifact. A text file with the .java file type written to be compiled by a Java compiler.

business service value object template The structural representation of a business service value object used in a C-business function.

Business Service Value Object Template Utility A utility used to create a business service value object template from a business service value object.

business services server artifact The object to be deployed to the business services server.

business view A means for selecting specific columns from one or more JD Edwards EnterpriseOne application tables whose data is used in an application or report. A business view does not select specific rows, nor does it contain any actual data. It is strictly a view through which you can manipulate data.

central objects merge A process that blends a customer's modifications to the objects in a current release with objects in a new release.

central server A server that has been designated to contain the originally installed version of the software (central objects) for deployment to client computers. In a typical JD Edwards EnterpriseOne installation, the software is loaded on to one machine—the central server. Then, copies of the software are pushed out or downloaded to various workstations attached to it. That way, if the software is altered or corrupted through its use on workstations, an original set of objects (central objects) is always available on the central server.

charts Tables of information in JD Edwards EnterpriseOne that appear on forms in the software.

check-in repository A repository for developers to check in and check out business service artifacts. There are multiple check-in repositories. Each can be used for a different purpose (for example, development, production, testing, and so on).

connector Component-based interoperability model that enables third-party applications and JD Edwards EnterpriseOne to share logic and data. The JD Edwards EnterpriseOne connector architecture includes Java and COM connectors.

contra/clearing account A general ledger account in JD Edwards EnterpriseOne Financial Management that is used by the system to offset (balance) journal entries. For example, you can use a contra/clearing account to balance the entries created by allocations in JD Edwards EnterpriseOne Financial Management.

Control Table Workbench An application that, during the Installation Workbench processing, runs the batch applications for the planned merges that update the data dictionary, user-defined codes, menus, and user override tables.

control tables merge A process that blends a customer's modifications to the control tables with the data that accompanies a new release.

correlation data The data used to tie HTTP responses with requests that consist of business service name and method.

cost assignment The process in JD Edwards EnterpriseOne Advanced Cost Accounting of tracing or allocating resources to activities or cost objects.

cost component In JD Edwards EnterpriseOne Manufacturing, an element of an item's cost (for example, material, labor, or overhead).

credentials A valid set of JD Edwards EnterpriseOne username/password/environment/role, EnterpriseOne session, or EnterpriseOne token.

cross-reference utility services Utility services installed in a BPEL/ESB environment that access EnterpriseOne cross-reference data.

cross segment edit A logic statement that establishes the relationship between configured item segments. Cross segment edits are used to prevent ordering of configurations that cannot be produced.

currency restatement The process of converting amounts from one currency into another currency, generally for reporting purposes. You can use the currency restatement process, for example, when many currencies must be restated into a single currency for consolidated reporting.

cXML A protocol used to facilitate communication between business documents and procurement applications, and between e-commerce hubs and suppliers.

database credentials A valid database username/password.

database server A server in a local area network that maintains a database and performs searches for client computers.

Data Source Workbench An application that, during the Installation Workbench process, copies all data sources that are defined in the installation plan from the Data Source Master and Table and Data Source Sizing tables in the Planner data source to the system-release number data source. It also updates the Data Source Plan detail record to reflect completion.

date pattern A calendar that represents the beginning date for the fiscal year and the ending date for each period in that year in standard and 52-period accounting.

denominated-in currency The company currency in which financial reports are based.

deployment artifacts Artifacts that are needed for the deployment process, such as servers, ports, and such.

deployment server A server that is used to install, maintain, and distribute software to one or more enterprise servers and client workstations.

detail information Information that relates to individual lines in JD Edwards EnterpriseOne transactions (for example, voucher pay items and sales order detail lines).

direct connect A transaction method in which a client application communicates interactively and directly with a server application.

See also batch-of-one immediate and store-and-forward.

Do Not Translate (DNT) A type of data source that must exist on the iSeries because of BLOB restrictions.

dual pricing The process of providing prices for goods and services in two currencies.

duplicate published business services authorization records Two published business services authorization records with the same user identification information and published business services identification information.

embedded application server instance An OC4J instance started by and running wholly within JDeveloper.

edit code A code that indicates how a specific value for a report or a form should appear or be formatted. The default edit codes that pertain to reporting require particular attention because they account for a substantial amount of information.

edit mode A condition of a form that enables users to change data.

edit rule A method used for formatting and validating user entries against a predefined rule or set of rules.

Electronic Data Interchange (EDI) An interoperability model that enables paperless computer-to-computer exchange of business transactions between JD Edwards EnterpriseOne and third-party systems. Companies that use EDI must have translator software to convert data from the EDI standard format to the formats of their computer systems.

embedded event rule An event rule that is specific to a particular table or application. Examples include form-to-form calls, hiding a field based on a processing option value, and calling a business function. Contrast with the business function event rule.

Employee Work Center A central location for sending and receiving all JD Edwards EnterpriseOne messages (system and user generated), regardless of the originating application or user. Each user has a mailbox that contains workflow and other messages, including Active Messages.

enterprise server A server that contains the database and the logic for JD Edwards EnterpriseOne.

Enterprise Service Bus (ESB) Middleware infrastructure products or technologies based on web services standards that enable a service-oriented architecture using an event-driven and XML-based messaging framework (the bus).

EnterpriseOne administrator An actor responsible for the EnterpriseOne administration system.

EnterpriseOne credentials A user ID, password, environment, and role used to validate a user of EnterpriseOne.

EnterpriseOne object A reusable piece of code that is used to build applications. Object types include tables, forms, business functions, data dictionary items, batch processes, business views, event rules, versions, data structures, and media objects.

EnterpriseOne development client Historically called "fat client," a collection of installed EnterpriseOne components required to develop EnterpriseOne artifacts, including the Microsoft Windows client and design tools.

EnterpriseOne extension A JDeveloper component (plug-in) specific to EnterpriseOne. A JDeveloper wizard is a specific example of an extension.

EnterpriseOne process A software process that enables JD Edwards EnterpriseOne clients and servers to handle processing requests and run transactions. A client runs one process, and servers can have multiple instances of a process. JD Edwards EnterpriseOne processes can also be dedicated to specific tasks (for example, workflow messages and data replication) to ensure that critical processes don't have to wait if the server is particularly busy.

EnterpriseOne resource Any EnterpriseOne table, metadata, business function, dictionary information, or other information restricted to authorized users.

Environment Workbench An application that, during the Installation Workbench process, copies the environment information and Object Configuration Manager tables for each environment from the Planner data source to the system-release number data source. It also updates the Environment Plan detail record to reflect completion.

escalation monitor A batch process that monitors pending requests or activities and restarts or forwards them to the next step or user after they have been inactive for a specified amount of time.

event rule A logic statement that instructs the system to perform one or more operations based on an activity that can occur in a specific application, such as entering a form or exiting a field.

explicit transaction Transaction used by a business service developer to explicitly control the type (auto or manual) and the scope of transaction boundaries within a business service.

exposed method or value object Published business service source files or parts of published business service source files that are part of the published interface. These are part of the contract with the customer.

facility An entity within a business for which you want to track costs. For example, a facility might be a warehouse location, job, project, work center, or branch/plant. A facility is sometimes referred to as a "business unit."

fast path A command prompt that enables the user to move quickly among menus and applications by using specific commands.

file server A server that stores files to be accessed by other computers on the network. Unlike a disk server, which appears to the user as a remote disk drive, a file server is a sophisticated device that not only stores files, but also manages them and maintains order as network users request files and make changes to these files.

final mode The report processing mode of a processing mode of a program that updates or creates data records.

foundation A framework that must be accessible for execution of business services at runtime. This includes, but is not limited to, the Java Connector and JDBj.

FTP server A server that responds to requests for files via file transfer protocol.

header information Information at the beginning of a table or form. Header information is used to identify or provide control information for the group of records that follows.

HTTP Adapter A generic set of services that are used to do the basic HTTP operations, such as GET, POST, PUT, DELETE, TRACE, HEAD, and OPTIONS with the provided URL.

instantiate A Java term meaning "to create." When a class is instantiated, a new instance is created.

integration developer The user of the system who develops, runs, and debugs the EnterpriseOne business services. The integration developer uses the EnterpriseOne business services to develop these components.

integration point (IP) The business logic in previous implementations of EnterpriseOne that exposes a document level interface. This type of logic used to be called XBPs. In EnterpriseOne 8.11, IPs are implemented in Web Services Gateway powered by webMethods.

integration server A server that facilitates interaction between diverse operating systems and applications across internal and external networked computer systems.

integrity test A process used to supplement a company's internal balancing procedures by locating and reporting balancing problems and data inconsistencies.

interface table See Z table.

internal method or value object Business service source files or parts of business service source files that are not part of the published interface. These could be private or protected methods. These could be value objects not used in published methods.

interoperability model A method for third-party systems to connect to or access JD Edwards EnterpriseOne.

in-your-face-error In JD Edwards EnterpriseOne, a form-level property which, when enabled, causes the text of application errors to appear on the form.

IServer service This internet server service resides on the web server and is used to speed up delivery of the Java class files from the database to the client.

jargon An alternative data dictionary item description that JD Edwards EnterpriseOne appears based on the product code of the current object.

Java application server A component-based server that resides in the middle-tier of a server-centric architecture. This server provides middleware services for security and state maintenance, along with data access and persistence.

JDBNET A database driver that enables heterogeneous servers to access each other's data.

JDEBASE Database Middleware A JD Edwards EnterpriseOne proprietary database middleware package that provides platform-independent APIs, along with client-to-server access.

JDECallObject An API used by business functions to invoke other business functions.

jde.ini A JD Edwards EnterpriseOne file (or member for iSeries) that provides the runtime settings required for JD Edwards EnterpriseOne initialization. Specific versions of the file or member must reside on every machine running JD Edwards EnterpriseOne. This includes workstations and servers.

JDEIPC Communications programming tools used by server code to regulate access to the same data in multiprocess environments, communicate and coordinate between processes, and create new processes.

jde.log The main diagnostic log file of JD Edwards EnterpriseOne. This file is always located in the root directory on the primary drive and contains status and error messages from the startup and operation of JD Edwards EnterpriseOne.

JDENET A JD Edwards EnterpriseOne proprietary communications middleware package. This package is a peer-to-peer, message-based, socket-based, multiprocess communications middleware solution. It handles client-to-server and server-to-server communications for all JD Edwards EnterpriseOne supported platforms.

JDeveloper Project An artifact that JDeveloper uses to categorize and compile source files.

JDeveloper Workspace An artifact that JDeveloper uses to organize project files. It contains one or more project files.

JMS Queue A Java Messaging service queue used for point-to-point messaging.

listener service A listener that listens for XML messages over HTTP.

local repository A developer's local development environment that is used to store business service artifacts.

local standalone BPEL/ESB server A standalone BPEL/ESB server that is not installed within an application server.

Location Workbench An application that, during the Installation Workbench process, copies all locations that are defined in the installation plan from the Location Master table in the Planner data source to the system data source.

logic server A server in a distributed network that provides the business logic for an application program. In a typical configuration, pristine objects are replicated on to the logic server from the central server. The logic server, in conjunction with workstations, actually performs the processing required when JD Edwards EnterpriseOne software runs.

MailMerge Workbench An application that merges Microsoft Word 6.0 (or higher) word-processing documents with JD Edwards EnterpriseOne records to automatically print business documents. You can use MailMerge Workbench to print documents, such as form letters about verification of employment.

Manual Commit transaction A database connection where all database operations delay writing to the database until a call to commit is made.

master business function (MBF) An interactive master file that serves as a central location for adding, changing, and updating information in a database. Master business functions pass information between data entry forms and the appropriate tables. These master functions provide a common set of functions that contain all of the necessary default and editing rules for related programs. MBFs contain logic that ensures the integrity of adding, updating, and deleting information from databases.

master table See published table.

matching document A document associated with an original document to complete or change a transaction. For example, in JD Edwards EnterpriseOne Financial Management, a receipt is the matching document of an invoice, and a payment is the matching document of a voucher.

media storage object Files that use one of the following naming conventions that are not organized into table format: Gxxx, xxxGT, or GTxxx.

message center A central location for sending and receiving all JD Edwards EnterpriseOne messages (system and user generated), regardless of the originating application or user.

messaging adapter An interoperability model that enables third-party systems to connect to JD Edwards EnterpriseOne to exchange information through the use of messaging queues.

messaging server A server that handles messages that are sent for use by other programs using a messaging API. Messaging servers typically employ a middleware program to perform their functions.

Middle-Tier BPEL/ESB Server A BPEL/ESB server that is installed within an application server.

Monitoring Application An EnterpriseOne tool provided for an administrator to get statistical information for various EntepriseOne servers, reset statistics, and set notifications.

named event rule (NER) Encapsulated, reusable business logic created using event rules, rather that C programming. NERs are also called business function event rules. NERs can be reused in multiple places by multiple programs. This modularity lends itself to streamlining, reusability of code, and less work.

nota fiscal In Brazil, a legal document that must accompany all commercial transactions for tax purposes and that must contain information required by tax regulations.

nota fiscal factura In Brazil, a nota fiscal with invoice information.

See also *nota fiscal.*

Object Configuration Manager (OCM) In JD Edwards EnterpriseOne, the object request broker and control center for the runtime environment. OCM keeps track of the runtime locations for business functions, data, and batch applications. When one of these objects is called, OCM directs access to it using defaults and overrides for a given environment and user.

Object Librarian A repository of all versions, applications, and business functions reusable in building applications. Object Librarian provides check-out and check-in capabilities for developers, and it controls the creation, modification, and use of JD Edwards EnterpriseOne objects. Object Librarian supports multiple environments (such as production and development) and enables objects to be easily moved from one environment to another.

Object Librarian merge A process that blends any modifications to the Object Librarian in a previous release into the Object Librarian in a new release.

Open Data Access (ODA) An interoperability model that enables you to use SQL statements to extract JD Edwards EnterpriseOne data for summarization and report generation.

Output Stream Access (OSA) An interoperability model that enables you to set up an interface for JD Edwards EnterpriseOne to pass data to another software package, such as Microsoft Excel, for processing.

package JD Edwards EnterpriseOne objects are installed to workstations in packages from the deployment server. A package can be compared to a bill of material or kit that indicates the necessary objects for that workstation and where on the deployment server the installation program can find them. It is point-in-time snapshot of the central objects on the deployment server.

package build A software application that facilitates the deployment of software changes and new applications to existing users. Additionally, in JD Edwards EnterpriseOne, a package build can be a compiled version of the software. When you upgrade your version of the ERP software, for example, you are said to take a package build.

Consider the following context: “Also, do not transfer business functions into the production path code until you are ready to deploy, because a global build of business functions done during a package build will automatically include the new functions.” The process of creating a package build is often referred to, as it is in this example, simply as “a package build.”

package location The directory structure location for the package and its set of replicated objects. This is usually \\deployment server\release\path_code\package\package name. The subdirectories under this path are where the replicated objects for the package are placed. This is also referred to as where the package is built or stored.

Package Workbench An application that, during the Installation Workbench process, transfers the package information tables from the Planner data source to the system-release number data source. It also updates the Package Plan detail record to reflect completion.

Pathcode Directory The specific portion of the file system on the EnterpriseOne development client where EnterpriseOne development artifacts are stored.

patterns General repeatable solutions to a commonly occurring problem in software design. For business service development, the focus is on the object relationships and interactions. For orchestrations, the focus is on the integration patterns (for example, synchronous and asynchronous request/response, publish, notify, and receive/reply).

planning family A means of grouping end items whose similarity of design and manufacture facilitates being planned in aggregate.

preference profile The ability to define default values for specified fields for a user-defined hierarchy of items, item groups, customers, and customer groups.

print server The interface between a printer and a network that enables network clients to connect to the printer and send their print jobs to it. A print server can be a computer, separate hardware device, or even hardware that resides inside of the printer itself.

pristine environment A JD Edwards EnterpriseOne environment used to test unaltered objects with JD Edwards EnterpriseOne demonstration data or for training classes. You must have this environment so that you can compare pristine objects that you modify.

processing option A data structure that enables users to supply parameters that regulate the running of a batch program or report. For example, you can use processing options to specify default values for certain fields, to determine how information appears or is printed, to specify date ranges, to supply runtime values that regulate program execution, and so on.

production environment A JD Edwards EnterpriseOne environment in which users operate EnterpriseOne software.

production-grade file server A file server that has been quality assurance tested and commercialized and that is usually provided in conjunction with user support services.

Production Published Business Services Web Service Published business services web service deployed to a production application server.

program temporary fix (PTF) A representation of changes to JD Edwards EnterpriseOne software that your organization receives on magnetic tapes or disks.

project In JD Edwards EnterpriseOne, a virtual container for objects being developed in Object Management Workbench.

promotion path The designated path for advancing objects or projects in a workflow. The following is the normal promotion cycle (path):

11>21>26>28>38>01

In this path, *11* equals new project pending review, *21* equals programming, *26* equals QA test/review, *28* equals QA test/review complete, *38* equals in production, *01* equals complete. During the normal project promotion cycle, developers check objects out of and into the development path code and then promote them to the prototype path code. The objects are then moved to the productions path code before declaring them complete.

proxy server A server that acts as a barrier between a workstation and the internet so that the enterprise can ensure security, administrative control, and caching service.

published business service EnterpriseOne service level logic and interface. A classification of a published business service indicating the intention to be exposed to external (non-EnterpriseOne) systems.

published business service identification information Information about a published business service used to determine relevant authorization records. Published business services + method name, published business services, or *ALL.

published business service web service — Published business services components packaged as J2EE Web Service (namely, a J2EE EAR file that contains business service classes, business service foundation, configuration files, and web service artifacts).

published table — Also called a master table, this is the central copy to be replicated to other machines. Residing on the publisher machine, the F98DRPUB table identifies all of the published tables and their associated publishers in the enterprise.

publisher — The server that is responsible for the published table. The F98DRPUB table identifies all of the published tables and their associated publishers in the enterprise.

pull replication — One of the JD Edwards EnterpriseOne methods for replicating data to individual workstations. Such machines are set up as pull subscribers using JD Edwards EnterpriseOne data replication tools. The only time that pull subscribers are notified of changes, updates, and deletions is when they request such information. The request is in the form of a message that is sent, usually at startup, from the pull subscriber to the server machine that stores the F98DRPCN table.

QBE — An abbreviation for *query by example*. In JD Edwards EnterpriseOne, the QBE line is the top line on a detail area that is used for filtering data.

real-time event — A message triggered from EnterpriseOne application logic that is intended for external systems to consume.

refresh — A function used to modify JD Edwards EnterpriseOne software, or subset of it, such as a table or business data, so that it functions at a new release or cumulative update level, such as B73.2 or B73.2.1.

replication server — A server that is responsible for replicating central objects to client machines.

Rt-Addressing — Unique data identifying a browser session that initiates the business services call request host/port user session.

rules — Mandatory guidelines that are not enforced by tooling, but must be followed in order to accomplish the desired results and to meet specified standards.

quote order — In JD Edwards Procurement and Subcontract Management, a request from a supplier for item and price information from which you can create a purchase order.

In JD Edwards Sales Order Management, item and price information for a customer who has not yet committed to a sales order.

secure by default — A security model that assumes that a user does not have permission to execute an object unless there is a specific record indicating such permissions.

Secure Socket Layer (SSL) — A security protocol that provides communication privacy. SSL enables client and server applications to communicate in a way that is designed to prevent eavesdropping, tampering, and message forgery.

SEI implementation — A Java class that implements the methods that declare in a Service Endpoint Interface (SEI).

selection — Found on JD Edwards EnterpriseOne menus, a selection represents functions that you can access from a menu. To make a selection, type the associated number in the Selection field and press Enter.

serialize — The process of converting an object or data into a format for storage or transmission across a network connection link with the ability to reconstruct the original data or objects when needed.

Server Workbench — An application that, during the Installation Workbench process, copies the server configuration files from the Planner data source to the system-release number

	data source. The application also updates the Server Plan detail record to reflect completion.
Service Endpoint Interface (SEI)	A Java interface that declares the methods that a client can invoke on the service.
SOA	Abbreviation for *Service Oriented Architecture*.
softcoding	A coding technique that enables an administrator to manipulate site-specific variables that affect the execution of a given process.
source repository	A repository for HTTP adapter and listener service development environment artifacts.
spot rate	An exchange rate entered at the transaction level. This rate overrides the exchange rate that is set up between two currencies.
Specification merge	A merge that comprises three merges: Object Librarian merge, Versions List merge, and Central Objects merge. The merges blend customer modifications with data that accompanies a new release.
specification	A complete description of a JD Edwards EnterpriseOne object. Each object has its own specification, or name, which is used to build applications.
Specification Table Merge Workbench	An application that, during the Installation Workbench process, runs the batch applications that update the specification tables.
SSL Certificate	A special message signed by a certificate authority that contains the name of a user and that user's public key in such a way that anyone can "verify" that the message was signed by no one other than the certification authority and thereby develop trust in the user's public key.
store-and-forward	The mode of processing that enables users who are disconnected from a server to enter transactions and then later connect to the server to upload those transactions.
subscriber table	Table F98DRSUB, which is stored on the publisher server with the F98DRPUB table and identifies all of the subscriber machines for each published table.
superclass	An inheritance concept of the Java language where a class is an instance of something, but is also more specific. "Tree" might be the superclass of "Oak" and "Elm," for example.
supplemental data	Any type of information that is not maintained in a master file. Supplemental data is usually additional information about employees, applicants, requisitions, and jobs (such as an employee's job skills, degrees, or foreign languages spoken). You can track virtually any type of information that your organization needs. For example, in addition to the data in the standard master tables (the Address Book Master, Customer Master, and Supplier Master tables), you can maintain other kinds of data in separate, generic databases. These generic databases enable a standard approach to entering and maintaining supplemental data across JD Edwards EnterpriseOne systems.
table access management (TAM)	The JD Edwards EnterpriseOne component that handles the storage and retrieval of use-defined data. TAM stores information, such as data dictionary definitions; application and report specifications; event rules; table definitions; business function input parameters and library information; and data structure definitions for running applications, reports, and business functions.
Table Conversion Workbench	An interoperability model that enables the exchange of information between JD Edwards EnterpriseOne and third-party systems using non-JD Edwards EnterpriseOne tables.

table conversion An interoperability model that enables the exchange of information between JD Edwards EnterpriseOne and third-party systems using non-JD Edwards EnterpriseOne tables.

table event rules Logic that is attached to database triggers that runs whenever the action specified by the trigger occurs against the table. Although JD Edwards EnterpriseOne enables event rules to be attached to application events, this functionality is application specific. Table event rules provide embedded logic at the table level.

terminal server A server that enables terminals, microcomputers, and other devices to connect to a network or host computer or to devices attached to that particular computer.

three-tier processing The task of entering, reviewing and approving, and posting batches of transactions in JD Edwards EnterpriseOne.

three-way voucher match In JD Edwards Procurement and Subcontract Management, the process of comparing receipt information to supplier's invoices to create vouchers. In a three-way match, you use the receipt records to create vouchers.

transaction processing (TP) monitor A monitor that controls data transfer between local and remote terminals and the applications that originated them. TP monitors also protect data integrity in the distributed environment and may include programs that validate data and format terminal screens.

transaction processing method A method related to the management of a manual commit transaction boundary (for example, start, commit, rollback, and cancel).

transaction set An electronic business transaction (electronic data interchange standard document) made up of segments.

trigger One of several events specific to data dictionary items. You can attach logic to a data dictionary item that the system processes automatically when the event occurs.

triggering event A specific workflow event that requires special action or has defined consequences or resulting actions.

two-way authentication An authentication mechanism in which both client and server authenticate themselves by providing the SSL certificates to each other.

two-way voucher match In JD Edwards Procurement and Subcontract Management, the process of comparing purchase order detail lines to the suppliers' invoices to create vouchers. You do not record receipt information.

user identification information User ID, role, or *public.

User Overrides merge Adds new user override records into a customer's user override table.

value object A specific type of source file that holds input or output data, much like a data structure passes data. Value objects can be exposed (used in a published business service) or internal, and input or output. They are comprised of simple and complex elements and accessories to those elements.

variance In JD Edwards Capital Asset Management, the difference between revenue generated by a piece of equipment and costs incurred by the equipment.

In JD Edwards EnterpriseOne Project Costing and JD Edwards EnterpriseOne Manufacturing, the difference between two methods of costing the same item (for example, the difference between the frozen standard cost and the current cost is an engineering variance). Frozen standard costs come from the Cost Components table, and the current costs are calculated using the current bill of material, routing, and overhead rates.

versioning a published business service Adding additional functionality/interfaces to the published business services without modifying the existing functionality/interfaces.

Version List merge The Versions List merge preserves any non-XJDE and non-ZJDE version specifications for objects that are valid in the new release, as well as their processing options data.

visual assist Forms that can be invoked from a control via a trigger to assist the user in determining what data belongs in the control.

vocabulary override An alternate description for a data dictionary item that appears on a specific JD Edwards EnterpriseOne form or report.

wchar_t An internal type of a wide character. It is used for writing portable programs for international markets.

web application server A web server that enables web applications to exchange data with the back-end systems and databases used in eBusiness transactions.

web server A server that sends information as requested by a browser, using the TCP/IP set of protocols. A web server can do more than just coordination of requests from browsers; it can do anything a normal server can do, such as house applications or data. Any computer can be turned into a web server by installing server software and connecting the machine to the internet.

Web Service Description Language (WSDL) An XML format for describing network services.

Web Service Inspection Language (WSIL) An XML format for assisting in the inspection of a site for available services and a set of rules for how inspection-related information should be made.

web service proxy foundation Foundation classes for web service proxy that must be included in a business service server artifact for web service consumption on WAS.

web service softcoding record An XML document that contains values that are used to configure a web service proxy. This document identifies the endpoint and conditionally includes security information.

web service softcoding template An XML document that provides the structure for a soft coded record.

Where clause The portion of a database operation that specifies which records the database operation will affect.

Windows terminal server A multiuser server that enables terminals and minimally configured computers to display Windows applications even if they are not capable of running Windows software themselves. All client processing is performed centrally at the Windows terminal server and only display, keystroke, and mouse commands are transmitted over the network to the client terminal device.

wizard A type of JDeveloper extension used to walk the user through a series of steps.

workbench A program that enables users to access a group of related programs from a single entry point. Typically, the programs that you access from a workbench are used to complete a large business process. For example, you use the JD Edwards EnterpriseOne Payroll Cycle Workbench (P07210) to access all of the programs that the system uses to process payroll, print payments, create payroll reports, create journal entries, and update payroll history. Examples of JD Edwards EnterpriseOne workbenches include Service Management Workbench (P90CD020), Line Scheduling Workbench (P3153), Planning Workbench (P13700), Auditor's Workbench (P09E115), and Payroll Cycle Workbench.

work day calendar In JD Edwards EnterpriseOne Manufacturing, a calendar that is used in planning functions that consecutively lists only working days so that component and work order scheduling can be done based on the actual number of work days available. A work

	day calendar is sometimes referred to as planning calendar, manufacturing calendar, or shop floor calendar.
workflow	The automation of a business process, in whole or in part, during which documents, information, or tasks are passed from one participant to another for action, according to a set of procedural rules.
workgroup server	A server that usually contains subsets of data replicated from a master network server. A workgroup server does not perform application or batch processing.
XAPI events	A service that uses system calls to capture JD Edwards EnterpriseOne transactions as they occur and then calls third-party software, end users, and other JD Edwards EnterpriseOne systems that have requested notification when the specified transactions occur to return a response.
XML CallObject	An interoperability capability that enables you to call business functions.
XML Dispatch	An interoperability capability that provides a single point of entry for all XML documents coming into JD Edwards EnterpriseOne for responses.
XML List	An interoperability capability that enables you to request and receive JD Edwards EnterpriseOne database information in chunks.
XML Service	An interoperability capability that enables you to request events from one JD Edwards EnterpriseOne system and receive a response from another JD Edwards EnterpriseOne system.
XML Transaction	An interoperability capability that enables you to use a predefined transaction type to send information to or request information from JD Edwards EnterpriseOne. XML transaction uses interface table functionality.
XML Transaction Service (XTS)	Transforms an XML document that is not in the JD Edwards EnterpriseOne format into an XML document that can be processed by JD Edwards EnterpriseOne. XTS then transforms the response back to the request originator XML format.
Z event	A service that uses interface table functionality to capture JD Edwards EnterpriseOne transactions and provide notification to third-party software, end users, and other JD Edwards EnterpriseOne systems that have requested to be notified when certain transactions occur.
Z table	A working table where non-JD Edwards EnterpriseOne information can be stored and then processed into JD Edwards EnterpriseOne. Z tables also can be used to retrieve JD Edwards EnterpriseOne data. Z tables are also known as interface tables.
Z transaction	Third-party data that is properly formatted in interface tables for updating to the JD Edwards EnterpriseOne database.

Index

D

E

F

G

I

J

L

R

S