PeopleSoft®

EnterpriseOne 8.10
Product Data Management
PeopleBook

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Product Data Management PeopleBook
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About These EnterpriseOne PeopleBooks Preface

EnterpriseOne PeopleBooks provide you with the information that you need to implement and use PeopleSoft EnterpriseOne applications.

This preface discusses:

- EnterpriseOne application prerequisites
- Obtaining documentation updates
- Typographical elements and visual cues
- Comments and suggestions

Note

EnterpriseOne PeopleBooks document only fields that require additional explanation. If a field 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 elements for the section, chapter, PeopleBook, or product line.

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 EnterpriseOne applications.

See the *Foundation Guide*.

You might also want to complete at least one EnterpriseOne introductory training course.

You should be familiar with navigating the system and adding, updating, and deleting information by using EnterpriseOne menus and forms. 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 EnterpriseOne applications most effectively.

Obtaining Documentation Updates

You can find updates and additional documentation for this release, as well as previous releases, on the PeopleSoft Customer Connection Website. Through the Documentation section of PeopleSoft Customer Connection, you can download files to add to your PeopleBook Library. You can find a variety of useful and timely materials, including updates to the full PeopleSoft documentation that is delivered on your PeopleBooks CD-ROM.

Note

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

See Also

PeopleSoft Customer Connection Website, *http://www.peoplesoft.com/corp/en/login.jsp*

Typographical Conventions and Visual Cues

This section discusses:

- Typographical conventions
- Visual cues

Typographical Conventions

The following table contains the typographical conventions that are used in EnterpriseOne PeopleBooks:

Typographical Convention or Visual Cue	Description
Italics	Indicates emphasis, topic titles, and titles of PeopleSoft or other book-length publications. Also used in code to indicate variable values.
Key+Key	A plus sign (+) between keys means that you must hold down the first key while you press the second key. For example, Alt+W means hold down the Alt key while you press W.
Monospace font	Indicates a PeopleCode program or other code example.
" " (quotation marks)	Indicates an adjective that is used in a way that might not be readily understood without the quotation marks, for example "as of" date, "as if" currency, "from" date, and "thru" date.
Cross-references	EnterpriseOne PeopleBooks provide cross-references either below the heading "See Also" or preceded by the word See. Cross-references lead to other documentation that is pertinent to the immediately preceding documentation.

Visual Cues

EnterpriseOne PeopleBooks contain the following visual cues:

- Notes
- Cautions

Notes

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

Note

Example of a note.

Cautions

Text that is preceded by *Caution* is crucial and includes information that concerns what you must do for the system to function properly.

Caution

Example of a caution.

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 PeopleBooks and other PeopleSoft reference and training materials. Please send your suggestions to:

PeopleSoft Product Documentation Manager, PeopleSoft Inc., 4460 Hacienda Drive, Pleasanton CA 94588

Or you can send e-mail comments to *doc@peoplesoft.com*.

While we cannot guarantee an answer to every e-mail message, we will pay careful attention to your comments and suggestions.

Product Data Management Overview

To understand the critical role that product data management plays in your business, you must understand the ways in which product data affects businesses and how businesses can more efficiently track, manage, and maintain product data.

Today's customers want specialized products and short leadtimes from ordering to the delivery of a product. Manufacturers want to respond to the pressure and opportunities that are presented by their customers' needs. The industry currently struggles with manual paperwork, slow response times, lack of systems integration, and product volume versus complexity. Manufacturers need agility to provide specialized products at competitive prices.

To be agile, manufacturers require a method of creating and maintaining critical product information. Manufacturers must then communicate this critical information to the rest of the organization. A company's sales, manufacturing, and service organizations need a fast, accurate, and reliable system. With today's integrated systems, product data management is crucial throughout the organization. Creating product data that meet the needs of various groups and insures accurate data within the organization is vitally important.

The Product Data Management system allows you to integrate all of the aspects of product data with the rest of your business operations. This system provides basic data for other manufacturing systems. You need to verify that your product data is accurate to ensure the efficiency of associated systems, such as Shop Floor Management and Master Production Schedule.

Accuracy of bills of material, routings, and work center information is essential to the system's overall integrity. Accuracy can be increased and maintained by cross-functional teams if they review new products, product changes, and process changes, as well as bills of material, routings, work center information, and the engineering change management process.

The Product Data Management system lets you track the fundamental information that is required to manufacture components, subassemblies, and end-item products. It includes bills of material, routings, work centers, and engineering change management.

Using Product Data Throughout the Organization

Bills of material, routings, work center information, and engineering change management are used throughout an organization. Although the manufacturing facility is the primary user of routings and work centers, and the bill of material was originally intended for engineering purposes, they are now critical inputs to other areas of an organization. Engineering change management is a tool that is used throughout the organization to communicate changes to product data.

Manufacturing engineers use bills of material to develop and communicate manufacturing requirements, and to indicate how and in what order the product should be built. Work centers are defined and manufacturing routings are then developed. To enhance planning and decrease leadtimes, components on a bill of material, which is attached to a routing operation, identify where specific material should be issued and consumed in the manufacturing sequence of the product.

Accounting uses bills of material and routings to run a cost rollup. From the cost rollup, you can determine the cost of the product and then determine the product price.

If you sell configured items, you use the bills of material that are created for features and options to create an overall bill of material and routing for the final configured item. The engineering change order (ECO) notifies you of changes to product features and options. If significant changes are applicable, the customer can be notified about any changes to the features and options of the final product.

Material planners, who usually drive planning and inventory control within the company, use bills of material to determine what manufactured and purchased items are required. Routings are used with the bills of material to determine when, where, and in what quantities parts are required, and what resources and work centers are required to complete the work orders.

When a work order is created, the engineering bill of material becomes the parts list on the work order. The stockroom uses this parts list to pull parts for the work order. Components are issued to the work order so that inventory is relieved.

After the work order and parts list are issued to the manufacturing floor, the product is manufactured or assembled. A bill of material might also be listed on the engineering drawing that is issued with the work order. Building the product while cross-referencing the bill of material on the drawing and the parts list attached to the work order accomplishes two things:

- It ensures that the part is manufactured to engineering specifications.
- It verifies the accuracy of the bill of material.

The service department uses the parent/component relationships in bills of material to determine what parts need to be stocked for warranty and replacement parts.

Competitive Advantage through Product Data Management

The following table provides examples of typical problems in the manufacturing industry and the solutions provided by the software:

When we create work orders, we have no way of knowing which parts are required at each operation on the routing.	The system integrates bills of materials and routings by matching the operation sequence number for each part on the bill of material to the operation sequence number on the routing.
	The system integration between bills of material and routings improves data integrity and supports better decision-making about the quantity of parts and when they are needed. Also, component requirements are affected by yield percentages on the routing. Leadtimes are decreased because the system knows exactly where and when a part is required in the manufacturing process.

We need to use one system to manage our various manufacturing methods.

The software provides an integrated system that accommodates different manufacturing environments. The system is capable of discrete, repetitive, and process manufacturing. Standard, rework, master, and alternate routings are all supported within this integrated system. You can work with batch, percent, process, and repetitive bills of material. All of these structures can be set up, planned, and executed in the system.

A single system manages all of your product and manufacturing data, increasing the effectiveness of setting up, planning, and executing the manufacture of products.

We have multiple facilities in multiple countries, and we do not have systems that reflect all of these sites. We manually plan across all sites; the plans are inaccurate and time- consuming.

Multiple site planning allows you to define bills of material and routings for each facility for the same item. The system manages material, bills of material, and routings for all defined business units. Current work-in-process (WIP), inventory, and current bills of material and routings allow you to accurately plan across multiple sites.

System integration ensures accurate and efficient planning. Other benefits include fewer item numbers and less WIP, which results in cost savings for material utilization, increased inventory accuracy, and reductions in leadtimes. All of these factors enhance customer service.

Our company needs to know whether it operates at a profit or a loss.

Product costing and various accounting functions throughout the software enable complete costing visibility, accounting visibility, or both, at each level of the organization. The system allows single-ledger record compilation, regardless of where a cost record was generated. In addition, you can report and sort costing information, accounting information, or both, by summary or detail.

Features of product costing and cost components (simulated and frozen) allow you to use predefined cost components and user defined cost extras to accurately account for costs and identify areas for improvement.

You have continuous visibility of product costs and accounting records that are generated from associated functions throughout your enterprise. Continuous visibility results in better-informed decision making by managers.

Our company needs to know the source of its costs.	Product costing by item, hours and quantities, and manufacturing accounting are all integrated. An item's cost can be broken down to each specific element that influences its cost. The system allows single-ledger record compilation regardless of where the cost record was generated. In addition, you can report and sort costing and accounting information by summary or detail.
	You can enter time spent working on specific work orders and compare this to the standard. Through manufacturing accounting, you can identify variances. More accurate and visible cost information results in better-informed management decisions. This information contributes to increased accuracy in determining costs to customers.
Inaccurate conversions and inventory counts occur when our company purchases and issues items in different units of measure.	The system converts different units of measure to a standard unit of measure, which allows the company to purchase, consume, and produce items in the appropriate units of measure. Inventory is accurate because the system performs the conversions. Each item can have as many as eight different units of measure.
Most companies cannot interface with the operating systems of other companies.	The software can operate interactively with third-party systems, such as Manugistics and SynQuest. Users can use the full EnterpriseOne Shop Floor Management system or a compatible third-party system.
	Today, companies have more choices about how to run their businesses and the systems that they use to support their business processes.

Types of Manufacturing

Discrete, process, and repetitive manufacturing all use bills of material and routing instructions. The bills of material contain individual parts or components, such as nuts, bolts, wire, plastic, or metal parts of a fixed or variable quantity. Products can be broken down into subassemblies that go into various larger assemblies. The routing instructions include the operations to be performed, their sequence, the various work centers involved, and the standards for setting up and running the operations.

All types of manufacturing use the term *item* for both the raw materials and finished goods. Not all items are planned, scheduled, or produced in their primary unit of measure. To accommodate this fact, full unit of measure capabilities are allowed throughout the Shop Floor Management system. Most entry programs have a Unit of Measure field next to the quantity fields. The unit of measure is stored in the database tables with the quantities. Throughout the Shop Floor Management system, the system uses the values in the following three fields in the Item Master table (F4101) as default values in entry forms:

- Component Unit of Measure
- Production Unit of Measure
- Primary Unit of Measure

The value in the Primary Unit of Measure field must be the smallest of the three units of measure.

Discrete Manufacturing

Discrete manufacturing is typically characterized by the following:

- Work orders produce a specific quantity of a single item for a specific completion date.

- Routing instructions are a series of independent operations.

- Components can be manually issued with the release of the work order, backflushed at the completion of the work order, or both.

Discrete manufacturing is most often used in the following manufacturing environments:

- Make-to-stock, using either a highly repetitive or process order-based system

- Any of the "to-order" strategies, such as make-to-order, assemble-to-order, or engineer-to-order

- The one-off or job shop environment

Discrete manufacturing is used to produce items such as the following:

- Cars

- Furniture

- Electronics

- Airplanes

Process Manufacturing

Process manufacturing is typically characterized by the following:

- Work orders produce multiple items, both coproducts and by-products, for a specific completion date.

- Routing instructions are a series of dependent operations that work together continuously.

- Products are often produced in batches or with a continuous process.

- Components or ingredients are often stated in terms of a recipe or formula.

- The quantities of components or ingredients can vary according to their grade or potency.

- Components or ingredients can be issued by preflushing with the release of the work order or backflushed at the completion of the work order.

Process manufacturing is most often used to produce the following:

- Pharmaceuticals

- Foods and beverages

- Raw materials such as lumber, metals, and fluids

The different types of processing in process manufacturing consist of the following:

Batch processing	In batch processing, a product is usually made in a standard run or lot-size that is determined by vessel size, line rates, or a length of standard run. Items are typically scheduled in short production runs due to the life cycle of the product after its completion. Typical items might be pharmaceuticals, foods, inks, glues, oil or chemical products, and paints. A coproducts and by-products list might be generated during batch processing.
Continuous processing	In continuous (or flow) processing, the production period is typically extended, using dedicated equipment that produces one product or product line with slight variations. This method of manufacturing is characterized by the difficulty of planning and controlling variances in quantity and quality yield. Typical items might be petroleum-based products or distilled seawater. Coproducts and by-products are generally more prevalent in continuous processing than in batch processing.

Strategies that are similar to discrete manufacturing, including repetitive or any of the to-orders strategies (such as, make-to-order, assemble-to-order, or engineer-to-order) might be used to control the process. Usually, both batch and continuous processing methods require extensive record-keeping. You must track quality and tolerance values during the process, as well as strictly adhere to *lot tracing* and *lot tracking*. You use lot tracing to display the items that are assigned to a lot. You use lot tracking to display the items that are removed from a lot.

Repetitive Manufacturing

Repetitive manufacturing is typically characterized by the following:

- Entire production lines are dedicated to a family of products.

- Product families share similar components and routing instructions.

- Products are often manufactured in a continuous process that requires less inventory movement to and from the production line.

- Work center setup and changeover times between related products are minimized.

- Production is defined in units per hour. The time spent at the operational level might or might not be important. Therefore, you must be able to set up line capacity and define routing instructions in units per hour at the line level. The fundamental basis for backscheduling and capacity planning is hours. To view information in units, the system uses a conversion factor defined at the work center level.

- Visual cues, called kanbans, control material movement. Kanbans represent predetermined quantities of components at specified locations on the production line. They are designed to minimize work-in-process inventories.

Product Data Management System Integration

Product Data Management is one of many systems that is used for Supply Chain Management. Supply Chain Management enables you to coordinate your inventory, raw material, and labor resources to deliver products according to a managed schedule. The systems within Supply Chain Management are fully integrated to ensure that information is current and accurate throughout all of your business operations. It is a manufacturing system that formalizes the activities of company and operations planning, as well as the execution of those plans.

The Product Data Management system integrates with the following EnterpriseOne systems to take advantage of single entries, information sharing, and data consistency between systems:

Inventory Management

Supplies the basic information about each component (or ingredient), such as part number, description, unit of measure, stocking type, issue type code, location, and lot control information

Activates flash messaging to warn of a pending engineering change order (ECO).

Manufacturing and Distribution Planning

Uses Product Data Management information to plan finished goods, the raw material, and purchased parts that are required to manufacture them.

Uses sales orders and forecasts to pass demand for items down through the bills of material to the components.

Uses the bills of material to determine component requirements for planned orders and work orders without a parts list.

Master Production Schedule

Uses the effective dates established by ECOs to plan and introduce products.

Procurement

Activates flash messaging to warn of a pending ECO.

Uses bills of material for kit processing.

Product Costing and Manufacturing Accounting

Uses bills of material, routing instructions, and work center information to calculate total material, labor, machine, and overhead costs for each primary unit of the parent item.

Uses bills of material during a cost rollup to determine the material cost for the parent.

Sales Order Management   Uses bills of material for kit processing.

Shop Floor Management

Uses bills of material and routing instructions to process work orders and schedule work activity within the plant.

Resource Requirements Planning

Retrieves a multilevel bill of material for a master-scheduled item and selects the routing instructions for the components.

Activates flash messaging to warn of a pending ECO.

Product Data Management Features

The Product Data Management system includes the following features:

Bills of material
The bill of material is the primary method for defining and communicating the structure of the product. Although there is no single correct way to structure the bill of material for a product, you can follow some general industry guidelines. These guidelines assist you in determining and developing the levels within the bill, creating part numbers, defining phantoms, and setting up other bill of material issues.

The bill of material was traditionally created, maintained, and used only by the engineering department. However, as bills of material take on new and increasingly important roles within a company, remember to create bills of material that support the needs of all departments. This action eliminates the need to create several different versions of bills of material to support the various needs within the company. Use bills of material to:

- Enter multiple bills of material to maintain many arrangements for an item without creating additional part numbers.
- Access items online by using the item description as search criteria.
- Define quantities of intermediate products in any unit of measure as they progress through the manufacturing process.
- Enter similar items by copying bills of material, routing instructions, and processes; and changing only the information that is unique to each item.
-

Work centers
Work centers are the specific, physical locations on the shop floor where routing operations occur. A work center defines basic information such as the machines and number of people employed at the work center. Additional information can include work center rates for labor, machines, and setup; work center capacity; and machine efficiency. Use work centers to:

- Define work center number, description, and link to business unit.
- Define queue and move times.
- Define operator, machine, and capacity by hours per day.
- Define rates for setup, labor, machine, and overhead.
- Define information for Capacity Planning.
- Define where an item is produced.

Routing instructions

A routing lists the operations, in sequence, that are required to manufacture a product. Each operation within the routing identifies specific information such as the work center and time standards for setup, machine run, and labor hours. Routing operations can also include additional information such as required tools and inspections. Each part in a bill of material can be linked to a routing operation to identify the specific routing operation where a part should be issued from inventory and consumed by the product. Use routing instructions to:

- Define each step of the manufacturing process with allowances for anticipated yield and scrap for each operation.
- Add alternate operations to routing instructions.

Engineering Change Management

Engineering change management is a general term for the engineering change request (ECR) and engineering change order (ECO) processes. Engineering change management is sometimes called engineering change notification (ECN).

The ECR process defines and tracks requested product changes. An ECR is created, reviewed, and approved. It then becomes an engineering change order. You use engineering change management to create, plan, review, approve, and implement product changes. New designs or products can be included in the ECO process or go through a similar process called engineering creation order. ECOs usually include changes or enhancements to existing products. ECOs can also include process specifications. For example, the engineering department might specify a product assembly method that must be followed. Changes are generally made to products to resolve quality and safety issues, or to improve product performance. Use engineering change orders to:

- Control item changes from a single source.
- Incorporate approved changes to bills of material automatically.

Tables for Product Data Management

Business Unit Master (F0006)	Stores branch, plant, warehouse, and business unit information, such as company, description, and category codes that are assigned to that entity.
Workday Calendar (F0007)	Contains workday types for month, year, century, and shift of each branch/plant.
Address Book Master (F0101)	Stores all address information pertaining to customers, vendors, employees, and prospects.
Work Center Master File (F30006)	Contains labor, machine, and overhead rates for each work center.
Work Center Rates File (F30008)	Stores work center rate information, such as simulated and frozen costs for labor and machines.
Bill of Material Master File (F3002)	Stores information at the business unit level about bills of materials, such as quantities of components, features, options, and levels of detail for each bill.
Routing Master File (F3003)	Stores information about routing instructions, including operation sequences; work centers; and run, setup, and machine time. The system uses this information to calculate labor, machine, and overhead costs.
Work Center Resource Units (F3007)	Stores the capacity information for work centers, such as business unit, month, shift, and efficiency.
Job Shop Manufacturing Constants (F3009)	Stores general branch/plant information, such as bill of material and routing instructions validation, commitment control, work hours per day, and costs.

Bill of Materials Change File (F3011)	Stores all changes to any bill of material, including dates, ECO reasons, and effective dates.
ECO Parts List Detail (F3013)	Lists the parts that are affected by the ECO.
Component Locator File (F3015)	Stores the location of a component that you define within a subassembly.
Kanban Master (F3016)	Stores the set of kanban cards that are associated with an item. Each kanban defines the supplying location, consuming location, quantity, and unit of measure. The system uses next numbers to control the kanban identification number. If the system obtains the item from an external source, the supplier's number is included.
Kanban Card Detail (F30161)	Stores information that is related to the kanban, such as status, transaction quantity, and date updated.
Work Order Routing (F3112)	Contains the routing steps for work order or ECO implementation.
Item Master (F4101)	Stores basic information about each defined inventory item, such as item number, description, category codes, and units of measure.
Line Type Control Constants File (F40205)	Stores constants for maintaining line types, such as general ledger classification, order type, and record variance.
Item Manufacturing Data (F4101M)	Stores manufacturing data for each item, such as leadtime, document type, and issue type code.
Item Branch File (F4102)	Stores the warehouse or plant-level information for an item, such as costs, quantities, category codes, and physical locations.

Item Location File (F41021)	Stores all inventory locations for an item.
Item Cross Reference File (F4104)	Stores information that enables you to relate item numbers for a specific purpose.
Work Order Master File (F4801)	Stores the work order and rate schedule information, such as item numbers, quantities, dates, lots, locations, and shift codes.
Order Routing Approval Master (F4808)	Contains the address book numbers for the people who are responsible for approving ECOs and the order in which those people should be notified.
WO Supplemental DB User Defined (F48092)	Stores additional information about ECOs, such as implementation costs.
Order Approval Audit (F4818)	Contains the approval history of an ECO.

Fast Path Commands for Product Data Management

You can use the following fast path commands to access Product Data Management menus:

Fast Path	Menu	Title
PDM	G30	Product Data Management
DPDD	G3011	Daily PDM Discrete
PDMM	G3011	Daily PDM Discrete
DPDP	G3012	Daily PDM Process
DEC	G3013	Engineering Change Management
COST	G3014	Product Costing
COSTI	G3014	Product Costing
COSTM	G3014	Product Costing
DPC	G3014	Product Costing
PDMR	G3021	Periodic PDM Discrete
PPDD	G3021	Periodic PDM Discrete
PPDP	G3022	Periodic PDM Process
APD	G3031	Advanced Product Data Management
PDMS	G3041	Product Data Management Setup
SPD	G3041	Product Data Management Setup
COSTS	G3042	Product Costing Setup
SPC	G3042	Product Costing Setup

Product Data Management Setup

Before you can use the Product Data Management you must set up the following information:

- User defined codes and standard procedures for your bills of material

- Manufacturing constants and decimal settings that are unique to your branch/plants

- Company work days and shifts by month and year

Prerequisite

❑ Define your items in the Inventory Management system. See *Entering Item Master Information* in the *Inventory Management Guide.*

Setting Up User Defined Codes

User defined codes are stored in tables by system and code type. For example, system 30, type TB represents Product Data Management (system 30) and time basis code (TB). To set up user defined codes, use the User Defined Codes program (P0004A) to identify the codes that you want to use. If you are working in a program and attempt to enter a user defined code was not defined on the User Defined Codes form for a particular UDC table, the system displays an error message.

The following user defined codes are primary to the Product Data Management system:

- Routing types (40/TR)

- Day Type (00/TD)

Bill Type (40/TB)

This code indicates the type of bill of material, such as manufacturing bill, rework bill, and spare parts bill. Regardless of the other bill of material types that you define, only the standard manufacturing bill (M) is planned and costed. A planned bill of material facilitates the master scheduling of material planning and forecasting. A costed bill of material extends the quantity per amount of every component by the cost of the components.

Time Basis Code (30/TB)

This code indicates the rate that is used for machine or labor hours as you enter a routing instruction. The following program and systems use the value of the time basis code to determine run time per unit:

- Leadtime Rollup program (R30822A)

- Product Costing

- Capacity Requirements Planning

- Shop Floor Management

Stocking Type Code (41/I)   This UDC table maintains stocking type codes that indicate whether an item is purchased or manufactured. For example, you can define types such as subassemblies and purchased raw materials.

M (manufactured) and P (purchased) are hard-coded and appear as the first character in the Description 02 field on the User Defined Codes form. You can use any other letter to define additional make and buy values.

Routing Type (40/TR)   This code indicates the type of routing instruction, such as alternate routing instruction, standard manufacturing routing instruction, rush routing instruction, and rework routing instruction. Regardless of the other routing types that you define, only the standard manufacturing routing (M) is planned for capacity and costed.

Type of Day (00/TD)   This code specifies the type of day on the shop floor calendar. Day type W is hard-coded for workday. You set up codes to identify non-working days.

Setting Up Standard Procedures

You can set up codes and text to describe standard procedures for your work orders. For example, you can do the following:

- Designate a specific procedure for a work order or group of work orders.

- Provide a list of instructions to complete a work order.

- Include messages for work orders.

For example, you might set up a code called 1000 for a 1000-hour maintenance inspection. For the 1000 code, you can enter text to describe procedures, such as checking coolant levels and adjusting belt tension.

To avoid retyping similar procedures for every work order, you can also copy the appropriate message text from another procedure.

After you set up standard procedures, you can assign them to the appropriate work orders.

► **To set up standard procedures**

Use one of the following navigations:

For the Work Orders system, choose Standard Procedures from the Work Order Setup menu (G4841).

For the Product Data Management system, choose Standard Procedure Descriptions from the Product Data Management Setup menu (G3041).

For the Shop Floor Management system, choose Standard Procedures from the Shop Floor Management Setup menu (G3141).

1. On Work With Generic Message/Rate Types, click Select or Add.

PeopleSoft.

Standard Procedures - Enter Generic Message/Rates

OK   Find   Delete   Cancel   Form   Row   Tools

Product Code	48	Work Order Processing
User Defined Codes	SN	

Records 1 - 10   Customize Grid

		Code	Description	Rate
⦿		01-405	Overhaul Motor	
○		1000	1000 hour maintenance steps	
○		1001	General Assembly Procedure	
○		1002	Quality Control General Proc	
○		250	250 hour maintenance steps	
○		500	500 hour maintenance steps	
○		CHECKLIST	Maintenance Checklist	
○		LOCKOUT	Lockout / Tagout Procedure	
○		VEHICLE	General Work On Vehicle	
○				

2. On Enter Generic Message/Rates, in a blank record, complete the following fields:

   - Code
   - Description

3. Choose the record that you entered and then choose General Message from the Row menu.

4. On General Message, to enter new message text, complete the following field:

   - Description

     Enter a description of the standard procedure.

5. Click OK and go to Step 10.

6. On General Message, to copy message text from another procedure, choose Search from the Row menu.

7. On Standard Text Search, complete any of the following fields and click Find:

   - Product Code
   - User Defined Codes
   - Message Number

8. Choose the rows of text to copy and click Select.

    The text that you selected to copy appears on the General Message form.

9. On General Message, click OK.

    The system adds the message text to the standard procedure code.

10. On Enter Generic Message/Rates, click OK.

    If you need to change message text for a standard procedure code, you can type over the existing text.

Processing Options for Standard Procedures (P00191)

Defaults

1. System Code

2. Record Type

Display

1. Text Type

1 = Display Rate Text

2 = Display Message Text

2. Text Column Display

1 = 60 Column Display

2 = 80 Column Display

Setting Up Manufacturing Information

You need to set up manufacturing information that is necessary for the Product Data Management system. This information includes decimal placement for quantities, manufacturing constants, and calendars. If you want the system to display quantities with the decimal set to something other that zero, you must change the decimal setting. You can change the manufacturing constants to record bill of material changes, perform online component and parent validation, and retrieve information from the master routing when attaching the routing instructions. You define workdays and shifts for your branch/plants by month and year by using the shop floor calendar.

Converting Quantity Decimal Places

From the Advanced Product Data Management menu (G3031), choose QNTY Decimal Conversion.

The following tables in the Manufacturing system maintain the Quantity (QNTY) data item:

- Bill of Material Master File (F3002)

- Bill of Materials Change File (F3011)

- ECO Parts List Detail (F3013)

- Work Order LSN (F3105)

- Rules Table Detail (F3283)

- Assembly Inclusions Rules (F3293)

PeopleSoft ships the QNTY data item in the data dictionary with the display decimals set to zero. You can change the decimals on this data item to a value other than zero. If you change the display decimals, the system displays any data that has already been entered into the tables incorrectly on forms and reports. To insure that the display decimals are correct, run the QNTY Decimal Conversion program before anyone enters any new data using the new display decimals.

Use the QNTY Decimal Conversion program to convert the QNTY data items on all affected tables from a specified number of decimal places to a new number of decimal places. You use the processing options to identify these numbers. If you enter 0 as the *display decimals from* value and 2 as the *display decimals to* value, the system adds two decimal places to the existing QNTY value. For example, the system converts 1 to 100 and displays it as 1.00. If you convert from two decimals to zero decimals, the system removes two decimal places. For example, the system converts 100 (displayed as 1.00) to 1.

Note

The system first rounds the value before adding or removing decimal places. If you convert from two decimals to zero decimals, and the display quantity is 1.51, the system rounds the quantity to 2.00 and then converts 200 to 2.

You should run this program only if you have changed the Quantity field to display decimal places. You can run this program in proof mode and final mode. Proof mode displays the changes that you made to the decimal placement but does not update any tables. Final mode displays the changes and updates the tables.

The system performs special processing for the following conditions:

- Prints a warning message when rounding a co-product or by-product quantity on the Bill of Material Master File table or the Bills of Materials Change File table.

- Prints a warning message when rounding a percent bill quantity on the Bill of Material Master File table or the Bill of Materials Change File table.

- Prints an error message, and does not convert the quantity when you are increasing the number of decimals and the quantity value is too large, such as adding decimal positions that would cause an overflow on the nondecimal portion of the quantity.

- Converts only P and Q type records on the Rules Table Detail table (F3283) and the Assembly Inclusions Rules table (F3293).

Caution

You should understand the changes that this program makes to your system and your existing data before you run this program. Because of the way that the system stores numeric values in Microsoft Access databases, you should not run this program for any Access tables.

Processing Options for QNTY Decimal Conversion (R30QNTY)

Process

1. Enter a '1' to run this program in Final mode (update and report). If left blank, the program will run in Proof mode (report only).

Proof or Final Mode

2. Enter the number of display decimals you are converting from.

Display Decimals From

3. Enter the number of display decimals you are converting to.

Display Decimals To

Setting Up Manufacturing Constants

You set up manufacturing constants to define branch-specific information that affects processing throughout the EnterpriseOne Manufacturing systems. You can use the Manufacturing Constants program (P3009) to specify the values for constants. The following table describes the information that appears on each tab of the Manufacturing Constants program:

Manufacturing constants	These constants specify the following: • Whether the system validates bills of material online as you enter them • Whether an audit trail tracks all changes made to bills of material • Whether the system uses the master routing for an item or the routing instructions that are defined for the parent item
Shifts	These constants specify the number of work hours that the plant typically operates in a day.
Commitment Control	These constants specify when inventory is committed and backflushed.
Costing options	These constants specify which overhead cost calculations are used and whether the system considers work center efficiency when it calculates direct labor and overhead costs. You can specify whether costs are maintained by cost components and work center or by cost component only. Costing options also include the source for machine and labor rates.

► **To set up manufacturing constants**

From the Product Data Management Setup menu (G3041), choose Manufacturing Constants.

1. On Work with Manufacturing Constants, type the branch/plant number in the Skip to Branch/Plant field and click Find:

2. Choose the branch/plant and click Select.

3. On Manufacturing Constants Revision, click the Manufacturing Constants tab and click any of the following options:

   - Log Bill of Material
   - On-Line BOM Validation
   - Master Routings

4. Click OK.

Setting Up a Shop Floor Calendar

Use the shop floor calendar to define workdays and shifts by month and year for all branch/plants. The system uses this calendar to determine the following information:

- Manufacturing schedules
- Start dates for work orders
- Start and complete dates for work order routing instructions

► To add a work day calendar

Use one of the following navigations:

For the Accounts Payable and Accounts Receivable systems, choose Work Day Calendar from the Payment Terms Revisions menu (G00141).

For the Capital Asset Management system, choose Work Day Calendar from the Planning Setup menu (G1346).

For the Transportation Management system, choose Work Day Calendar from the Transportation Setup menu (G4941).

For the Shop Floor Management system, choose Shop Floor Calendar from the Shop Floor Management Setup menu (G3141).

For the Product Data Management system, choose Shop Floor Calendar from the Product Data Management Setup menu (G3041).

The Work With Workday Calendar form appears, displaying all of the calendars that have been set up.

1. To add a new calendar, on Work With Workday Calendar, complete the following required fields:

   • Branch/Plant
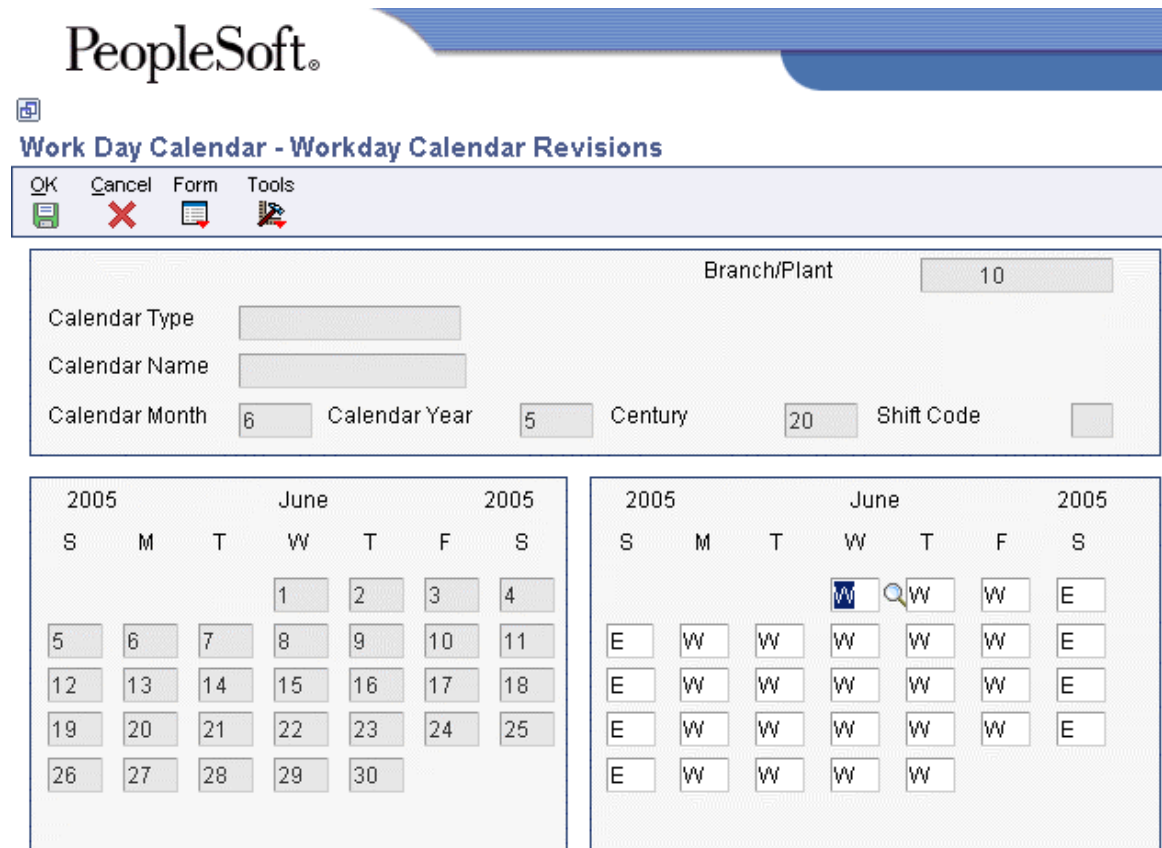
With the exception of ALL, which is a hard-coded value for this program, the branch/plant that you assign must exist in the Business Unit Master table (F0006).

- Calendar Year
- Calendar Month

2. Complete the following optional fields to specify unique calendars for the same branch/plant:

- Calendar Type
- Calendar Name
- Shift Code

If you enter a value in the Calendar Name field, you must enter a shift code.

3. Click Add.

The Workday Calendar Revisions form appears, displaying two calendars for the month and year. The calendar on the left shows the numerical days, and the one on the right shows the work days and nonworking days.

4. On Workday Calendar Revisions, change the default values as necessary for each day of the week and click OK.

   The types of days that you can specify are in UDC 00/TD. With the exception of W, which is hard-coded as a work day, all other values specified are nonworking days. Examples of the type of day that you can specify on the calendar are:

   - W (workday)
   - E (weekend)
   - H (holiday)
   - S (shut-down)

Processing Options for Workday Calendar (P00071)

Interop

1. Enter the transaction type for the interoperability transaction. If left blank, outbound interoperability processing will not be performed.

Type - Transaction

2. Enter a '1' to write before images for outbound change transactions. If left blank, only after images will be written.

Before Image Processing

Bills of Material

A bill of material identifies the manufacture of finished products (end items), subassemblies, and components. Before you create a bill of material, you must first understand the types of bills of material and how they are used. Then you can create a bill of material; define its components; enter reference, grade, or potency information; and substitute item information as necessary. After you have entered bills of material, you can review them to plan and research engineering change orders; view the results of a pending product change; determine the effect of an item shortage; or evaluate capacity, manpower, equipment needs, and other resources.

Use a bill of material to accomplish the following actions:

- Detail specific items and quantities that are used to assemble the parent item.
- Define items as parents or components in the assembly.
- Provide the foundation for Product Costing and Master Production Schedule programs.

A properly structured bill of material does the following:

- Allows for efficient storage and maintenance of bill of material information
- Reflects material flow and how the product is built
- Permits easy order entry
- Allows the system to display the master schedule in the fewest end items possible
- Allows for forecasting of optional product features

An inaccurate bill of material might result in the following problems:

- Poor material planning
- Material shortages
- Inaccurate product costing
- Increased production costs
- Delayed shipments
- Lost sales
- Excess and obsolete inventory
- Poor specification control
- Increased product liability

The features and functionality that are associated with bills of material enable you to complete the following tasks:

- Replace all occurrences of one component with another.
- Plan for component scrap in the Product Costing and Shop Floor Management systems.
- Substitute one component for another.
- View the producible quantity of an end item for the amount of the component that you enter.

- Print complete bill of material information.

- Copy an existing bill of material and make changes for a new item.

- Offset the required date of a component in a work order from the order start date.

- Locate all bills of material that use a specified part.

- Create multiple versions of your bills of material to present information in formats that are tailored to the needs of different departments.

- Track the status of all bill of material changes.

- Define where a component is located within a specific assembly.

- Check an item's low-level codes.

- Inquire on a bill of material by using a single-level or multilevel format.

Using bills of material in a multiple-plant environment allows you to define different manufacturing data, such as order policy or lot size, for an item that is used in different branches.

You can specify the effective dates for component parts on a bill of material and nonstock, bulk, and expense items. You can also add notes describing tool requirements.

The system uses a bill of material as a master list when generating parts lists for work orders, cost rollups, leadtime rollups, MPS/MRP/DRP generation, and kit processing for sales orders.

Types of Bills of Material

Depending on your business requirements, the Product Data Management system provides several types of bills of material. For example:

- Planning bill of material

- Batch bill of material

- Percent bill of material

- Manufacturing bill of material

Planning Bill of Material

Use a planning bill of material to facilitate master scheduling and material planning by categorizing product features or options. This bill includes the ratio of each item as determined from sales history. The planning bill of material is also known as any of the following:

- Super bill of material

- Modular bill of material

- Transient bill of material

- Aggregate bill of material

Batch Bill of Material

Use a batch bill of material to accommodate physical constraints, such as ovens or vats, in industries where products are produced in fixed quantities.

The Material Requirements Planning (MRP) system plans orders to fill net requirements by using one or multiple batch quantities. If the system does not find a batch quantity for the net requirement, it uses the next larger batch size. If larger batch size does not exist, MRP uses multiples of the closest smaller batch size until the requested amount is supplied.

The MRP system functions differently when you have defined more than one batch bill of material. When only one batch bill exists, the MRP system uses the batch quantity as a:

- Multiple if the net requirements are greater than the batch quantity
- Minimum if the net requirements are less than the batch quantity

The following table shows the resulting MRP planned order for one batch bill of material:

Batch Quantity	MRP Requirement	Resulting MRP Planned Order
1000	1500	1000
		1000
1000	967	1000

If multiple batch bills of material exist and the net requirement is greater than all of the batch quantities, then the system uses the largest batch quantity in combination with any of the others to satisfy the requirement.

The following table shows the resulting MRP planned order for multiple batch bills of material:

Batch Quantity	MRP Requirement	Resulting MRP Planned Order
400	1500	1000
600		600
800		
1000		
400	3000	1000
600		1000
800		1000
1000		

If multiple batch bills exist and the net requirement does not match, but is less than the largest batch quantity, then the system uses the smallest batch bill that satisfies the requirements.

The following table shows the resulting MRP planned order for multiple batch bills of material with requirements that are less than the largest batch quantity:

Batch Quantity	MRP Requirement	Resulting MRP Planned Order
400	780	800
600		
800		
1000		

Percent Bill of Material

A percent bill of material enables you to express component quantities as a percent of the parent item or process batch quantity. The system converts the batch quantity to the primary unit of measure for the parent item or process.

The system stores quantities for components as follows:

- Calculates a percentage for the component in relation to the batch size
- Converts the batch unit of measure to the component unit of measure and stores the quantity for the component.

Example: Percent Bill

The parent item is Soft Drink and its batch quantity is 300 galllons (GA).

The following table shows the components of the parent item along with the component quantity; unit of measure; and whether the component is a fixed quantity, variable quantity, or expressed as a percentage:

Component	Quantity	Unit of Measure	Fixed/Variable
Vanilla	50	GA	%
Water	40	QT	%
Concentrate	10	LT	%

The system calculates the following values:

% Calculation and Conversion to Batch Unit of Measure Storage			
Vanilla	= .5 X 300	= 150 GA	150 GA
Water	= .4 X 300	= 120 GA	480 QT
Concentrate	= .1 X 300	= 30 GA	114 LT

The system uses the component unit of measure in the percent bill to convert the number of gallons that correspond to the percent for each component. In this example, the system calculates the water and concentrate components to be 120 GA and 30 GA of the batch size. The system converts the unit of measure to the component unit of measure and stores them as 480 QT and 114 LT.

You must set up the unit of measure conversion for percent bills to work properly. Verify that all of the components can convert to the batch quantity unit of measure.

Manufacturing Bill of Material

Use a manufacturing bill of material to document and track components. This type of bill is also known as any of the following:

- As-built bill of material

- Customer order configured bill of material

- Frozen bill of material

- Standard bill of material

Bill of Material Terminology

To be able to work with bills of material, you should be familiar with the following terminology:

Parent and Component Relationship

A parent and component relationship defines the association between a parent item and the components that you use to produce it. Parent and component relationships are used in engineering change orders to define the proposed item change.

The following example shows the relationship of a parent item to components in a single-level bill of material that includes parts, raw materials, and subassemblies.

Single-Level Bill of Material
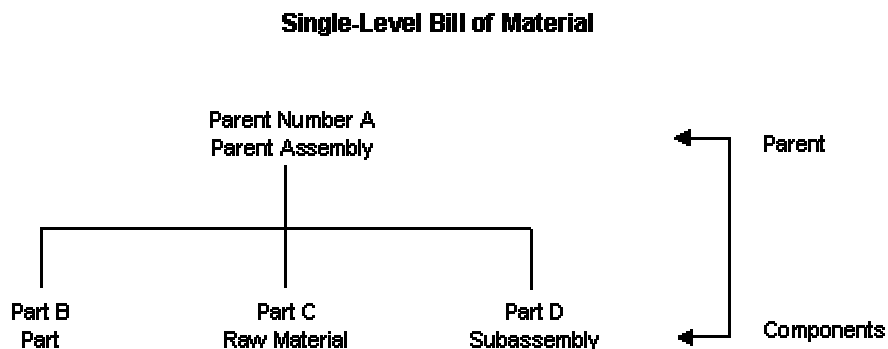
The illustration below shows a more complex relationship of a parent item to its components. Part B is both an independent part and part of the subassembly that makes up Part G.

Parent Item and Components
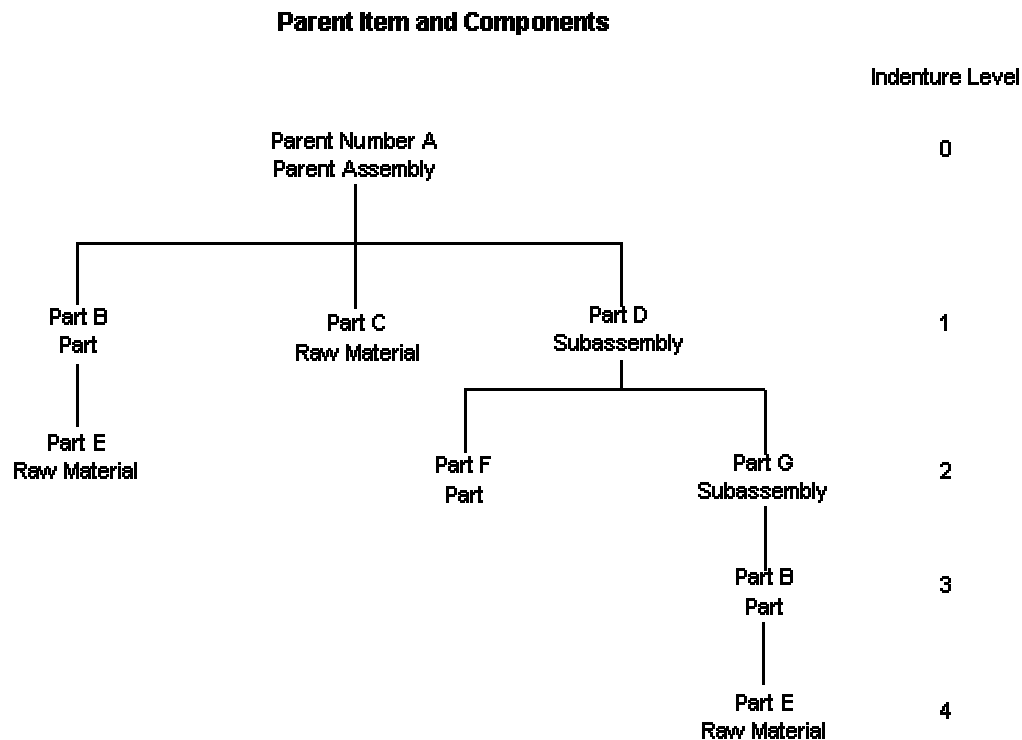
Phantom Item

A phantom is an individual item that can exist anywhere in the bill of material. Phantom items are also known by other terms-- for example, transient items, non-stock assemblies, and blow-through or self-consumed items.

An example of a phantom item occurs during the production of a spray pump nozzle. The spray pump nozzle consists of a button, tubing, and an insert. The first operation specifies placing the button and inserting items in an automated assembly machine. The machine combines them into a phantom part called a button unit. This unit goes directly to the next operation. After the next operation attaches the tubing, the spray pump nozzle is complete. The button unit, as with all phantom items, is never stocked.

Substitute Item

You can define a substitute item for components within your parent item. You might need to do this for several reasons:

- Quality concerns
- Inventory shortages
- Supplier delivery problems

Component Locator

A component locator indicates the specific location of a component within a subassembly. Component locators are common features in the electronics industry. For example, the printed key pads that cover the keys on your computer keyboard must be placed in a specific sequence. Use a component locator to indicate the location of each key pad cover to ensure that each is correctly placed during production.

Nonstock Item

You can add a nonstock item to the bill of material. Nonstock items include drawings, tools, bulk items, or reference materials. The system does not plan for nonstock items, but they appear on the bill of material and parts list for shop floor personnel. You can enter drawing numbers on your bills of material as nonstock items so that they are printed on the shop paperwork. If your drawing numbers differ for each branch/plant, enter the drawing number as a component.

Tools

If a tool is needed to create the parent item and is located on the shop floor and reused as needed, you can indicate that it is a necessary component item which is required for the parent item. Enter reusable tools as text lines or nonstock items in the bill of material. You enter expendable tools (that is, tools used one time) on the bill of material like any other component item. The manufacturing process commits and consumes expendable tools in the same way as other components. Paint roller pads are an example of an expendable tool.

Bulk Item

You use bulk items on the shop floor. Bulk items are not closely tracked, but are ordered in large quantities as they are needed. Examples include tape, rubber bands, lubricants, cleaning fluid, rivets, and nails. You must enter bulk items in the Item/Branch Plant Information form.

Part Replacement

You might need to replace one part with another in the bill of material. You can either scrap the old part or deplete the inventory. Use the following guidelines to specify a replacement part:

- Leadtime must be set to 0 (zero).

- Order policy code in the branch/plant record must be set to lot-for-lot.

- Bill of material must be entered so that the new part is a component of the old part.

- Stocking type must be set appropriately.

As the Material Requirements Planning system uses up the quantity of the old part, the quantity reaches zero. Since requirements still exist, the system generates a planned order release. This planned order becomes the requirement for the new item in the same period (because the leadtime of the old part is zero). MRP then plans the new part, which alerts the material planner to change the bill of material by removing the old part.

Entering Bills of Material

A bill of material defines an item as a parent or component in the assembly. It details the specific components and quantities that are used to assemble the parent item and provides the foundation for costing and planning activities.

As you define a bill of material, you combine information from the Job Shop Manufacturing Constants (F3009), Item Master (F4101), and Item Branch File tables (F4102). The resulting bill of material is stored in the Bill of Material Master File table (F3002). Changes are stored in the Bill of Materials Change File table (F3011).

When you delete a parent item's bill of material, the bills of material for the item's lower level components and subassemblies are not affected.

Prerequisite

❑ If you are using batch bills of material, define a bill of material for batch bills, define routing instructions that correspond to the batch sizes, and set the processing options for the Enter/Change Bill (P3002) and Work With Routing Master (P3003) programs to activate the Batch Quantity field.

Entering a Bill of Material

A parent item is the end result of a bill of material. After you enter a parent item, you can define the specific components and quantities that are used to assemble the parent item. If you are working in a batch manufacturing environment, you can also define the batch quantity. The bill of material displays component information that you defined in the Item Master (P4101) and Item Branch (P41026) programs-- for example, issue type code and lead time. In addition, use the Enter Bill of Material Information form to enter grade and potency information for a specific item. You can define either grade or potency information, but not both. You can enter grade or potency information only for items that are defined as lot-controlled.

If you want to enter bills of material for the same parent item but multiple branch/plants, you can copy the original bill of material. Locate the existing bill, select Copy, and enter the new branch/plant.

Use the Enter/Change Bill program (P3002) to enter substitute item for components within your parent item, if necessary. You can use substitute items if you encounter quality issues, inventory shortages, or supplier delivery problems with the original component. To locate substitute items for any of your components, use item cross-references set up in the Item Cross Reference program (P4104).

► **To enter basic bill of material information**

From the Daily PDM Discrete menu (G3011), choose Enter/Change Bill.

1. On Work with Bill of Material, complete the following fields and click Add:

   - Branch/Plant
   - Item Number
   - As of Date

PeopleSoft.

Enter/Change Bill - Enter Bill of Material Information

OK   Find   Delete   Cancel   Form   Row   Report   Tools

Branch/Plant	M30
Parent Item	220	Touring Bike, Red
Batch Quantity		EA
As of Date	*	Type of Bill	M	Oper Seq#	*
Drawing #	200T	Item Rev. Level		Skip to Line No.	*

Records 1 - 10

		Item Number	Description	Quantity	UM	Active Ingr. Flag	F V	Is Cd	Stkg Typ	Ln Ty
□		2001	Cro-Moly Frame, Red	1	EA		V	U	M	S
□		2006	Touring Fork	1	EA		V	U	P	S
□		2007	Bottom Bracket	1	EA		V	U	P	S
□		2008	Head Set	1	EA		V	U	P	S
□		2009	Crank	2	EA		V	U	P	S
□		2010	Chain Rings	1	EA		V	U	P	S
□		2011	Chain, Std	1	EA		V	U	P	S
□		2013	Shift Kit	1	EA		V	U	P	S
□		2014	Brake Kit	1	EA		V	U	P	S
□		2015	Wheel Set, Front	1	EA		V	U	P	S

2. On Enter Bill of Material Information, complete the following fields:

- Item Number
- Quantity
- UM
- F V
- Is Cd
- Effective From
- Effective Thru
- Percent Scrap

3. To provide reference information, complete the following fields:

- Ln Ty
- Bubble Seq No
- Remarks

The following fields display stocking information:

- Stkg Typ
- Drawing Number

4. Click OK.

► **To enter grade and potency information**

From the Daily PDM Discrete menu (G3011), choose Enter/Change Bill.

1. On Work with Bill of Material, complete the following fields and click Find:

    -   Branch/Plant
    -   Item Number

2. Choose the item and click Select.

3. On Enter Bill of Material Information, complete the following fields to define grade information:

    -   Frm Grd
    -   Thr Grd

4. To define potency information, complete the following fields:

    -   From Potency
    -   Thru Potency

5. Click OK.

► **To enter a substitute item**

From the Daily PDM Discrete menu (G3011), choose Enter/Change Bill.

1. On Work with Bill of Material, complete the following fields and click Find:

    -   Branch/Plant
    -   Item Number

2. Choose the item and click Select.

3. On Enter Bill of Material Information, choose a component, and then choose Substitutes from the Row menu.

4. On Enter Component Substitutes, complete the following fields and click OK.

- Substitute Item
- Quantity
- UM
- Effective From
- Effective Thru
- Sub Item Sequence
- Percent Scrap
- F V
- Frm Grd
- Thr Grd
- From Potency
- Thru Potency

5. Click OK.

Entering Planning Bill and Kit Information

Use planning bills and kits to produce items in which components are features and might not be listed as separate inventory items. When you enter these components as parts of kits, the system places them in the planning and manufacturing processes.

► **To enter planning bill and kit information**

From the Daily PDM Discrete menu (G3011), choose Enter/Change Bill. .

1. On Work with Bill of Material, complete the following fields and click Find:

- Branch/Plant
- Item Number

2. Choose the item and click Select.

3. On Enter Bill of Material Information, complete the following fields in the detail area and click OK.

- Feat Plan %
- Feat Cost %
- R
- D C
- Opt (S/O/F)

Entering Production Information

Use production information to identify how the system issues each component from stock and how many days the component is needed before or after the start date of the work order. For each component, enter an issue code and the number of days for the leadtime offset. The Shop Floor Management system uses this production information when processing work orders.

▶ **To enter production information**

From the Daily PDM Discrete menu (G3011), choose Enter/Change Bill.

1. On Work with Bill of Material, complete the following fields and click Find:

   - Branch/Plant
   - Item Number

2. Choose the item and click Select.

3. On Enter Bill of Material Information, complete the following fields in the detail area and click OK.

   - Is Cd
   - Leadtime Offset

Processing Options for Bill of Material Revisions (P3002)

Defaults Tab

These processing options control the default values for the parent branch, the bill of material type, and the current date. The system uses the default values when processing a bill of material. You can also sort the information by component line number or by operation sequence number.

1. Component Branch

Use this processing option to specify whether the system uses the parent branch as the default value in the bill of material records when you copy the bill of material to add a new bill of material. Valid values are:

  Blank The system uses the component branch when you copy the bill of material.

  1   The system uses the parent branch when you copy the bill of material.

2. Bill of Material Type

Use this processing option to specify the type of bill of material for the system to use as the default value in the Type of Bill fields. Bill of material type is a user defined code (40/TB) that designates the type of bill of material. Enter the bill of material type to use or choose it from the Select User Define Code form. If you leave this processing option blank, the system uses M.

3. As of Date

Use this processing option to specify whether the system uses the current date as the default value in the As Of Date field in the header area of the Work with Bill of Material form. Enter the date to use or choose it from the Calendar. Additional valid values are:

  Blank The system uses * as the default value, which allows the system to select all dates.

  1   The system uses the current date as the default value.
4. Display Sequence

Use this processing option to specify how the system sorts the information on the Enter Bill of Material Information form. You can choose whether to sequence the data by component line number or by operation sequence number.

The component line number indicates the sequence of the components on a bill of material. The operation sequence number indicates the sequence of the fabrication or assembly steps in the manufacture of an item. Valid values are:

  Blank The system sorts by component line number.

  1   The system sorts by component line number.

  2   The system sorts by operation sequence number.

Display Tab

These processing options control whether the system displays the Bill Type and Batch Quantity fields. The Bill Type field appears in the header area on the Work With Bill of Material and the Enter Bill of Material Information forms. The Batch Quantity field only appears in the header area on the Enter Bill of Material Information form. If you leave these processing options blank, the system does not display the fields.

1. Bill Type

Use this processing option to activate the Bill Type field in the header area of both the Work With Bill of Material and Enter Bill of Material Information forms. Bill of material type is a user defined code (40/TB) that designates the type of bill of material. Valid values are:

  Blank The system does not display the Bill Type field.

  1   The system displays the Bill Type field.
2. Batch Quantity

Use this processing option to specify whether the system activates the Batch Quantity field in the header area of the Enter Bill of Material Information form. Batch quantity is the

quantity of finished units that you expect a specific bill of material to produce. Valid values are:

Blank The system does not display the Batch Quantity field.

1   The system displays the Batch Quantity field.

Versions Tab

These processing options control which versions of the following programs that the system uses when processing a bill of material.

1. Single Level BOM Print (R30460)

Use this processing option to specify the version of the Single Level Bill of Material Print program that the system uses. If you leave this processing option blank, the system uses the ZJDE0001 version.

Versions control how the Single Level Bill of Material program displays information. Therefore, you might need to set the processing option to a specific version to meet your needs.

2. Multi Level BOM Print (R30460)

Use this processing option to specify the version of the Multi Level Bill of Material Print program that the system uses. If you leave this processing option blank, the system uses the ZJDE0001 version.

Versions control how the Multi Level Bill of Material program displays information. Therefore, you might need to set the processing option to a specific version to meet your needs.

3. ECO Workbench (P30225)

Use this processing option to specify the version that the system uses when you choose the Row exit to the ECO Workbench form. If you leave this processing option blank, the system uses the ZJDE0001 version.

Versions control how the ECO Workbench program displays information.

Therefore, you might need to set the processing option to a specific version to meet your needs.

4. Component Maintenance (P3015)

Use this processing option to specify the version that the system uses when you choose the Row exit to the Component Maintenance form. If you leave this processing option blank, the system uses the ZJDE0001 version.

Versions control how the Component Maintenance program displays information.

Therefore, you might need to set the processing option to a specific version to meet your needs.

5. ECO Header [P30BREV]

Use this processing option to specify the version that the system uses when you choose the Row exit to the ECO Header form. If you leave this processing option blank, the system uses the ZJDE0001 version.

Versions control how the ECO Header program displays information. Therefore,you might need to set the processing option to a specific version to meet your needs.

6. Bill of Material Where Used (P30201)

Use this processing option to specify the version of the Bill of Material Where Used program that the system uses. If you leave this processing option blank, the system uses the ZJDE0001 version.

Versions control how the Bill of Material Where Used program displays information. Therefore, you might need to set the processing option to a specific version to meet your needs.

7. Item Master (P4101)

Use this processing option to specify the version that the system uses when you choose the Row exit to the Item Master program. If you leave this processing option blank, the system uses the ZJDE0001 version.

Versions control how the Item Master program displays information. Therefore,you might need to set the processing option to a specific version to meet your needs.

8. Co/By- Products Inquiry (P30211)

Use this processing option to specify the version that the system uses when you choose the Row exit to the Co/By-Products Inquiry program. If you leave this processing option blank, the system uses the ZJDE0001 version.

Versions control how the Co/By-Products Inquiry program displays information.

Therefore, you might need to set the processing option to a specific version to meet your needs.

9. Bill of Material Inquiry (P30200)

Use this processing option to specify the version that the system uses when you choose the Row exit to the Bill of Material Inquiry program. If you leave this processing option blank, the system uses the ZJDE0001 version.

Versions control how the Bill of Material Inquiry program displays information. Therefore, you might need to set the processing option to a specific version to meet your needs.

Edit Tab

This processing option controls whether the system verifies that an item branch record exists in the Item Branch File table (F4102).

1. Item Branch Validation

Use this processing option to specify whether the system checks for a component's existing item branch record in the Item Branch table (F4102).

Valid values are:

Blank The system does not check to see if the item branch is valid.

1   The system checks for a valid item branch record.

Interoperability Tab

These processing options control the transaction type that the system uses for export processing, the version of the Interoperability Generic Outbound Subsystem UBE report (R00460), and whether you want the system to write the before or after image for a changed transaction.

1. Transaction Type

Use this processing option to specify the transaction type that the system uses for export processing. Transaction type is a user defined code (00/TT) that identifies the type of transaction for the work order. Enter the transaction type to use as the default value or choose it from the Select User Define Codes form. If you leave this processing option blank, the system does not use export processing.
2. Write Image for a Change Transaction

Use this processing option to specify whether the system writes the before or after image for a change transaction. The images are written to the Bill of Material Transaction Revisions table (F3002Z1) from the Bill of Material Master table (F3002). Valid values are:

Blank The system stores the after image.

1   The system stores the before image.
3. Interoperability Outbound (R00460)

Use this processing option to specify the version of the Interoperability Outbound Subsystem program that the system uses for export processing. If you leave this processing option blank, the system uses the ZJDE0001 version.

Versions control how the Interoperability Outbound Subsystem program displays information. Therefore, you might need to set the processing option to a specific version to meet your needs.

Entering Component Locators

Use component locators to indicate the specific location of a component within a subassembly. You can define locations with any combination of characters, but the number of locations must equal the quantity per assembly. To add locators, you call the Component Locator Revisions form from the Enter Bill of Material Information form by choosing Location from the Row menu. The value in the Quantity field on the bill of material indicates the maximum number of locators that you can enter. Once you have created a locator for a component, you can access the Component Locator Rev (Revisions) program (P3015) directly from the menu and make changes to the locator information.

► **To enter component locators**

From the Daily PDM Discrete menu (G3011), choose Component Locator.

1. On Work With Component Locators, complete the following fields and click Find:

   - Branch/Plant
   - Parent Item

2. Choose the row and then choose Revisions from the Row menu.

3. On Component Locator Revisions, complete the locator fields in the grid as needed and click OK.

If the number of the locators that you entered does not match the quantity on the bill of material, the system issues a warning. You can accept the entry by clicking OK again.

Processing Options for Component Locator Rev (P3015)

Defaults
1. Enter the date to be used as the Effective From date. If left blank, the current date will be used.
Effective From Date
2. Enter the Sales or Purchasing Category Code that will be used as the Designator (e.g. S1 = Sales Category Code 1, P1 = Purchasing Category Code 1, etc.)
Designator
Versions
1. Enter the version to use for each application listed. If left blank, version "ZJDE0001" will be used.
Bill of Materials (P3002)

Reviewing Bills of Material

You can review bills of material to:

- Plan and research engineering change orders.

- View the results of a pending product change.

- Determine the effect of an item shortage.

- Evaluate capacity, manpower, equipment needs, and other resources.

Verifying Bills of Material

From the Advanced Product Data Management menu (G3031), choose Integrity Analysis.

Use the Integrity Analysis program (R30601) to check your bills of material for low-level codes and product structure errors, such as parent items that are listed as their own components.

This program generates a report that identifies any bills of material that you need to correct. If the report indicates errors, you should correct the bills of material and run the Integrity Analysis program again. When the program does not find errors in the bills of material, it updates the low-level codes in both the Item Master (F4101) and the Item Branch File (F4102) tables.

You should run the Integrity Analysis program immediately after a data conversion, such as system startup, and then periodically, such as two or four times a year. You should also run the Integrity Analysis program before running the Cost Simulation – Build Temp (R30812) or MRP/MPS Requirements Planning (R3482) programs to prevent the system from updating tables with incorrect product structures.

Note

As an alternative to running Integrity Analysis, you can activate online validation in the Manufacturing Constants program (P3009), whereby the system validates the items as you enter them. When you turn on the Online BOM Validation option, the system issues an error message when you attempt to enter recursive components.

Locating Bills of Material

You can use the Bill of Material Inquiry program (P30200) to find and display the components of a bill of material, as well as parts availability and lead time information. Several forms display bill of material information. Depending on the information that you want to see, you can review a parent item and its components, the subassemblies of components, a graphical tree structure of a bill of material, or review where a component is used.

You can view the bill of material with a single level of components, with multiple component levels, and in a tree structure format. You can use processing options to determine what elements are included in the bill of material view:

- Phantom items or only components of the phantom items

- Subassemblies or only components of the subassemblies

- Processes or discrete bills of material

You can choose to consolidate entries with the same component branch, component item, and fixed and variable information into one component record. You can also consolidate across a single level or multiple levels.

In addition, you can display an adjusted quantity of parent or component items based on shrink information from the Item Branch File table (F4102), and scrap and yield information from the bill of material.

Use the Graphical Bill Inquiry form to review each parent item and its components organized in a tree structure. You can change the inquiry type and display sequence, based on the options you choose. For example, you can view a single-level, multilevel, or indented bill of material; and you can view the bill sequenced by line number, operation sequence number, or item number.

▶ **To locate a single-level bill of material**

From the Daily PDM Discrete menu (G3011), choose Single Level Bill Inquiry.

1. On Bill of Material Inquiry - Single Level, click the BOM Inquiry tab, complete the following fields, and then click Find:

   - Branch
   - Parent Item
   - Requested Quantity
   - Type of Bill
   - As of Date

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Single Level Bill Inquiry - Bill of Material Inquiry - Single Level

Select Find Close Form Report View Row Tools

| BOM Inquiry | Parts Availability | Leadtime Inquiry |

Branch M30
Parent Item 220   Touring Bike, Red

Requested Quantity   EA   Drawing Number 200T
Quantity w/Shrink   Type of Bill M

Revision Level   As of Date 03/15/04   Skip to Line *

Records 1 - 10

Level	2nd Item Number	Description	Quantity	UM	F V	Issue Code
1	2001	Cro-Moly Frame, Red	1	EA	V	U
1	2006	Touring Fork	1	EA	V	U
1	2007	Bottom Bracket	1	EA	V	U
1	2008	Head Set	1	EA	V	U
1	2009	Crank	2	EA	V	U
1	2010	Chain Rings	1	EA	V	U
1	2011	Chain, Std	1	EA	V	U
1	2013	Shift Kit	1	EA	V	U
1	2014	Brake Kit	1	EA	V	U
1	2015	Wheel Set, Front	1	EA	V	U

2. From the View menu, you can change how the system displays the bill of material.

► **To locate a multilevel bill of material**

From the Daily PDM Discrete menu (G3011), choose Multi Level Bill Inquiry.

1. On Bill of Material Inquiry - Multi Level Indented, click the BOM Inquiry tab, complete the following fields, and then click Find:

- Branch
- Parent Item
- Requested Quantity
- Type of Bill
- As of Date

2. From the View menu, you can change how the system displays the bill of material.

► **To locate a bill of material graphically**

From the Daily PDM Discrete menu (G3011), choose Graphical Bill Inquiry.

1. On Work With Bill of Material - Tree View, complete the following fields and then click Find.

   - Branch/Plant
   - Parent Item
   - Requested Quantity
   - Type of Bill
   - As of Date

PeopleSoft

Graphical Bill Inquiry - Work With Bill of Material - Tree View

Find	Close	Form	Row	Report	View	Tools

Branch/Plant M30

Parent Item 220 Touring Bike, Red

Requested Quantity 1 EA

Revision Level Type of Bill M As of Date 03/15/04

Records 1 - 17

	Item Number	2nd Item Number	Description	Quantity	Extended Quantity	UM
☐	⊞ 2001	2001	Cro-Moly Frame, Red	1	1	EA
☐	2006	2006	Touring Fork	1	1	EA
☐	2007	2007	Bottom Bracket	1	1	EA
☐	2008	2008	Head Set	1	1	EA
☐	2009	2009	Crank	2	2	EA
☐	2010	2010	Chain Rings	1	1	EA
☐	2011	2011	Chain, Std	1	1	EA
☐	2013	2013	Shift Kit	1	1	EA
☐	2014	2014	Brake Kit	1	1	EA
☐	2015	2015	Wheel Set, Front	1	1	EA
☐	2016	2016	Wheel Set, Rear	1	1	EA
☐	2017	2017	Seat	1	1	EA
☐	2018	2018	Seat Post, AA	1	1	EA
☐	2020	2020	Stem	1	1	EA
☐	2021	2021	Handle Bar	1	1	EA

2. From the View menu, choose Options to change the inquiry type and display sequence.

Processing Options for Bill of Material Inquiry (P30200)

Defaults Tab

These processing options control the default mode of processing, mode of inquiry, type of bill of material, and how the system sequences detail information. You choose one of three modes of processing:

- Simple inquiry
- Parts availability
- Leadtime inquiry

You choose one of three modes of inquiry:

- Single level
- Multilevel
- Multilevel indented

You define the bill of material type by specifying the appropriate user defined code. In addition, you choose whether to allow the system to display the detail information by component line number or by operation sequence number. The system uses these default values when processing the bill of material inquiry.

---

1. Processing Mode

Use this processing option to specify how the system displays the information on which you inquiry. Choose from the following processing modes: simple inquiry, parts availability, or leadtime inquiry.

The simple inquiry mode displays the components of a bill of material.

The parts availability mode displays the components of a bill of material and the available quantities for those components. If you use this mode, specify whether you want the system to subtract safety stock from the quantity on hand and whether to display negative quantities using the Safety Stock and Negative Items processing options under the Select tab.

The leadtime inquiry mode displays actual and calculated leadtimes for an item. Actual leadtimes are derived from the leadtimes as updated in the Item Branch table by the Leadtime Rollup program. Calculated leadtimes are the number of days that you must start to manufacture a part prior to the date that the parent needs it. You can use this mode of processing to define leadtimes for an item at each routing instruction step or to compare the actual and calculated leadtimes. If you use this mode, specify whether you want the system to display the actual or calculated leadtimes in the Leadtime Values processing option under the Select tab.

Valid values are:

1   The system displays the simple inquiry mode.

2   The system displays the parts availability mode.

3   The system displays the leadtime inquiry mode.

If you leave this processing option blank, the system displays the simple inquiry mode.

2. Inquiry Mode

Use this processing option to specify the level of detail that you want the system to display. The single level mode displays the parent item and its components. The multilevel mode displays the parent item, its components, and the subassemblies of the components. The multilevel indented mode displays the parent item, its components, and the subassemblies of the components. In addition, it indents the subassemblies. Valid values are:

1　The system displays the single level mode.

2　The system displays the multilevel mode.

3　The system displays the multilevel indented mode.

If you leave this processing option blank, the system displays the multilevel indented mode.

3. Bill of Material Type

Use this processing option to specify the type of bill of material that the system uses as the default value in the Type of Bill field on the Work With Bill of Material form. Bill of material type is a user defined code (40/TB)

that designates the type of bill of material. Enter the bill of material type to use or choose it from the Select User Define Code form. If you leave this processing option blank, the system uses M for manufacturing bill of material.

4. Display Sequence

Use this processing option to specify how you want the system to sort information on the Work With Bill of Material form. You can choose to sequence the data by component line number or by operation sequence number. The component line number indicates the sequence of the components on a bill of material. The operation sequence number indicates the sequence of the fabrication or assembly steps in the manufacture of an item. Valid values are:

1　The system sorts by component line number.

2　The system sorts by operation sequence number.

If you leave this processing option blank, the system sorts the data by component line number.

Versions Tab

These processing options control which versions of the following programs the system uses to process a bill of material.

1. Bill Of Material Print (R30460)

Use this processing option to specify the version of the Bill of Material Print report that the system uses. If you leave this processing option blank,the system uses the ZJDE0001 version.

Versions control how the Bill of Material Print report displays information.

Therefore, you might need to set the processing option to a specific version to meet your needs.

2. ECO Workbench (P30225)

Use this processing option to specify the version that the system uses when you choose the Row exit to the ECO Workbench program from the Work With Bill of Material form. If you leave this processing option blank, the system uses the ZJDE0001 version.

Versions control how the ECO Workbench program displays information.

Therefore, you might need to set the processing option to a specific version to meet your needs.

3. ECO Header (P48020)

Use this processing option to specify the version of the ECO Header program that the system uses when you choose the Form exit to the Bill of Material Revisions program from the Work With Bill of Material. If you leave this processing option blank, the system uses the ZJDE0001 version.

Versions control how the ECO Header program displays information. Therefore,you might need to set the processing option to a specific version to meet your needs.

4. Bill of Material Revisions (P3002)

Use this processing option to specify the version that the system uses when you choose the Form exit to the Bill of Material Revisions program from the Work With Bill of Material form. If you leave this processing option blank,the system uses the ZJDE0001 version.

Versions control how the Bill of Material Revisions program displays information. Therefore, you might need to set the processing option to a specific version to meet your needs.

5. Item Master (P4101B)

Use this processing option to specify the version that the system uses when you choose the Form exit to the Item Master program from the Work With Bill of material form. If you leave this processing option blank, the system uses the ZJDE0001 version.

Versions control how the Item Master program displays information. Therefore,you might need to set the processing option to a specific version to meet your needs.

6. Process Inquiry (P30240)

Use this processing option to specify the version that the system uses when you choose the Form exit to the Process Inquiry program from the Work With Bill of Material form. If you leave this processing option blank, the system uses the ZJDE0001 version.

Versions control how the Process Inquiry program displays information.

Therefore, you might need to set the processing option to a specific version to meet your needs.

7. Work With Routing Master (P3003)

Use this processing option to specify the version of the Work With Routing Master program that the system uses. If you leave this processing option blank, the system uses the ZJDE0001 version.

Versions control how the Work With Routing Master program displays information. Therefore, you might need to set the processing option to a specific version to meet your needs.

8. Item Availability (P41202)

Use this processing option to specify the version of the Item Availability program that the system uses. If you leave this processing option blank, the system uses the ZJDE0001 version.

Versions control how the Item Availability program displays information.

Therefore, you might need to set the processing option to a specific version to meet your needs.

9. Item Cross Reference (P4104)

Use this processing option to specify the version of the Item Cross Reference program that the system uses. If you leave this processing option blank, the system uses the ZJDE0001 version.

Versions control how the Item Cross Reference program displays information.

Therefore, you might need to set the processing option to a specific version to meet your needs.

10. Item Search (P41200)

Use this processing option to specify the version of the Item Search program that the system uses. If you leave this processing option blank, the system uses the ZJDE0001 version.

Versions control how the Item Search program displays information. Therefore,you might need to set the processing option to a specific version to meet your needs.

Select Tab

These processing options control whether the system subtracts the safety stock from the quantity on hand, displays only negative availability of items, and displays the calculated or the actual leadtimes.

1. Safety Stock

Use this processing option to specify whether the system subtracts the safety stock from the quantity on hand. Use this processing option in conjunction with the Parts Availability mode in the Processing Mode processing option under the Defaults tab. Valid values are:

Blank The system does not subtract safety stock from the quantity on hand.

1   The system subtracts safety stock from the quantity on hand.

2. Negative Quantities

Use this processing option to specify whether the system displays negative amounts for the component quantities. Use this processing option in conjunction with the Parts Availability mode in the Processing Mode processing option under the Defaults tab. Valid values are:

Blank The system displays all amounts.

1   The system displays only negative amounts.

3. Leadtime Values

Use this processing option to specify whether the system displays the actual or calculated leadtime values. Use this processing option in conjunction with the Leadtime Inquiry mode in the Processing Mode processing option under the Defaults tab. Valid values are:

Blank The system displays the actual leadtime values from the Item Branch table (F4102).

1   The system displays the calculated leadtime values.

Process Tab

These processing options control whether the system displays phantom items, process items, text lines, consolidated component rows, subassemblies, and purchased items. If you leave any of these processing options blank, the system excludes them from the inquiry. In addition, these processing options specify how the system adjusts the requested quantity for shrinkage and whether the system adjusts the extended quantity for scrap and for yield.

1. Phantom Items

Use this processing option to specify whether the system explodes the phantoms to the next level and omits the display of the phantom. A phantom is normally defined for

engineering or manufacturing purposes. Phantoms allow common parts, that may or may not be assembled, to be grouped in a bill of material structure. When viewing the bill of material, you may want to display only the subassemblies and raw material. Valid values are:

Blank The system omits the phantom items from the inquiry and displays only the subassemblies and raw material.

1   The system includes phantom items in the inquiry.

2. Process Items

Use this processing option to specify whether the system displays the process items. Process items include the process, co-products, by-products, and ingredients. A discrete bill may contain a component that is produced from a process. You use this processing option when you combine discrete and process manufacturing to display a complete structure of the requirements. Valid values are:

Blank The system excludes process items from the inquiry.

1   The system includes process items in the inquiry.

3. Text Lines

Use this processing option to specify whether the system displays the text lines. Valid values are:

Blank The system excludes text lines from the inquiry.

1   The system includes text lines in the inquiry.

4. Consolidate Component Items

Use this processing option to specify whether the system consolidates duplicate components. The same component may be listed in the bill of material several times, either on different subassemblies or on the same subassembly at different operations. When you use this processing option with the Subassemblies processing option, the system consolidates components at the subassembly level or for all levels of the bill of material. When viewing the consolidated components, the quantity required is accumulated for duplicate components. Valid values are:

Blank The system displays individual occurrences of duplicate components in the inquiry.

1   The system consolidates duplicate components in the inquiry.

5. Subassemblies

Use this processing option to specify whether the system displays the subassemblies. A

subassembly is an assembly that is used at a higher level to make up another assembly. Valid values are:

   Blank The system excludes subassemblies from the inquiry.

   1   The system includes subassemblies in the inquiry.
6. Shrink

Use this processing option to specify whether the system adjusts the requested quantity for shrinkage. Shrinkage is the planned loss of a parent item caused by factors such as breakage, theft, deterioration, and evaporation. Valid values are:

   Blank The system does not adjust the requested quantity.

   1   The system adjusts the requested quantity for shrinkage.
7. Scrap

Use this processing option to specify whether the system adjusts the extended quantity for scrap. Scrap is unusable material that results from the production process. It is material outside of specifications and of such characteristics that rework is impractical. Valid values are:

   Blank The system does not adjust the extended quantity.

   1   The system adjusts the extended quantity for scrap.
8. Yield

Use this processing option to specify whether the system adjusts the extended quantity for yield. Yield is the ratio of usable output from a process to its input. Valid values are:

   Blank The system does not adjust the extended quantity.

   1   The system adjusts the extended quantity for yield.
9. Purchased Items

Use this processing option to specify whether the system explodes to the next level of purchased items in the bill of material report. Valid values are:

   Blank The system excludes lower-level purchased items from the report.

   1   The system includes lower-level purchased items in the report.
10. Phantom Operation Sequence Number

Use this processing option to specify how the system displays operation sequence numbers

for components of a phantom item. Valid values are:

Blank
The system displays the operation sequence number of the component.

1
The system displays the operation sequence number of the phantom item.

Locating Components on Bills of Material

You might want to determine where a component is used on a bill of material. Components can appear on different levels in the bill of material and can be part of different subassemblies. You can use the Bill of Material Where Used program (P30201) to review where a component is used in a bill of material. You can conduct this review on single-level and on a multilevel bill of material. When you enter a component number, the system displays all of its parent items.

► **To locate where a component is used in a single-level bill of material**

From the Daily PDM Discrete menu (G3011), choose Single Level Where Used.

1. On Work With Bill of Material Where Used, complete the following fields and click Find:

   - Component Branch / Plant
   - Component Number
   - Parent Quantity
   - As of Date

2. From the View menu, you can change how the system displays the bill of material.

► **To locate where a component is used in a multilevel bill of material**

From the Daily PDM Discrete menu (G3011), choose Multi Level Where Used.

1. On Work With Bill of Material Where Used, complete the following fields and click Find:

   - Component Branch / Plant
   - Component Number
   - Parent Quantity
   - As of Date

2. From the View menu, you can change how the system displays the bill of material.

Processing Options for Bill of Material Where Used (P30201)

Defaults
1. Enter the Screen Default type: '1' Single Level, '2' Multi-Level, '3' Multi-Level Indented
Mode - Processing
2. Enter the default Bill Type to be used. If left blank, 'M' will be used for all Bill Types
Default Type Bill of Material
Versions
1. Enter the version to execute of the following programs. If left blank, the "ZJDE0001"
will execute.
Item Search (P41200)
Material Where Used Print (R30420)
Item Master (P4101B)
Where Used Inquiy (P13226)
Manufacturing Work Order Processing (P48013)
Bill of Material Inquiry (P30200)

Comparing Bills of Material

Use Bill of Material Comparison to compare bills of material. Based on the view mode that you select, the system displays all of the components of both bills or only those components of the two that are different. You can also use this program to compare a bill of material with a parts list or to compare two parts lists with each other. You can define the comparison in the processing options or by choosing the appropriate tab on the Work With Comparisons form.

►   **To compare bills of material**

From the Daily PDM Discrete menu (G3011), choose Bill of Material Comparison.

1. On Work With Comparisons, choose the BOM to BOM tab and complete the following fields under the BOM Comparison 1 heading:

    *   Item
    *   Branch/Plant

2. Complete the following fields under the BOM Comparison 2 heading:

    *   Item
    *   Branch/Plant

3. From the View menu, choose Mode.

    You will have two options: All or Difference. Only one option is displayed at a time. You can toggle between All and Difference to specify the data comparison view.

4. Click Find to view the comparison.

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Bill of Material Comparison - Display Comparisons

Find   Close   Tools

BOM Comparison

Records 1 - 10

	Work Center	2nd Item Number	/	Quantity Item 1	UOM Item1	Stocking Type Item1	/	Quantity Item 2	UOM Item2	Stocking Type Item2
⊙		2006		1.0000	EA	P		1	EA	P
○		2007		2.0000	EA	P		2	EA	P
○		2008		1.0000	EA	P		1	EA	P
○		2009		2.0000	EA	P		2	EA	P
○		2010		1.0000	EA	P		1	EA	P
○		2011		1.0000	EA	P		1	EA	P
○		2013		1.0000	EA	P		1	EA	P
○		2014		1.0000	EA	P		1	EA	P
○		2015		1.0000	EA	P		1	EA	P
○		2016		1.0000	EA	P		1	EA	P

5. On Display Comparisons, for each row review the differences between the information in the following fields:

- Quantity Item 1
- Quantity Item 2

Processing Options for Bill of Material Comparison (P30204)

Defaults Tab

This processing option controls the default value for the Bill Type fields.

1. Bill of Material Type

Use this processing option to specify the type of bill of material that the system uses as the default value in the Bill Type fields. Bill of material type is a user defined code (40/TB) that designates the type of bill of material. Enter the bill of material type to use or choose it from the Select User Define Code form. If you leave this processing option blank, the system uses M (manufacturing bill of material).

Display Tab

These processing options control the comparison level and the view mode for the review.

1. Single Level or Multilevel Comparison

Use this processing option to specify whether the system displays the information in a single level or multilevel comparison. The single level comparison shows the item's first-level components; the multilevel comparison shows the subassemblies and components for an item. Valid values are:

1   The system displays a single level comparison.

2   The system displays a multilevel comparison.

If you leave this processing option blank, the system displays a single level comparison.
2. View Mode

Use this processing option to specify the mode in which the system displays the information. The bill of material mode compares two bills of material, the parts list mode compares two parts lists, and the parts list to bill of material mode compares a parts list to a bill of material. Valid values are:

1   The system uses the bill of material mode.

2   The system uses the parts list mode.

3   The system uses the parts list to bill of material mode.

If you leave this processing option blank, the system uses the bill of material mode.

Process Tab

These processing options control the information that is included in the comparison.

1. Include Different Records

Use this processing option to specify whether the system displays all components or only those components that are different between the two bills of material or parts lists. Valid values are:

D The system displays the component that are different between the two bills of material or parts lists.

A The system displays all the components of the two bills of material or parts lists.

If you leave this processing option blank, the system displays the components that are different between the two bills of material or parts lists.

2. Work Center or Item Summary

Use this processing option to specify whether the system sorts the information by work center or by item number. Valid values are:

1   The system sorts the information by work center.

2   The system sorts the information by item number.

If you leave this processing option blank, the system sorts the information by item number.

3. Subassemblies

Use this processing option to specify whether the system displays the subassemblies. A subassembly is an assembly that is used at a higher level to make up another assembly. Valid values are:

Blank The system excludes subassemblies from the inquiry.

1   The system includes subassemblies in the inquiry.

4. Phantom Items

Use this processing option to specify whether the system explodes the phantom to the next level and omits the display of the phantom. A phantom is normally defined for engineering or manufacturing purposes. Phantoms allow common parts, that may or may not be assembled, to be grouped in a bill of material structure. When viewing the bill of material, you may want to display only the subassemblies and raw material. Valid values are:

Blank The system omits the phantom items from the inquiry and displays only the subassemblies and raw material.

1   The system includes phantom items in the inquiry.

Printing Bill of Material Information

You can generate several reports to review bill of material information. These reports retrieve data from the Bill of Material Master File table (F3002). You access these report from the Periodic PDM Discrete menu (G3021). They allow you to display different views of the bill of material. The following reports are available:

Single Level Bill of Material Report (R30460)   Displays the first-level components for an item.

Multi Level Bill of Material Report (R30460)   Displays all the levels of an item's components and allows you to review all of the subassemblies.

Where Used Item Report (R30420)   Lists the parent assemblies that contain a specific component and shows all the subassemblies of the components for an item, as well as the indented level of these subassemblies.

You can use processing options to define the scope for each report.

Caution

PeopleSoft recommends that you do not change the first two data sequences from the settings in the demonstration version of these reports. If you change the data sequencing, you might obtain unexpected or inaccurate results.

Processing Options for Bill of Material Print (R30460)

Display Tab

These processing options control the display format, display sequence, and other parameters for the report.

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1. Inquiry Mode

Use this processing option to specify whether the system displays the information in single level or multilevel format. The single level format shows the item's first-level components, the multilevel format shows the subassemblies and components for an item, and the multilevel indented format shows the subassemblies indented. Valid values are:

  1 The system displays the single level format.

  2 The system displays the multilevel format.

  3 The system displays the multilevel indented format.

If you leave this processing option blank, the system displays the multilevel indented format.

---

2. As of Date

Use this processing option to specify the "as of" date that the system uses for the bill of material. The "as of" date is the date that the system uses for effectivity checking. Enter a specific date to display bills of material that are effective on or after that date. You can enter any future or past date as the default value or choose it from the Calendar. If you leave this processing option blank, the system uses the current date.

3. Type Bill of Material

Use this processing option to specify the type of bill of material that the system uses as the default value. Bill of material type is a user defined code (40/TB) that designates the type of bill of material. Enter the bill of material type to use or choose it from the Select User Define Code form. If you leave this processing option blank, the system uses M (manufacturing bill of material).

4. Display Sequence

Use this processing option to specify whether the system sequences the information by component line number or by operation sequence number. The component line number indicates the sequence of components on a bill of material. The operation sequence number indicates the number that designates the routing step in the fabrication or assembly process that requires a specified component part. Valid values are:

1   The system sequences by component line number.

2   The system sequences by operation sequence number.

If you leave this processing option blank, the system sequences by component line number.

Print Tab

These processing options control the types of information that are included on the report.

1. Detail Line

Use this processing option to specify whether the system prints a second line of detail for each item. This second line of detail includes data such as leadtime level and bill revision level. Valid values are:

Blank The system prints only one line of detail for each item.

1   The system prints a second line of detail for each item.

2. Component Locators

Use this processing option to specify whether the system prints the component locations.

The component location is the specific location of a component in the assembly of an item, for example, the location of a part on a circuit board. Valid values are:

  Blank The system does not print component locations.

  1   The system prints component locations.

3. Parent Item Detail Line

Use this processing option to specify whether the system prints a line of detail for the parent item. This detail line includes data such as the drawing number. Valid values are:

  Blank The system does not print a line of detail for the parent item.

  1   The system prints a line of detail for the parent item.

Process Tab

These processing options control the types of item quantities that are included on the report.

1. Phantom Items

Use this processing option to specify whether the system explodes the phantoms to the next level and omits the display of the phantom. A phantom is normally defined for engineering or manufacturing purposes. Phantoms allow common parts, that may or may not be assembled, to be grouped in a bill of material structure. When viewing the bill of material, you may want to display only the subassemblies and raw material. Valid values are:

  Blank The system omits the phantom items from the inquiry and displays only the subassemblies and raw material.

  1   The system includes phantom items in the inquiry.

2. Process Items

Use this processing option to specify whether the system displays process items. Process items include the process, co-products, by-products, and ingredients. A discrete bill may contain a component that is produced from a process. You use this processing option when you combine discrete and process manufacturing to display a complete structure of the requirements. Valid values are:

  Blank The system excludes process items.

1   The system includes process items.

3. Subassemblies

Use this processing option to specify whether the system displays subassemblies. A subassembly is an assembly that is used at a higher level to make up another assembly. Valid values are:

  Blank The system excludes subassemblies.

  1   The system includes subassemblies.

4. Text Lines

Use this processing option to specify whether the system displays text lines.

Valid values are:

  Blank The system excludes text lines.

  1   The system includes text lines.

5. Consolidate Component Items

Use this processing option to specify whether the system consolidates duplicate components. The same component may be listed in the bill of material several times, either on different subassemblies or on the same subassembly at different operations. When you use this processing option with the Subassemblies processing option, the system consolidates components at the subassembly level or for all levels of the bill of material. When viewing the consolidated components, the quantity required is accumulated for duplicate components. Valid values are:

  Blank The system displays individual occurrences of duplicate components.

  1   The system consolidates duplicate components.

6. Purchased Item

Use this processing option to specify whether the system explodes to the next level of purchased items in the bill of material report. Valid values are:

  Blank The system excludes lower-level purchased items.

  1   The system includes lower-level purchased items.

7. Shrinkage

Use this processing option to specify whether the system adjusts the requested quantity for shrinkage. Shrinkage is the planned loss of a parent item caused by factors such as

breakage, theft, deterioration, and evaporation. Valid values are:

  Blank The system does not adjust the requested quantity for shrinkage.

  1   The system adjusts the requested quantity for shrinkage.
8. Scrap

Use this processing option to specify whether the system adjusts the extended quantity for scrap. Scrap is unusable material that results from the production process. It is material outside of specifications and of such characteristics that rework is impractical. Valid values are:

  Blank The system does not adjust the extended quantity for scrap.

  1   The system adjusts the extended quantity for scrap.
9. Yield

Use this processing option to specify whether the system adjusts the extended quantity for yield. Yield is the ratio of usable output from a process to its input. Valid values are:

  Blank The system does not adjust the extended quantity for yield.

  1   The system adjusts the extended quantity for yield.
10. Requested Quantity

Use this processing option to specify the required quantity of the parent item in the bill of material inquiry.
11. Unit of Measure as Input

Use this processing option to specify the unit of measure of the parent item in which the requested quantity is entered.

Processing Options for Material Where Used (R30420)

Format Option
1. Select the Mode or Style of report to be created: 1 = Single Level; 2 = Multi- Level; 3=Multi-Level Indented
Mode of Report
2. Enter a '1' to print a second line of detail on the report. If left blank, only one line of detail will be printed.
Print Line of Detail

Changing Multiple Bills of Material

From the Advanced Product Data Management menu (G3031), choose Where Used Update.

You change multiple bills of material by running the Where Used Bill of Material Update program (R30520). You can use this program to perform mass updates to information such as the following:

- Replacing one component item with another

- Deleting an item

- Changing effective dates for an item

- Changing the quantity per assembly for an item

- Changing the issue type code

- Changing the unit of measure

You use data selection to specify the items that you want to change. You then use processing options to define the change. The system locates all occurrences of the item (as a component) and updates the bills of material. You can also update a component with past or future effective dates.

If you want to make changes to a bill of material and remove the old records, run the program twice. First run the program to create the new records, and then run it again to delete the old ones.

The system stores changes in the Bill of Material Master File table (F3002). The system does not automatically update existing parts lists, MRP calculations, and costing information.

In addition, the program updates the following fields in other tables:

- Low Level Code (in the Item Master table, F4101)
- Net Change Flag (in the Item Branch File table, F4102)

You can run this program in either proof or final mode. In proof mode, the system generates a report of the proposed changes for your review but does not update the data. In final mode, the system updates the data and generates a report identifying the changes.

Caution

When you run this program, you can potentially change many bills of material in your system. PeopleSoft recommends that you run this program in proof mode first to verify your choices before running it in final mode to change the data. You might want to restrict access to this program.

Prerequisite

❑ Review your bills of material to verify that the item that you are updating is active within the effective dates and appears in at least one bill of material.

Processing Options for Where Used Bill of Material Update (R30520)

Defaults 1

1. Enter the Branch/Plant location to select for Bill of Material changes. This is a required field; if left blank, no processing will be performed.

Branch/Plant

2. Enter the new Component Item number. If left blank, no change will be made to the Component Item number.

New Component Item Number

3. Enter the new Quantity Per amount. If left blank, no change will be made to the Quantity Per amount.

New Quantity Per

4. Enter the new Quantity Per Unit of Measure. If left blank, no change will be made to the Quantity Per Unit of Measure.

New Unit of Measure

Defaults 2

1. Enter the new Effective From Date. If left blank, today's date will be used.

New Effective From

2. Enter the new Effective Thru Date. If left blank, no change will be made to the Effective Thru Date.

New Effective Thru Date

3. Enter the new Issue Type Code. If left blank, no change will be made to the Issue Type Code.

New Issue Type Code

Process

1. Enter a "1" if this is to be run in Final Mode. If left blank, the program will be run in Proof Mode.

Final Mode

2. Enter a "1" to DELETE the existing record(s) from the BOM file. No updating will be performed when Delete is selected.

Delete Mode

Edits

1. Enter a "1" to validate the new component against the Item Branch file (F4102). If left blank, the new item will not be validated.

Item Branch Validation

Work Centers and Routing Instructions

After you have defined an item's components using a bill of material, you must specify where each operation occurs and the sequence of operations that is necessary to manufacture the item. Work centers consist of people and machines where routing operations occur. Routing instructions define the operations that are required to produce an item, and the leadtime for an item at each routing instruction step.

Work Centers

A work center consists of people and machines. It is a specific production facility on the shop floor where the routing operations occur. For each work center, you define the following information:

- Number, description, and associated business unit

- Queue and move times

- Operator, machine, and hours-per-day capacity

- Rates for setup, labor, machine, and overhead

A work center enables you to do the following:

- Set up a dispatch group for departments that perform similar operations.

- Specify if an operation is a reporting point for material, or labor, or both.

- Define crew size per work center.

- Specify the work center efficiency for Product Costing.

- Define work center labor, machine, and setup rates.

The following graphic illustrates how work centers are integrated in the manufacturing process.

Work Center Integration

Product Costing

Routing instructions affect standard and actual costs.

Work centers are considered one unit for product costing.

Routing instructions affect generation of load hours in Capacity Requirements Planning.

Work center standard rate.

Work Center values affect leadtime calculations.

Shop Floor Management
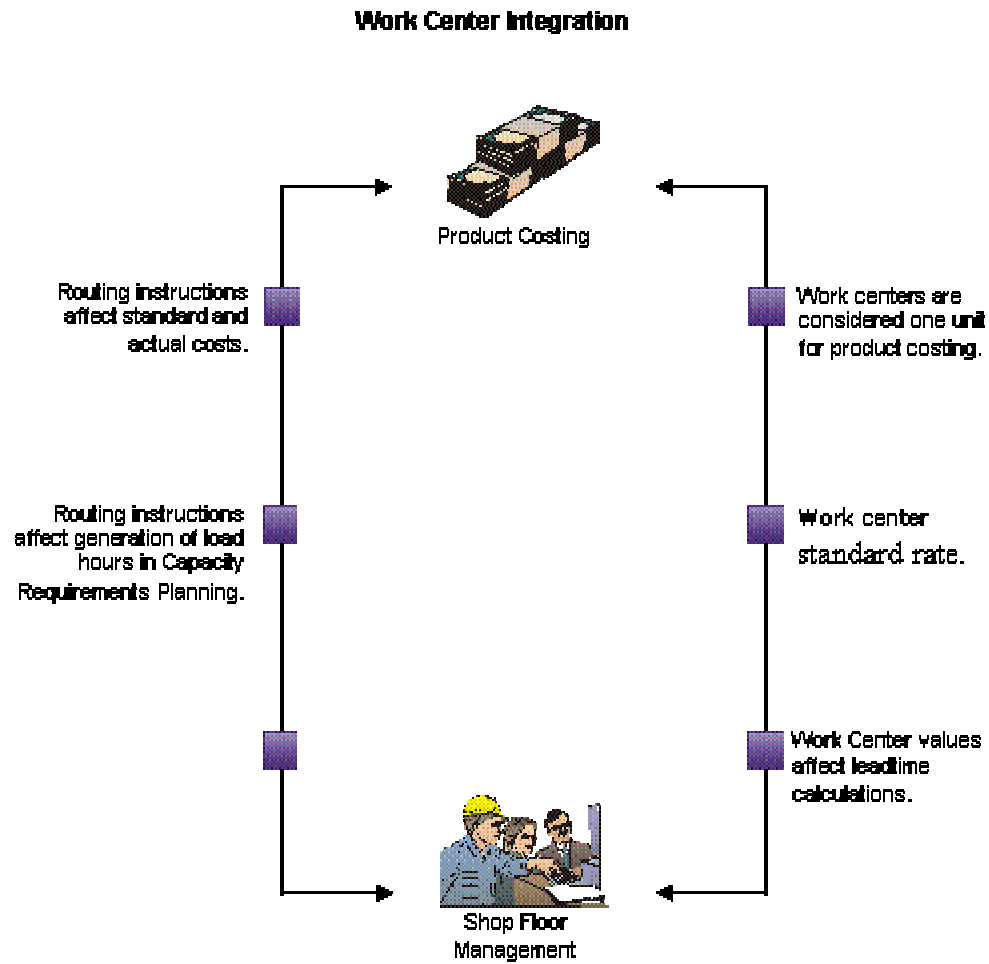
You should arrange your work centers so that work in process moves efficiently from one area to the next.

In the following example, equipment is grouped by operation. This structured flow layout provides a direct path and ensures efficient workflow.

Work Center Arrangement by Operation
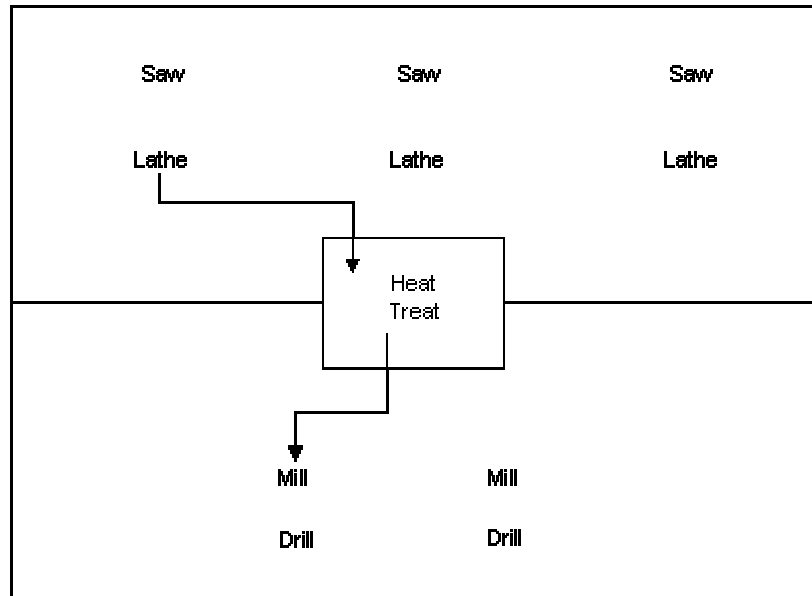
Routing Instructions

After you have defined the item's bill of material and where each operation occurs on the factory floor (work center), you must define the sequence of operations that is necessary to manufacture the item (routing instructions).

Routing instructions are critical for shop floor control, capacity requirements planning, product costing; and for measuring production efficiency. For each item, you define routing instructions that include the following information:

- Production process
- Equipment
- Operator skill level
- Inspection criteria
- Operations
- Sequence

- Applicable work centers

- Standard values for setup, machine, and labor times

You can define an alternate routing instruction operation to be performed, for example, using drill B if drill A is not operational. An alternate routing instruction operation is information for shop floor personnel. The system ignores it during product costing and backscheduling.

For activities that occur outside the plant, you define outside operations. Outside operations are characterized by their own line type and stocking type. They require a supplier and a purchase order.

For multiplant environments, set up identical or different routing instructions for an item by plant. Use the effective from and thru dates to enter and date routing instruction changes as they occur.

You have the option of setting up a master routing to create one routing instruction for parts that use the same manufacturing steps. By creating a master routing, you can eliminate duplicate routing instructions For example, during the manufacture of furniture, the frame and fabric might change, but the routing instructions are the same. To set up a master routing, you need to activate the Master Routing option in the Manufacturing Constants program (P3009) for the branch/plant where the item will be manufactured.

Use batch routing instructions for products that are commonly made in batch quantities. Batch routing instructions are useful in industries such as pharmaceuticals, foods, or petroleum, where products are manufactured in fixed quantities or batches. You can create different batch routing instructions for the same item by branch, type, batch quantity produced; or a combination of these items.

Working with Work Centers

You use work centers to define each production facility on the shop floor where routing instruction operations occur. Once you set up the work centers, you can enter costing and accounting information so that you can generate reports and journal entries. As you set up work centers, you associate them with particular branch/plants. This association allows you to use the same work center in different branch/plants. The system stores work center information in the Work Center Master table (F30006).

Prerequisite

❑ Set up your work centers and dispatch groups as valid business units in the Revise Single Business Unit program (P0006). See *Setting Up Business Units* in the *General Accounting Guide*.

Entering Work Centers

Enter work center information that corresponds to the facilities on your shop floor, such as dispatch group; pay point; crew size; and queue, move, and replenishment hours. You can also enter a shop floor calendar for the work center, even though the system does not validate this information.

If you are using the EnterpriseOne Capital Asset Management system, you enter work center information that corresponds to your maintenance labor groups.

► To enter work centers

Use one of the following navigations:

For Product Data Management, choose Enter/Change Work Center from the Daily PDM Discrete menu (G3011).

For Capital Asset Management, choose Work Center Revision from the Planning Setup menu (G1346).

1. On Work With Work Centers, click Add.

2. On Work Center Master Revisions, complete the following field in the header area:

    - Work Center
    - Branch/Plant

3. Choose the Work Center Master tab, and complete the following fields:

    - Prime Load
    - Crew Size
    - Number of Employees

Note

If you are setting up a work center as a production line, complete the following fields as well:

- Dispatch Group
- Location - Issue
- Location Branch
- Work Center Type
- Pay Point
- Critical W/C
- Number of Machines

4. Choose the Capacity & Shifts tab and complete the following fields:

- Hours
- Shift

Note

If you are setting up a work center as a production line, complete the following fields as well:

- Standard Capacity
- Capacity UOM
- Minimum Capacity
- Maximum Capacity

5. Choose the Hours & Efficiency tab and complete the following optional fields:

- Queue Hours
- Move Hours
- Replen. Hrs.
- Efficiency
- Utilization

6. Click OK.

Processing Options for Work Center Revision (P3006)

Interop

1. Enter the transaction type for the interoperability transaction. If left blank, outbound interoperability processing will not be performed.

Type - Transaction

2. Enter a '1' to write before images for Outbound change transactions. If left blank, only after images will be written.

Before Image Processing

Versions

Manufacturing Constants (P3009)

Business Units (P0006)

Entering Costing and Accounting Information

After you enter a work center, you can enter simulated rates for machine and labor hours. The Product Costing and Manufacturing Accounting systems use these values to generate reports, cost rollups, and journal entries. The Cost Rollup program uses all of these values to calculate the simulated cost.

You can update the simulated rates but not the frozen values. The system updates frozen values when you run Frozen Update.

See Also

❑ *Updating Frozen Costs* in the *Product Costing and Manufacturing Accounting Guide* for more information about updating frozen amounts

► **To enter costing and accounting information**

Use one of the following navigations:

For the Product Data Management system, choose Enter/Change Work Center from the Daily PDM Discrete menu (G3011).

For the Capital Asset Management system, choose Work Center Revision from the Planning Setup menu (G1346).

1. On Work With Work Centers, complete the following field and click Find:

   • Work Center

2. Choose the work center, and then choose Rates from the Row menu.

3. On Work With Work Center Rates, click Add.

4. On Work Center Rates Revisions, complete the following fields and click OK:

   • Cost Method
   • Direct Labor
   • Setup Labor

- Labor Variable O/H
- Labor Fixed O/H
- Machine Run
- Machine Variable O/H
- Machine Fixed O/H

5. Click Cancel.

6. On Work With Work Center Rates, click Find to confirm the new information.

Reviewing Operations by Work Center

You can review operations by work center to plan capacity, resources, and manpower; evaluate equipment needs; and display the items that include routing instruction operations at the work center.

► **To review operations by work center**

From the Daily PDM Discrete menu (G3011), choose Operations by Work Center.

1. On Work With Work Center Where Used, complete the following fields and click Find:

- Branch/Plant
- Work Center

2. Choose a work center and click Select.

3. On Enter Routing Information, review the following fields that display work hour information:

- Run Labor
- Run Machine
- Setup Labor

Working with Routing Instructions

After you enter a bill of material, you must define the routing instruction information for each item and for each branch/plant. Use routing instructions to define the sequence of operations necessary to manufacture an item. Routing instruction information is stored in the Routing Master table (F3003).

If you want to include an alternate routing step for any routing instructions, you need to complete the operation type field on the grid. If you manually link the routing instruction to a work order, the system includes alternate routing steps with the work order routing instructions. If you use the Order Processing program (R31410) to link the routing instruction to the work order, the system does not include alternate routing steps.

For an operation that is to be performed on an item by an external supplier, you can define an outside routing operation. For an outside operation, a purchase order is required. You can generate the purchase order when you run the Order Processing program. You can also enter a purchase order interactively after you have attached the routing to the work order.

If you are using activity-based costing, you can enter an activity code for each operation sequence to indicate how you want the system to account for the operation. To activate the Activity Code field, you need to turn on activity-based costing in the Advanced Cost Accounting Constants program (P1609).

You can print all routing instruction operations for an item by generating the Standard Routing Information report (R30430).

Note

You have the option to access work center information for a particular operation by choosing the Work Center option on the Row menu of Enter Process Information (P3003).

► **To enter routing instructions**

From the Daily PDM Discrete menu (G3011), choose Enter/Change Routing.

1. On Work with Routing Operations, complete the following fields:

    - Branch/Plant
    - Item Number
    - Routing Type
    - Item Rev

2. Click Add.

3. On Enter Routing Information, complete the following field:

    - Work Center

4. Complete the following optional fields:

- Oper. Seq.
- Description
- Activity Code

Note

The Activity Code field is only displayed if activity-based accounting is activated in the Advanced Cost Accounting Constants program (P1609).

- Run Labor
- Run Machine
- Setup Labor
- Cons Prod
- Queue Hours
- Move Hours
- Effective From
- Effective Thru
- Crew Size
- Supplier
- Cost Type
- Type Oper

- Equip No
- Standard Desc.
- P C
- Job Type
- PO (Y/N)
- Next Oper
- Yield %
- Cum Yield %
- Percent of Overlap
- Time Basis
- Consuming Location
- Resource Units
- Capacity UOM
- Employee Number
- Competency Type
- Competency Code
- Level From
- Level To
- Match Rule

5. Click OK.

Processing Options for Enter/Change Routing (P3003)

Display Tab

These processing options control whether these fields display in the routing header.

1. Line/Cell

blank = Field is inactive on the form
1 = Field is active on the form

Use this processing option to specify whether the system displays the Line/Cell field in the routing header. The Line/Cell number defines a production line or cell in repetitive manufacturing. Valid values are:

Blank
Do not display the Line/Cell field.

1

Display the Line/Cell field.
2. Routing Type

blank = Field is inactive on the form
1 = Field is active on the form

Use this processing option to specify whether the system displays the routing type (40/TR) in the routing header. You can define routing types to meet the needs of your organization. Valid values are:

Blank
Do not display the Routing Type.

1
Display the Routing Type.
3. Batch Quantity

blank = Field is inactive on the form
1 = Field is active on the form

Use this processing option to specify whether the system displays the Batch Quantity field in the routing header. The batch quantity is the number of finished units that you expect this bill of material or routing to produce. You can specify varying quantities of components based on the amount of finished goods expected. Valid values are:

Blank
Do not display Batch Quantity.

1
Display Batch Quantity.

Defaults Tab

This processing option controls what routing type is used as a default value

1. Type of Routing

Use this processing option to specify the routing type that the system displays. Routing types are defined in UDC 40/TR. You can define routing types that correspond to routing instructions. Examples include:

M
Standard Manufacturing Routing

RWK

Rework Routing

RSH

Rush Routing

If you choose to include the routing type in the routing header, the related routing instructions apply.

Note: The product costing and capacity planning systems use only M routing types.

Process Tab

These processing options control whether the program is called in inquiry or revision mode, and whether the operation scrap percent value in the bill material and the cumulative yield value on the routing are updated.

1. Mode - Processing

0 = Inquiry (Default)
1 = Revise

Use this processing option to specify whether the system uses inquiry mode or revision mode for the Work With Routing Master program (P3003). If you specify inquiry mode, you can add routings but you cannot revise existing routings. If you specify revision mode, you can add routings and make changes to existing routings. Valid values are:

0

Inquiry Mode (default)

1

Revision Mode

2. Update Component Operation Scrap Percent and Cumulative Yield

Blank = Do not update the operation scrap perecent and cumulative yield percent
1= Update the operation scrap percent and cumulative yield percent

Use this processing option to specify whether the system updates the following fields for the components in the operation when you update the operation yield percent:

 o Operation Scrap Percent in the Bill of Material Revisions program (P3002)
 o Cumulative Yield Percent in the Work With Routing Master program (P3003)

Valid values are:

Blank

Do not update the Operation Scrap Percent and Cumulative Yield Percent.

1

Update the Operation Scrap Percent and Cumulative Yield Percent.

Interop Tab

These processing options control processing for outbound transactions.

1. Transaction Type

Use this processing option to specify the transaction type that the system uses for export processing or for the supply chain scheduling and planning. Transaction Type is a user defined code (00/TT) that specifies the type of transaction for the rate schedule.

Note: Blank is a valid value if you do not use export processing.
2. Outbound Processing Version

Use this processing option to specify the version that the system uses when you access the Outbound Processing program (R00460) from the Work With Routing Master (P3003) program. If you leave this processing option blank, the system uses version ZJDE0001.

3. Before Image Processing

Use this processing option to specify whether the system writes the "before" image for an outbound change transaction. Valid values are:

Blank
Do not write the "before" image for a change transaction.

1
Write the "before" image for a change transaction.

Versions Tab

These processing options control which version the system uses when you call the following programs from the Enter/Change Routing program:

1. Bill of Material Revision (P3002)

Use this processing option to specify the version that the system uses when you access the Bill of Material Revisions program (P3002) from the Enter/Change Routings form. If you leave this processing option blank, the system uses version ZJDE0001.

2. Work With Assets (P1204)

Use this processing option to specify the version that the system uses when you access the Work With Assets program (P1204) from the Enter/Change Routings form. If you leave this processing option blank, the system uses version ZJDE0001.

3. Work With Item Master (P4101)

Use this processing option to specify the version that the system uses when you access the Item Master program (P4101) from the Enter/Change Routings form. If you leave this processing option blank, the system uses version ZJDE0001.

4. Work With Activity Based Costing Workbench (P1640)

Use this processing option to specify the version that the system uses when you access the Activity Based Costing Workbench program (P1640) from the Enter/Change Routing form. If you leave this processing option blank, the system uses version ZJDE0001.

► **To enter outside operations**

From the Daily PDM Discrete menu (G3011), choose Enter/Change Routing.

1. On Work with Routing Operations, complete the following fields and click Find:

   - Branch/Plant
   - Item Number
   - Routing Type

2. Click Select.

3. On Enter Routing Information, complete the following fields for the outside operation:

   - Supplier
   - Cost Type
   - PO (Y/N)

4. Click OK.

Updating Component Scrap

From the Advanced Product Data Management (G3031) menu, choose Planned Yield Update.

During manufacturing, material loss often occurs at operations. Examples of loss include evaporation or items damaged during move time. You can update the amount of materials and labor hours to account for operation loss by running Planned Yield Update.

For the operations that you choose, this program uses the operational planned yield percent to update the cumulative percent for the routing instruction, and the operation scrap percent for the bill of material.

You enter the operational planned yield percent value on the routing instruction. This value represents the planned output yield percent for a step. The system uses this value to adjust the operation scrap percent for the components at that step. Then Material Requirements Planning uses the step scrap percent along with the existing component scrap percent to plan component demand.

The system updates the cumulative planned yield percent on the routing instruction. This value represents the item quantity that an operation is expected to produce. It is the ratio of usable output to input quantity. This value can be less than 100 percent, due to loss at one or more operations. The system calculates the cumulative yield in reverse of the operations' sequence. The system uses this value to increase the labor hours to make up for loss within the operation, or to decrease labor hours if the cumulative planned yield percent is higher than 100 percent.

The system updates the operation scrap percent value on the bill of material. The operation scrap percent represents the expected amount of scrap material that is created at each operation. The system calculates this value by compounding the yield percentages from the last operation to the first operation. The system uses this value to increase or decrease the amount of materials to account for loss within the operation.

Example: Component Scrap

Step	Operational Planned Yield %	Cumulative Planned Yield %	Operation Scrap %
40	80	80%	(100/80) - 100 = 25%
30	90	.80 x .90 x 100 = 72%	(100/72) - 100 = 39%
20	100	.72 x 100 = 72%	(100/72) - 100 = 39%
10	95	.72 x .95 x 100 = 68%	(100/68) - 100 = 47%

Processing Options for Planned Yield Update (R3093)

Defaults
Enter the "As of" date for the Planned Yield Update. If left blank the current date will be used.
Date 01

Working with Lead Times

Determining lead time is an essential part of any manufacturing or scheduling process. For any product that you purchase or manufacture, you encounter a time lag between when you order or start the item and when you receive or finish it. To account for the time lag, you must estimate the extra time and allow for it in your planning.

You define leadtimes for an item at each routing step, and then run the Leadtime Rollup program (R30822A) to update leadtime information in the Item Branch File table (F4102). The system stores leadtime information in the Bill of Material Master File table (F3002).

You can review the actual level lead time and manufacturing lead time for an item on the Leadtime Inquiry form (P30200). These are the leadtimes as updated in the Item Branch File table (F4102) by the Leadtime Rollup program (R30822A). The calculated leadtimes display how many days prior to the requested date of the parent you must start to manufacture a part.

▶ **To review lead times**

From the Daily PDM Discrete menu (G3011), choose Leadtime Inquiry.

1. On Leadtime Inquiry - Multi Level Indented, choose the Leadtime Inquiry tab, complete the following fields, and then click Find:

   - Branch
   - Item Number

2. Review the following fields in the header area:

    - Level
    - Manufacturing
    - Cumulative
    - Type of Bill

3. From the View menu, you can change how the system displays the bill of material:

    - Single Level
    - Multi Level
    - Multi Level Indented

Generating Lead Times

From the Advanced PDM menu (G3031), choose Leadtime Rollup.

You must generate lead times for the Material Requirements Planning and Capacity Requirements Planning systems. The Leadtime Rollup program (R30822A) calculates planned level lead times for manufactured items and updates them in the Item Branch File table (F4102). This program calculates the following values:

- Queue, move, and setup hours

- Lead time per unit

- Level, manufactured, and cumulative lead times for selected items

When calculating the lead time per unit, you can set a processing option so that the number of employees or machines in the work center that you use to divide the run time in the routing by is set to 1. This value overrides the actual number of employees or machines in the work center.

Caution

You cannot run this program in proof mode. It updates the records according to the processing options you choose. Changes to leadtimes affect the Materials Requirements Planning and Capacity Requirements Planning systems. Run this program without any data selection and with no changes to data sequencing.

Processing Options for Leadtime Rollup (R30822A)

Defaults

1. Enter the Branch/Plant to be processed or leave it blank for all Branches.

Branch

2. Enter date for routing effectivity. Blanks will default to today's date.

As of Date

3. Calculate Leadtime Level for Queue and Move Hours

Blank - Use Work Center Hours

1   - Use Work Hours per Day

4. Zero Move/Queue hours in Routings

Blank - Use Zero hours from Routings.

1   - Use hours from Work Center master

5. Override Number of Employees/Machines to '1'

Blank - Use existing No. of Employees/Machines

1   - Override No. of Employees/Machines to '1'

Repetitive Manufacturing Setup

Repetitive or rate-based manufacturing of discrete products uses manufacturing techniques that are associated with achieving just-in-time or flow line production. Repetitive manufacturing aims to achieve the continuous production of a mix of similar items on a specialized flow line rather than the traditional work order with its fixed quantity and due date of a single item. It is usually the preferred method with families of products that have minor variation among products with a constant, high-volume demand, such as cameras and electronics.

Repetitive manufacturing dedicates entire production lines to a family of products. These product families share similar components and routing instructions. Generally, these products are manufactured in a continuous process, which requires less inventory movement to and from the production line. Work center setup and changeover times among related products are minimized.

Equipment and work centers are designed to manufacture a family of products and allow quick setup changes. Repetitive environments define production in terms of units per hour. The capacity for the line is determined by one constraining operation. You define the constraining operation as the slowest cell in the line. Scheduling this line requires the tools to schedule, sequence, and balance production. Balancing the line so that the workload is distributed evenly along the production line is very important and you can produce a mix of products with different constraining operations. This product mix, when properly sequenced, allows the production line to operate consistently and efficiently.

The product mix is typically not a large batch of one item. Instead, the mix is the integration of different variances within the product family members through the production line in an order that optimizes the production line. For example, when manufacturing cameras, the cast body remains the same while certain components vary, such as top and bottom covers. The production line can be mixed by ordering the production of cameras as follows: 3 black, 2 silver, 1 black with silver trim, 3 black, 2 silver, 1 black with silver trim, and so on. This product mix meets production demand.

To supply the product line, inventory can be pulled from stock or another work center and delivered as needed to the consuming operation or delivered directly to the line by external suppliers. While requirements for material are driven by demand, movement is controlled by visual cues called kanbans. The kanban authorization to produce is generated by actual demand.

Repetitive manufacturing has the following benefits:

- Decreases work-in-process inventory
- Increases responsiveness to the customer's requirements
- Reduces leadtime
- Ties inventory consumption to production completion
- Ties frequent supplier deliveries to actual production demand
- Minimizes non-value-added activities

Caution

All items that are produced in a repetitive manufacturing environment must have an Order Policy Code value of 5, defined in the Item Master program (P4101) or Item Branch program (P41026). This value defines the item as a rate scheduled item.

Example: Manufacturing Bicycle Frames

The following table illustrates a production line that is operating in a repetitive manufacturing environment. This production line manufactures three aluminum bicycle frames for three different bicycles.

Consuming Location	Material	Operation Number	Work Center	Description
LA.10	50mm aluminum tubing	10	R-112	Cut to length.
		20	R-121	Mill ends.
		30	R-122	Drill mounting holes and pin.
LA.10	Rear assembly, touring	40	R-112	Cut to length.
		50	R-121	Mill ends.
		60	R-134	Form rear assembly.
LA.70	Head tube light Bottom tube	70	R-101	Weld frame.
LA.80	Front fork, touring	80	R-103	Inspect welds.

Repetitive Terminology

The following topics describe terminology with which you should be familiar before working with repetitive manufacturing:

Production line	A production line is a sequence of operations that are arranged to produce a family of products. The production line is defined as a work center. The operations that make up the production line might or might not be work centers. You defined these in the routing instruction. The capacity of the production line is determined by the constraining operation within the production line.
Bill of Material	For items produced in a repetitive manufacturing environment, the operation sequence number on the bill of material is crucial to ensure that the components are delivered to the production line at the operations for which they are needed. Because the line is set up to run in a continuous fashion, components typically are set up to be consumed through backflushing, at a specific paypoint, or upon completion..
Routing Instruction	The relationship between the production line and the operations or work centers that the line contains are defined in the routing instructions for the parent item. Each operation is tied to its production line by the line or cell number in the Line/Cell field on the routing instruction. The consuming location is the inventory location from which the production line pulls components that are necessary to produce the parent at a particular operation. The consuming location must be identified in the routing instruction to ensure that inventory is always available to the line. When the system backflushes and relieves inventory from the consuming location, it triggers the kanban, a visual cue, to replenish inventory as materials are consumed.
Kanban	Kanban is a method of just-in-time production that uses standard containers or lot sizes. It is a pull system in which work centers or locations signal that they need to withdraw parts from feeding work centers, inventory locations, or suppliers. This signal alerts manufacturing to build, or suppliers to furnish, the required part in the standard lot size that is defined by the Kanban Master table (F3016).
Item to Line Relationship	Item-to-line defines the relationship between an item produced in a repetitive manufacturing environment and the production line or lines om which the item is produced. Each relationship defines the number of resource units that are required by the line to produce one end product.

See Also

❑ *Kanban Management Setup* in the *Kanban Management Guide*

Setting Up Shift Information

You need to identify specific shift information for repetitive manufacturing in three places:

- Manufacturing constants
- Work centers
- Shop floor calendars

You set up information in the manufacturing constants to identify the usual number of work hours by shift that the plant operates in one day. Use the Manufacturing Constants program (P3009) to establish shifts that are unique to your branch/plants. You can identify up to six shifts for a 24-hour period. However, the work hours per day are calculated only from the first three shifts that are listed.

You must define shop floor calendars by shift so that the system can use the calendars to schedule and sequence lines by shift. To increase plant capacity, you can run production lines for more than one shift, as well as run different lines of production on different days of the week. The system uses these calendars for line sequencing by shift in repetitive manufacturing. Shift calendars are not used for Distribution Requirements Planning, Master Production Schedule, and Material Requirements Planning.

If you locate a month and year that does not exist, it appears with default values for workdays (Monday through Friday) and weekends (Saturday and Sunday). Holidays are always user defined.

Enter production line information that corresponds to the facilities on your shop floor. Any work hours per shift that you enter in the Work Center Revision program (P3006) override all of the hours per shift information in the Job Shop Manufacturing Constants table (F3009).

You also set up resource unit information that indicates the capacity of a work center on a given day for a specified shift. Use the Work Center Resource Units program (P3007) to identify additional shifts for your work centers.

Note

When you add resource units for a shift, the system also adds a blank shift that represents the total of all shifts.

See Also

See the following topics in the *Product Data Management Guide*:

- ❑ *Setting Up a Shop Floor Calendar* for information about setting up a shift calendar
- ❑ *Entering Work Centers* for information about setting up shifts for work centers

► **To set up shifts in manufacturing constants**

From the Product Data Management Setup menu (G3041), choose Manufacturing Constants.

1. On Work with Manufacturing Constants, complete the following field and click Find:

   - Skip to Branch/Plant

2. Choose a branch/plant and click Select.

3. On Manufacturing Constants Revision, click the Shifts tab and complete the following fields for all the shifts that you want set up:

   - Hours
   - Shift Code

   You can enter hours for up to six different shifts. However, the Work Hours Per Day field is the total of only the first three shift hours entries.

4. Click OK.

► **To set up resource units**

Use one of the following navigations:

For Shop Floor Management, choose Enter/Change Resource Units from the Shop Floor Management Setup menu (G3141).

For Capital Asset Management, choose Craft Resource Units from the Labor Planning menu (G1324).

1. On Work with Resource Units, complete the following fields:

   - Branch/Plant
   - Work Center
   - Month
   - Year

2. To specify a specific shift, complete the following field:

   - Shift

3. Click Find.

4. Choose a record and click Select.

5. On Work Center Resource Unit Revision, complete the following field for each day:

   - Total Resource Units

6. Complete the following optional fields:

   - Efficiency
   - Utilization

7. Click OK.

8. Review the following field:

   - Shift

Note

You cannot manually change the values if the value in the Shift field is blank. A blank value in the Shift field represents the sum of all shifts for a work center for a specific period of time.

Enter/Change Resource Units - Work Center Resource Unit Revision

| Work Center | 200-901 | Assembly | | Branch/Plant | M30 |
| Month/Year | 1 | 5 | Century | 20 | Unit of Measure | HR | Shift |

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Efficiency
						1	100.00
2	3	4	5	6	7	8	
9	10	11	12	13	14	15	
16	17	18	19	20	21	22	Utilization
23	24	25	26	27	28	29	
30	31						100.00

						0	
0	32.00	32.00	32.00	32.00	32.00	0	
0	32.00	32.00	32.00	32.00	32.00	0	
0	32.00	32.00	32.00	32.00	32.00	0	Total
0	32.00	32.00	32.00	32.00	32.00	0	Resource Units
0	32.00						672.00

9. Click OK.

Processing Options for Work Center Resource Units (P3007)

Defaults

1. Enter the Default Unit of Measure for Work Center Resource Units. If left blank, HR will be used as the default Unit of Measure.

Unit of Measure as Input

Work Day Calender (P00071)

Process Manufacturing

Process manufacturing produces products such as liquids, fibers, powders, or gases. Pharmaceuticals, foodstuffs, and beverages are typical examples of process products and represent a significant share of the manufacturing market. These types of products are usually manufactured by the following two-step process:

- Mixing or blending
- Filling or packaging

Intermediate steps, such as curing, baking, or additional preparation, can also occur. Intermediates allow you to track the quantity of output of any operation in a work center at a specific time. You can define intermediates in different units of measure, by item, or by quantity. You can set up one intermediate per operation, but you cannot define an intermediate for the last operation in a routing instruction.

Process manufacturing uses recipes or formulas, and resources or ingredients. Resources can either be consumed or produced during the manufacturing process. Products that the process produces are called co-products and by-products. In a process recipe or formula, the quantity of a component can vary according to its grade or potency.

The different types of processing in process manufacturing are as follows:

Batch processing	In batch processing, a product is usually made in a standard run or lot size determined by vessel size, line rates, or standard run length. Items made this way are typically scheduled in short production runs due to the life cycle of the product after its completion. Typical items are pharmaceuticals, foods, inks, glues, oil or chemical products, and paints. Co-products and by-products might be generated during batch processing.
Continuous processing	In continuous processing, production typically occurs over an extended period using dedicated equipment that produces one product or product line with only slight variations. This method of manufacturing is characterized by the difficulty of planning and controlling quantity and quality yield variances. Typical items are petroleum-based products or distilled seawater. Co-products and by-products are generally more prevalent in continuous processing than in batch processing.

In addition, strategies similar to those in discrete manufacturing, such as repetitive or "to-orders" (for example, make-to-order, assemble-to-order, or engineer-to-order) might drive the process. Usually, both batch and continuous processing methods require extensive record keeping on quality and tolerance values during the process, as well as strict adherence to lot tracing and tracking.

Not all process are planned, scheduled, or produced in their primary unit of measure. To accommodate this situation, full unit of measure capabilities are allowed throughout the Shop Floor Management system.

Most entry programs have a unit of measure next to the quantity fields, and the unit of measure is stored in the database tables along with the quantities. The system uses the following four fields in the Item Master table (F4101) throughout shop floor as default values in entry forms:

- Component Unit of Measure

- Production Unit of Measure

- Primary Unit of Measure

- Secondary Unit of Measure

The Primary Unit of Measure value must be the smallest of the three units of measure. If intermediates exist for an operation, the intermediate can be any valid unit of measure as long as the conversion is set up.

Process Terminology

You should be familiar with the following process manufacturing terms before using process manufacturing:

Co-Products	Many process steps create more than one output. A co-product is produced by process steps that are defined for specific ingredients. Co-products are usually the main products that companies sell to customers. For example, a graphite lubricant process creates two co-products: household and graphite lubricants. Material Requirements Planning plans for co-product demand.
By-Products	A by-product is produced as a residual or incidental item that results from the process steps. Companies can recycle, sell, or use by-products for other purposes. For example, a graphite lubricant process creates one by-product: sludge. Material Requirements Planning does not plan for by-product demand.
Ingredients	An ingredient is the raw material or item that is combined during process manufacturing to produce the end item. Typically, raw materials are purchased.
Intermediates	Intermediates allow you to track the quantity of output of any operation in a work center at a specific time. You can define intermediates in different units of measure, by item, or by quantity. You can set up one intermediate per operation, but you cannot define an intermediate for the last operation in a routing. You can manually attach intermediates. Intermediates are not stocked in inventory, sold to customers, or planned by MRP.

Fermented liquid is an example of an intermediate. The liquid ferments for an extended period of time before being distilled. The resulting liquid is not a finished product, but it proceeds to the next operation. |

Process Routing Instructions

A process routing instruction details the method of manufacture for a specific process item. It includes operations and operation sequence, work centers, and standards for setup and run. You can also define operator skill levels, inspection operations, and testing requirements.

Substitutes

A substitute item is an alternate item that the system uses in production when the primary item is not available. You can define substitutes for a single ingredient within your process. You might need to do so for several reasons, such as quality concerns, inventory shortages, or supplier delivery problems.

Alternate Operations

An alternate operation is a replacement for a normal operation for an item in the manufacturing process. You can define an alternate operation to be performed only as required, such as using oven B if oven A is unavailable. This information assists shop floor personnel, but it is not used by the Product Costing or the planning and execution systems.

Batch Processes

In batch processing, items are produced in fixed quantities, or batches. Food, petroleum, and pharmaceutical industries use batch processing. The batch process feature allows you to define different processes for items based on quantity or batch size, since processes vary by quantity.

Percent Bills of Material

Percent bills of material enable you to define processes with ingredient quantities that are expressed as a percent of the process batch quantity. The system processes percent information as follows:

- Multiplies the ingredient percentage times the batch quantity to obtain ingredient quantities expressed in the batch quantity unit of measure
- Converts the ingredient quantities from the batch unit of measure to the ingredient unit of measure

The system stores quantities for ingredients as follows:

- Calculates a percentage for the ingredient in relation to the batch size
- Converts the batch unit of measure to the ingredient unit of measure and stores the quantity for the ingredient

You must set up unit of measure conversions for percent bills of material to work properly. You must also verify that all components can convert to the batch quantity unit of measure.

Process Manufacturing Examples

The following section provides different examples of process manufacturing.

Graphite Lubricant Batch Process

The following illustration shows the ingredients, routing instructions in operation number sequence, and the co-products and by-products that the graphite lubricant batch process produces:

Graphite Lubricant Production Process

Ingredients	Routing Instructions	Co-products and By-products
	10 Filter oil	By-product = sludge
Bulk oil	20 Blend additives	
	30 Refine	Co-product = Household lubricant
	40 Blend graphite	Co-product = Graphite lubricant
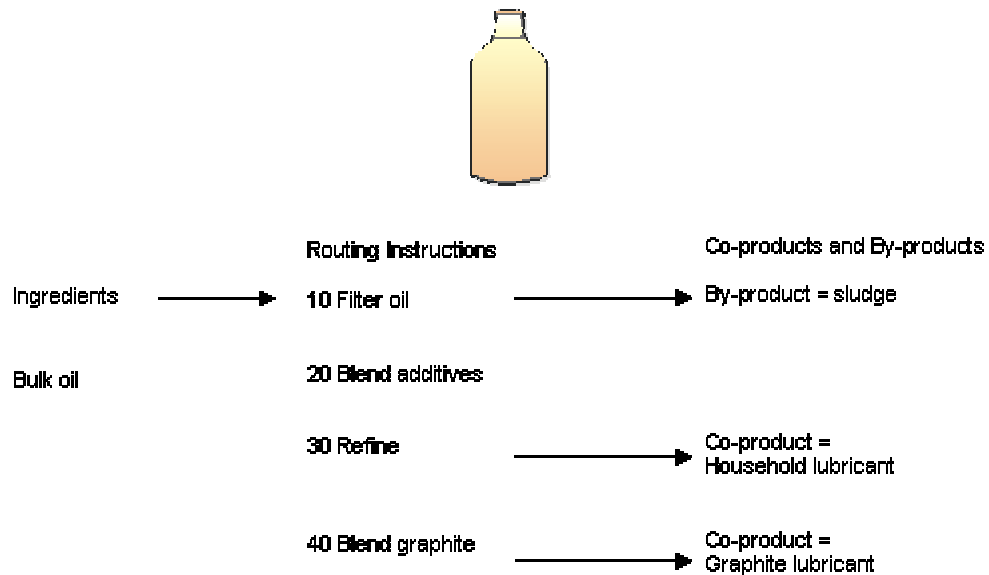
Percent Process

In the following example, the parent item is Soft Drink and its batch quantity is 300 GA:.

Components	Quantity	Unit of Measure	Fixed or Variable
Vanilla	50	GA	%
Water	40	QT	%
Concentrate	10	LT	%

The system calculates the following:

% Calculation and Conversion to Batch Unit of Measure	Storage		
Vanilla	= .5 X 300	= 150 GA	150 GA
Water	= .4 X 300	= 120 GA	480 QT
Concentrate	= .1 X 300	= 30 GA	114 LT

The system uses the ingredient unit of measure in the percent process to convert the number of gallons that correspond to the percent for each ingredient. In this example, the system calculates the ingredients water and concentrate to be 120 gallons (GA) and 30 GA of the batch size. The system converts the unit to ingredient unit of measure and stores them as 480 quarts (QT) and 114 liters (LT).

Potato Chip Continuous Process

The following illustration shows the ingredients, routing instructions in operation number sequence, and the co-products and by-products that the potato chip continuous process produces:

Potato Chip Production Process
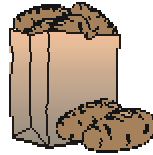
Ingredients	Routing Instructions	Co-Products and By-Products
Potato slices ⟶	10 Starch-wash potatoes	
	20 Drain water	⟶ By-product = waste water
	30 Add water, soak	
	40 Drain water	⟶ By-product = waste water
Frying oil ⟶	50 Deep fry	⟶ By-product = used frying oil
Seasoning ⟶	60 Add seasoning	
	70 Packages	
Nitrogen ⟶	80 Add preservatives	⟶ Co-product = potato chips

Working With Processes

Process manufacturing companies must cost, plan, and schedule the products that they produce. Processes use formulas or recipes to add value to ingredients in either batch or continuous processing. The following activities can occur in a process:

- Mixing ingredients

- Separating ingredients

- Forming ingredients

- Performing chemical reactions on ingredients

Processes provide the basis for creating a parts list for a work order in the Shop Floor Management system. Processes include ingredient relationships and routing instructions. The ingredient relationship defines information about the ingredients-- including effectivity dates, fixed and variable quantities-- and queue and move times.

You define a process item with ingredient relationships on the Enter/Change Process form. Relationships also determine information about co-products, by-products, intermediates, and substitutions.

You define the steps that are required to produce a manufactured item with process routing instructions. Routing instructions define work centers and labor standards. Process routing instructions are critical for capacity planning and product costing, and for measuring production efficiency.

When you define a process, you combine information from the following tables:

- Job Shop Manufacturing Constants table (F3009)
- Item Master table (F4101)
- Work Order Routing table (F3112)
- Item Branch File table (F4102)

The resulting process is stored in the Bill of Material Master table (F3002) and changes are stored in the Bill of Materials Change File table (F3011). The process operations are stored in the Routing Master File table (F3003).

Prerequisite

❑ To use batch processing, set the processing options for Enter/Change Process (P3003) and Enter/Change Bill (P3002) to activate batch functions.

Entering Processes

You use the Enter/Change Process program (P3003) to enter a process. You define a process item with ingredient relationships. Relationships also determine information about co-products, by-products, intermediates, and substitutions. You also enter batch information, batch quantity and unit of measure for the process.

▶ **To enter processes**

From the Daily PDM Process menu (G3012), choose Enter/Change Process.

1. On Work with Routing Operations, complete the following fields and click Add:

- Branch/Plant
- Item Number

2. On Enter Process Information, complete the following optional fields:

- Routing Type
- Line/Cell

3. To enter batch information, complete the following fields and click OK:

- Batch Quantity
- Unit of Measure

4. The new process now displays on the Work with Process form.

Entering Process Operations

After you enter a process, you must enter the process operations. Operations define the work centers and labor standards that are required to manufacture the process item. To enter the process operations, you must provide the following information:

- Work center and operation sequence for the process

- Hours for any machine, labor, setup, move, and queue time that you might incur

- For operations that you set up as outside operations, you need to specify a supplier and indicate that a purchase order is required.

Note

You have the option to access work center information for a particular operation by choosing the Work Center option on the Row menu of the Work With Routing Master form (P3003).

If you are using activity-based costing, you can enter an activity code for each operation sequence to indicate how you want the system to account for the operation. To activate the Activity Code field, you need to turn on activity-based costing in the Advanced Cost Accounting Constants program (P1609).

► To enter process operations

From the Daily PDM Process menu (G3012), choose Enter/Change Process.

1. On Work With Routing Operations, complete the following fields for the process for which you want to enter an operation, and then click Add:

    *   Branch/Plant
    *   Item Number

2. On Enter Routing Information, complete the following fields:

    *   Work Center
    *   Oper. Seq.
    *   Run Labor
    *   Run Machine
    *   Setup Labor
    *   Queue Hours
    *   Move Hours

3. Complete the following optional fields and click OK:

    *   Standard Desc.
    *   Line/Cell
    *   Effective From
    *   Effective Thru
    *   Crew Size
    *   Type Oper
    *   Equipment Number
    *   P C
    *   Job Type
    *   Next Oper
    *   Yield %
    *   Percent of Overlap
    *   Time Basis

► To enter outside operations

From the Daily PDM Process menu (G3012), choose Enter/Change Process.

1. On Work With Routing Operations, complete the following fields for the process for which you want to enter outside operations, and then click Find:

    *   Branch/Plant
    *   Item Number

2. Choose the work center and click Select.

3. On Enter Process, complete the following fields and click OK:

- Work Center
- Move Hours
- Supplier
- Cost Type
- PO (Y/N)

Entering Process Ingredients

After you define operations for each process, you must enter the ingredients. These ingredients are the raw materials or items that are combined during operations to produce the process item. When entering process ingredients you must provide the following information:

- Ingredients for each operation

- Minimum and maximum grade or potency ranges that apply to the ingredients

- Substitute ingredients that the system uses when the primary ingredient is not available

- Percentages of applicable ingredients that the system uses

When entering grade and potency information, you can only enter grade or potency values for an ingredient, but not both. You can only enter grade or potency information for items that are defined as lot-controlled.

You can enter substitute ingredients for components within your parent item. You can use substitute items if you encounter quality issues, inventory shortages, or supplier problems with the original component. The system highlights an ingredient's item description to indicate a substitution. Specify ingredient substitution for a specific process. Use item cross references for global substitutions.

You can enter as many ingredients in the form of percentages as necessary, but the sum of the percentages must equal 100 percent. The system uses the batch size to calculate percentages of the process for each ingredient. You should verify that each ingredient can convert to the process unit of measure, either by using the item unit of measure conversion or the standard unit of measure conversion.

See Also

❏ *Updating Component Scrap* in the *Product Data Management Guide* for information about updating component scrap

► **To enter an ingredient**

From the Daily PDM Process menu (G3012), choose Enter/Change Process.

1. On Work With Routing Operations, complete the following fields for the process for which you want to enter ingredients, and then click Find:

- Branch/Plant
- Item Number

2. Choose a record in the detail area, and then click Select.

3. On Enter Process Information, choose Ingredients from the Form menu.

4. On Enter Ingredients, position the cursor in a blank line in the detail area, complete the following fields, and then click OK:

- Item Number
- Quantity
- UM
- Ln Ty
- Line No.
- Oper Seq#
- Effective From
- Effective Thru
- P
- Remarks
- Component Branch
- Percent Scrap

► **To enter grade or potency information**

From the Daily PDM Process menu (G3012), choose Enter/Change Process.

1. On Work With Routing Operations, complete the following fields for the process for which you want to enter grade or potency information and then click Find:

- Branch/Plant
- Item Number

2. Choose a record in the detail area and click Select.

3. On Enter Process Information, choose Ingredients from the Form menu.

4. On Enter Ingredients, complete the following fields to enter grade information for an ingredient:

- Frm Grd
- Thr Grd

5. To enter potency information, complete the following fields and click OK:

- From Potency
- Thru Potency

Note

You enter either grade or potency information for an ingredient, but not both together.

► **To enter a substitute ingredient**

From the Daily PDM Process menu (G3012), choose Enter/Change Process.

1. On Work With Routing Operations, complete the following fields for the process for which you want to enter a substitute ingredient and then click Find:

- Branch/Plant
- Item Number

2. Choose a record in the detail area and click Select.

3. On Enter Process Information, choose an operation and then choose Ingredients from the Row menu.

4. On Enter Ingredients, choose an ingredient and then choose Substitutes from the Row menu.

5. On Enter Component Substitutes, complete the following fields and click OK:

- Substitute Item
- Quantity
- Sub Item Sequence

► **To enter ingredients as percentages**

From the Daily PDM Process menu (G3012), choose Enter/Change Process.

1. On Work With Routing Operations, complete the following fields for the process for which you want to enter ingredients as percentages and then click Find:

   - Branch/Plant
   - Item Number

2. Choose a record in the detail area and click Select.

3. On Enter Process Information, choose an operation and then choose Ingredients from the Row menu.

4. On Enter Ingredients, complete the following fields for each ingredient and click OK:

   - Quantity
   - F V

Entering Production Information

You can enter production and cost information based on demand for a specified feature. You specify an issue type code that identifies how the system issues each component from stock. You identify how many days before or after the start of the process that a component is needed. You also identify the percentage of demand for a specified feature and the percentage that is used to calculate the cost of the feature.

► **To enter production information**

From the Daily PDM Process menu (G3012), choose Enter/Change Process.

1. On Work With Routing Operations, complete the following fields for the process for which you want to enter production information, and then click Find:

   - Branch/Plant
   - Item Number

2. Choose a record in the detail area and click Select.

3. On Enter Process Information, choose an operation, and then choose Ingredients from the Row menu.

4. On Enter Ingredients, complete the following fields for each ingredient and click OK:

   - Is Cd
   - Feat Plan %
   - Feat Cost %
   - Leadtime Offset

Entering a Co-Products and By-Products List

Many process steps create more than one output. You can enter co-products, which are usually the main products that companies sell to customers, or by-products, which are produced as a residual item to the process steps.

Note

If you are entering a co-products and by-products list for a batch process, verify that the ratio of the co-products and by-products is the same for each batch quantity. For example, if a batch process with a batch quantity of 10 produces 10 each of a co-product and by-product, then a batch quantity of 20 must produce 20 each of the co-product and by-product.

► **To enter a co-products and by-products list**

From the Daily PDM Process menu (G3012), choose Enter/Change Process.

1. On Work With Routing Operations, complete the following fields for the process for which you want to enter co-products and by-products, and then click Find:

   - Branch/Plant
   - Item Number

2. Choose a record in the detail area and click Select.

3. On Enter Process Information, choose Co/By Revision from the Form menu.

4. On Co/By Product Revision, complete the following fields for each operation and click OK:

   - Co By
   - Co/By Product
   - Output Quantity
   - UM
   - Co/By Branch
   - Feat Cost%
   - Resource %
   - Oper Seq#
   - Remark

Entering Intermediates

Intermediates are products that are produced from ingredients in the process. Intermediates are not a finished product, but they do proceed to the next operation in the process. Intermediates allow you to track the quantity of output of any operation in a work center at a specific time. You can define intermediates, in different units of measure, by item or by quantity. You can set up one intermediate per operation, but you cannot define an intermediate for the last operation in the routing instruction.

► **To enter intermediates**

From the Daily PDM Process menu (G3012), choose Enter/Change Process.

1. On Work With Routing Operations, complete the following fields for the process for which you want to enter intermediates, and then click Find:

   • Branch/Plant
   • Item Number

2. Choose a record in the detail area and click Select.

3. On Enter Process Information, choose a process operation, and then choose Intermediates from the Row menu.

4. On Enter Intermediate Products, complete the following fields and click OK:

   • Intermediate Product
   • Output Qty
   • UM
   • Ln Ty
   • Oper Seq#
   • Effective From
   • Effective Thru
   • F V
   • Remark

Changing Multiple Processes

From the Advanced Product Data Management menu (G3031), choose Where Used Update.

Use the Where Used Update program (R30520) to change multiple processes. For example, you can use this program to replace an old ingredient with a new one. When you run this program, you can review the report to verify changes. You can use this program to perform the following types of mass updates:

- Replace one ingredient with another

- Delete a process item

- Change effectivity dates for a process item

- Change the quantity per assembly value for a process item

- Change the issue type code

- Change the unit of measure

Use data selection to specify the process items that you want to change. Use processing options to define the change. This program finds all occurrences of the item (as an ingredient) in the Bill of Material Master File table (F3002) and updates the process. You can also update an ingredient that has past or future effectivity dates.

You can run this program in either proof or final mode. In proof mode, the system generates a report of the proposed changes for your review, but it does not update the data. In final mode, the system generates a report that lists the changes and updates the data according to your choices.

Caution

This program can potentially change many processes in your system at the same time. PeopleSoft recommends that you first run it in proof mode to verify your choices, and then run it in final mode to change the data. You might want to restrict access to this program.

To make changes to a process and remove the old records, run the program twice. First, create the new records and then delete the old ones.

The system stores your changes in the Bill of Material Master File table. It does not automatically update the existing parts lists, MRP calculations, and costing information. The program updates the following information:

- Low Level Code field in the Item Master table (F4101)

- Net Change Flag field in the Item Branch File table (F4102)

Prerequisite

❑ Review your process to verify that the item that you are updating is active (within the effective dates) and appears in at least one process.

See Also

❑ *Changing Multiple Bills of Material* in the *Product Data Management Guide* for information about the processing options for Where Used Bill of Material Update (R30520)

Reviewing Processes

You can review your processes for low-level codes and product structure errors (where a process item is listed as an ingredient of itself), by using the Integrity Analysis program (R30601).

You can also review the processes for which to plan and research engineering change orders (ECOs); view the results of a pending product change; determine the effect of an item shortage; or evaluate capacity, manpower, equipment needs, and resources.

Verifying Processes

From the Advanced Product Data Management menu (G3031), choose Integrity Analysis.

The Integrity Analysis program (R30601) generates a report that identifies any processes that you need to correct. If the report indicates errors, you should correct the processes and run the Integrity Analysis program again. When the program does not find errors in the processes, it updates the low-level codes in both the Item Master (F4101) and the Item Branch File (F4102) tables.

Note

PeopleSoft recommends that you run the Integrity Analysis program immediately after a data conversion, such as a system startup, and then on a periodic basis, such as two or four times a year. You should also run the Integrity Analysis program before you run the Simulate Rollup (R30812) or MRP/MPS Requirements Planning (R3482) programs.

Instead of running the Integrity Analysis report, you can use online validation so that the system validates process items as you enter them. When you use online validation, the system does not allow you to enter recursive ingredients. For example, the system displays an error message if you attempt to enter a parent process item as an ingredient of itself.

The system retrieves the data for this report from the Bill of Material Structure Analysis Work File table (F30UI002).

Reviewing Process Information

You can review process information from several programs, depending on the information that you want to review. The Product Data Management system provides the following review programs, which allow you to review information about ingredients, co- and by-products, resources, and process instructions:

Ingredients Inquiry (P30200)	Use this program to review the ingredients in a process.
Ingredients Where Used (P30201)	Use this program to review the processes that include a specific ingredient.
Where Produced Inquiry (P30210)	Use this program to review the processes that include a specific co-product or by-product.
Resources Inquiry (30240)	Use this program to review the resources of the process, such as the operations of the process and the work center at which they are processed.
Instructions Inquiry (P3003)	Use this program to review the hours for machine, labor, and setup, as well as move and queue hours in the instructions for a specific process.

For the Ingredients Inquiry and the Ingredients Where Used programs, you can use the procession options or the View menu to determine how the system presents the information.

► **To review ingredients**

From the Daily PDM Process menu (G3012), choose Ingredients Inquiry.

1. On Parts Availability - Multi Level Indented, choose the Parts Availability tab. Complete the following fields and click Find:

    - Branch
    - Parent Item
    - Requested Quantity
    - As of Date
    - Rev Lev
    - Skip to Line

2. From the View menu, you can choose to display the process in single-level, multi-level or multi-level indented format.

3. Click Close.

► **To review where an ingredient is used**

From the Daily PDM Process menu (G3012), choose Ingredients Where Used.

1. On Work With Bill of Material Where Used, complete the following fields:

   - Component Branch / Plant
   - Component Number
   - Parent Item No

2. Complete the following optional fields and click Find:

   - Parent Quantity
   - Bill Type
   - Grade
   - As of Date
   - Potency

3. From the View menu, choose whether to display the process in single-level, multi-level or multi-level indented format.

4. Click Close.

►   **To review co-products and by-products**

From the Daily PDM Process menu (G3012), choose Co-/By-Products Inquiry.

1. On Work With Co-/By-Product Produced Inquiry, complete the following fields and click Find:

    *   Process
    *   Branch/Plant

2. Review the co-product and by-product information.

3. Click Close.

►   **To review where co-products and by-products are produced**

From the Daily PDM Process menu (G3012), choose Where Produced Inquiry.

1. On Work With Co-/By-Products Where Produced, complete the following fields and click Find:

    *   Branch/Plant
    *   Co-/By-Product

    The detail area displays the process and the specific operation that produces the co- or by-product.

2. Click Close.

Processing Options for Where Produced Inquiry (P30210)

Versions

Enter the version for each program. If left blank, version ZJDE0001 will be used.

1. Item Master (P4101)
2. ECO Workbench (P30225)
3. Bill of Material Revisions (P3002)
4. Single Level BOM Report (R30410)

►   **To review resources**

From the Daily PDM Process menu (G3012), choose Resources Inquiry.

1. On Work With Operations Sequence, complete the following fields and click Find:

    *   Branch/ Plant
    *   Process

2. Choose an operation and choose Operation Resource from the Row menu.

3. On Work with Operation Resources, you can review the ingredient and co- or by-product quantities for the operation.

4. Click Close.

► **To review process instructions**

From the Daily PDM Process menu (G3012), choose Instructions Inquiry.

Note

Use the Instruction Inquiry program to review the hours for machine, labor, and setup in the instructions for a specific process.

1. On Work With Routing Operations, complete the following fields and click Find:

    - Branch/Plant
    - Item Number

2. On Work with Process, choose a process operation, and then choose Inquiry from the Row menu.

3. On Process Inquiry, review the following fields:

    - Run Hours
    - Run Machine
    - Setup Hours
    - Move Hours
    - Queue Hours

4. Click Cancel.

Printing Process Information

You can generate several reports to review process information. These reports retrieve data from the Bill of Material Master File table (F3002) and from the Routing Master File table (F3003). You access these reports from the Periodic PDM Process menu (G3022). They allow you to print different views of the process. The following reports are available:

Single Level Ingredient report (R30460)	This report prints information about a parent item and its components.
Multi Level Ingredient report (R30460)	This report prints information about a parent item, its components, and subassemblies.
Where Used Ingredient report (R30420)	This report shows all processes that use a specific ingredient.
Process Report (R30435)	This report displays processes.
Instructions Report (R30430)	This report displays the instructions for all process.

You can use processing options to define the scope of each report.

Caution

PeopleSoft recommends that you do not change the first two data sequences from the setting in the demonstration version of these reports. If you change the data sequencing, you might obtain unexpected or inaccurate results.

See Also

❑ *Printing Bill of Material Information* in the *Product Data Management Guide* for information about the processing options for the Single Level Ingredient (R30460), Multi Level Ingredient (R30460) and Where Used Ingredient (R30420) reports

Engineering Change Management

To maintain and increase market share, manufacturers often must respond quickly with engineering changes to their products. Engineering changes might be necessary to respond to market demand, governmental requirements, safety issues, service requirements, or for other functional or competitive reasons. Changes can involve adding a new part, changing an existing part, replacing an old part with a new part, or removing an existing item. Use the Engineering Change Management system to create, plan, review, approve, and implement engineering change orders and engineering change requests for any of these types of changes.

Product or process changes can affect many areas within your company, including the following:

- Customer service
- Tooling
- Standards
- Suppliers
- Master production schedule
- Product cost
- Service parts
- Inventory
- Plant layout

Engineering change orders (ECOs) are numbered documents that you use to track product changes within the Engineering Change Management system. After you have tested and approved an ECO, you can implement it and modify your standard product or process.

Engineering change requests (ECRs) are numbered documents that you use to track requested product changes within the Engineering Change Management system. After you have tested and approved an ECR, you can convert it to an ECO and implement it using your ECO processes.

The procedures for ECOs and ECRs are the same, except that you must use order type EN when you set up, review, or approve ECOs; and you must use order type EG when you set up, review, or approve ECRs.

The following graphic illustrates the engineering change order process:

Engineering Change Order Processes

ECO Related Item Window (P30131)

ECO Approval Routing Master (P4808)

Enter/Change ECO (P48020)

ECO Parts List (P3013)

ECO Notification (R48181)

Work Order Routing (P3112)

ECO Details (R48020P)

ECO Approval/Audit Review (P48185)

WO Supplemental DB User Defined (F48092)

Engineering Change Population (R30510)
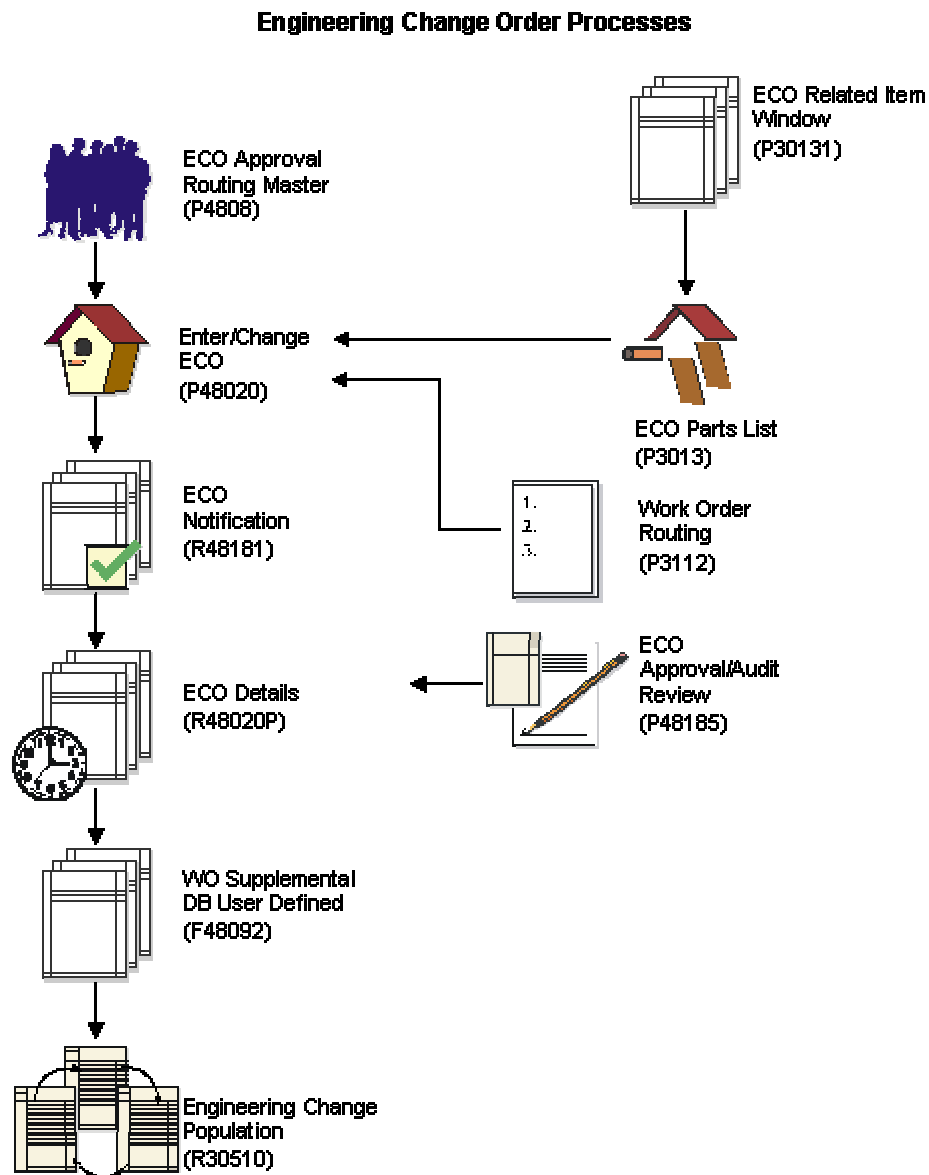
Engineering Change Management Features

You use ECOs to provide the following information:

Define who approves the ECO

Defining ECO approvers enables you to do the following:

- Establish levels of approval so that each member of the first review group must approve the ECO before the next group receives notification
- Locate the status of an ECO and review who has approved it and who has yet to approve it
- Use electronic mail to notify reviewers and approve ECOs
- Create and maintain bill of material data that is associated with the change
- Notify reviewers during the approval process
- Limit access to the approval records

Define which items to change

Defining which items to change enables you to do the following:

- Describe the change
- Define the parts and processes that are necessary to implement the ECO
- Include multiple parent item or component relationships on the same change order

Define the change to the routing instructions

Defining the change to the routing instructions enables you to itemize the steps required to make the change.

Define additional detail

Defining additional detail enables you to do the following:

- Enter into a centralized database supporting data, such as costs, dates, reasons, status, affected work and purchase orders, approval history, and implementation steps
- Identify the originator of and reason for the change
- Set up user defined codes to define the reason, status, and disposition of the change order
- Attach supplemental information

System Integration for Engineering Change Management

Engineering change orders (ECOs) integrate with the following systems:

Shop Floor Management The system uses the revision level maintained by ECOs to retrieve the appropriate bill of material for a work order. You can create a work order from a prior ECO revision level.

Inventory Management The system updates the drawing revision level in the Item Master table (F4101).

Roles in the Engineering Change Order Process

The ECO process involves several people, each of whom fills one of the following roles:

- The administrator, who sets up the ECO by completing the following tasks:

    - Setting up the approval routing master

    - Reviewing and modifying the ECO codes

    - Setting up next numbers

- The coordinator, who creates the ECO by completing the following tasks:

    - Verifying that no prior ECO or ECR exists for this change

    - Entering the ECO

    - Defining the change with a list of affected parent and component items

    - Establishing the new routing instruction operations to implement the ECO

    - Maintaining supplemental details

    - Running the notification program

- The reviewer, who approves or rejects the ECO by completing the following tasks:

    - Reviewing the ECO after system notification

    - Running reports to obtain information for an individual ECO or a list of open ECOs

    - Periodically searching for outstanding ECOs

After the reviewer approves the ECO, the coordinator implements it by running the Engineering Change Population program (P30510).

Engineering Change Order Revision Levels

A revision level is an alphanumeric character that represents the number of times that an item has been changed. This value usually indicates a permanent change to the form, fit, or function of an item. For efficient tracking of changes with revision levels, the revision levels for an item's bill of material and its routing instruction should match. You can use an ECO to update the revision level for an item and a drawing.

Use ECOs to manage revision-level information. For example, you can do the following:

- Assign the next revision level to an ECO using a value in UDC 30/NR

- Load parent revision levels for a component that is being added or modified

- Locate the revision levels of an ECO

- Assign ECO revision levels automatically

- Maintain drawing revision levels for each item that is changed by an ECO and update the drawing revision in either the Bill of Material (F3002) or Item Master (F4101) table

Setting Up Engineering Change Orders

Before you use the Engineering Change Management system, you need to set up codes, next numbers, and the approval routing master for engineering change orders (ECOs). The codes that you must set up are user defined and specify the type, priority, and status of the ECO. The user defined codes also indicate how the system handles existing items that are affected by the ECO and the reasons for the ECO. You must also set up next numbers to automatically number ECOs according to your specifications. You can set up the system to route the ECO information to specified reviewers for their approval before it is processed. To do so, you must identify an ECO approval routing.

Prerequisites

❑ Define your work centers.

❑ Define your items in the Inventory Management system.

❑ Ensure that the document type for engineering change orders is set up in Document Type Maintenance program (P40040).

Setting Up User Defined Codes for Engineering Change Management

You set up the following user defined code to use in conjunction with the Engineering Change Management system:

Work Order/ECO Type (00/TY)

This code indicates the type of engineering change order, such as G for government change and R for rework.

Order Type (48/OT)

This code allows you to distinguish each work order record in the Work Order Master File table (F4801) from other records with different work order types. For example, you do not use the same document type and work order type to represent both an equipment work order and a manufacturing work order. The relationship between the document and its related work order type is defined in the Document Type Maintenance program (P40400).

Work Order Priority (00/PR)

This code indicates the priority of the engineering change order, such as H for high priority and 3 for normal priority.

Work Order Status (00/SS)

This code indicates the status of the engineering change order, such as EM for emergency and A for approved.

Phase In (40/PH)

This code specifies how to phase in engineering change orders, such as IMD for immediate and AVL for as available.

Existing Disposition (40/ED)

This code specifies what to do with existing items that are affected by the engineering change order, such as CNL for cancel, RWK for rework, UAI for use as is, and SCP for scrap.

Engineering Change Reason (40/CR)

This code indicates the reasons for defined engineering change orders, such as CC for customer change and RF for federal requirements.

ECO Next Revision Levels (30/NR)

This code indicates the sequence of revision levels that are assigned to engineering change order transactions.

Defining Document Type Constants for Work Orders

Document types are used in the software to specify particular types of transactions. You define the characteristics of document types in the Document Type Maintenance program (P40040). The document type constants defined in this program affect all software transactions. The order type for each of the document types must be defined so that the system knows how to process the activity for it. For example, the document type for a manufacturing work order can be set to WO for the correct transactions that relate to the processing of a manufacturing work order.

To differentiate the various work order document types from each other, you assign a specific order type to each work order document type. For example, a manufacturing work order is associated with order type 02.

The following order type values for work order processing are stored in the UDC table 48/OT (Order Type) and are hard-coded:

Document Type	Order Type
Manufacturing Work Order	02
Manufacturing Rework Work Order	03
Equipment Work Order	04
Service Order	05
Warranty Claim Order	06
Supplier Recovery Order	07
Engineering Change Order	08
Engineering Change Request Order	09
Real Estate Management	10
ETO Summary Order	11
Rate Schedule	12

See Also

❑ *Setting Up Document Type Information* in the *Inventory Management Guide*

Converting Existing Document Types

From the Upgrade Conversions menu (GH9619A), choose Convert F40039 to ERP 9.0.

In PeopleSoft EnterpriseOne 8.9 software, each type of work order is designated by a specific work order type (A201). If you have existing records in the Document Type Master table (F40039), these records now require a specific value in the Work Order Type field (A201). You run the Convert F40039 to ERP 9.0 program (R31P40039) only once to enter the desired values in this field. You determine the values entered in the processing options. Depending on which systems you use, you complete the fields on the appropriate tabs. For example, you complete the fields on the Manufacturing tab for manufacturing work orders. You can run this program in either proof mode or final mode.

Processing Options for Document Type Master (F40039) Conversion (R31P40039)

Process Tab

This processing option controls whether you run the conversion program in proof or in final mode.

---

1. Mode

   Blank = Proof
   1 = Final

Use this processing option to specify whether the system runs the report in proof or final mode. Valid values are:

1
Proof (default)

2
Final

Manufacturing Tab

These processing options specify which order type is assigned to manufacturing orders during conversion.

---

1. Order Type value 01 for Manufacturing Orders

Use this processing option to specify the order type for manufacturing work orders.
2. Order Type value 02 for Manufacturing Orders

Use this processing option to specify the order type for manufacturing work orders.
3. Order Type value 03 for Manufacturing Orders

Use this processing option to specify the order type for manufacturing work orders.
4. Order Type value 04 for Manufacturing Orders

Use this processing option to specify the order type for manufacturing work orders.
5. Order Type value 05 for Manufacturing Orders

Use this processing option to specify the order type for manufacturing work orders.

Manufacturing Rework Tab

These processing options specify which order type is assigned to manufacturing rework orders during conversion.

1. Order Type value 01 for Engineering Change Request Orders

Use this processing option to specify the order type for manufacturing rework work orders.
2. Order Type value 02 for Engineering Change Request Orders

Use this processing option to specify the order type for manufacturing rework work orders.
3. Order Type value 03 for Engineering Change Request Orders

Use this processing option to specify the order type for manufacturing rework work orders.
4. Order Type value 04 for Engineering Change Request Orders

Use this processing option to specify the order type for manufacturing rework work orders.
5. Order Type value 05 for Engineering Change Request Orders

Use this processing option to specify the order type for manufacturing rework work orders.

Equipment Tab

These processing options specify which order type is assigned to equipment orders during conversion.

1. Order Type value 01 for Equipment Orders

Use this processing option to specify the order type for service work orders.
2. Order Type value 02 for Equipment Orders

Use this processing option to specify the order type for service work orders.
3. Order Type value 03 for Equipment Orders

Use this processing option to specify the order type for service work orders.

4. Order Type value 04 for Equipment Orders

Use this processing option to specify the order type for service work orders.
5. Order Type value 05 for Equipment Orders

Use this processing option to specify the order type for service work orders.

S/WM Tab

These processing options specify which order type is assigned to service during conversion.

1. Order Type value 01 for Service Orders

Use this processing option to specify the order type for service work orders.
2. Order Type value 02 for Service Orders

Use this processing option to specify the order type for service work orders.
3. Order Type value 03 for Service Orders

Use this processing option to specify the order type for service work orders.
4. Order Type value 04 for Service Orders

Use this processing option to specify the order type for service work orders.
5. Order Type value 05 for Service Orders

Use this processing option to specify the order type for service work orders.

Warranty Claim Tab

These processing options specify which order type is assigned to warranty claim orders during conversion.

1. Order Type value 01 for Warranty Claim Orders

Use this processing option to specify the order type for warranty claim orders.
2. Order Type value 02 for Warranty Claim Orders

Use this processing option to specify the order type for warranty claim orders.
3. Order Type value 03 for Warranty Claim Orders

Use this processing option to specify the order type for warranty claim orders.

4.Order Type value 04 for Warranty Claim Orders

Use this processing option to specify the order type for warranty claim orders.
5. Order Type value 05 for Warranty Claim Orders

Use this processing option to specify the order type for warranty claim orders.

Supplier Recovery Tab

These processing options specify which order type is assigned to supplier recovery orders during conversion.

1. Order Type value 01 for Supplier Recovery Orders

Use this processing option to specify the order type for supplier recovery orders.
2. Order Type value 02 for Supplier Recovery Orders

Use this processing option to specify the order type for supplier recovery orders.
3. Order Type value 03 for Supplier Recovery Orders

Use this processing option to specify the order type for supplier recovery orders.
4. Order Type value 04 for Supplier Recovery Orders

Use this processing option to specify the order type for supplier recovery orders.
5. Order Type value 05 for Supplier Recovery orders

Use this processing option to specify the order type for supplier recovery orders.

ECO Tab

These processing options specify which order type is assigned to engineering change orders during conversion.

1. Order Type value 01 for Engineering Change Orders

Use this processing option to specify the order type for engineering change orders.
2. Order Type value 02 for Engineering Change Orders

Use this processing option to specify the order type for engineering change orders.
3. Order Type value 03 for Engineering Change Orders

Use this processing option to specify the order type for engineering change orders.
4. Order Type value 04 for Engineering Change Orders

Use this processing option to specify the order type for engineering change orders.
5. Order Type value 05 for Engineering Change Orders

Use this processing option to specify the order type for engineering change orders.

ECO Request Tab

These processing options specify which order type is assigned to engineering change request orders during conversion.

1. Order Type value 01 for Engineering Change Request Orders

Use this processing option to specify the order type for engineering change request orders.
2. Order Type value 02 for Engineering Change Request Orders

Use this processing option to specify the order type for engineering change request orders.
3. Order Type value 03 for Engineering Change Request Orders

Use this processing option to specify the order type for engineering change request orders.
4. Order Type value 04 for Engineering Change Request Orders

Use this processing option to specify the order type for engineering change request orders.
5. Order Type value 05 for Engineering Change Request Orders

Use this processing option to specify the order type for engineering change request orders.

Real Estate Management Tab

These processing options specify which order type is assigned to Real Estate Management orders during conversion.

1. Order Type value 01 for Real Estate Management Orders

Use this processing option to specify the order type for property management orders.
2. Order Type value 02 for Real Estate Management Orders

Use this processing option to specify the order type for property management orders.
3. Order Type value 03 for Real Estate Management Orders

Use this processing option to specify the order type for property management orders.

4. Order Type value 04 for Real Estate Management Orders

Use this processing option to specify the order type for property management orders.
5. Order Type value 05 for Real Estate Management Orders

Use this processing option to specify the order type for property management orders.

Rate Schedule Tab

These processing options specify which order type is assigned to rate schedules during conversion.

1. Order Type value 01 for Rate Schedule Orders

Use this processing option to specify the order type for rate schedules.
2. Order Type value 02 for Rate Schedule Orders

Use this processing option to specify the order type for rate schedules.
3. Order Type value 03 for Rate Schedule Orders

Use this processing option to specify the order type for rate schedules.
4. Order Type value 04 for Rate Schedule Orders

Use this processing option to specify the order type for rate schedules.
5. Order Type value 05 for Rate Schedule Orders

Use this processing option to specify the order type for rate schedules.

ETO Summary Order Tab

These processing options specify which order type is assigned to ETO summary orders during conversion.

1. Order Type value 01 for ETO Summary Orders

Use this processing option to specify the order type for engineer to order summary orders.

2. Order Type value 02 for ETO Summary Orders

Use this processing option to specify the order type for engineer to order summary orders.

3. Order Type value 03 for ETO Summary Orders

Use this processing option to specify the order type for engineer to order summary orders.

4. Order Type value 04 for ETO Summary Orders

Use this processing option to specify the order type for engineer to order summary orders.

5. Order Type value 05 for ETO Summary Orders

Use this processing option to specify the order type for engineer to order summary orders.

Converting Order Types

In the EnterpriseOne Windows environment, choose Batch Versions from the System Administration Tools menu (GH9011).

In PeopleSoft EnterpriseOne 8.9 software, different work orders have to be designated by different document types. For example, if manufacturing work orders have document type WO, equipment orders have to be assigned a different document type. To ensure that the different types of work orders have unique document types, you run the Order Type Conversion program (R31P802). You use the data selection to define which orders in the Work Order Master File table (F4801) need to be converted. The program assigns new document types to work orders based on the definition in the processing options.

Processing Options for Order Type Conversion (R31P802)

Default Tab

This processing option defines the new order type to which the selected work orders should be converted.

1. Order Type (to be converted to)

Use this processing option to specify the new order type to which orders are converted. The order type that you specify here will be the default order type for the selected records.

Process Tab

This processing option controls whether the conversion program runs in proof or final mode.

1. Mode

    1   = Final
    Blank = Proof

Use this processing option to specify whether the program runs in proof mode or final mode. When you run the program in proof mode, the system generates a report but does not update data. When you run the program in final mode, the system updates the order

type in the Work Order Master File table (F4801). Valid values are:

Blank
Proof mode

1
Final mode

Setting Up System Next Numbers

When you create a document such as an invoice, a voucher, or a journal entry, you can assign a document number or let the Next Numbers program (P0002) assign one.

Next numbers is an automatic numbering feature. The Next Numbers program assigns numbers to documents using either or both of the following types of numbers:

- Standard next numbers. The system finds the next available number in the Next Numbers - Automatic table (F0002) and assigns that number to the document.

- Next numbers by company and fiscal year. The system finds the next available number by company and fiscal year, or by company only, in the Next Numbers by Company/Fiscal Year - Automatic table (F00021).

Next numbers work in conjunction with the data dictionary. Each data dictionary item that uses next numbers contains a next numbering index value that corresponds to the line number that contains the next number value for that data item.

We recommend the following when you set up next numbers:

- Do not use blank as a next number value.

- Do not change a next number. Changing the numbers can result in duplicate numbers, as well as the inability to locate previously added numbers. If you must change a next number, change it to a greater value only.

- Do not delete next number values. If you delete a next number value, you might get unexpected results.

- Do not change the sequence of the next numbers in the table. Each next number must remain on its current line because programs reference a specific line in the table. For example, in the General Accounting system, the next number for journal entries must be on the second line.

You can have the system assign check digits for any set of standard next numbers. Check digits prevent errors caused by transposition during data entry. For example, activating check digits in the address book for suppliers prevents a voucher from being assigned to the wrong supplier if digits are transposed during voucher entry. We recommend that you use check digits for next numbers only when a transposition error is likely to occur during data entry.

Note
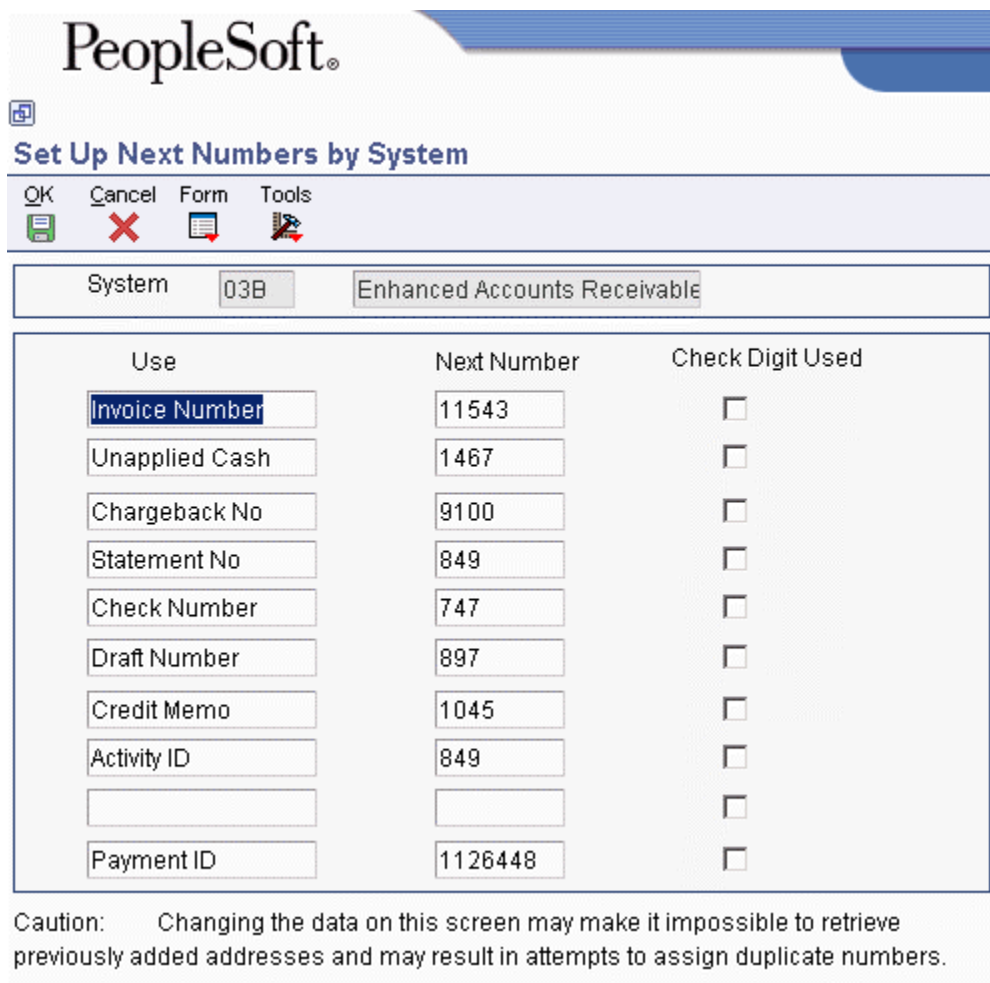
If you choose to manually assign a document number instead of using next numbers, you must enter the number during data entry.

► **To set up system next numbers**

You can review the next numbers that the system assigns to documents and specify whether to assign check digits for a type of next number.

From the General Systems menu (G00), choose Next Numbers.

1. On Work With Next Numbers, choose the system that you want to review and click Select.

2. On Set Up Next Numbers by System, review the information supplied by the system in the following field:

   - Next Number

3. Turn on the following option for each type of next number for which you want to activate check digits:

   - Chk Dgt

You should use check digits for next numbers only when a transposition error is likely to occur during data entry.

4. Click OK.

Setting Up Approval Routings

Use an approval routing to maintain a list of reviewers who should receive an electronic mail notification of pending ECOs.

You can set up two types of approval routing:

- Approval routing master

  The approval routing master applies to a specific branch/plant and order type combination.

- Order-specific approval routing

  An order-specific approval routing applies to a specific ECO.

After you set up an approval routing master for your branch/plant, you can customize the routing for a specific ECO.

The system notifies all of the reviewers in a group at the same time. The system notifies the groups in the order that is defined within the user defined code. The codes do not have to be numeric. The system waits to send notification to a group until all of the members in the prior group have approved the ECO.

► **To set up an approval routing master**

From the Engineering Change Management menu (G3013), choose ECO Approval Routing Master.

1. On Work With ECO Approval Routing Master, complete the following fields:

   - Order Type
   - Branch/Plant

   Note

   You can use a processing option to define the default value for the Order Type field.

2. Click Add.

3. On ECO Approval Routing Revisions, complete the following fields and click OK:

   - Seq#
   - Group
   - Approver#

Processing Options for ECO Approval Routing Master (P4808)

Defaults

Enter the default search order type. If left blank, 'EN' will be used.

Order Type

Versions

Address Book (P0101)

► **To set up an order-specific approval routing**

From the Engineering Change Management menu (G3013), choose ECO Order Specific Routing Approval.

1. On Order Specific Routing Approval Revisions, complete the following field and click Find:

    *   Order Number

2. For each approver, complete the following fields and click OK:

    *   Sequence No.
    *   Grouping No.
    *   Approver No.

Working With Engineering Change Orders

Use engineering change orders (ECOs) to plan, approve, and implement product changes. The creator of the ECO typically performs several tasks, such as setting up the approval routing master, reviewing and modifying the user defined codes, and setting up next numbers.

Locating Existing Engineering Change Orders

Before you create an ECO, you might want to determine whether one already exists for the change. Use the ECO Workbench program (P30225) to review and manage ECO information and to determine the progress of an ECO.

► **To locate existing engineering change orders**

From the Engineering Change Management menu (G3013), choose ECO Workbench.

1. On Work With ECO Workbench by Item, choose the ECO Workbench tab, complete the following fields, and click Find:

   - Branch/Plant
   - Item Number

2. To limit your search, complete any additional fields in the header area of this tab, or choose the Additional Selection tab and complete any of the fields in the header area.

3. Review the following fields in the detail area:

   - Status
   - Order Number
   - Or Ty
   - Description
   - Originator
   - Reason

- Phase In
- Priority
- Target Incorp
- Actual

Processing Options for ECO Workbench (P30225)

Versions

Enter the version for each program. If left blank, version ZJDE0001 will be used.

1. Enter/Change Order (P48020)

2. WO Details *ZJDE0001 (P480200)

3. Pending PO's *ZJDE0002 (P480200)

4. Parts List (P3013)

5. Approval Audit/Review (P48185)

6. Address Book Master Search (P0101S)

7. Work Order Routing (P3112)

Defaults 1

1. Enter the values to preload to the screen at initial inquiry. If left blank, no value will be preloaded.

Reason Code

Phase Code

Work Order Type

Priority

Originator

Defaults 2

1. Enter the values to preload to the screen at initial inquiry. If left blank, no value will be preloaded.

From Status

Thru Status

Item Number

Document Type

Phase

Entering Engineering Change Orders

You must first define the ECO number and codes that determine its priority, status, effective dates, and so on. Later, you must define the routing instruction, parts list, and detail information. If you specify a parent work order number on the ECO, you can retrieve related work orders and review the history of a product.

To delete an ECO, you must first delete the ECO parts list and then delete the ECO.

► To enter engineering change orders

From the Engineering Change Management menu (G3013), choose Enter/Change ECO.

1. On Work With ECO Work Order Entry, click Add.

2. On ECO Work Order Entry Revisions, complete the following fields:

   - Branch/Plant
   - ECO Description

3. Click the ECO Entry tab, and complete the following optional fields:

   - Charge to Cost Center
   - Cost Code
   - Parent Work Order
   - Search X-Ref
   - Standard Desc
   - W.O. Flash Message

4. Click the following options as necessary:

   - Drawing Change
   - BOM Change
   - Routing Change
   - New Part Number

5. Click the Type tab and complete the following optional fields:

- Type
- Priority
- Status
- Phase In
- Existing Disp
- Reason

6. Click the Names tab and complete the following optional fields:

- Originator
- Coordinator
- Customer
- Supervisor
- Manager

7. Click the Dates tab and complete the following optional fields under the Target Dates heading:

- Design
- Engineering
- Incorporated

8. Complete the following optional fields under the Actual Dates heading:

- Design
- Engineering
- Incorporated

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9. Click the Category Codes tab, complete the following optional fields, and click OK:

- Phase
- Category 02
- Category 03
- Category 04
- Category 05
- Experience Level
- Service Type
- Skill Type
- Status
- Category 10

10. Click OK again.

Processing Options for ECO Entry (P48020)

Defaults

1. Enter the default value for Document Type. If left blank, "EN" will be used.

Document Type

2. Enter the default value for Order Status. If no value is entered, then blank will be used as the default status.

Status

Process

1. Enter the document type created when creating an engineering change order from an engineering change request. If left blank, type 'EN' will default.

ECO Order Type

Edits

1. ECR Approval Validation

    Blank - No approval validation

    1   - Approval validation

2. Copy ECR Generic Text to ECO

    Blank - Do not copy ECR text to the ECO

    1   - Copy ECR text to the ECO

Versions

1. Enter the version to use for each program listed. If left blank, version ZJDE0001 will be used.

WO Details *ZJDE0001 (P480200)

Parts List (P3013)

Workbench (P30225)

Pending PO's *ZJDE0002 (P480200)

Approval Notification (R48181)

Approval Audit/Review (P48185)

Instruction/Disposition (P4802)

Work Order Routing (P3112)

Work Order Record (P48217)

Defining Routing Instructions and Affected Items for Engineering Change Orders

After you enter the ECO, you can define routing instructions that indicate the steps that are necessary to implement the ECO. For example, the engineering department might request that you test a new manufacturing process before it is implemented.

Note

You cannot use the Enter/Change ECO program (P48020) to change production routing instructions.

You also define the items affected by the change. You can update an ECO with the next revision level only if no pending ECOs exist for the item. If pending ECOs exist, the system displays an error message and does not update the revision level.

The Engineering Change Order system automatically selects related items based on the change type and parent and child relationship values. You can delete the related items for which you do not want to implement the change.

Use effective dates to phase in and out any product or process changes. Effective dates might not require an ECO process and are for smaller, short-term or low-impact changes.

You can maintain the drawing revision level for each item. The Engineering Change Population program (R30510) can update the drawing revision level in both the Bill of Material Master File table (F3002) and the Item Master table (F4101).

Defining changes does not update the work order parts list for the item. You can update your bills of material with engineering change information manually, or by using either the Where Used Update program (R30520) or the Engineering Change Population program. However, you cannot delete or change the parts on the ECO parts list after you have run the Engineering Change Population program.

► **To define routing instructions for engineering change orders**

From the Engineering Change Management menu (G3013), choose Enter/Change ECO.

1. On Work With ECO Work Order Entry, complete the following field and click Find.

    *   Branch/Plant

2. Choose a record in the detail area, and then choose Routing from the Row menu.

3. On Work Order Routing, complete the following fields and click OK:

- Work Center
- Operation Sequence
- Operation Description
- Start Date
- Request Date

► **To define affected items**

From the Engineering Change Management menu (G3013), choose ECO Parts List.

1. On Work With ECO Parts List, complete the following field and click Find:

- Branch/Plant

2. Choose a record in the detail area that contains the ECO for which you want to define affected items and click Select.

3. On ECO Parts List Entry, complete the following fields and click OK:

- Chg Type
- P/C Rel
- Item Number
- Frm Rev
- To Rev
- Effective From
- Effective Thru
- Batch Qty
- UM
- Bill Type
- Swap to Item
- Swp Rev

Defining Changes

After you have created the ECO and defined the routing instruction, you must define the change and identify the affected items. For all engineering change types except swap parent, you must enter information about the change for other items on the ECO Related Items List form.

You can use the user defined code Next Revision Levels (30/NR) to automatically update revision levels based on the sequence that you define. Revision levels usually require an ECO and are for permanent, long-term changes. Revision levels include changes to form, fit, or function; and should match on a bill of material and routing instruction for the item. You can track changes in a bill of material with revision levels. Use the Item Revision Level field in the Enter/Change Bill program (P3002) to display a revision history of the bill. These revision levels are user defined and for reference only.

The values that you enter in the Chg Type (Change Type) and P/C Rel (Parent/Component Relationship) fields on the ECO Parts List Entry form define the changes and determine how the Engineering Change Population program (P30510) updates the bill of material for the item.

You can use the following values in the Change Type and Parent/Component Relationship fields:

Change Type field	N. Add a new part.
	C. Change an existing part.
	S. Swap an old part with new part.
	R. Remove an existing part.
Parent/Component Relationship field	P. Parent item.
	C. Component item.

The Change Type and Parent/Child Relationship fields allow eight possible combinations. These combinations are as follows:

Change	ECO Parts List Entry form				ECO Related Items form	
	Change Type	P/C Rel	Information that You Enter	Revision Level	Information that You Enter	Revision Level
Add a new bill	N	P	New parent item for the new bill	New parent revision	Components for the new parent	Revision level of added components
Change a bill	C	P	Current parent item	Current parent revision	Updated parent information	New revision
Swap a parent item	S	P	Swap-to parent information	Swap to parent revision in fold	Not allowed	Not allowed
			Swap-from parent information	Revision of swap from parent		
Remove a bill	R	P	Current parent information	Current revision	Not allowed	Not allowed
Add a new component	N	C	New component	New component revision	Parent bills using component (where used)	Revision of new components' parent
Change a component	C	C	The component to change	New revision of component	Parent bills that will have component changes	Parent of new component revision
Swap a component	S	C	Swap to component	Revision of swap to component	Parent bill having components swapped	Revision of parent having component swapped
			Swap from component	Revision of swap from component		
Remove a component	R	C	The component to remove	Revision of component to remove	Parent bills have component removed (where used)	Revision of parent having component removed

► **To define engineering changes**

From the Engineering Change Management menu (G3013), choose ECO Parts List.

1. On Work With ECO Parts List, complete the following field and click Find:

   • Branch/Plant

2. Choose a record in the detail area that contains the ECO with which you want to work and click Select.

3. On ECO Parts List Entry, choose a record in the detail area, and then choose Related Items from the Row menu.

4. On ECO Related Items, complete the following fields for each related item and click OK:

   • Frm Rev

   • To Rev

   • Effective From

   • Effective Thru

   • Quantity

   • UOM

   • Oper Seq#

   • F V

5. On ECO Related Items, choose the row, click Delete, and then click OK to remove one of the items.

6. On ECO Related Items, choose Where Used SS from the Form menu to choose other parent items.

PeopleSoft.

ECO Parts List - BOM Where Used Search & Select

Select   Find   Close   Tools

Component Branch   *

2nd Item Number   2018   Seat Post, AA

Records 1 - 10

	Parent 2nd Item	Parent Branch	Description	Batch Quantity	UOM	Typ BOM	Oper Seq#	Line No.	Is Cd
☐	220	M30	Touring Bike, Red	0	EA	M	60.00	130.00	U
☐	220	MPS	Touring Bike, Red	0	EA	M	1.00	13.00	U
☐	221	D30	Touring Bike, Blue	0	EA	M	60.00	130.00	U
☐	221	M30	Touring Bike, Blue	0	EA	M	60.00	130.00	U
☐	222	M30	Touring Bike, Green	0	EA	M	60.00	130.00	U
☐	225	M40	Road Bike, Red	0	EA	M	60.00	130.00	U
☐	226	M40	Road Bike, Blue	0	EA	M	60.00	130.00	U
☐	227	M40	Road Bike, Green	0	EA	M	60.00	130.00	U
☐	250	D30	Prototype Racing Bike	0	EA	M	60.00	130.00	U
☐	255	D30	Prototype Racing Bike	0	EA	M	60.00	130.00	U

7. On the BOM Where Used Search & Select, choose the parent items and click Select.

The system populates the grid on the ECO Related Items List program with the additional parent items.

Note

The name of this form varies depending on the Change Type and Parent/Child Relationship values.

8. On ECO Related Items, click OK.

Processing Options for ECO Parts List (P3013)

Defaults Tab

This processing option specifies the document type that you want to use for your search.

1. Order Type

Use this processing option to specify the type of document on which you want the system to search. Order type is a user defined code (00/DT) that identifies the type of document, such as an order or an invoice. Enter an order type to use as the default value or choose it from the Search User Define Code form. If you leave this processing option blank, the system uses EN for engineering change order.

Versions Tab

These processing options control which versions of the following programs that the system uses when processing an ECO parts list:

1. Item Master Revisions (P4101B)

Use this processing option to specify the version that the system uses when you choose the Row exit to the Item Master Revisions program from the ECO Parts List Entry form. If you leave this processing option blank, the system uses the ZJDE0001 version.

Versions control how the Item Master Revisions program displays information.

Therefore, you might need to set the processing option to a specific version to meet your needs.

2. Item Inquiry With Word Search (P41200)

Use this processing option to specify the version that the system uses when you choose the Row exit to the Item Inquiry With Word Search program from the ECO Parts List Entry form. If you leave this processing option blank, the system uses the ZJDE0001 version.

Versions control how the Item Inquiry With Word Search program displays information. Therefore, you might need to set the processing option to a specific version to meet your needs.

3. Supply and Demand Inquiry (P4021)

Use this processing option to specify the version that the system uses when you choose the Row exit to the Supply and Demand Inquiry program from the ECO Parts List Entry form. If you leave this processing option blank, the system uses the ZJDE0001 version.

Versions control how the Supply and Demand Inquiry program displays information. Therefore, you might need to set the processing option to a specific version to meet your needs.

4. Bill of Material Inquiry (P30200)

Use this processing option to specify the version that the system uses when you choose the Row exit to the Bill of Material Inquiry program from the ECO Parts List Entry form. If you leave this processing option blank, the system uses the ZJDE0001 version.

Versions control how the Bill of Material Inquiry program displays information. Therefore, you might need to set the processing option to a specific version to meet your needs.

5. Where Used Inquiry (P30201)

Use this processing option to specify the version that the system uses when you choose the Row exit to the Where Used Inquiry program from the ECO Parts List Entry form. If you leave this processing option blank, the system uses the ZJDE0001 version.

Versions control how the Where Used Inquiry program displays information.

Therefore, you might need to set the processing option to a specific version to meet your needs.

6. Item Branch (P41026B)

Use this processing option to specify the version that the system uses when you choose the Row exit to the Item Branch program from the ECO Parts List Entry form. If you leave this processing option blank, the system uses the ZJDE0001 version.

Versions control how the Item Branch program displays information. Therefore,you might need to set the processing option to a specific version to meet your needs.

7. WO Scheduling Workbench (P31225)

Use this processing option to specify the version that the system uses when you choose the Row exit to the Work Order Scheduling Workbench program from the ECO Parts List Entry form. If you leave this processing option blank, the system uses the ZJDE0001 version.

Versions control how the Work Order Scheduling Workbench program displays information. Therefore, you might need to set the processing option to a specific version to meet your needs.

8. Enter/Change Order (P48020)

Use this processing option to specify the version that the system uses when you choose the Form exit to the Enter/Change Order program from the Work With ECO Parts List form or from the ECO Parts List Entry form. If you leave this processing option blank, the system uses the ZJDE0001 version.

Versions control how the Enter/Change Order program displays information.

Therefore, you might need to set the processing option to a specific version to meet your needs.

9. Work Order Routing (P3112)

Use this processing option to specify the version that the system uses when you choose the Row exit to the Work Order Routing program from the Work With ECO Parts List form. If you leave this processing option blank, the system uses the ZJDE0001 version.

Versions control how the Work Order Routing program displays information.

Therefore, you might need to set the processing option to a specific version to meet your needs.

10. ECO Related Item (P30131)

Use this processing option to specify the version that the system uses when you choose the Row exit to the ECO Related Item program from the ECO Parts List Entry form. If you leave this processing option blank, the system uses the ZJDE0001 version.

Versions control how the ECO Related Item program displays information.

Therefore, you might need to set the processing option to a specific version to meet your needs.

11. Purchase Order (P4310)

Use this processing option to specify the version that the system uses when you choose the Row exit to the Purchase Order program from the ECO Parts List Entry form. If you leave this processing option blank, the system uses the ZJDE0001 version.

Versions control how the Purchase Order program displays information.

Therefore, you might need to set the processing option to a specific version to meet your needs.

12. WO Details (P480200)

Use this processing option to specify the version that the system uses when you choose the Row exit to the Work Order Detail program from the ECO Parts List Entry form. If you leave this processing option blank, the system uses the ZJDE0001 version.

Versions control how the Work Order Detail program displays information.

Therefore, you might need to set the processing option to a specific version to meet your needs.

13. Pending PO (P480200)

Use this processing option to specify the version that the system uses when you choose the Row exit to the Pending Purchase Orders program from the ECO Parts List Entry form. If you leave this processing option blank, the system uses the ZJDE0002 version.

Versions control how the Pending Purchase Orders program displays information.

Therefore, you might need to set the processing option to a specific version to meet your needs.

Process Tab

These processing options control information about pending engineering change orders. First, specify the version of the Supply/Demand Inclusion Rules program (P34004) to use when adding engineering change orders. Secondly, specify whether the system uses the value in the To Revision field from the UDC table 30/NR when no pending engineering change orders exist. Finally, specify the user defined code table for retrieving the next revision level.

1. Supply/Demand Inclusion Rules

Use this processing option to specify the version of the Supply/Demand Inclusion Rules that the system uses. The system uses this version to add orders to the ECO Pending Orders Detail program. If you leave this processing option blank, the system does not add any orders.

Versions control how the Supply/Demand Inclusion Rules program displays information. Therefore, you might need to set the processing option to a specific version to meet your needs.

2. To Revision Field

Use this processing option to specify whether the system uses the default value in the To Revision field from the next revision level UDC table when no pending engineering change orders exist.

When you set this processing option to update the item revision to the next revision level, the system updates the revision level for the change types as shown in the Tab level help.

Valid values are:

  Blank The system uses a default value of the current revision level in the To Revision field.

  1   The system uses a default value of the next revision level in the To Revision field.

3. UDC Product Code

Use this processing option to specify the product code of the user defined code table from which the system retrieves the next revision level. If you leave this processing option and the UDC Code Type processing option blank,the system uses 30.

4. UDC Code Type

Use this processing option to specify code type of the user defined code table from which the system retrieves the next revision level. If you leave this processing option and the UDC Product Code processing option blank, the system uses NR.

Reviewing Pending Orders

After you process existing work orders and purchase orders, you can review pending orders for items that are affected by the ECO. You can work with open and existing work orders and purchase orders, and enter a quantity and cost estimate for incorporating the ECO into the work order or part on the purchase order.

The system displays the orders, based on the supply and demand inclusion rules that you specify in the processing options.

Use the ECO Parts List program (P3013) to access and review the items on pending purchase orders and work orders that are affected by an ECO.

► **To review purchase orders**

From the Engineering Change Management menu (G3013), choose ECO Parts List.

1. On Work With ECO Parts List, complete the following field and click Find:

   - Branch/Plant

2. Choose a record in the detail area and click Select.

3. On ECO Parts List Entry, choose a record in the detail area and then choose Open POs from the Row menu.

4. On Work With Order Details, review the following fields that display ECO information:

   - Order Number
   - Or Ty

► **To review work orders**

From the Engineering Change Management menu (G3013), choose ECO Parts List.

1. On Work With ECO Parts List, complete the following field and click Find:

   - Branch/Plant

2. Choose a record in the detail area and click Select.

3. On ECO Parts List Entry, choose a record in the detail area and then choose Open WOs from the Row menu.

4. On Work With Order Scheduling, review the following fields that display ECO information:

   - WO Number
   - Or Ty
   - Quantity Open
   - Requested Date

► **To load purchase orders into supplemental data**

From the Engineering Change Management menu (G3013), choose ECO Parts List.

1. On Work With ECO Parts List, complete the following field and click Find:

   • Branch/Plant

2. Choose a record in the detail area and click Select.

3. On ECO Parts List Entry, choose a record in the detail area, and then choose Load Supp POs from the Row menu to load the pending purchase orders into supplemental data.

4. On Work With Supplemental Data, review the information and then click Close.

► **To load work orders into supplemental data**

From the Engineering Change Management menu (G3013), choose ECO Parts List.

1. On Work With ECO Parts List, complete the following field and click Find:

   • Branch/Plant

2. Choose a record in the detail area and click Select.

3. On ECO Parts List Entry, choose a record in the detail area and then choose Load Supp WOs from the Row menu to load the pending work orders into supplemental data.

4. On Work With Supplemental Data, review the information, and then click Close.

Notifying Reviewers of Engineering Change Orders

From the Engineering Change Management menu (G3013), choose ECO Notification.

After you define an ECO and its routing instructions and parts list, use the ECO Notification program (R48181) to send notices to the reviewers that you defined in the approval routing master. To generate notifications, you must have an address book record established. You can run ECO Notification in either of the following two ways:

   • To process several ECOs, use the data selection in the ECO Notification program

   • To process a single ECO, run the ECO Notification program from the Enter/Change ECO program (P48020)

You run this program only once. After all of the reviewers in the first review group have reviewed the ECO, the system sends notification to the next review group.

You can set a processing option to activate flash messages for the item that is affected by the ECO. You can then view the flash message from review programs. The system deactivates the flash message when you run the Engineering Change Population program (R30510) to update the bill of material for the item.

Processing Options for ECO Notification (R48181)

Process
1. Enter the Flash Message to activate. If left blank, the Flash Message will not be updated.
Item Flash Message

Reviewing Engineering Change Orders

Both reviewers and coordinators can review engineering change order (ECO) information. For an ECO, you can locate all of the revision-level changes made to the item. To view the most current revision information, you should run the Engineering Change Population program (R30510) daily. To help you plan and schedule work, you can search for an ECO by requested dates, start dates, and labor hours by operation. You can review ECOs and evaluate outstanding ECOs that are awaiting approval. An ECO coordinator can review ECO information to accomplish the following purposes:

- Review work orders and purchase orders for affected items

- Determine whether anyone has rejected an ECO

- Review the progress of an ECO

- Plan and schedule work

- Determine who is in the process of reviewing an ECO

- Determine who has not received notification

► **To review revision information**

From the Engineering Change Management menu (G3013), choose ECO Revisions Inquiry.

1. On Work With ECO Revisions Inquiry, complete the following fields and click Find:

   - Branch/Plant
   - Item Number

   Note

   To display pending ECOs as well, turn on the Display Pending ECO option.

2. Choose an ECO and click Select.
3. On ECO Work Order Entry Revisions, choose Audit/Review from the Form menu.

4. On Work With ECO Approval/Audit Review, review the following fields that display ECO information:

- Approver Name
- Status
- Planned Complete
- Date Approved
- Seq No.
- Group No.
- Note

Processing Options for ECO Revisions Inquiry (P30135)

Versions

Enter the version to use for each program listed. If left blank, ZJDE0001 will be used.

1. Enter/Change Order (P48020)

2. BOM Revisions (P3002)

Defaults

1. Enter the default Order Type. If blank, order type 'EN' will default.

Order Type

► **To review approval audit information**

From the Engineering Change Management menu (G3013), choose ECO Approval/Audit Review.

1. On Work With ECO Approval/Audit Review, complete the following field and click Find:

    • Order Number

2. Choose an approver name and click Select.

3. On ECO Approval Revisions, review the following fields that contain ECO information:

    • S T
    • ECO Number
    • Or Ty
    • ECO Description
    • Branch/ Plant
    • Note
    • Target Date
    • Date Approved

Processing Options for ECO Approval/Audit Review (P48185)

Versions

Enter the version to use for each program listed. If left blank, version 'ZJDE0001' will be used.

1. Approval   (P4818)
2. Enter/Change Order   (P48020)

► **To review open tasks**

From the Engineering Change Management menu (G3013), choose ECO Open Task Review.

1. On Work With ECO Assignment Review, complete the following fields and click Find:

   - Branch/Plant
   - Work Center
   - Status
   - Thru

2. Choose an operation and click Select.

3. On Enter ECO Assignments, review the following fields that display ECO information:

   - Op St
   - Operation Description
   - ECO Number
   - Work Center
   - Oper Seq#

Processing Options for ECO Open Task Review (P30220)

Defaults

1. Enter the default document type to be used. If left blank, '*' will load all document types.

Order Type

2. Enter the default value for From Status.

Operation Status - From

3. Enter the default value for Thru Status.

Operation Status - Thru

Versions

Enter the version to use for each program listed. If no version is entered, ZJDE0001 will be used.

1. Enter/Change Order (P48020)

2. Parts List (P3013)

3. Work Order Routing (P3112)

Printing Engineering Change Order Information

You can print a variety of engineering change order information to help you manage the ECOs that you create. You can access the reports from the Engineering Change Management menu (G3013).

You can generate the ECO Work Order Print report (R48020P) to list all of the details for a specific ECO. You can set the processing options to specify the amount and type of information in the report. The system retrieves the data for this report from the Bill of Material Master table (F3002).

Use the ECO Summary Report (R48421) to list the ECOs that are currently in the approval process or as a basis for running the Engineering Change Population program (R30510).

You can set up the report by the following types of information:

- Document type and status code

- Category code and product family

- Status code for pending approval

- Status code for ECOs that have been approved

The system retrieves the data for this report from the Work Order Master table (F4801).

Processing Options for ECO Details (R48020P)

Print

Enter a '1' to print any of the following details:

1. Notes:

2. Parts List:

3. Routing:

Defaults

Enter the default note type that will be printed. If left blank, note type 'A' will be used.

Record Type

Approving Engineering Change Orders

You locate the ECO that awaits your approval, and then indicate your approval or rejection. You can also enter text to provide more information regarding your approval.

After you locate an engineering change order (ECO) for review, you must indicate your approval or rejection. The reviewer typically performs this task. After the last person in the approval routing has approved the ECO, the system updates the status code with the value that you specify in a processing option.

To reject an ECO, use status code R to stop the notification process. After a reviewer rejects an ECO, the creator of the ECO must redefine the ECO and restart the notification process.

You can set a processing option to protect the approval field so that only the current user can change approval status.

Approval status codes are stored in user defined code table 30/ST. Approval status code A is hard-coded and is the only value that initiates the notification of other review groups. You can define additional approval status codes.

Prerequisite

❑ Locate the ECOs assigned to you for review. You can either have the system notify you automatically or you can locate open ECOs using the ECO Approval/Audit Review program (P48185).

▶ **To approve engineering change orders**

From Engineering Change Management (G3013), choose ECO Approval.

1. On Work With ECO Approval, complete the following fields and click Find:

   • Branch/ Plant

   • Approver Number

2. Choose an ECO record and click Select.

3. On ECO Approval Revisions, complete the following field to indicate your approval or rejection, and then click OK:

   - S T

Processing Options for ECO Approval (P4818)

Defaults

Enter the default search order type. If left blank, all order types will be used.

1. Order Type

Enter the default search approval status. If left blank, then blank will be used.

2. Approval Status

Enter the ECO status code to update the ECO order master (F4801) when approval routing is complete. If left blank, no ECO status update will occur.

3. Status Code W.O.

Versions

Enter the version to execute for the programs listed below. If left blank ZJDE0001 will be used.

1. Enter/Change Order (P48020)

2. Approval Notification   (R48181)

Edits

1. Approval Security

Blank = Approval security is disabled.

1   = Approval security is enabled.

Updating Bills of Material

From the Engineering Change Management menu (G3013), choose Engineering Change Population.

For engineering change orders (ECOs) with attached parts lists, you can process the ECO parts list and related items list to update the Bill of Material Master File table (F3002) with the requested changes.

The Engineering Change Population program (R30510) performs the following actions:

- Processes ECOs

- Updates the bills of material for the items on the ECO

- Creates a report in proof or final mode that describes the requested changes

- Updates ECO-related information in the Item Branch File table (F4102)

- Updates the Item Master table (F4101) for item flash messages that are based on other outstanding ECOs

- Validates the ECO for full approval before accepting the requested changes

- Updates the effectivity dates

- Updates the drawing revision level

- Copies substitute items from the old component to the new component

- Updates the parent or component revision level

Caution

PeopleSoft recommends that you first run this program in proof mode. In proof mode, the report lists all of the requested changes without actually changing any records. Review the report and then run the program in final mode to update records. After you run this program and update table F3002, you cannot change the parts list and run the program again.

The Engineering Change Population program updates only the bill of material. You must update the routing instruction to include the same item revision level as the bill of material if you want to synchronize them.

Prerequisites

❑ Verify that all reviewers approved the ECO.

❑ Verify that the ECO parts list contains the correct change type and relationship values.

❑ Verify that the ECO-related items list contains the items that you want to include in the change.

Processing Options for Engineering Change Population (R30510)

Mode Tab

This processing option control whether the program is run in proof or final mode.

Mode

   Blank = Proof Mode
   1 = Final Mode

Use this processing option to specify whether the system runs the Engineering Change Population program (P30510) in proof or final mode. J.D. Edwards recommends that you first run this program in proof mode. The proof report lists all requested changes without actually changing any data. Review the report and then run the program in final mode to update the data in the Bill of Materials Change table (F3011). After you run this program in final mode,you cannot change the parts list and run the program again. Valid values are:

   Blank The system runs in proof mode.

   1   The system runs in final mode.

Edits Tab

This processing options control whether the system uses engineering change order verification for the Engineering Change Population program (R30510).

ECO Approval Validation

   Blank = No approval validation
   1 = Approval Validation

Use this processing option to specify whether the system uses engineering change order verification for the Engineering Change Population program (P30510). ECO approval verification lets you update the ECO in final mode only if everyone on the ECO approval list has approved the ECO. If you leave this field blank, it is possible that an ECO can be fully incorporated without any approval. Valid values are:

   Blank The system does not verify that the ECO is fully approved before allowing the final mode update.

   1   The system verifies that the ECO is fully approved before allowing the final mode update.

Process Tab

These processing option control various updates options, which item flash message the system uses, and whether the system automatically copies a component's substitute items to the new bill of material.

Update Actual Incorporation Date

    Blank = No Date Update

    1 = Update w/ today's date

Use this processing option to specify whether the system updates the actual incorporation date of the engineering change order to the system date. Valid values are:

  Blank The system does not update the date.

    1   The system updates the date of the ECO.

Status Code

    Blank = No Status Change

Use this processing option to specify the default status code for the engineering change order. Status code is a user defined code (00/SS) that identifies the status of the engineering change order. Enter the status code to use as the default value or choose it from the Select User Define Code form. If you leave this field blank, the system does not change the status.

Update Revision Level

    Blank = No Update

    1 = Update Revision Level

Use this processing option to specify whether the system updates the revision level in the Item Branch table (F4102) when the bill of material revision level is updated for a corresponding parent item. The item revision level appears on the Manufacturing Data form in the Inventory Management system.

Valid values are:

  Blank The system does not update the revision level.

    1   The system automatically updates the revision level in the Item Branch table.

Update Item Balance Revision Info

    Blank = No Update

    1 = Update Revision Info

Use this processing option to specify whether the system updates the engineering change order item balance revision level information in the Item Branch table (F4102). Item balance revision level information appears on the Manufacturing Data form in the Inventory Management system. Valid values are:

Blank The system does not update the item balance revision level information.

1   The system automatically updates the item balance revision level information in the Item Branch table.

Item Flash Message

Blank = No Flash Message

Use this processing option to specify the message that the system uses when resetting the flash message due to other outstanding engineering change orders. Item flash message is a user defined code (40/FL) that identifies the item message. Enter the status code to use as the default value or select it from the Select User Define Code form. If you leave this field blank, the system does not display the item flash message.

Update Drawing Revision Level

Blank = Manually Update Drawing Revision

1 = Automatic Update Drawing Revision

Use this processing option to specify whether the system updates the drawing revision level in the Item Master table (F4101) when a change is made to the drawing revision level for items defined in the engineering change order (ECO)

parts list and related item list. The drawing revision level appears on the Manufacturing Data form in the Inventory Management system. Valid values are:

Blank The system does not update the drawing revision level.

1   The system automatically updates the drawing revision level in the Item Master table.

Copy Substitutes Items

Blank = Manually Copy Substitute Items

1 = Automatically Copy Substitute Items

Use this processing option to specify whether the system copies a component's substitute items to the new component or bill of material during a swap or change. Valid values are:

Blank The system does not copy a component's substitute items.

1   The system automatically copies a component's substitute items to the new component or bill of material.

Defaults Tab

This processing option controls the default engineering change order type that the system uses.

Order Type
   Blank = Select All

Use this processing option to specify the order type that the system uses when running the Order Change Population program (P30510). Order type is a user defined code (00/DT) that identifies the type of the engineering change order.

Enter the order type to use as the default value or choose it from the Select User Define Code form. If you leave this field blank, the system includes all order types.

Creating an Engineering Change Order from a Request

Engineering Change Requests (ECRs) are numbered documents that you use to track requested product changes within the Engineering Change Management system. When used with engineering change orders (ECOs), ECRs allow you to create two change request processes with separate reviewers and approvers. For example, your shop floor employees can use ECRs to request that your design engineering staff make a change to a product. After the ECR is reviewed and approved, you can use your ECO processes to implement the change.

The procedures for ECRs are the same as the procedures for ECOs. Use order type EG when setting up, reviewing, or approving ECRs.

► To create an engineering change order from a request

From the Engineering Change Request menu (G3015), choose Enter/Change ECR.

1. On Work With ECO Work Order Entry, complete the following fields and click Find to locate the ECR:

   - Order Type

     Enter EG for the order type.

   - Branch/Plant

2. Choose a record in the detail area that contains the ECR and click Select.

3. On ECO Work Order Entry Revisions, choose the ECO Entry tab and complete the following optional fields:

- Charge to Cost Center
- Cost Code
- Parent Work Order
- Search X-Ref
- Standard Desc
- W.O. Flash Message

4. Click the following options:

- Drawing Change
- BOM Change
- Routing Change
- New Part Number

5. Choose the Type tab and complete the following optional fields:

- Type
- Priority
- Status
- Phase In
- Existing Disp
- Reason

6. Choose the Names tab and complete the following optional fields:

- Originator
- Coordinator
- Customer
- Supervisor
- Manager

7. Choose the Dates tab and complete the following optional fields in the Target Dates group box:

- Design
- Engineering
- Incorporated

8. Complete the following optional fields in the Actual Dates group box:

- Design
- Engineering
- Incorporated

9. Choose the Category Codes tab and complete the following optional fields, and then click OK:

- Phase
- Category 02
- Category 03
- Category 04
- Category 05
- Experience Level
- Service Type
- Skill Type
- Status
- Category 10

Interoperability

To fully cover the information requirements of an enterprise, companies sometimes use products from different software and hardware providers. Interoperability between different products is important to successfully implementing the enterprise solution. Full interoperability between different systems results in a flow of data between the systems that is seamless to the user. The interoperability function provides an interface that facilitates exchanging transactions, both inbound and outbound, with external systems.

External systems send data to the interface tables, either using an external program or using flat files and the Inbound Flat File Conversion program (R47002C). The sending party is responsible for conforming to format and other requirements for the interface tables. You run a transaction process (a batch program) that validates the data, updates valid data to the EnterpriseOne application tables, and sends action messages to the Employee Work Center about any invalid data.

You use an inquiry function to interactively review the invalid data for correctness, and then run the transaction process again. You repeat this process as often as necessary.

You set a processing option to specify the transaction type for the outbound transaction. The system uses the master business function for the type of transaction, creates a copy of the transaction, and places it in the interface table from which external systems can access it.

You use the purge function to remove obsolete and unnecessary data from interface tables. Your system is more efficient when you keep these tables as small as possible.

Interoperability Programs for Product Data Management

Product Data Management provides the following interoperability programs:

Inbound Flat File Conversion Programs (R47002C)

- Inbound Work Center Data

- Inbound Work Day Calendar Data

- Inbound Bill of Material Data

- Inbound Routing Data

Inbound Transaction Programs

- Process Inbound Work Center (R30006Z1I)

- Process Inbound Bill of Material (R3002Z1I)

- Process Inbound Routing (R3003Z1I)

- Process Inbound Work Day Calendar DC (R0007Z1I)

Inbound Inquiry Programs

- Work Center Transaction Revisions (P30006Z1)

- Work Day Calendar Transaction Revisions (P0007Z1)

- Revise Bill of Material Transactions (P3002Z1)

- Routing Transaction Revisions (P3003Z1)

Purge Programs

- Purge Work Center Transactions (R30006Z1P)

- Purge Work Day Calendar Transactions (R0007Z1P)

- Purge BOM Transactions (R3002Z1P)

- Purge Routing Transactions (R3003Z1P)

Converting Flat Files to Interface Tables

You can use a variety of methods to send data from external systems to the interoperability interface tables. One method is to enter the data in a flat file. If you use this method, the system converts the flat file to the interface table.

You can set a processing option to start the transaction process when the conversion completes successfully.

Prerequisites

❑ Ensure that the flat file is a comma-delimited ASCII text file that is stored on the hard drive of your personal computer.

❑ Ensure that the data conforms to the specified format. See *Converting Data from Flat Files into EDI Interface Tables* in the *Data Interface for Electronic Data Interchange Guide* for information about formatting requirements.

Setting Up the Flat File Cross-Reference

Before you can convert a flat file, you must provide a cross-reference from the flat file fields to the interface table fields. When you exchange data between this system and an external system, you use flat file cross-reference information for the following conditions:

- For inbound transactions for which the external system cannot write data to the interface tables in the required format for this system. In this case, the external system can write the data to a specific flat file for each transaction and record type.

- For outbound transactions for which this system cannot write data to the interface tables in the format that is required by the external system. In this case, this system can write the data to a specific flat file for each transaction and record type.

See Also

❑ *Converting Data from Flat Files into EDI Interface Tables* in the *Data Interface for Electronic Data Interchange Guide* for more information about this process. The process for setting up flat file cross-references for Interoperability is identical to that for EDI interface tables.

Prerequisite

❑ On the appropriate drives on your computer or network, set up the folders for the flat files.

► To set up the flat file cross-reference

Use one of the following navigations:

From the Forecast Interoperability menu (G36301), choose Flat File Cross-Reference.

From the Sales Interoperability menu (G42A313), choose Flat File Cross Reference.

From the Inventory Interoperability menu (G41313), choose Flat File Cross-Reference.

From the Product Data Interoperability menu (G30311), choose Flat File Cross-Reference.

From the Purchasing Interoperability menu (G43A313), choose Flat File Cross-Reference.

From the Shop Floor Management Interoperability menu (G31311), choose Flat File Cross-Reference.

1. On Work With Flat File Cross-Reference, click Add.

2. On Flat File Cross-Reference, to specify the transaction type, such as receipts, complete the following field:

   • Transaction

3. To indicate whether this transaction type is Inbound (1), or Outbound (2), complete the following field:

   • Direction Indicator

4. To indicate the information source, complete the following field:

   • Record Type

5. Enter the specific file name in the following field:

   • File Name

   The file name refers to the application table from which the system exchanges information, as defined by the record type.

6. Click OK.

Running the Conversion Program

Use one of the following navigations:

From the Forecast Interoperability menu (G36301), choose Inbound Flat File Conversions

From the Inventory Interoperability menu (G41313), choose Inbound Flat File Conversion.

From the Product Data Interoperability menu (G30311), choose the applicable Inbound Flat File Conversion.

From the Purchasing Interoperability menu (G43A313), choose Inbound Flat File Conversion.

From the Shop Floor Management Interoperability menu (G31311), choose the applicable Inbound XX Flat File Conversion, where XX is the process that the conversion completes, such as Inbound Completion Flat File Conversion.

You use the Inbound Flat File Conversion program (R47002C) to import flat files into PeopleSoft interface tables. You can create a separate version of the Inbound Flat File Conversion program for each interface table. This program recognizes both the flat file from which it reads and the record types (UDC 00/RD) within the flat file. Each flat file contains records of differing lengths, based on the interface table record to which they correspond. The Inbound Flat File Conversion program uses the Flat File Cross-Reference Table (F47002) to convert the flat file into the interface tables. Table F47002 indicates to the conversion program which flat file to read from, based on the transaction type that you are receiving.

The conversion program reads each record in the flat file and maps the record data into each field of the interface tables, based on the text qualifiers and field delimiters that are specified in the flat file.

The conversion program inserts the field data as one complete record in the interface table. If the conversion program encounters an error while converting data, it withholds the data in error and continues processing the conversion. If the data is successfully converted, the system automatically starts the transaction process for that interface table, provided that you set the processing options in the conversion program to do so.

See Also

❑ *Receiving Transactions from External Systems* in the *Inventory Management Guide* for information about the transaction process programs

Receiving Transactions from External Systems

From the Product Data Interoperability menu (G30311), choose one of the following:

- Process Inbound Work Center Transactions

- Process Inbound WDC Transactions

- Process Inbound BOM

- Process Inbound Routing

When an external system sends inbound transactions, the system stores the data in interface tables. These tables contain unedited transactions. The next step is to run the appropriate transaction process to edit the transactions and update the application tables. For example, if you receive transactions in the Bill of Material Transaction File table (F3002Z1), you run Process Inbound Bill of Material (R3002Z1I) to update the Bill of Material Master File table (F3002).

Note

When you run the Inbound Flat File Conversion program (R47002C) and it completes successfully, the system automatically starts the transaction process, if specified in the processing option for the conversion.

To be received in the interface tables, data from an external system must conform to the minimum field requirements specified for the interface table.

The transaction process:

- Validates the data in the interface table (for example, table F3002Z1) to ensure that it is correct and conforms to the format that is defined for the Product Data Management system

- Updates the associated application table (for example, table F3002) with validated data

- Produces a report that lists invalid transactions and sends an action message for each invalid transaction to the employee work center

- Marks in the interface tables those transactions that are successfully updated to the application tables

If the report indicates errors, access the Employee Work Center program from the Workflow Management menu (G02) and review the messages in the message center. Then use the associated inquiry function to review and revise the transactions, and rerun the transaction process.

Before you run any of the inbound transaction programs, specify the appropriate values for processing in the processing options.

Processing Options for Process Inbound Routing (R3003Z1I)

Versions
1. Enter the version of "Enter/ Change Routing" to retrieve processing option values for updates. If left blank, ZJDE0001 will be used.
Version

Reviewing and Revising Inbound Transactions

Running one of the transaction processes, such as the Work Center Transaction Revisions, often identifies one or more inbound transactions that contain invalid transactions. For example, a work center might have an invalid location branch. In that case, the program cannot add that work center to the Work Center Master File table (F30006). Instead, the program sends an error message to the Employee Work Center indicating the transaction number for the transaction in error.

Use the inquiry menu selections to review and revise inbound transactions. Use the inquiry menu selections to add, change, or delete transactions containing errors. Then run the transaction process again. Continue to make corrections and rerun the transaction process until the program runs without errors.

The Product Data Management inquiry menu selections are as follows:

- Work Center Transaction Revisions

- Workday Calendar Transaction Revisions

- Bill of Material Transaction Revisions

- Routing Transaction Revisions

See Also

❑ *EDI Document Inquiry and Revision* in the *Data Interface for Electronic Data Interchange Guide* for information about reviewing and revising inbound transactions

► **To review and revise inbound transactions**

From the Product Data Interoperability menu (G30311), choose Work Center Transaction Revisions.

1. On Work With Work Center Transactions, complete the following fields and click Find to limit the search to specific transactions:

   - User ID
   - Batch Number
   - Transaction Number

2. Choose the transaction to review and revise, and then click Select.

3. On Work Center Transaction Revisions, review and revise as needed, and then click OK.

   After you correct the errors that are identified by the Inbound Work Order Processor, run the transaction process again. If other errors are identified, correct them and run the transaction process again.

Processing Options for Work Center Transaction Revisions (P30006Z1)

Display

1. Enter a '1' to inquire at the batch level, blank to inquire at the transaction level.
Level of Inquiry

2. Default View: Enter a '1' for Processed, a '2' for Unprocessed, or blank for both.
Processed Status.

3. Default View: Enter a '1' for Inbound, a '2' for Outbound, or blank for both.
Direction

Processing Options for Work Day Calendar Transaction Revisions (P0007Z1)

Display

1. Enter a '1' to inquire at the Batch level, blank to inquire at the Transaction level.
Level of Inquiry

2. Default View: Enter a '1' for Processed, a '2' for Unprocessed, or blank for both.
Processed Status

3. Default View: Enter a '1' for Inbound, a '2' for Outbound, or blank for both.
Direction

Processing Options for Revise Bill of Material Transaction (P3002Z1)

Display

Level of Inquiry: Enter a "1" to inquire at the Batch Level, Or Blank to inquire at the transaction level.

Processed View: Enter a "1" for Processed, a "2" for Unprocessed, Or Blank for both.

Direction: Enter a "1" for Inbound, a "2" for outbound, Or Blank for both.

Versions

Default Version: Enter the version for "Processed Inbound Bill of Material" to submit. If left blank, ZJDE0001 will be used.

Processing Options for Routing Transaction Revisions (P3003Z1)

Display

1. Enter a '1' to inquire at the Batch level, blank to inquire at the Transaction level.

Level of Inquiry

2. Default View: Enter a '1' for Processed, a '2' for Unprocessed, or blank for both.

Processed Status

3. Default View: Enter a '1' for Inbound, a '2' for Outbound, or blank for both.

Direction

Sending Transactions to External Systems

You might send transactions that you create or change in the Product Data Management system to another system. For example, if your organization uses hand-held scanning devices, you can use interoperability transactions to update the database that is used by the scanning devices.

The default outbound transaction is a copy of a data transaction after you created or changed it (an *after image*). With interoperability, you can also send a copy of each transaction as it was before you changed it (a *before image*). Creating and sending before images requires additional processing time. To control the type of image, you set a processing option in the application programs that create transactions.

You can send transactions to an external system from the following programs in the Product Data Management system:

- Work Center Revision (P3006)
- Workday Calendar (P00071)
- Enter/Change Bill (P3002)
- Work With Routing Master (P3003)

To create outbound transactions, specify the appropriate transaction type in the related processing option. The system places a copy of the transaction in the interface table for that type of transaction. For example, when you run Work Center Revisions with the interoperability processing option turned on, the system places a copy of updated work center data in the Work Center Transaction File table. The data is then available for an external system to use.

The system creates the outbound transaction in Electronic Data Interchange (EDI) format. External systems can process the transactions using standard EDI processing, including extraction.

Prerequisites

❏ Set up the conversion table that supports Unicode processing. See *Flat File Encoding* in the *System Administration Guide* for information on setting up this table.

❏ Define the data export controls for the type of outbound transaction. The system uses data export controls to determine the batch programs or business processes that third parties supply for use in processing transactions. See *Setting Up Data Export Controls* in the *Interoperability Guide*.

Lead Times

Determining lead time is an essential part of any manufacturing or scheduling process. For any product that you purchase or manufacture, you encounter a time lag between when you order or start it, and when you receive or finish it. To account for the lag, you must estimate the extra time (lead time) and allow for it in your planning.

Cumulative lead time is the total amount of time that is required to produce a product. The Shop Floor Management system uses the requested date of the order and calculates the appropriate order start date, based on the methods used to define the level lead time or lead time per unit for the product. Many factors can influence your company's lead time policy, including the following:

- Manufacturing environment (assemble-to-order, make-to-order)
- Fixed or variable quantities
- Serial or overlap operations
- Fixed or variable time
- Number of shifts and operators
- Factoring by efficiency
- Protection

Whether your company uses fixed or variable lead time depends on whether you have consistent work order quantities for a manufactured item. If your work order quantities vary significantly, you use variable lead time. A significant variation is any amount that requires more or less lead time. Items with short lead times can have larger fluctuations than items with long lead times. You specify fixed or variable lead time on the Additional System Information forms in the Item Master program (P4101) and the Item Branch/Plant program (P41026). The system calculates lead times for parent and component items based on this information combined with the work center information and routing instructions that are set up in the Product Data Management system. At any point in your planning and scheduling process, you can change lead time values manually.

The system subtracts fixed lead times directly from the requested date on the work request to calculate the start date of production. Fixed lead time remains the same, regardless of the quantity produced. However, variable lead time adjusts according to the quantity produced.

For any manufactured product, the system calculates the following four types of lead time:

Level lead time	The number of workdays required to complete the product after all items are available.
Manufacturing lead time	The total number of workdays required to complete a product, from its lowest-level components to the final item, assuming that all purchased items are in-house.
Cumulative lead time	The number of workdays required to acquire items and complete a product, from its lowest-level components to the final item. Cumulative lead time is the level lead time for a product plus the longest cumulative lead time of any of its components.
Per unit lead time	The sum of the run times, as defined by the prime load codes for the work centers, factored by the routing time basis and converted to the lead time per unit. You use this lead time calculation when the Fixed/Variable option in the Item Master and the Item Branch/Plant programs is set to variable lead time.

The Shop Floor Management system uses the following information to calculate lead times:

- Serial or overlap operations
- Fixed or variable lead time indicator
- Routing labor, setup, queue, move, and machine run hours
- Work center prime load code
- Number of employees or machines per work center
- Hours per work day

Lead Time Concepts

The following table explains important lead time terms and concepts that you need to understand:

Machine hours	The number of machine hours that is required to produce the amount from the time basis code.
Labor hours	The number of labor hours that is required to produce the amount from the time basis code.

Setup hours	The number of hours that is required to prepare machinery to produce a specific item, regardless of quantity.
Move hours	The number of hours that a manufacturing work order is in transit from the completion of one operation to the beginning of the next.
Queue hours	The number of hours that a job waits at a work center before setup or work is performed on it.
Total queue and move hours	The sum of the move hours and the queue hours.
Time basis code	A user defined code (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 step in the routing instructions, such as 25 hours per 1000 pieces.
Resource units	The available amount of capacity in a work center for the months in the calendar. As the system calculates the operation start and due dates, it uses the available hours to calculate the operation start dates. You maintain the resource units in the Enter/Change Resource Units program (P3007).
Prime load code	A code that indicates whether a work center is labor-intensive or machine-intensive. The prime load code also indicates whether the system uses the number of employees or the number of machines to determine the daily resource units in the Work Center Resource Units table (F3007). You maintain the prime load codes in the Enter/Change Work Centers program (P3006). For calculating lead times, the following prime load code values are valid:

- L = run labor hours
- M = machine labor hours
- B = run and setup hours
- C = machine and setup hours
- O = Other

Purchased parts	A part bought from a supplier. For any purchased part, you specify the level lead time, which is equal to the cumulative lead time. By default, the manufacturing lead time, lead time per unit, total queue and move hours, and setup times for purchased parts are zero.

Work Order Start Dates

When an item has a fixed lead time, the system uses the item's level lead time value to backschedule the work order start date. For backscheduling, the start of a work order is based on the due date of the order.

For example, suppose that the system generates a planned order with a requested due date of 10/15. The level lead time is three days for this product, so the system calculates the start date by counting back three working days on the shop floor calendar from (but not including) the requested date. The system assigns the order a start date of 10/12.

Fixed Leadtime

10/12	10/13	10/14	10/15
Start Date			**Due Date**

Level LT 3 days
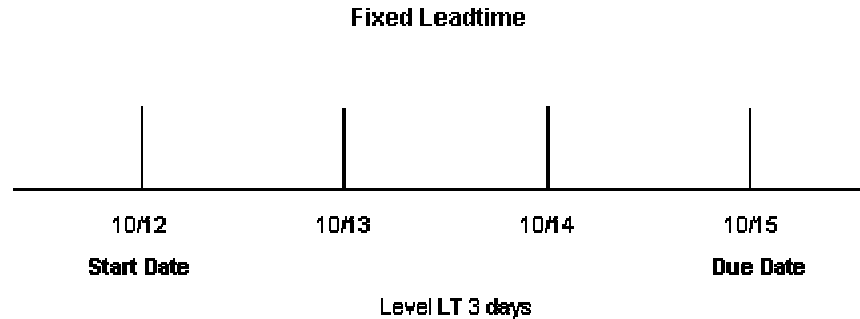
When an item has a variable lead time, the system uses the following calculation to determine the lead time days:

> (Lead time per unit x order quantity / TIMB*) + setup + total queue/move = Variable lead time

The system reads the time basis code (TIMB) from the Item Branch File table (F4102).

The calculation uses the following values:

Due date   10/15

Lead time per unit   32 hours

Order quantity   1000

Setup   1 hour

Total queue/move   9 hours

Work hours per day   8 hours

> ((32 x 1000 / 10,000) + 1 + 9) / 8 = 2 days

To determine the start date, the system counts back the lead time days from the due date of planned orders. The system backschedules the due date, 10/15, two days to determine the start date of 10/13.

Note

Lead time per unit does not use crew size to calculate lead time for an item with a labor-based work center. However, lead time per unit does use the number of employees in the work center to calculate lead time.

Operation Start Dates

The system calculates the operation start dates with the average number of hours per operation.

For a fixed lead time, the system calculates the operation hours using the following information:

- Level lead time
- Hours per work day
- Number of employees per machine
- Number of operations

You must schedule the hours per operation according to the resource units within the entire level lead time to ensure that the start date of the first operation is the same as the start date of the work order. When the job moves to a different work center in the same day, the system decreases the resource units available by the percentage of the work day remaining. The system does not use resource units on the due date of the work order. Instead, it assumes that the order was completed at the end of the previous day.

For each operation, the system then schedules this average time into the appropriate work center, based on the available hours from the Work Center Resource Units table (F3007). The system schedules the last operation due date on the day before the work order due date.

The system uses the following formula to calculate average time per operation:

$$\frac{\text{Level lead days x work hours per day* x employees or machine}}{\text{number of operation sequences (blank operation sequence codes only)}} = \text{Average time per operation}$$

The work hours per day are retrieved from the Job Shop Manufacturing Constants table (F3009)

The following table shows the values used in this calculation.

Work order due date	05/01/05		
Average time per operation	25 hours		
Operations in the routing instructions	OP40	WC 200-204	due 4/30 start 4/27
	OP30	WC 200-101	due 4/27 start 4/24
	OP20	WC 200-204	due 4/24 start 4/21
	OP10	WC 200-101	due 4/21 start 4/17
WC Resource Units 200-204	8		
WC Resource Units 200-101	8		

To determine variable lead times, the system schedules the actual hours from the work order routing instructions according to the same resource unit rules used for fixed lead time.

The system uses the prime load code to determine the hours to use. The hours are then applied to the Work Center Resource Units table, similar to fixed lead time. The system applies the queue time from the work order routing instructions at the beginning of an operation and the move time at the end of an operation.

Overlapping Operations

To compress lead times, operations can be scheduled to overlap. Overlapping operations occur when two or more operations in a routing instruction run at the same time. The percentage of overlap is the amount of time that these operations can run concurrently. You can define the point at which the second operation can begin before the first operation is complete. Because of setup, move, and queue times, the actual overlap in run time might be less than the percent of overlap that you defined.

In the following example, Operation B has an 80 percent overlap, so Operation B can begin when 80 percent of Operation A remains to be finished, or when Operation A is 20 percent complete. Operations A and B are both active as they overlap.

Overlapping Operations
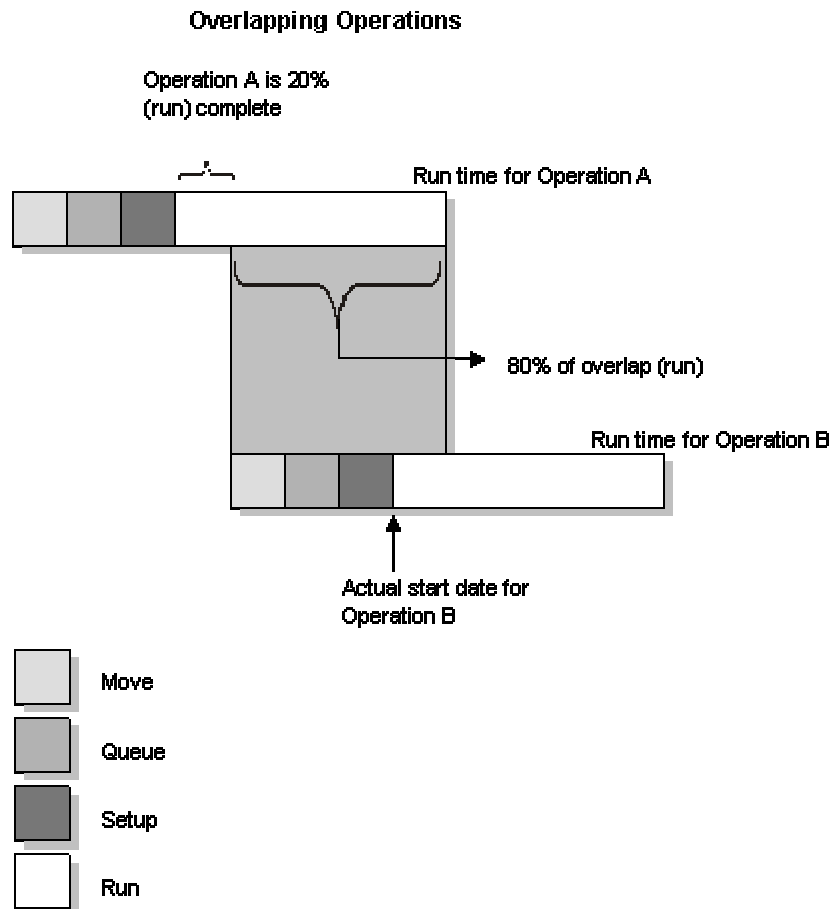
When the percent of overlap causes an operation to end later than the last operation in the routing instructions, the system issues an error message and enters the work order start and requested dates into each operation.

Overlapping and Concurrent Operations

If a percent of overlap is specified in the routing instructions, the work order routing instruction includes specified operations that overlap. For example, an overlap percentage of 80 percent for an operation means that the next operation can start when 20 percent of the previous operation is complete.

Work order complete date	05/01
Last operation 20	24 hours
First operation 10	24 hours
Resource hours per day, per work center	8 hours
Operation overlap on 20	75%

	Without Overlap	With Overlap
Operation 10		
start	04/27	04/27
complete	04/29	04/29
Operation 20		
start	04/30	04/27
complete	05/02	04/30

Using data from the previous tables, the system advances the complete date of the previous operation by 75 percent of 24 hours, or 18 hours. The system then recalculates the start date using normal backscheduling rules. As a result, operations 10 and 20 overlap and will take 24 hours to complete. The following diagram illustrates this concept.

Date	4/27	4/28	4/29	4/30	5/1	5/2
Resource hours	8	8	8	8	8	8
OP 10 (24 hrs) (w/o overlap)	<----	-----	---->			

OP 20 (24 hrs) (w/o overlap)				<----	-----	---->
OP 10 (w/ overlap)	<----	-----	---->			
OP 20 (w/ overlap)	<-	-----	-----	-->		

Calculating Lead Times

From the Advanced Product Data Management menu (G3031), choose Leadtime Rollup.

When you run the Leadtime Rollup program (R30822A), the system updates the following values in the Item Branch File table (F4102):

- Level lead time (if using manufacturing lead time quantity)
- Manufacturing lead time
- Cumulative lead time
- Lead time per unit
- Total queue and move hours
- Setup hours

Level Lead Time

For a manufactured product, level lead time is the number of workdays that is required to complete the product after all of the items are available. Level lead time for a purchased item is the number of calendar days that are required for you to receive the item after the supplier receives your purchase order. The following example shows you where the level lead times occur for a manufactured item and a purchased item:

The system uses the following formula to calculate level lead time.

$$\sum \frac{\{[\ [\{(M\ or\ L)/(E\ or\ M)\}\ /\ \{(EF\ or\ UT)*(CUM\ Yield)\}]\ *MLQ\ ]\ /\ TIMB\} +\ Setup + Total\ Queue\ \&\ Move}{Work\ Hours\ per\ Day}$$

The work hours per day are retrieved from Job Shop Manufacturing Constants table (F3009). The system reads the time basis code from the Routing Master File table (F3003).

The following table defines the values used in the formula.

M or L	Machine or labor hours based on the prime load code
SUM	Sum of all operations
TIMB	Time basis code
MLQ	Manufacturing lead time quantity
E or M	Number of employees or machines in the work center
Setup	Information from the routing
Queue	Queue plus move time from the routing or work center
EF or UT	Efficiency or utilization from the work center
CUM Yield %	Yield from the routing

Manufacturing Lead time

Manufacturing lead time is the total number of workdays required to complete a product, from its lowest-level components to the final item, assuming that all purchased items are in-house. Manufacturing lead time includes the following:

- Order preparation time
- Queue time
- Setup time
- Run time
- Move time
- Inspection time
- Putaway time

Manufacturing lead time is the total of the level lead time for an item plus the longest manufacturing lead time for any of its components. Lead time for purchased items is not included in manufacturing lead time calculations.

The following example, which depicts the calculation for manufacturing lead time, shows you where the manufacturing lead time occurs in the process for a manufactured item:

Manufacturing Leadtime Calculation
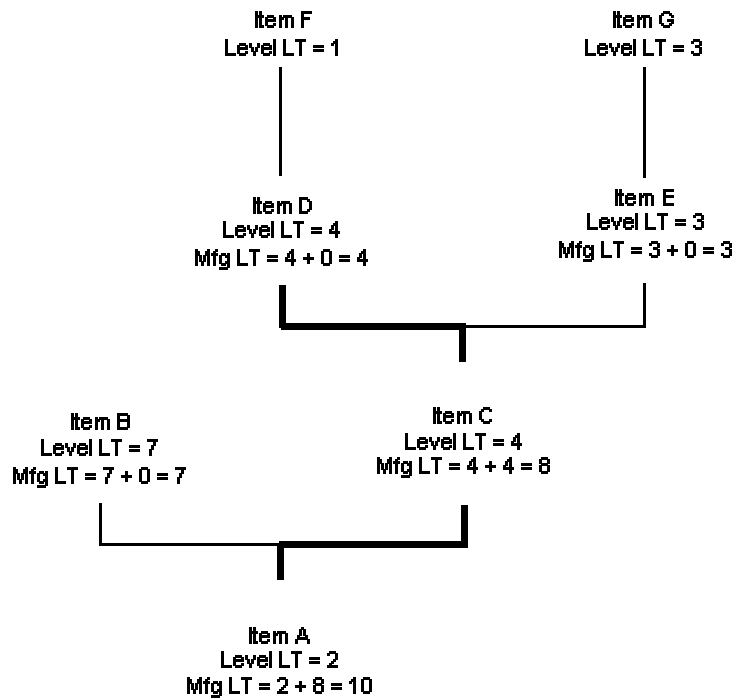
Item F
Level LT = 1

Item G
Level LT = 3

Item D
Level LT = 4
Mfg LT = 4 + 0 = 4

Item E
Level LT = 3
Mfg LT = 3 + 0 = 3

Item B
Level LT = 7
Mfg LT = 7 + 0 = 7

Item C
Level LT = 4
Mfg LT = 4 + 4 = 8

Item A
Level LT = 2
Mfg LT = 2 + 8 = 10

Bold line = Longest manufacturing leadtime for any of the product's items
Items A, B, C, D, and E are manufactured items
Items F and G are purchased items

Cumulative Lead time

Unlike manufacturing lead time, cumulative lead time includes the lead times for purchased items. It includes both the time to acquire purchased items and the time to complete the product.

Cumulative lead time is the number of workdays that are required to acquire items and complete a product, from its lowest-level components to the final item. Cumulative lead time is the level lead time for a product plus the longest cumulative lead time of any of its components. The cumulative lead time for a purchased item is its level lead time.

The following flow chart depicts the calculation for cumulative lead time.

Cumulative Leadtime Calculation

Item F
Level LT = 1

Item G
Level LT = 3

Item D
Level LT = 4
Cume LT = 4 + 1 = 5

Item E
Level LT = 3
Cume LT = 3 + 3 = 6

Item B
Level LT = 7
Cume LT = 7 + 0 = 7

Item C
Level LT = 4
Cume LT = 4 + 6 = 10

Item A
Level LT = 2
Cume LT = 2 + 10 = 12

Bold line = Longest manufacturing leadtime for any of the product's items
Items A, B, C, D, and E are manufactured items
Items F and G are purchased items

Total Queue and Move Hours

Queue hours indicate the time that a manufacturing work order is idle at a work center before setup or work begins. Move hours indicate the time that a manufacturing work order is moving from the completion of one operation to the start of the next operation. To calculate the total queue and move hours, add together the move hours per routing and the queue hours per routing.

In the following example, the total queue and move hours are nine hours.

OP 30   OP 60   OP 80

(1+2)   (2+4)   (0+0)   = 9

Lead Time Per Unit

The lead time per unit is the sum of the run times, as defined by the prime load codes for the work centers, factored by the routing time basis and converted to the lead time per unit. The lead time per unit sets valid start dates for orders planned in other-than-normal planned order quantity. When you run the lead time rollup program, the system measures the lead time per unit in hours.

The system uses the following formula to calculate the lead time per unit:

$$\sum_{\text{TIMB2}} \{ ((M \text{ or } L)/(E \text{ or } M)) / ((EF \text{ or } UT)*(CUM \text{ Yield})) \} / TIMB1$$

The system reads the time basis code 1 (TIMB1) from the Item Branch File table (F4102) and the time basis code 2 (TIMB2) from the Routing Master File table (F3003).

If the processing option to override the number of employees or machines in the work center is set to one, the system uses the following formula:

$$\sum_{\text{TIMB2}} \{ ((M \text{ or } L)/(1)) / ((EF \text{ or } UT)*(CUM \text{ Yield})) \} / TIMB1$$

The following table defines the values used in the formula.

M or L	Machine or labor hours based on the prime load code
SUM	Sum of all operations
TIMB1	Time basis code from the Item Branch File table
TIMB2	Time basis code from the routing
E or M	Number of employees or machines in the work center
EF or UT	Efficiency or utilization from the work center
CUM Yield %	Yield from the routing

Setup Hours

Setup hours indicate the time that is required to prepare the machinery to run a specific item. To calculate setup hours, divide the setup by the number of employees or machines for each routing, and then add the values together. This formula ensures consistency during the backscheduling routing because the resource units for the work center are created based on those numbers.

In the following example, the setup hours equal six hours:

Setup Hours

$$\frac{\text{Setup}}{\text{Employees or machines}} = \frac{1}{1} + \frac{2}{1} + \frac{6}{2} = 6 \text{ setup hours}$$

OP 30   OP 60   OP 80

EnterpriseOne PeopleBooks Glossary

"as of" processing	A process that is run at a specific point in time to summarize item transactions.
52 period accounting	A method of accounting that uses each week as a separate accounting period.
account site	In the invoice process, the address to which invoices are mailed. Invoices can go to a different location or account site from the statement.
active window	The window that contains the document or display that will be affected by current cursor movements, commands, and data entry in environments that are capable of displaying multiple on-screen windows.
ActiveX	A technology and set of programming tools developed by Microsoft Corporation that enable software components written in different languages to interact with each another in a network environment or on a web page. The technology, based on object linking and embedding, enables Java applet-style functionality for Web browsers as well as other applications (Java is limited to Web browsers at this time). The ActiveX equivalent of a Java applet is an ActiveX control. These controls bring computational, communications, and data manipulation power to programs that can "contain" them—for example, certain Web browsers, Microsoft Office programs, and anything developed with Visual Basic or Visual C++.
activity	In Advanced Cost Accounting, an aggregation of actions performed within an organization that is used in activity-based costing.
activity driver	A measure of the frequency and intensity of the demands that are placed on activities by cost objects. An activity driver is used to assign costs to cost objects. It represents a line item on the bill of activities for a product or customer. An example is the number of part numbers, which is used to measure the consumption of material-related activities by each product, material type, or component. The number of customer orders measures the consumption of order-entry activities by each customer. Sometimes an activity driver is used as an indicator of the output of an activity, such as the number of purchase orders that are prepared by the purchasing activity. See also cost object.
activity rule	The criteria by which an object progresses from a given point to the next in a flow.
actual cost	Actual costing uses predetermined cost components, but the costs are accumulated at the time that they occur throughout the production process.
adapter	A component that connects two devices or systems, physically or electronically, and enables them to work together.
add mode	The condition of a form where a user can enter data into it.
advanced interactive executive	An open IBM operating system that is based on UNIX.

agent	A program that searches through archives or other repositories of information on a topic that is specified by the user.
aging	A classification of accounts by the time elapsed since the billing date or due date. Aging is divided into schedules or accounting periods, such as 0-30 days, 31-60 days, and so on.
aging schedule	A schedule that is used to determine whether a payment is delinquent and the number of days which the payment is delinquent.
allegato IVA clienti	In Italy, the term for the A/R Annual VAT report.
allegato IVA fornitori	In Italy, the term for the A/P Annual VAT report.
application layer	The seventh layer of the Open Systems Interconnection Reference Model, which defines standards for interaction at the user or application program level.
application programming interface (API)	A set of routines that is used by an application program to direct the performance of procedures by the computer's operating system.
AS/400 Common	A data source that resides on an AS/400 and holds data that is common to the co-existent library, allowing PeopleSoft EnterpriseOne to share information with PeopleSoft World.
assembly inclusion rule	A logic statement that specifies the conditions for using a part, adjusting the price or cost, performing a calculation, or using a routing operation for configured items.
audit trail	The detailed, verifiable history of a processed transaction. The history consists of the original documents, transaction entries, and posting of records and usually concludes with a report.
automatic return	A feature that allows a user to move to the next entry line in a detail area or to the first cell in the next row in several applications.
availability	The expression of the inventory amount that can be used for sales orders or manufacturing orders.
available inventory	The quantity of product that can be promised for sale or transfer at a particular time, considering current on-hand quantities, replenishments in process, and anticipated demand.
back office	The set of enterprise software applications that supports the internal business functions of a company.
backhaul	The return trip of a vehicle after delivering a load to a specified destination. The vehicle can be empty or the backhaul can produce less revenue than the original trip. For example, the state of Florida is considered a backhaul for many other states—that is, many trucking companies ship products into the state of Florida, but most of them cannot fill a load coming out of Florida or they charge less. Hence, trucks coming out of Florida are either empty or produce less revenue than the original trip.

balance forward	The cumulative total of inventory transactions that is used in the Running Balance program. The system does not store this total. You must run this program each time that you want to review the cumulative inventory transactions total.
balance forward receipt application method	A receipt application method in which the receipt is applied to the oldest or newest invoices in chronological order according to the net due date.
bank tape (lock box) processing	The receipt of payments directly from a customer's bank via customer tapes for automatic receipt application.
base location	[In package management] The topmost location that is displayed when a user launches the Machine Identification application.
basket discount	A reduction in price that applies to a group or "basket" of products within a sales order.
basket repricing	A rule that specifies how to calculate and display discounts for a group of products on a sales order. The system can calculate and display the discount as a separate sales order detail line, or it can discount the price of each item on a line-by-line basis within the sales order.
batch job	A job submitted to a system and processed as a single unit with no user interaction.
batch override	An instruction that causes a batch process to produce output other than what it normally would produce for the current execution only.
batch process	A type of process that runs to completion without user intervention after it has been started.
batch program	A program that executes without interacting with the user.
batch version	A version of a report or application that includes a set of user-defined specifications, which control how a batch process runs.
batch/lot tracking	The act of identifying where a component from a specific lot is used in the production of goods.
batch/mix	A manufacturing process that primarily schedules short production runs of products.
batch-of-one processing	A transaction method that allows a client application to perform work on a client workstation, and 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, store-and-forward.
binary large object (BLOB)	A collection of binary data stored as a single entity in a [file].
binder clip	See paper clip.
black products	Products that are derived from the low or heavy end of the distillation process—for example, diesel oils and fuel oils. See also white products.

blend note	Document that authorizes a blending activity, and describes both the ingredients for the blend and the blending steps that occur.
blend off	Reworking off-specification material by introducing a small percentage back into another run of the same product.
blind execution	The mode of execution of a program that does not require the user to review or change the processing options set for the program, and does not require user intervention after the program has been launched.
boleto	In Brazil, the document requesting payment by a supplier or a bank on behalf of a supplier.
bolla doganale	VAT-Only Vouchers for Customs. In Italy, a document issued by the customs authority to charge VAT and duties on extra-EU purchasing.
bookmark	A shortcut to a location in a document or a specific place in an application or application suite.
bordero & cheque	In Brazil, bank payment reports.
broker	A program that acts as an intermediary between clients and servers to coordinate and manage requests.
BTL91	In the Netherlands, the ABN/AMRO electronic banking file format that enables batches with foreign automatic payment instructions to be delivered.
budgeted volume	A statement of planned volumes (capacity utilization) upon which budgets for the period have been set.
bunkering	A rate per ton or a sum of money that is charged for placing fuel on board; can also mean the operation itself.
business function	An encapsulated set of business rules and logic that can normally be re-used by multiple applications. Business functions can execute a transaction or a subset of a transaction (check inventory, issue work orders, and so on). Business functions also contain the APIs that allow them to be called from a form, a database trigger, or a non-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	Encapsulated, reusable business logic that is created by using through event rules rather than C programming. Contrast with embedded event rule. See also event rule.
business object library	[In interoperability] The repository that stores EnterpriseOne business objects, which consist of Java or CORBA objects.

business unit	A financial entity that is used to track the costs, revenue, or both, of an organization. A business unit can also be defined as a branch/plant in which distribution and manufacturing activities occur. Additionally, in manufacturing setup, work centers and production lines must be defined as business units; but these business unit types do not have profit/loss capability.
business view	Used by EnterpriseOne applications to access data from database tables. A business view is a means for selecting specific columns from one or more tables with data that will be used in an application or report. It does not select specific rows and does not contain any physical data. It is strictly a view through which data can be handled.
business view design aid (BDA)	An EnterpriseOne GUI tool for creating, modifying, copying, and printing business views. The tool uses a graphical user interface.
buy-back crude	In foreign producing oil countries, that portion of the host government's share of "participation crude" which it permits the company holding a concession to "buy back."
CAB	In Italy, the bank branch code or branch ID. A five-digit number that identifies any agency of a specific bank company in Italy.
cadastro de pessoas físicas	Cadastro de pessoas físicas. In Brazil, the federal tax ID for a person.
category code	A code that identifies a collection of objects sharing at least one common attribute.
central object	A software component that resides on a central server.
central objects merge	A process that blends a customer's modifications with the objects in a current release with objects in a new release.
central server	A computer that has been designated to contain the originally installed version of the software (central objects) for deployment to client computers.
certificate input	See direct input.
certificate of analysis (COA)	A document that is a record of all of the testing which has been performed against an item, lot, or both, plus the test results for that item and lot.
change management	[In software development] A process that aids in controlling and tracking the evolution of software components.
change order	In PeopleSoft, an addendum to the original purchase order that reflects changes in quantities, dates, or specifications in subcontract-based purchasing. A change order is typically accompanied by a formal notification.
chargeback	A receipt application method that generates an invoice for a disputed amount or for the difference of an unpaid receipt.
chart	EnterpriseOne term for tables of information that appear on forms in the software. See forms.

check-in location	The directory structure location for the package and its set of replicated objects. This location is usually \\deploymentserver\release\path_code\package\packagename. The subdirectories under this path are where the central C components (source, include, object, library, and DLL file) for business functions are stored.
checksum value	A computed value that depends on the contents of a block of data, and that is transmitted or stored with the data to detect whether errors have occurred in the transmission or storage.
class	[In object-oriented programming] A category of objects that share the same characteristics.
clean cargo	Term that refers to cargoes of gasoline and other refined products. See also dirty cargo.
client access	The ability to access data on a server from a client machine.
client machine	Any machine that is connected to a network and that exchanges data with a server.
client workstation	A network computer that runs user application software and is able to request data from a server.
ClieOp03	In the Netherlands, the euro-compliant uniform electronic banking file format that enables batches with domestic automatic direct debit instructions and batches with domestic payment instructions to be delivered.
ClieOp2	In the Netherlands, the uniform electronic banking file format that enables batches with domestic automatic direct debit instructions and batches with domestic payment instructions to be delivered.
cluster	Two or more computers that are grouped together in such a way that they behave like a single computer.
co-existence	A condition where two or more applications or application suites access one or more of the same database tables within the same enterprise.
cold test	The temperature at which oil becomes solid. Generally considered to be 5 degrees F lower than the pour point.
commitment	The number of items that are reserved to fill demand.
common object request broker architecture	An object request broker standard that is endorsed by the Object Management Group.
compa-ratio	An employee's salary divided by the midpoint amount for the employee's pay grade.
component changeout	See component swap.

component object model (COM)	A specification developed by Microsoft for building software components that can be assembled into programs or add functionality to existing programs running on Microsoft Windows platforms. COM components can be written in a variety of languages, although most are written in C++, and can be unplugged from a program at runtime without having to recompile the program.
component swap	In Equipment/Plant Management, the substitution of an operable component for one that requires maintenance. Typically, you swap components to minimize equipment downtime while servicing one of the components. A component swap can also mean the substitution of one parent or component item for another in its associated bill of material.
conference room pilot environment	An EnterpriseOne environment that is used as a staging environment for production data, which includes constants and masters tables such as company constants, fiscal date patterns, and item master. Use this environment along with the test environment to verify that your configuration works before you release changes to end-users.
configurable network computing (CNC)	An application architecture that allows interactive and batch applications that are composed of a single code base to run across a TCP/IP network of multiple server platforms and SQL databases. The applications consist of re-usable business functions and associated data that can be configured across the network dynamically. The overall objective for businesses is to provide a future-proof environment that enables them to change organizational structures, business processes, and technologies independently of each other.
configurable processing engine	Handles all "batch" processes, including reporting, Electronic Data Exchange (EDIt) transactions, and data duplication and transformation (for data warehousing). This ability does not mean that it exists only on the server; it can be configured to run on desktop machines (Windows 95 and NT Workstation) as well.
configuration management	A rules-based method of ordering assemble-to-order or make-to-order products in which characteristics of the product are defined as part of the Sales Order Entry process. Characteristics are edited by using Boolean logic, and then translated into the components and routing steps that are required to produce the product. The resulting configuration is also priced and costed, based on the defined characteristics.
configured item segment	A characteristic of a configured item that is defined during sales order entry. For example, a customer might specify a type of computer hard drive by stating the number of megabytes of the hard drive, rather than a part number.
consuming location	The point in the manufacturing routing where a component or subassembly is used in the production process. In kanban processing, the location where the kanban container materials are used in the manufacturing process and the kanban is checked out for replenishment.
contra/clearing account	A G/L account 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.
contribution to profit	Selling price of an item minus its variable costs.

control table	A table that controls the program flow or plays a major part in program control.
control table workbench	During the Installation Workbench process, Control Table Workbench runs the batch applications for the planned merges that update the data dictionary, user defined codes, menus, and user overrides tables.
control tables merge	A process that blends a customer's modifications to the control tables with the data that accompanies a new release.
corrective work order	A work order that is used to formally request unscheduled maintenance and communicate all of the details pertaining to the requested maintenance task.
corrective work order	A work order that is used to formally request unscheduled maintenance and communicate all of the details pertaining to the requested maintenance task.
cost assignment	Allocating resources to activities or cost objects.
cost component	An element of an item's cost—for example, material, labor, or overhead.
cost object	Any customer, product, service, contract, project, or other work unit for which you need a separate cost measurement.
cost rollup	A simulated scenario in which work center rates, material costs, and labor costs are used to determine the total cost of an item.
costing elements	The individual classes of added value or conversion costs. These elements are typically materials, such as raw and packaging; labor and machine costs; and overhead, such as fixed and variable. Each corporation defines the necessary detail of product costs by defining and tracking cost categories and subcategories.
credit memo	A negative amount that is used to correct a customer's statement when he or she is overcharged.
credit notice	The physical document that is used to communicate the circumstances and value of a credit order.
credit order	A credit order is used to reflect products or equipment that is received or returned so that it can be viewed as a sales order with negative amounts. Credit orders usually add the product back into inventory. This process is linked with delivery confirmation.
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.
crude oil assay	A procedure for determining the distillation curve and quality characteristics of a crude oil.
cumulative update	A version of software that includes fixes and enhancements that have been made since the last release or update.

currency relationships	When converting amounts from one currency to another, the currency relationship defines the from currency and the to currency in PeopleSoft software. For example, to convert amounts from German marks to the euro, you first define a currency relationship between those two currencies.
currency restatement	The process of converting amounts from one currency into another currency, generally for reporting purposes. It can be used, for example, when many currencies must be restated into a single currency for consolidated reporting.
current cost	The cost that is associated with an item at the time a parts list and routing are attached to a work order or rate schedule. Current cost is based on the latest bill of material and routing for the item.
customer pricing rules	In Procurement, the inventory pricing rules that are assigned to a supplier. In Sales, inventory pricing rules that are assigned to a customer.
D.A.S. 2 Reporting (DAS 2 or DADS 1)	In France, the name of the official form on which a business must declare fees and other forms of remuneration that were paid during the fiscal year.
data dictionary	A dynamic repository that is used for storing and managing a specific set of data item definitions and specifications.
data source workbench	During the Installation Workbench process, Data Source Workbench copies all of the 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.
data structure	A description of the format of records in a database such as the number of fields, valid data types, and so on.
data types	Supplemental information that is attached to a company or business unit. Narrative type contains free-form text. Code type contains dates, amounts, and so on.
datagram	A self-contained packet of information that is forwarded by routers, based on their address and the routing table information.
date pattern	A period of time that is set for each period in standard and 52-period accounting and forecasting.
DCE	See distributed computing environment.
DEB	See déclaration d'echange de biens.
debit memo	In Accounts Payable, a voucher that is entered with a negative amount. Enter this type of voucher when a supplier sends you a credit so that you can apply the amount to open vouchers when you issue payment to the supplier.
debit memo	A form that is issued by a customer, requesting an adjustment of the amount, which is owed to the supplier.
debit statement	A list of debit balances.

de-blend	When blend off does not result in a product that is acceptable to customers. The further processing of product to adjust specific physical and chemical properties to within specification ranges. See also blend off.
déclaration d'echange de biens (DEB)	The French term that is used for the Intrastat report.
delayed billing	The invoicing process is delayed until the end of a designated period.
delta load	A batch process that is used to compare and update records between specified environments.
denominated-in currency	The company currency in which financial reports are based.
deployment server	A server that is used to install, maintain, and distribute software to one or more enterprise servers and client workstations.
detail	The specific information that makes up a record or transaction. Contrast with summary.
detail information	Information that primarily relates to individual lines in a sales or purchase order.
direct connect	A transaction method in which a client application communicates interactively and directly with a server application. See also batch-of-one immediate, store-and-forward.
direct input	The system calculates the net units when you enter gross volume, temperature, and gravity or density. This data is generally entered during product receiving from the certificate that is prepared by an independent inspector.
direct ship orders	A purchase order that is issued to a third-party supplier who designates the destination as the customer. A direct ship sales order is also created for the customer. Direct ship orders occur when a product is not available from a company-owned or company-operated source, so the system creates an order to ship the product from a third-party source directly to the customer. Sometimes referred to as a drop ship or third-party supply.
direct usage	Consumption of resources that are attributable to specific production runs because the resources were directly issued to the schedule/order.
director	An EnterpriseOne user interface that guides a user interactively through an EnterpriseOne process.
dirty cargo	Term that refers to crude oil cargoes or other non-refined petroleum cargoes. See also clean cargo.

dispatch planning	Efficient planning and scheduling of product deliveries. Considerations include: Dispatch groups Scheduled delivery date Scheduled delivery time Preferred delivery date Preferred delivery time Average delivery time for that geographical location Available resources Special equipment requirements at the product's source or destination.
displacement days	The number of days that are calculated from today's date by which you group vouchers for payment. For example, if today's date is March 10 and you specify three displacement days, the system includes vouchers with a due date through March 13 in the payment group. Contrast with pay-through date.
display sequence	A number that the system uses to re-order a group of records on the form.
distributed computing environment (DCE)	A set of integrated software services that allows software which is running on multiple computers to perform seamless and transparently to the end-users. DCE provides security, directory, time, remote procedure calls, and files across computers running on a network.
distributed data processing	Processing in which some of the functions are performed across two or more linked facilities or systems.
distributed database management system (DDBMS)	A system for distributing a database and its control system across many geographically dispersed machines.
do not translate (DNT)	A type of data source that must exist on the AS/400 because of BLOB restrictions.
double-byte character set (DBCS)	A method of representing some characters by using one byte and other characters by using two bytes. Double-byte character sets are necessary to represent some characters in the Japanese, Korean, and Chinese languages.
downgrade profile	A statement of the hierarchy of allowable downgrades. Includes substitutions of items, and meeting tighter specifications for those products with wider or overlapping specification ranges.
DTA	Datenträgeraustausch. A Swiss payment format that is required by Telekurs (Payserv).
dual pricing	To provide prices for goods and services in two currencies. During the euro transition period, dual pricing between the euro and Economic and Monetary Union (EMU) member currencies is encouraged.
dynamic link library (DLL)	A set of program modules that are designed to be invoked from executable files when the executable files are run, without having to be linked to the executable files. They typically contain commonly used functions.

dynamic partitioning	The ability to dynamically distribute logic or data to multiple tiers in a client/server architecture.
economy of scale	A phenomenon whereby larger volumes of production reduce unit cost by distributing fixed costs over a larger quantity. Variable costs are constant; but fixed costs per unit are reduced, thereby reducing total unit cost.
edit mode	A processing mode or condition where the user can alter the information in a form.
edit rule	A method that is used for formatting user entries, validating user entries, or both, against a predefined rule or set of rules.
embedded event rule	An event rule that is specific to a particular table or application. Examples include form-to-form calls, hiding a field that is based on a processing option value, or calling a business function. Contrast with business function event rule. See also event rule.
employee work center	A central location for sending and receiving all 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. With respect to workflow, the Message Center is MAPI compliant and supports drag-and-drop work reassignment, escalation, forward and reply, and workflow monitoring. All messages from the message center can be viewed through EnterpriseOne messages or Microsoft Exchange.
Emulator	An item of software or firmware that allows one device to imitate the functioning of another.
encapsulation	The ability to confine access to and manipulation of data within an object to the procedures that contribute to the definition of that object.
engineering change order (ECO)	A work order document that is used to implement and track changes to items and resulting assemblies. The document can include changes in design, quantity of items required, and the assembly or production process.
enhanced analysis database	A database containing a subset of operational data. The data on the enhanced analysis database performs calculations and provides summary data to speed generation of reports and query response times. This solution is appropriate when external data must be added to source data, or when historical data is necessary for trend analysis or regulatory reporting. See also duplicated database, enterprise data warehouse.
enterprise server	A computer containing programs that collectively serve the needs of an enterprise rather than a single user, department, or specialized application.
EnterpriseOne object	A re-usable 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. See also object.

EnterpriseOne process	Allows EnterpriseOne clients and servers to handle processing requests and execute transactions. A client runs one process, and servers can have multiple instances of a process. EnterpriseOne processes can also be dedicated to specific tasks (for example, workflow messages and data replication) to ensure that critical processes do not have to wait if the server is particularly busy.
EnterpriseOne web development computer	A standard EnterpriseOne Windows developer computer with the additional components installed: Sun's JDK 1.1. JFC (0.5.1). Generator Package with Generator.Java and JDECOM.dll. R2 with interpretive and application controls/form.
environment workbench	During the Installation Workbench process, Environment Workbench 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.
equivalent fuel	A barrel of equivalent fuel supplies six million BTUs of heat. Fuel gas quantities are usually calculated as equivalent fuel barrels in economic calculations for refinery operations.
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.
ESR	Einzahlungsschein mit Referenznummer. A pay slip with a reference number.
event rule	[In EnterpriseOne] A logic statement that instructs the system to perform one or more operations that are based on an activity that can occur in a specific application, such as entering a form or exiting a field.
exit bar	[In EnterpriseOne] The tall pane with icons in the left portion of many EnterpriseOne program windows.
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. Sometimes referred to as a business unit.
fast path	[In EnterpriseOne] A command prompt that allows the user to move quickly among menus and applications by using specific commands.
file handle	A temporary reference (typically a number) that is assigned to a file which has been opened by the operating system and is used throughout the session to access the file.
file server	A computer that stores files to be accessed by other computers on the network.

find/browse	A type of form used to:
	Search, view, and select multiple records in a detail area.
	Delete records.
	Exit to another form.
	Serve as an entry point for most applications.
firm planned order (FPO)	A work order that has reached a user defined status. When this status is entered in the processing options for the various manufacturing programs, messages for those orders are not exploded to the components.
fiscal date pattern	A representation of the beginning date for the fiscal year and the ending date for each period in that year.
fix/inspect	A type of form used to view, add, or modify existing records. A fix/inspect form has no detail area.
fixed quantity	A term that indicates the bill of material relationship between a parent item and its components or ingredients. When a bill of material component has a fixed quantity relationship to its parent, the amount of the component does not change when the software calculates parts list requirements for different work order quantities. Contrast with variable quantity.
flexible account numbers	The format of account numbers for journal entries. The format that you set up must be the three segments:
	Business unit.
	Object.
	Subsidiary.
form design aid (FDA)	The EnterpriseOne GUI development tool for building interactive applications and forms.
form exit	[In EnterpriseOne] An option that is available as a button on the Form Exit bar or as a selection in the Form menu. It allows users to open an interconnected form.
form interconnection	Allows one form to access and pass data to another form. Form interconnections can be attached to any event; however, they are normally used when a button is clicked.
form type	The following form types are available in EnterpriseOne:
	Find/browse.
	Fix/inspect.
	Header detail.
	Headerless detail.
	Message.
	Parent/child.
	Search/select.

form-to-form call	A request by a form for data or functionality from one of the connected forms.
framework	[In object-oriented systems] A set of object classes that provide a collection of related functions for a user or piece of software.
frozen cost	The cost of an item, operation, or process after the frozen update program is run; used by the Manufacturing Accounting system.
frozen update program	A program that freezes the current simulated costs, thereby finalizing them for use by the Manufacturing Accounting system.
globally unique identifier (GUI)	A 16-byte code in the Component Object Model that identifies an interface to an object across all computers and networks.
handle	[In programming] A pointer that contains the address of another pointer, which, in turn, contains the address of the desired object.
hard commitment	The number of items that are reserved for a sales order, work order, or both, from a specific location, lot, or both.
hard error	An error that cannot be corrected by a given error detection and correction system.
header	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.
header information	Information that pertains to the entire order.
hover help	A help function that provides contextual information or instructions when a cursor moves over a particular part of the interface element for a predefined amount of time.
ICMS	Imposto sobre circulação de mercadoria e servicos. In Brazil, a state tax that is applied to the movement of merchandise and some services.
ICMS Substituto	Imposto sobre circulacao de mercadoria e servicos substituto. In Brazil, the ICMS tax that is charged on interstate transactions, or on special products and clients.
ICMS Substituto-Markup	See imposto sobre circulação de mercadoria e servicos substituto-markup.
imposto de renda (IR)	Brazilian income tax.
imposto sobre produtos industrializados	In Brazil, a federal tax that applies to manufactured goods (domestic and imported).
imposto sobre services (ISS)	In Brazil, tax on services.
inbound document	A document that is received from a trading partner using Electronic Data Interface (EDI). This document is also referred to as an inbound transaction.

indented tracing	Tracking all lot numbers of intermediates and ingredients that are consumed in the manufacture of a given lot of product, down through all levels of the bill of material, recipe, or formula.
indexed allocations	A procedure that allocates or distributes expenses, budgets, adjustments, and so on, among business units, based on a fixed percentage.
indirect measurement	Determining the quantity on-hand by: Measuring the storage vessels and calculating the content's balance quantity. or Theoretically calculating consumption of ingredients and deducting them from the on-hand balance.
indirect usage	Determining what should have been used by multiplying receipt quantity of the parent times the quantity per statement in the formula, recipe, or bill of material. This transaction typically affects both consumption on schedule as well as issue from on-hand balances.
in-process rework	Recycling a semi processed product that does not meet acceptable standards. Further processing takes the product out of a given operation and sends it back to the beginning of that operation or a previous operation (for example, unreacted materials). Rework that is detected prior to receipt of finished goods and corrected during the same schedule run.
INPS withholding tax	Instituto Nazionale di Previdenza Sociale withholding tax. In Italy, a 12% social security withholding tax that is imposed on payments to certain types of contractors. This tax is paid directly to the Italian social security office.
inscrição estadual	ICMS tax ID. In Brazil, the state tax ID.
inscrição municipal	ISS tax ID. In Brazil, the municipal tax ID.
integrated toolset	Unique to EnterpriseOne is an industrial-strength toolset that is embedded in the already comprehensive business applications. This toolset is the same toolset that is used by PeopleSoft to build EnterpriseOne interactive and batch applications. Much more than a development environment, however, the EnterpriseOne integrated toolset handles reporting and other batch processes, change management, and basic data warehousing facilities.
integrity test	A process that is used to supplement a company's internal balancing procedures by locating and reporting balancing problems and data inconsistencies.
interbranch sales order	A sales order that is used for transactions between branch/plants other than the selling branch/plant.
Interoperability	The ability of different computer systems, networks, operating systems, and applications to work together and share information.
inventory pricing rule	A discount method that is used for purchases from suppliers and sales to customers. The method is based on effectivity dates, up-to quantities, and a factor by which you can mark up or discount the price or cost.

inventory turn	The number of times that the inventory cycles, or turns over, during the year. A frequently used method to compute inventory turnover is to divide the annual costs of sales by the average inventory level.
invoice	An itemized list of goods that are shipped or services that are rendered, stating quantities, prices, fees, shipping charges, and so on. Companies often have their invoices mailed to a different address than where they ship products. In such cases, the bill-to address differs from the ship-to address.
IP	See imposto sobre produtos industrializados.
IR	See imposto de renda.
IServer Service	Developed by PeopleSoft, 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.
ISS	See imposto sobre servicos.
jargon	An alternate data dictionary item description that EnterpriseOne or PeopleSoft World displays, 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 and provides middleware services for security and state maintenance, along with data access and persistence.
JDBNET	A database driver that allows heterogeneous servers to access each other's data.
jde.ini	A PeopleSoft file (or member for AS/400) that provides the runtime settings that are required for EnterpriseOne initialization. Specific versions of the file or member must reside on every machine that is running EnterpriseOne, including workstations and servers.
JDE.LOG	The main diagnostic log file of EnterpriseOne. Always located in the root directory on the primary drive. Contains status and error messages from the startup and operation of EnterpriseOne.
JDEBASE Database Middleware	PeopleSoft proprietary database middleware package that provides two primary benefits: 1. Platform-independent APIs for multidatabase access. These APIs are used in two ways: a. By the interactive and batch engines to dynamically generate platform-specific SQL, depending on the data source request. b. As open APIs for advanced C business function writing. These APIs are then used by the engines to dynamically generate platform-specific SQL. 2. Client-to-server and server-to-server database access. To accomplish this access, EnterpriseOne is integrated with a variety of third-party database drivers, such as Client Access 400 and open database connectivity (ODBC).
JDECallObject	An application programming interface that is used by business functions to invoke other business functions.

JDEIPC	Communications programming tools that are used by server code to regulate access to the same data in multiprocess environments, communicate and coordinate between processes, and create new processes.
JDENET	PeopleSoft proprietary middleware software. JDENET is a messaging software package.
JDENET communications middleware	PeopleSoft proprietary communications middleware package for EnterpriseOne. It 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 EnterpriseOne supported platforms.
just in time installation (JITI)	EnterpriseOne's method of dynamically replicating objects from the central object location to a workstation.
just in time replication (JITR)	EnterpriseOne's method of replicating data to individual workstations. EnterpriseOne replicates new records (inserts) only at the time that the user needs the data. Changes, deletes, and updates must be replicated using Pull Replication.
Kagami	In Japan, summarized invoices that are created monthly (in most cases) to reduce the number of payment transactions.
latitude	The X coordinate of the location of an item in the warehouse. The system can use latitude, longitude, and height when suggesting locations for putaway, replenishment, and picking.
laytime (or layhours)	The amount of time that is allotted to a tanker at berth to complete loading or discharging cargo. This time is usually expressed in running hours, and is fixed by prior agreement between the vessel owner and the company that is chartering the vessel. Laytime is stipulated in the charter, which states exactly the total of number of hours that are granted at both loading and unloading ports, and indicates whether such time is reversible. A statement of "Seventy-Two Hours, Reversible" means that a total of 72 hours is granted overall at both ports, and any time saved at one port can be applied as a credit at the other port.
	For example, if the vessel uses only 32 hours instead of 36 hours to load cargo, it can apply an additional four hours to the 36 hours allotted at the discharge port. Such considerations are important for purposes of computing demurrage.
leading zeros	A series of zeros that certain facilities in PeopleSoft systems place in front of a value that is entered. This situation normally occurs when you enter a value that is smaller than the specified length of the field. For example, if you enter 4567 in a field that accommodates eight numbers, the facility places four zeros in front of the four numbers that you enter. The result appears as 00004567.
ledger type	A code that designates a ledger which is used by the system for a particular purpose. For example, all transactions are recorded in the AA (actual amounts) ledger type in their domestic currency. The same transactions can also be stored in the CA (foreign currency) ledger type.
level break	The position in a report or text where a group of similar types of information ends and another one begins.

libro IVA	Monthly VAT report. In Italy, the term for the report that contains the detail of invoices and vouchers that were registered during each month.
line of business	A description of the nature of a company's work; also a tool to control the relationship with that customer, including product pricing.
linked service type	A service type that is associated with a primary service type. Linked service types can be cancelled, and the maintenance tasks are performed when the primary service type to which they are linked comes due. You can specify whether the system generates work orders for linked service types, as well as the status that the system assigns to work orders that have already been generated. Sometimes referred to as associated service types. See also primary service type and service type.
livro razao	In Brazil, a general ledger report.
load balancing	The act of distributing the number of processes proportionally to all servers in a group to maximize overall performance.
location workbench	During the Installation Workbench process, Location Workbench 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.
log files	Files that track operations for a process or application. Reviewing log files is helpful for troubleshooting problems. The file extension for log files is .LOG.
logic data source	Any code that provides data during runtime.
logical compartment	One of two ways that is identified in the transportation constants to display compartments on vehicles. Logical display numbers the compartments sequentially. For example, if two vehicles are on a trip and each vehicle has three compartments, the logical display is 1,2,3,4,5,6.
logical file	A set of keys or indices that is used for direct access or ordered access to the records in a physical file. Several logical files can have different accesses to a physical.
logical shelf	A logical, not physical, location for inventory that is used to track inventory transactions in loan/borrow, or exchange agreements with other companies. See also logical warehouse.
logical warehouse	Not a physical warehouse containing actual inventory, but a means for storing and tracking information for inventory transactions in loan/borrow, or exchange agreements with other companies.
longitude	The Y coordinate of the location of an item in the warehouse. The system can use latitude, longitude, and height when suggesting locations for putaway, replenishment, and picking.
LSV	Lastschriftverfahren. A Swiss auto debit format that is required by Telekurs (Payserv).

mail merge	A mass-mail facility that takes names, addresses, and (sometimes) pertinent facts about recipients and merges the information into a form letter or a similarly basic document.
mailmerge workbench	[In EnterpriseOne] An application that merges Microsoft Word 6.0 (or higher) word-processing documents with EnterpriseOne records to automatically print business documents.
main fuels	Usually refers to bulk fuel products, but sometimes includes packaged products.
maintenance loop	See maintenance route.
maintenance route	A method of performing PMs for multiple pieces of equipment from a single preventive maintenance work order. A maintenance route includes pieces of equipment that share one or more identical maintenance tasks which can be performed at the same time for each piece of equipment. Sometimes referred to as maintenance loop.
maintenance work order	In PeopleSoft EnterpriseOne systems, a term that is used to distinguish work orders created for the performance of equipment and plant maintenance from other work orders, such as manufacturing work orders, utility work orders, and engineering change orders.
manufacturing and distribution planning	Planning that includes resource and capacity planning, and material planning operations. Resource and capacity planning allows you to prepare a feasible production schedule that reflects your demand forecasts and production capability. Material Planning Operations provides a short-range plan to cover material requirements that are needed to make a product.
mapping	A set of instructions that describes how one data structure passes data to another.
master business function	An interactive master file that serves as a central location for adding, changing, and updating information in a database.
master business function	A central system location for standard business rules about entering documents, such as vouchers, invoices, and journal entries. Master business functions ensure uniform processing according to guidelines that you establish.
master table	A database table that is used to store data and information that is permanent and necessary to the system's operation. Master tables might contain data such as paid tax amounts, supplier names, addresses, employee information, and job information.
matching document	A document that is associated with an original document to complete or change a transaction. For example, a receipt is the matching document of an invoice.
media object	An electronic or digital representation of an object.
media storage objects	Files that use one of the following naming conventions that are not organized into table format: Gxxx, xxxGT, or GTxxx.
memory violation	An error that occurs as the result of a memory leak.

menu selection	An option on a menu that initiates a software function directly.
message center	A central location for sending and receiving all EnterpriseOne messages (system- and user-generated), regardless of the originating application or user.
messaging application programming interface (MAPI)	An architecture that defines the components of a messaging system and how they behave. It also defines the interface between the messaging system and the components.
metal content	A series of properties of a blended product that help to determine its suitability for a prescribed purpose.
metals management	The process of maintaining information about the location and status of durable product containers such as liquid petroleum gas (LPG) cylinders.
mobile inventory	Inventory that is transferred from a depot to a barge or truck for milk-run deliveries.
modal	A restrictive or limiting interaction that is created by a given condition of operation. Modal often describes a secondary window that restricts a user's interaction with other windows. A secondary window can be modal with respect to its primary window or to the entire system. A modal dialog box must be closed by the user before the application continues.
model work order	For scheduled preventive maintenance or for a condition-based alert, a model work order functions as a template for the creation of other work orders. You can assign model work orders to service types and condition-based alerts. When the service type comes due or the alert is generated, the system automatically generates a work order that is based on information from the model work order.
modeless	Not restricting or limiting interaction. Modeless often describes a secondary window that does not restrict a user's interaction with other windows. A modeless dialog box stays on the screen and is available for use at any time, but also permits other user activities.
multiple stocking locations	Authorized storage locations for the same item number at locations, in addition to the primary stocking location.
multitier architecture	A client/server architecture that allows multiple levels of processing. A tier defines the number of computers that can be used to complete some defined task.
named event rules (NER)	Also called business function event rules. Encapsulated, re-usable business logic that is created by using event rules, rather than C programming.
national language support (NLS)	Mechanisms that are provided to facilitate internationalization of both system and application user interfaces.
natureza da operação	Transaction nature. In Brazil, a code that classifies the type of commercial transaction to conform to the fiscal legislation.

negative pay item	An entry in an account that indicates a prepayment. For example, you might prepay a supplier before goods are sent or prepay an employee's forecasted expenses for a business trip. The system stores these pending entries, assigning them a minus quantity as debit amounts in a designated expense account. After the prepaid goods are received or the employee submits an expense report, entering the actual voucher clears all of the negative pay items by processing them as regular pay items. Note that a negative pay item can also result from entering a debit memo (A/P) or a credit memo (A/R).
net added cost	The cost to manufacture an item at the current level in the bill of material. Thus, for manufactured parts, the net added cost includes labor, outside operations, and cost extras applicable to this level in the bill of material, but not materials (lower-level items). For purchased parts, the net added cost also includes the cost of materials.
next status	The next step in the payment process for payment control groups. The next status can be either WRT (write) or UPD (update).
node	A termination point for two or more communications links. A node can serve as the control location for forwarding data among the elements of a network or multiple networks, as well as performing other networking and, in some cases, local processing.
non-inventory items	See non-stock items.
non-list price	A price for bulk products that is determined by its own algorithms, such as a rolling average or commodity price plus.
non-prime product	A manufactured product with revenue potential that is less than the product planned for, or scheduled to be produced.
non-stock items	Items that the system does not account for as part of the inventory. For example, office supplies, or packaging materials can be non-stock items.
nota fiscal	In Brazil, a legal document that must accompany all commercial transactions.
nota fiscal fatura	In Brazil, a nota fiscal and invoice information.
notula	In Italy, the process whereby a business does not recognize value added tax until the payment of a voucher.
object configuration manager (OCM)	EnterpriseOne's object request broker and the control center for the runtime environment. It keeps track of the runtime locations for business functions, data, and batch applications. When one of these objects is called, the Object Configuration Manager directs access to it by using defaults and overrides for a given environment and user.
object embedding	When an object is embedded in another document, an association is maintained between the object and the application that created it; however, any changes made to the object are also only kept in the compound document. See also object linking.

object librarian	A repository of all versions, applications, and business functions that are re-usable in building applications.
object linking	When an object is linked to another document, a reference is created with the file in which the object is stored, as well as with the application that created it. When the object is modified, either from the compound document or directly through the file in which it is saved, the change is reflected in that application as well as anywhere it has been linked. See also object embedding.
object linking and embedding (OLE)	A technology for transferring and sharing information among applications by allowing the integration of objects from diverse applications, such as graphics, charts, spreadsheets, text, or an audio clip from a sound program. OLE is a compound document standard that was developed by Microsoft Corporation. It enables you to create objects with one application, and then link or embed them in a second application. Embedded objects retain their original format and links to the application that created them. See also object embedding, object linking.
object management workbench (OMW)	The change management system that is used for EnterpriseOne development.
object-based technology (OBT)	A technology that supports some of the main principles of object-oriented technology: Classes. Polymorphism.I Inheritance. Encapsulation.
object-oriented technology (OOT)	Brings software development past procedural programming into a world of re-usable programming that simplifies development of applications. Object orientation is based on the following principles: Classes. Polymorphism.I Inheritance. Encapsulation.
offsetting account	An account that reduces the amount of another account to provide a net balance. For example, a credit of 200 to a cash account might have an offsetting entry of 200 to an A/P Trade (liability) account.
open database connectivity (ODBC)	Defines a standard interface for different technologies to process data between applications and different data sources. The ODBC interface comprises set of function calls, methods of connectivity, and representation of data types that define access to data sources.
open systems interconnection (OSI)	The OSI model was developed by the International Standards Organization (ISO) in the early 1980s. It defines protocols and standards for the interconnection of computers and network equipment.
order detail line	A part of an order that contains transaction information about a service or item being purchased or sold, such as quantity, cost, price, and so on.

order hold	A flag that stops the processing of an order because it has exceeded the credit or budget limit, or has another problem.
order-based pricing	Pricing strategy that grants reductions in price to a customer. It is based upon the contents and relative size (volume or value) of the order as a whole.
outbound document	A document that is sent to a trading partner using EDI. This term is also referred to as an outbound transaction.
outturn	The quantity of oil that is actually received into a buyer's storage tanks when a vessel is unloaded. For various reasons (vaporization, clingage to vessel tank walls, and so on), the amount of a product pumped into shore tankage at unloading is often less than the quantity originally loaded onto the vessel, as certified by the Bill of Lading. Under a delivered or CIF outturn transaction, the buyer pays only for the barrels actually "turned out" by the vessel into storage.

When a buyer is paying CIF Bill of Lading figures, a loss of 0.5% of total cargo volume is considered normal. Losses in excess of 0.5%, however, are either chargeable to the seller or are covered by specialized insurance that covers partial, as well as total, loss of the cargo. |
overhead	In the distillation process, that portion of the charge that leaves the top of the distillation column as vapor. This definition is strictly as it relates to ECS.
override conversion method	A method of calculating exchange rates that is set up between two specific currencies. For those specific currencies, this method overrides the conversion method in General Accounting Constants and does not allow inverse rates to be used when calculating currency amounts.
package / package build	A collection of software that is grouped into a single entity for modular installation. 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 the installation program can find them on the deployment server. It is a point-in-time "snapshot" of the central objects on the deployment server.
package location	The directory structure location for the package and its set of replicated objects. This location is usually \\deployment server\release\path_code\package\ package name. The replicated objects for the package are placed in the subdirectories under this path. This location is also where the package is built or stored.
package workbench	During the Installation Workbench process, Package Workbench 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.
packaged products	Products that, by their nature, must be delivered to the customer in containers which are suitable for discrete consumption or resale.
pane/panel	A resizable subarea of a window that contains options, components, or other related information.
paper clip	An icon that is used to indicate that a media object is attached to a form or record.

parent/child form	A type of form that presents parent/child relationships in an application on one form:
	The left portion of the form presents a tree view that displays a visual representation of a parent/child relationship.
	The right portion of the form displays a detail area in browse mode. The detail area displays the records for the child item in the tree.
	The parent/child form supports drag and drop functionality.
parent/child relationship	See parent/component relationship.
parent/component relationship	1. In Capital Asset Management, the hierarchical relationship of a parent piece of equipment to its components. For example, a manufacturing line could be a parent and the machinery on the line could be components of the line. In addition, each piece of machinery could be a parent of still more components.
	2. In Product Data Management, a hierarchical relationship of the components and subassemblies of a parent item to that parent item. For example, an automobile is a parent item; its components and subassemblies include: engine, frame, seats, and windows.
	Sometimes referred to as parent/child relationship.
partita IVA	In Italy, a company fiscal identification number.
pass-through	A process where data is accepted from a source and forwarded directly to a target without the system or application performing any data conversion, validation, and so on.
pay on consumption	The method of postponing financial liability for component materials until you issue that material to its consuming work order or rate schedule.
payment group	A system-generated group of payments with similar information, such as a bank account. The system processes all of the payments in a payment group at the same time.
PeopleSoft database	See JDEBASE Database Middleware.
performance tuning	The adjustments that are made for a more efficient, reliable, and fast program.
persistent object	An object that continues to exist and retains its data beyond the duration of the process that creates it.
pervasive device	A type of intelligent and portable device that provides a user with the ability to receive and gather information anytime, from anywhere.
planning family	A means of grouping end items that have similarity of design or manufacture.
plug-in	A small program that plugs into a larger application to provide added functionality or enhance the main application.
polymorphism	A principle of object-oriented technology in which a single mnemonic name can be used to perform similar operations on software objects of different types.

portal	A Web site or service that is a starting point and frequent gateway to a broad array of on-line resources and services.
Postfinance	A subsidiary of the Swiss postal service. Postfinance provides some banking services.
potency	Identifies the percent of an item in a given solution. For example, you can use an 80% potent solution in a work order that calls for 100% potent solution, but you would use 25% more, in terms of quantity, to meet the requirement (100 / 80 = 1.25).
preference profile	The ability to define default values for specified fields for a user defined hierarchy of items, item groups, customers, and customer groups. In Quality Management setup, this method links test and specification testing criteria to specific items, item groups, customers, or customer groups.
preflush	A work order inventory technique in which you deduct (relieve) materials from inventory when the parts list is attached to the work order or rate schedule.
preventive maintenance cycle	The sequence of events that make up a preventive maintenance task, from its definition to its completion. Because most preventive maintenance tasks are commonly performed at scheduled intervals, parts of the preventive maintenance cycle repeat, based on those intervals.
preventive maintenance schedule	The combination of service types that apply to a specific piece of equipment, as well as the intervals at which each service type is scheduled to be performed.
primary service type	A service type to which you can link related service types. For example, for a particular piece of equipment, you might set up a primary service type for a 1000-hour inspection and a linked service type for a 500-hour inspection. The 1000-hour inspection includes all of the tasks performed at 500 hours. When a primary service type is scheduled to be performed, the system schedules the linked service type. See also linked service type.
pristine environment	An EnterpriseOne environment that is used to test unaltered objects with PeopleSoft demonstration data or for training classes. You must have this environment so you can compare pristine objects that you modify.
processing option	A data structure that allows users to supply parameters that regulate the execution of a batch program or report.
product data management (PDM)	In PeopleSoft EnterpriseOne software, the system that enables a business to organize and maintain information about each item which it manufactures. Features of this system, such as bills of material, work centers, and routings, define the relationships among parents and components, and how they can be combined to manufacture an item. PDM also provides data for other manufacturing systems including Manufacturing Accounting, Shop Floor Management, and Manufacturing and Distribution Planning.
product line	A group of products with similarity in manufacturing procedures, marketing characteristics, or specifications that allow them to be aggregated for planning; marketing; and, occasionally, costing.

product/process definition	A combination of bill of material (recipe, formula, or both) and routing (process list). Organized into tasks with a statement of required consumed resources and produced resources.
production environment	An EnterpriseOne environment in which users operate EnterpriseOne software.
program temporary fix (PTF)	A representation of changes to PeopleSoft software that your organization receives on magnetic tapes or diskettes.
project	[In EnterpriseOne] A virtual container for objects being developed in Object Management Workbench.
projected cost	The target expenditure in added value for material, labor, and so on, during manufacture. See also standard cost.
promotion path	The designated path for advancing objects or projects in a workflow.
protocollo	See registration number.
PST	Provincial sales tax. A tax that is assessed by individual provinces in Canada.
published table	Also called a "Master" table, this is the central copy to be replicated to other machines and resides on the "publisher" machine. The Data Replication Publisher Table (F98DRPUB) identifies all of the published tables and their associated publishers in the enterprise.
publisher	The server that is responsible for the published table. The Data Replication Publisher Table (F98DRPUB) identifies all of the published tables and their associated publishers in the enterprise.
pull replication	One of the EnterpriseOne methods for replicating data to individual workstations. Such machines are set up as pull subscribers that use EnterpriseOne's 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 Data Replication Pending Change Notification table (F98DRPCN).
query by example (QBE)	Located at the top of a detail area, this area is used to search for data to display in the detail area.
rate scheduling	A method of scheduling product or manufacturing families, or both.

Also a technique to determine run times and quantities of each item within the family to produce enough of each individual product to satisfy demand until the family can be scheduled again. |
| rate type | For currency exchange transactions, the rate type distinguishes different types of exchange rates. For example, you can use both period average and period-end rates, distinguishing them by rate type. |
| real-time | Pertaining to information processing that returns a result so rapidly that the interaction appears to be instantaneous. |

receipt routing	A series of steps that is used to track and move items within the receipt process. The steps might include in-transit, dock, staging area, inspection, and stock.
referential integrity	Ensures that a parent record cannot be deleted from the database when a child record for exists.
regenerable	Source code for EnterpriseOne business functions can be regenerated from specifications (business function names). Regeneration occurs whenever an application is recompiled, either for a new platform or when new functionality is added.
register types and classes	In Italian VAT Summary Reporting, the classification of VAT transactions.
relationship	Links tables together and facilitates joining business views for use in an application or report. Relationships that are created are based on indexes.
réléve d'identité bancaire (RIB)	In France, the term that indicates the bank transit code, account number, and check digit that are used to validate the bank transit code and account number. The bank transit code consists of the bank code and agency code. The account number is alphanumeric and can be as many as 11 characters. PeopleSoft supplies a validation routine to ensure RIB key correctness.
remessa	In Brazil, the remit process for A/R.
render	To include external data in displayed content through a linking mechanism.
repasse	In Brazil, a discount of the ICMS tax for interstate transactions. It is the adjustment between the interstate and the intrastate ICMS tax rates.
replenishment point	The location on or near the production line where additional components or subassemblies are to be delivered.
replication server	A server that is responsible for replicating central objects to client machines.
report design aid (RDA)	The EnterpriseOne GUI tool for operating, modifying, and copying report batch applications.
repost	In Sales, the process of clearing all commitments from locations and restoring commitments, based on quantities from the Sales Order Detail table (F4211).
resident	Pertaining to computer programs or data while they remain on a particular storage device.
retorno	In Brazil, the receipt process for A/R.
RIB	See réléve d'identité bancaire.
ricevute bancarie (RiBa)	In Italy, the term for accounts receivable drafts.
riepilogo IVA	Summary VAT monthly report. In Italy, the term for the report that shows the total amount of VAT credit and debit.
ritenuta d'acconto	In Italy, the term for standard withholding tax.

rollback	[In database management] A feature or command that undoes changes in database transactions of one or more records.
rollup	See cost rollup.
row exit	[In EnterpriseOne] An application shortcut, available as a button on the Row Exit bar or as a menu selection, that allows users to open a form that is related to the highlighted grid record.
runtime	The period of time when a program or process is running.
SAD	The German name for a Swiss payment format that is accepted by Postfinance.
SAR	See software action request.
scalability	The ability of software, architecture, hardware, or a network to support software as it grows in size or resource requirements.
scripts	A collection of SQL statements that perform a specific task.
scrub	To remove unnecessary or unwanted characters from a string.
search/select	A type of form that is used to search for a value and return it to the calling field.
selection	Found on PeopleSoft menus, selections represent functions that you can access from a menu. To make a selection, type the associated number in the Selection field and press Enter.
serialize	To convert a software object into a stream of bytes to store on a disk or transfer across a network.
server map	The server view of the object configuration mapping.
server workbench	During the Installation Workbench process, Server Workbench copies the server configuration files from the Planner data source to the System release number data source. It also updates the Server Plan detail record to reflect completion.
service interval	The frequency at which a service type is to be performed. Service intervals can be based on dates, periods, or statistical units that are user defined. Examples of statistical units are hours, miles, and fuel consumption.
service type	An individual preventive maintenance task or procedure, such as an inspection, lubrication, or overhaul. Service types can apply to a specific piece of equipment or to a class of equipment. You can specify that service types come due based on a predetermined service interval, or whenever the task that is represented by the service type becomes necessary.
servlet	A [small] program that extends the functionality of a Web server by generating dynamic content and interacting with Web clients by using a request-response paradigm.
share path	The network node under which one or more servers or objects reside.

shop floor management	A system that uses data from multiple system codes to help develop, execute, and manage work orders and rate schedules in the enterprise.
silent mode	A method for installing or running a program that does not require any user intervention.
silent post	A type of post that occurs in the background without the knowledge of the user.
simulated cost	After a cost rollup, the cost of an item, operation, or process according to the current cost scenario. This cost can be finalized by running the frozen update program. You can create simulated costs for a number of cost methods—for example, standard, future, and simulated current costs. See also cost rollup.
single-byte character set (SBCS)	An encoding scheme in which each alphabetic character is represented by one byte. Most Western languages, such as English, can be represented by using a single-byte character set.
single-level tracking	Finding all immediate parents where a specific lot has been used (consumed).
single-voyage (spot) charter	An agreement for a single voyage between two ports. The payment is made on the basis of tons of product delivered. The owner of the vessel is responsible for all expenses.
slimer	A script that changes data in a table directly without going through a regular database interface.
smart field	A data dictionary item with an attached business function for use in the Report Design Aid application.
SOC	The Italian term for a Swiss payment format that is accepted by Postfinance.
soft commitment	The number of items that is reserved for sales orders or work orders in the primary units of measure.
soft error	An error from which an operating system or program is able to recover.
software action request (SAR)	An entry in the AS/400 database that is used for requesting modifications to PeopleSoft software.
SOG	The French term for a Swiss payment format that is accepted by Postfinance.
source directory	The path code to the business function source files belonging to the shared library that is created on the enterprise server.
special period/year	The date that determines the source balances for an allocation.

specification merge	The Specification merge is comprised of three merges:
	Object Librarian merge (via the Object Management Workbench).
	Versions List merge.
	Central Objects merge.
	The merges blend customer modifications with data that accompanies a new release.
specification table merge workbench	During the Installation Workbench process, Specification Table Merge Workbench runs the batch applications that update the specification tables.
specifications	A complete description of an EnterpriseOne object. Each object has its own specification, or name, which is used to build applications.
spot charter	See single-voyage charter.
spot rates	An exchange rate that is entered at the transaction level. Spot rates are not used on transactions between two EMU member currencies because exchange rates are irrevocably fixed to the euro.
stamp tax	In Japan, a tax that is imposed on drafts payable, receipts over 30000 Japanese yen, and all contracts. The party that issues any of the above documents is responsible for this tax.
standalone	Operating or capable of operating independently of certain other components of a computer system.
standard cost	The expected, or target cost of an item, operation, or process. Standard costs represent only one cost method in the Product Costing system. You can also calculate, for example, future costs or current costs. However, the Manufacturing Accounting system uses only standard frozen costs.
standard costing	A costing method that uses cost units that are determined before production. For management control purposes, the system compares standard costs to actual costs and computes variances.
subprocess	A process that is triggered by and is part of a larger process, and that generally consists of activities.
subscriber table	The Subscriber table (F98DRSUB), which is stored on the Publisher Server with the Data Replication Publisher table (F98DRPUB), that identifies all of the subscriber machines for each published table.
summary	The presentation of data or information in a cumulative or totaled manner in which most of the details have been removed. Many systems offer forms and reports that summarize information which is stored in certain tables. Contrast with detail.
super backflush	To create backflush transactions for material, labor, or both, against a work order at predefined pay points in the routing. By doing so, you can relieve inventory and account for labor amounts at strategic points throughout the manufacturing process.

supersession	Specification that a new product is replacing an active product on a specified effective date.
supplemental data	Additional types of data for customers and suppliers. You can enter supplemental data for information such as notes, comments, plans, or other information that you want in a customer or supplier record. The system maintains this data in generic databases, separate from the standard master tables (Customer Master, Supplier Master, and Address Book Master).
supplying location	The location from which inventory is transferred once quantities of the item on the production line have been depleted. In kanban processing, the supplying location is the inventory location from which materials are transferred to the consuming location when the containers are replenished.
system code	A numeric or alphanumeric designation that identifies a specific system in EnterpriseOne software.
system function	[In EnterpriseOne] A named set of pre-packaged, re-usable instructions that can be called from event rules.
table access management (TAM)	The EnterpriseOne component that handles the storage and retrieval of user 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	During the Installation Workbench process, Table Conversion Workbench runs the table conversions that change the technical and application tables to the format for the new release of EnterpriseOne. It also updates the Table Conversions and Controls detail records to reflect completion.
table design aid (TDA)	An EnterpriseOne GUI tool for creating, modifying, copying, and printing database tables.
table event rules	Use table event rules to attach database triggers (or programs) that automatically run whenever an action occurs against the table. An action against a table is referred to as an event. When you create an EnterpriseOne database trigger, you must first determine which event will activate the trigger. Then, use Event Rules Design to create the trigger. Although EnterpriseOne allows event rules to be attached to application events, this functionality is application-specific. Table event rules provide embedded logic at the table level.
table handle	A pointer into a table that indicates a particular row.
table space	[In relational database management systems] An abstract collection of containers in which database objects are stored.
task	[In Solution Explorer and EnterpriseOne Menu] A user defined object that can initiate an activity, process, or procedure.
task view	A group of tasks in Solution Explorer or EnterpriseOne Menu that are arranged in a tree structure.

termo de abertura	In Brazil, opening terms for the transaction journal.
termo de encerramento	In Brazil, closing terms for the transaction journal.
three-tier processing	The task of entering, reviewing, approving, and posting batches of transactions.
three-way voucher match	The process of comparing receipt information to supplier's invoices to create vouchers. In a three-way match, you use the receipt records, the purchase order, and the invoice to create vouchers.
threshold percentage	In Capital Asset Management, the percentage of a service interval that you define as the trigger for maintenance to be scheduled. For example, you might set up a service type to be scheduled every 100 hours with a threshold percentage of 90 percent. When the equipment accumulates 90 hours, the system schedules the maintenance.
throughput agreement	A service agreement in which a business partner agrees to store and manage product for another business partner for a specified time period. The second partner actually owns the stock that is stored in the first partner's depot, although the first partner monitors the stock level; suggests replenishments; and unloads, stores, and delivers product to the partner or its customers. The first partner charges a fee for storing and managing the product.
throughput reconciliation	Reconcile confirmed sales figures in a given period with the measured throughput, based on the meter readings. This process is designed to catch discrepancies that are due to transactions not being entered, theft, faulty meters, or some combination of these factors. This reconciliation is the first stage. See also operational reconciliation.
token	[In Object Management Workbench] A flag that is associated with each object which indicates whether you can check out the object.
tolerance range	The amount by which the taxes that you enter manually can vary from the tax that is calculated by the system.
TP monitor	Transaction Processing 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 can include programs that validate data and format terminal screens.
tracing	The act of researching a lot by going backward, to discover its origin.
tracking	The act of researching a lot by going forward, to discover where it is used.
transaction set	An electronic business transaction (EDI Standard document) composed of segments.
transclude	To include the external data in the displayed content through a linking mechanism.

transfer order	An order that is used to ship inventory between branch/plants within your company and to maintain an accurate on-hand inventory amount. An interbranch transfer order creates a purchase order for the shipping location and a sales order for the receiving location.
translation adjustment account	An optional G/L account used in currency balance restatement to record the total adjustments at a company level.
translator software	The software that converts data from an application table format to an EDI Standard Format, and from EDI Standard Format to application table format. The data is exchanged in an EDI Standard, such as ANSI ASC X12, EDIFACT, UCS, or WINS.
tree structure	A type of graphical user interface that displays objects in a hierarchy.
trigger	Allows you to attach default processing to a data item in the data dictionary. When that data item is used on an application or report, the trigger is invoked by an event which is associated with the data item. EnterpriseOne also has three visual assist triggers: Calculator. Calendar. Search form.
two-way voucher match	The process of comparing purchase order detail lines to the suppliers' invoices to create vouchers. You do not record receipt information.
universal batch engine (UBE)	[In EnterpriseOne] A type of application that runs a noninteractive process.
unnormalized	Data that is a random collection of data elements with repeating record groups scattered throughout. Also see Normalized.
user overrides merge	The User Overrides merge adds new user override records into a customer's user override table.
user-defined code (UDC)	A value that a user has assigned as being a valid entry for a given or specific field.
utility	A small program that provides an addition to the capabilities which are provided by an operating system.
variable numerator allocations	A procedure that allocates or distributes expenses, budgets, adjustments, and so on, among business units, based on a variable.
variable quantity	A term that indicates the bill of material relationship between a parent item and its components or ingredients. When a bill of material component has a variable quantity relationship to its parent, the amount of the component changes when the software calculates parts list requirements for different work order quantities. Contrast with fixed quantity.

variance	1. In Product Costing and Manufacturing Accounting, the difference between the frozen standard cost, the current cost, the planned cost, and the actual cost. 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 by using the current bill of material, routing, and overhead rates. 2. In Capital Asset Management, the difference between revenue that is generated by a piece of equipment and costs that are incurred by the equipment.
versions 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.
VESR	Verfahren Einzahlungsschein mit Referenznummer. The processing of an ESR pay slip with reference line through accounts receivable and accounts payable.
visual assist	Forms that can be invoked from a control to assist the user in determining what data belongs in the control.
voucher logging	The process of entering vouchers without distributing amounts to specific G/L accounts. The system initially distributes the total amount of each voucher to a G/L suspense account, where it is held until you redistribute it to the correct G/L account.
wareki date format	In Japan, a calendar format, such as Showa or Heisei. When a new emperor begins to reign, the government chooses the title of the date format and the year starts over at one. For instance, January 1, 1998, is equal to Heisei 10, January 1st.
wash down	A minor cleanup between similar product runs. Sometimes used in reference to the sanitation process of a food plant.
wchar_t	An internal type of a wide character. Used for writing portable programs for international markets.
web server	A server that sends information as requested by a browser and uses the TCP/IP set of protocols.
work order life cycle	In Capital Asset Management, the sequence of events through which a work order must pass to accurately communicate the progress of the maintenance tasks that it represents.
workfile	A system-generated file that is used for temporary data processing.
workflow	According to the Workflow Management Coalition, worlflow means "the automation of a business process, in whole or 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 network server usually containing subsets of data that are replicated from a master network server.

WorldSoftware architecture	The broad spectrum of application design and programming technology that PeopleSoft uses to achieve uniformity, consistency, and complete integration throughout its software.
write payment	A step in processing payments. Writing payments includes printing checks, drafts, and creating a bank tape table.
write-off	A method for getting rid of inconsequential differences between amounts. For example, you can apply a receipt to an invoice and write off the difference. You can write off both overpayments and underpayments.
Z file	For store and forward (network disconnected) user, EnterpriseOne store-and-forward applications perform edits on static data and other critical information that must be valid to process an order. After the initial edits are complete, EnterpriseOne stores the transactions in work tables on the workstation. These work table are called Z files. When a network connection is established, Z files are uploaded to the enterprise server; and the transactions are edited again by a master business function. The master business function then updates the records in your transaction files.
z-process	A process that converts inbound data from an external system into an EnterpriseOne software table or converts outbound data into an interface table for an external system to access.
zusammenfassende melding	In Germany, the term for the EU Sales Listing.

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