PeopleSoft

EnterpriseOne 8.10 Kanban Management PeopleBook

May 2004

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Kanban Management PeopleBook
SKU SCM810K0504

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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.

Kanban Management Overview

Kanban Management enables you to streamline the day-to-day functions of your shop floor and associated departments. Kanbans are execution tools that you use when your production and inventory control systems are based on a pull system, rather than a push system.

Kanbans represent predetermined quantities of components at specified locations on the production line. They are designed to minimize work-in-process inventories.

Kanbans are visual cues that authorize the replenishment of inventory at a specified consuming location in a pull environment. When kanban inventory is consumed, a replenishment action is triggered when the holding bin is emptied.

A kanban can include, but is not limited to, bins used to physically transport material from work center to work center on the production floor. Kanbans can also represent pallets of raw material.

Replenishment of inventory can be achieved by manufacturing activity, procurement, or simply movement of the required goods. The size attribute of a kanban determines the replenishment quantity. The size of the kanban affects the effectiveness of the kanban system significantly; when the kanban size is too high, the system contains more inventory than necessary, which is unacceptable. When the kanban size is too low, the system will eventually run out of inventory.

Kanbans support just-in-time manufacturing, but are not used exclusively with repetitive or lean manufacturing. You can also effectively use them in a discrete manufacturing environment.

EnterpriseOne kanbans allow you to pull material from the following five sources:

- Work center. When a work center kanban is checked out, the system finds an open work order or rate schedule. When no work order or rate schedule exists, the system creates a work order or rate schedule to fulfill the kanban demand. When the kanban is checked in to indicate replenishment, an inventory transfer from the supplying location to the consuming location occurs as defined in the kanban master.
- Inventory. When an inventory kanban is checked out and checked in at its consuming location, the system creates an inventory transfer to move the material from its supplying location to the consuming location. For example, you can move required materials from raw materials inventory to a work center location on the shop floor.
- Supplier. When a supplier kanban is checked out, the system creates a purchase order or initiates a blanket purchase order release, depending on how you have your system set up. Additionally, depending upon setup criteria, you can also allow the check in of the kanban to perform the purchase order receipt for goods received. When the kanban is checked in to indicate replenishment, an inventory transfer from the supplying location to the consuming location occurs as defined in the kanban master.
- Branch/plant. When this kanban is checked out, the system creates a sales order and purchase order for the kanban item. When the last card is checked in, the system receives the purchase order that was created at check out. This kanban type is particularly useful for companies that prefer to utilize the formal sales and procurement transactions (transfer orders) between facilities instead of managing inventory replenishment using inventory transfers.

- Outside assembly. When an outside assembly kanban is checked out, the system creates a sales order for a list of components that is required to make a product. When the kanban is checked in, a purchase order is created for the finished product. When the kanban is checked in to indicate replenishment, an inventory transfer from the supplying location to the consuming location occurs as defined in the kanban master. This kanban is particularly useful for companies that use outsourcing to provide additional value to their products and want a more robust record of inventory balances. Special setup is required to use this kanban type.

Kanbans provide automated background transactions that eliminate much of the required paperwork and data entry.

Kanban Management System Integration

Kanban Management is one of many systems that you use 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 Kanban Management system integrates with the following systems to take advantage of single entries, information sharing, and data consistency between systems:

Inventory Management

The Inventory Management system supplies the basic information about each item, such as part number, description, unit of measure, stocking type, location, and lot control information. It allows you to track materials between inventory or storage locations and the shop floor. You can manage inventory issues and commitments, complete orders, and track order quantities throughout the production process. The system allows you to issue material in two different units of measure, if dual units of measure are defined for the item in the Item Master program (P4101). When the item that you are issuing is a lot-controlled item, and the effective date of the lot is greater than the current date, the system issues a warning.

Product Data Management

The Product Data Management system provides information about bills of material, work centers, routing instructions, and product costs.

Shop Floor Management

The Shop Floor Management system uses bills of material and routing instructions to process work orders and schedule work activity within the plant.

The system also records material issue transactions to determine the actual quantities of materials that are used in the production process, versus the material indicated on the parts list for the work order or rate schedule.

Product Costing and Manufacturing Accounting	The Product Costing and Manufacturing Accounting systems use 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. The Manufacturing Accounting system uses issue transactions to determine the actual quantities of materials that are used in the production process according to the parts list for the work order or rate schedule.
Requirements Planning	The Requirements Planning system uses Product Data Management and Shop Floor Management information to plan finished goods, raw material, and purchased parts that are required to manufacture an item. It uses sales orders and forecasts to pass demand for items down through the bills of material to the components.
Sales Order Management	The Sales Order Management system allows you to generate sales orders for outside assembly work and transfer orders between branch/plants.
Procurement	The Procurement system allows you to automatically generate purchase orders for outside operations on the routing instructions and to transfer orders between branch/plants.
Warehouse Management	The Warehouse Management system allows you to originate picking requests through manufacturing systems, which further enhances the automated method of tracking inventory movement within a warehouse.

Features of Kanban Management

Kanban Management enables you to perform the following functions:

- Define a kanban master for a kanban-controlled item
- Define kanban sizing calculation methods
- Define specific parameter values for kanban-specific and calculation-specific parameters
- Run the Kanban Size Calculation program (R30450) to establish the size of the kanban
- Work with kanban-controlled items in the planning systems
- Identify when insufficient inventory exists
- Perform kanban card check-ins and check-outs
- Define adhoc kanban cards to support a spike in demand

Kanban Management offers the ability to manage kanbans and provides seamless integration within the consumption (pull) environment.

Terms and Concepts for Kanban Management

The following terms apply to kanban management:

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, suppliers to furnish, or other branch/plants to provide the required part in the standard lot size that is defined by the Kanban Master table (F3016).

Kanban ID A unique identifier for a kanban master record, which can represent one or more physical containers. The Kanban ID is generated from Next Numbering.

Kanban card A kanban card can be represented by a card, bin, or shelf location. Kanban cards can be system-generated.

Pull system A manufacturing environment in which material is pulled through the system by actual system requirements, usually by the use of kanbans.

Push system A manufacturing environment in which parts are pushed through the system, generally by the use of work orders that materials planning systems generate.

Adhoc kanban card A kanban card that is inserted into a single cycle to cover an abnormal spike in demand.

Calculation method A business function and defined set of parameters used to determine kanban size, number of kanban cards, and quantity per card.

Supplying location The location that has been defined at the item-branch level that will be used to supply the kanban item to the consuming location. Completions of work orders and receipts of purchase orders facilitated by kanban transactions will be to this location.

Consuming location The location that has been defined at the item branch level that will use the kanban item. Kanban processing moves replenishment materials from the supplying location to the consuming location.

Source The type of process that supplies the kanban item, such as a work order or a purchase order.

Phase A condition that allows you to state that the completion and transfer to the consuming location will be completed at the same time or that another step is involved prior to the transfer.

Check out A condition that indicates that, when the kanban quantity is used up at the consuming location, a replenishment action might be required. The actual replenishment transaction, such as the creation of a work order, does not take place until the last card has been checked out.

Check in A condition that indicates that, when the replenishment action has been completed, the kanban item is available for use by the consuming location.

Kanban Flag An option, called Kanban Item), that indicates that an item that is a kanban-controlled item. This option appears on the Additional System Information form of the Item Master (P4101) or Item Branch (P41026) programs. Tables updated for kanban-controlled items are the Item Master SRM Tag File table (F4101SRM) for the item master, and the Item Branch SRM Tag File table (F4102SRM) for the item branch. The Kanban Item option is used by the requirements planning system to indicate that generated action messages cannot be processed.

Tables Used by Kanban Management

The following tables are used throughout Kanban Management:

Bill of Material Master File (F3002) Stores information at the branch/plant 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.

Job Shop Manufacturing Constants (F3009) Stores general branch/plant information, such as bill of material and routing instruction validation, commitment control, work hours per day, and cost calculation methods.

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 address book number is included.
Kanban Master Tag Table (F3016T)	Stores information about the calculation method used by the kanban and the related kanban in the case of tiered kanbans.
Kanban Size Calculation Definition (F3017)	Stores information related to the calculation method, such as calculation identifier, business function, and whether a parameter is kanban-specific, calculation-specific, or not used.
Kanban Size Calculation Parameters (F3018)	Stores the specific value of kanban specific and calculation specific parameters.
Kanban Replenishment Capacity (F3019)	Stores kanban capacity and demand over a user specified period of time.
Kanban Card Detail (F30161)	Stores information related to the kanban, such as status, transaction quantity, and date updated.
Line/Item Relationship Master (F3109)	Stores the relationships between items and production lines. The default production line for an item is the line on which production is scheduled at rate schedule creation for that item.
Work Order Parts List (F3111)	Stores the components required by a work order.
Work Order Routing (F3112)	Stores the routing steps that are attached to a work order or rate schedule. It contains one record for each operation sequence number and work center.

Item Master (F4101)	Stores basic information about each defined inventory item, such as item number, description, category codes, and units of measure.
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.

Note

There are no table conversions for Kanban Management.

Menu Overview of Kanban Management

Kanban Management uses the following menus:

Setup

G30 Product Data Management
G3041 Product Data Management Setup
G30411 Kanban Management Setup

Execution

G31 Shop Floor Management
G3110 Daily Processing
G3115 Daily Processing - Repetitive

Kanban Management Setup

Kanban Management integrates with several other systems, and it is critical that you set up each system appropriately to support your business processes.

In the Inventory Management system, branch/plant constants allow you to customize how you process daily transactions for each branch/plant in your distribution and manufacturing systems. You use the Branch/Plant Constants program (P41001) to set location control and warehouse control. By predefining locations to which material can be moved or completed through work order completions transactions, location and warehouse control can support backflush as an inventory-level improvement technique.

The bills of material and routings that support your work order and rate schedule for kanban-controlled items must be set up in the Product Data Management system. The bill of material associates each component item to a routing step which, in turn, identifies the consuming location of the item. If you are using work center locations for backflushing transactions, you should make sure that your business processes are accurately defined to do so.

In the Shop Floor Management system, you set up manufacturing constants to define branch-specific information that affects processing throughout the manufacturing systems. You use the Manufacturing Constants program (P3009) to specify the value for backflush options on the Manufacturing Constants tab. On the Commitment Control tab, you specify when inventory is committed and backflushed.

When you finish producing items on the shop floor, you need to record the completions to inventory. The completion transactions that you enter in the Shop Floor Management system update the item quantity records in the Inventory Management system. You can record completions for discrete and process work orders, as well as rate schedules.

You use the Super Backflush (P31123) and Work Order Completions (P31114) programs to enter completions for work orders, and the Completions Workbench program (P3119) to enter completions to rate schedules.

The Super Backflush program, which is called by the Check-In transaction (one-phase) or Complete transaction (two-phase), completes the kanban-generated work orders and rate schedules. In order to use Super Backflush to complete manufacturing orders, you should:

- Set up your bills of material and routings with the correct issue codes and pay point codes, respectively.
- Define consuming locations in the items' routings that agree with the related kanbans.

When you create a manufacturing order via a kanban transaction, the system automatically updates the work order completion form with the finished goods location identifier. This location is the supplying location identifier of the related kanban.

Inventory kanbans are always only 1 phase, even though you can technically define them as 2 phase. When you check out an inventory (source type 1) kanban, the kanban is marked in the software as requiring replenishment, but no software transactions occur. When you check in the kanban, you initiate an inventory transfer to move the material from the supplying location to the consuming location.

Kanban-controlled items that are supplied by an outside source (supplier) can use blanket orders in the Procurement system to facilitate order and replenishment of those items.

You can enter a blanket order when you have an agreement with a supplier to purchase a certain quantity or amount of goods over a period of time. Blanket purchase orders allow you to negotiate and control supplier prices over longer periods of time. When you create a blanket purchase order, you enter the total quantity for which you have negotiated with your supplier.

When you are ready to receive a portion of the goods or services on a blanket order, you must release the quantity or amount for which you want to create a purchase order. For example, if you have a blanket order for 1200 widgets, and you want to receive 100, you must locate the blanket order detail line and release 100 widgets. When you have a valid blanket order and your kanban is set up to release from blanket purchase orders, the system automatically debits the blanket order for the kanban quantity. When multiple blanket orders for the kanban item exist, a blanket release form appears so that you can choose the blanket order from which you want to release materials.

The system creates transfer orders for kanbans that move from one branch/plant to another. You use sales orders and purchase orders during the check-out and check-in processes.

For Kanban Management, you must identify the items as kanban-controlled, create the kanban master, define the calculation method, define the parameter values, and then generate and print the kanban cards.

See Also

- *Defining Branch/Plant Constants* in the *Inventory Management Guide*
- *Bills of Material* in the *Product Data Management Guide*
- *Work Centers and Routing Instructions* in the *Product Data Management Guide*
- *Setting Up Manufacturing Constants* in the *Shop Floor Management Guide*
- *Completions* in the *Shop Floor Management Guide*
- *Working with Blanket Orders* in the *Procurement Guide*
- *Additional Order Entry and Release* in the *Sales Order Management Guide*

Setting Up Kanban Item Records

As with all items, you must set up an item record in both the Item Master (F4101) and Item Branch File (F4102) tables for kanban-controlled items.

Note

All items that are part of a source type 4 kanban must have a stocking type of 9, including the parent item. Additionally, you must verify that stocking type 9 in your system is defined with O in the special handling code and either an M or P code in the Description 02 column. The stocking type user defined code table is 41/I.

The parent item for your source type 4 kanban must have a corresponding bill of material structure. You use this bill of material to perform cost rollups and generate sales orders.

On the Additional System Information form (Plant Manufacturing tab) of the item branch record, you must turn on the associated option to identify the item as kanban-specific to that branch. Within a branch/plant, an item that is kanban-controlled must be a kanban-controlled item throughout the entire branch/plant. This helps the planning system identify kanban-specific items.

Along with the item branch record that you create for a kanban item in the Item Branch File (F4102), you must define a consuming location (the location to which the item is transferred for consumption) and a supplying location (the originating location, which could be a completion or receiving location, depending on whether the item is manufactured or purchased). The source, or supply, for a kanban can be an inventory location (common parts), a work center (a manufactured subassembly), or a receiving location (a purchased or transferred part).

The system validates that the consuming and supplying locations are set up, regardless of how the location control switch is set on branch/plant constants.

Setting Up Kanban Master Records

Before you can initiate any kanban transactions, you must set up a kanban master record for the item. You set up kanban master records in the Kanban Master Revisions program (P3016). When you set up the kanban master record, you define the information that the system uses to generate the transaction when you initiate a kanban trigger.

Each record in the Kanban Master table (F3016) has a unique kanban ID. Each of these kanban records can have multiple containers or cards. The records also appear in the Kanban Card Detail table (F30161). When you define an item as kanban-controlled, you essentially define the relationship between a supplying location and consuming location. You define a kanban-controlled item by item number, consuming branch/plant, consuming location, supplying branch/plant, and supplying location. The system generates a unique kanban identifier for this specific relationship.

When you have multiple kanban records (kanban IDs) with the same item number, consuming branch/plant, consuming location, supplying branch/plant, and supplying location, the kanban size for each of these records should be the same.

When you set up the item as a kanban item, you define the source type in the kanban master record to indicate how the item is supplied. For example, if the source, or supply, is a manufacturing activity (the item is a subassembly part), the system can generate a work order when the last kanban card is checked out. You choose the source type from the 31/RS Replenishment Source user defined code (UDC) table, which contains the following types:

- Work center – Source Type 1
- Inventory – Source Type 2
- Supplier – Source Type 3
- Outside assembly – Source Type 4
- Branch/plant – Source Type 5

You also define whether the system transfers a kanban item in a one-phase or two-phase process. When the transfer occurs in one phase, the completed work order or received purchase order quantity is directly transferred to the consuming location. When the kanban is set up as a two-phase kanban, the materials that are being facilitated through the processing of the kanban cards require an additional Complete transaction to make the materials ready for transfer to the consuming location,

from the supplying location. This option, for example, allows you to test the materials before they move on to be consumed during subsequent manufacturing operations.

When you set up a kanban master record, you can enter the kanban size manually or define a calculation method. If you manually enter the kanban size on the Kanban Master Revisions form, ensure that the quantity that you enter is large enough to supply the material consumed, according to the replenishment leadtime that is defined for the item. If you decide that the system should not override the user-specified kanban size, then you must set the override option in the kanban master record to 1.

If you choose to use a calculation method, you must first define the calculation method in the Kanban Size Calculation Definition program (P3017). You enter the calculation method identifier in the Calculation Method field of the kanban master record.

You then define parameter values in the Kanban Size Calculation Parameter Definition program (P3018) and run the Kanban Size Calculation program (R30450). The system updates the kanban master record with the kanban size, and either the number of cards or quantity per card that the batch program calculated. If more than one kanban master record has the same supplying branch, supplying location, consuming branch, consuming location, and item number, the system uses the calculation value of the first record to calculate the kanban size of the subsequent record.

It is recommended that the first kanban master record have the highest calculation values set up in the Kanban Size Calculation Parameter Definition program (P3018), so that the requirements of the consuming location are met correctly.

When you leave the Calculation Method Identifier field blank, the system supplies the default value of Manual Entry.

When the kanban is a source type 1 (work center), and the item being produced when the kanban is checked out is a rate-scheduled item, you can indicate that you want the rate schedule to be assigned to a particular repetitive line. The line that you specify must be a valid work center in the Work Center Master File table (F30006) and have a valid line and item relationship.

Note

When a source type 2 kanban is slated to generate multitier kanban requests from the supplying location, the system maintains information about the secondary kanban and links to it using the Related Kanban ID.

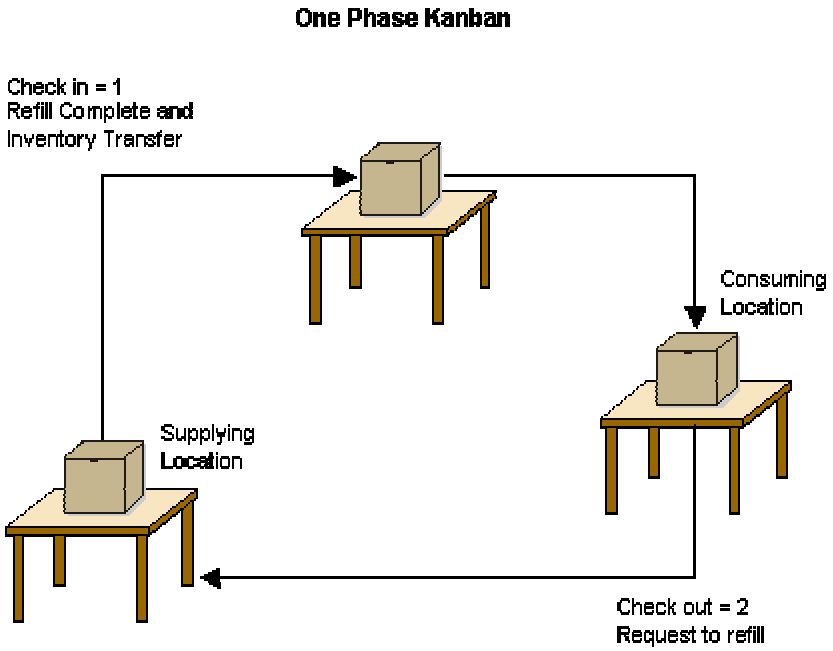
Given the relationship that you specify between the kanban size and the container size, the system calculates the number of containers. You define each kanban ID with the number of containers, and you can specify as many containers as needed.

Only internal users can maintain kanban records. When you change to the kanban quantity, number of cards, or leadtime, you can set up the system to initiate workflow to advise the supplier. All users can review kanban records. Each supplier can review only the procurement kanban master records for that supplier.

Kanban Processing

Kanbans can be used as part of a one-phase or two-phase process. The one-phase process assumes that the completion or receipt of quantity to the supplying location and transfer to the consuming location are performed in one step. With a one-phase kanban, the status of the kanban progresses as follows:

- Check In to Checked Out
- Checked Out to Checked In

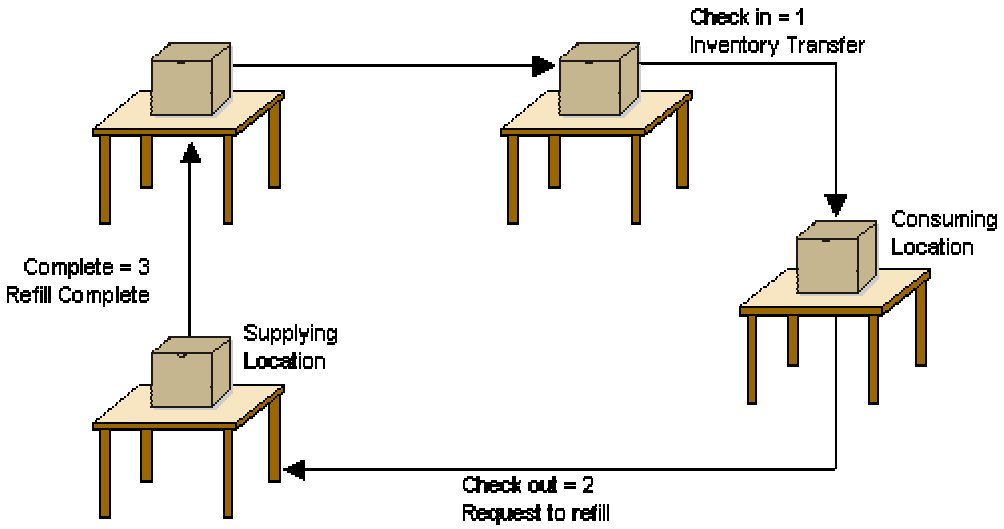


The two-phase approach assumes that the completion and transfer to the consuming location are reported separately. You complete or receive the quantity to the supplying location by using the Complete status, which is status 3. After the quantity has been physically received at the supplying location, you initiate an inventory transfer from the supplying location to the consuming location by checking in the kanban. The kanban status changes to Checked In (1). Using this method is helpful when you are working with items that require inspections or tests before they are moved to the consuming location. With a multiphase kanban, the status of the kanban progresses as follows:

- Check In to Check Out
- Check Out to Complete
- Complete to Check In

When you check in a kanban quantity from the supplier, the system can initiate a receipt transaction if the Receipts option in the kanban master is turned on.

Two Phase Kanban



You can process kanbans for the following items:

- Inventoried items
- Manufactured items (subassemblies)
- Externally supplied items (supplier)
- Interbranch items

When you check out an inventory kanban (source type 2), the system changes the kanban status. The supplying location replenishes the kanban quantity. You then check in the kanban, which results in an inventory transfer. Inventory kanbans only perform software transactions during the check-in process. All other statuses for this kanban type are informational only.

When you check out a work center kanban (source type 1), the program does one of the following:

- For discrete manufactured items, the software creates a new work order.
- For rate scheduled items, which have an order policy code of 5 in the item branch record, the software looks for an existing open rate. If no rate exists for the item and line combination specified in the kanban master record, then the software creates a new rate for the kanban quantity. You should be aware that the software assumes that rate quantities generated from kanbans are due the same day that they are initiated. Therefore, no standard spreading of the subsequent rate quantity occurs in the Line Scheduling Workbench. You can set a processing option for the Enter/Change Rate Schedule program (P3109) so that the system automatically attaches the parts list and routing instructions when a new rate is created or changed.

When you check in a work center kanban, you complete the work order or rate, issue materials, enter hours and quantities, and transfer the parent item to the consuming location.

When you check out a kanban that a work center or production line supplies, and the item is a phantom, no transactions other than inventory transfers occur. When you have no work orders or rates to process; the producing line replenishes the item, and the system completes the kanban and checks it in. This results in a transaction for inventory transfer, from the supplying location to the consuming location.

An externally supplied kanban creates an open purchase order for the kanban item. This purchase order can be an existing one, or, optionally, one created by the check-out process. In addition, when you check out the kanban, the system might also initiate an electronic data interchange (EDI) transaction. When you check in kanbans from an external supplier, the system optionally creates a receipt for the purchase order. You can also use kanbans to release quantities from open blanket purchase orders.

A kanban supplied from a branch/plant requires you to create a transfer sales order when you check out the kanban. When you check in the kanban supplied by another branch/plant, the system creates a transfer purchase order and receipt.

Kanban Processing Logic

Source	Source Type	Phase	Status Sequence	Check-in (1) Transactions	Check-out (2) Transactions	Complete (3) Transactions
Work center	1	1	1 to 2 2 to 1	Complete to the supplying location using super backflush transactions and generate an inventory transfer from supplying location to consuming location	Create a work order (WO) or rate (SC) if none already exists	Not applicable in a one-phase kanban
Work center	1	2	1 to 2 2 to 3 3 to 1	Generate an inventory transfer from the supplying location to the consuming location	Create work order (WO) or rate (SC) if none already exists	Complete to the supplying location using super backflush transactions
Inventory	2	1	1 to 2 2 to 1	Generate an inventory transfer from the supplying location to the consuming location	No transaction	Not applicable in a one-phase kanban
Inventory	2	2	1 to 2 2 to 3 3 to 1	Generate inventory transfer from the supplying location to the consuming location.	No transaction	No transaction

Supplier	3	1	1 to 2 2 to 1	Receive Purchase Order if Receipts flag is on (Kanban Master) otherwise, NO transactions occur and generate an inventory transfer from the supplying location to the consuming location	Create a purchase order (PO) if none already exists	Not applicable in a one-phase kanban
Supplier	3	2	1 to 2 2 to 3 3 to 1	Generate an inventory transfer from the supplying location to the consuming location	Create a purchase order (PO) if none already exists	Receive a purchase order when the Receipts option is turned on in the Kanban Master table (F3016); otherwise, no transactions occur
Outside assembly (subcontract)	4	1	1 to 2 2 to 1	Create a sales order for the related bill of material component items and create a purchase order for the related bill of material parent item	Process a shipment confirmation for the shipped component items and receive a purchase order for the value-add parent item and generate an inventory transfer for the parent item from the supplying location to the consuming location	Not applicable in a one-phase kanban

Outside assembly (subcontract)	4	2	1 to 2 2 to 3 3 to 1	Create a sales order for the related bill of material component items and create a purchase order for the related bill of material parent item	Process a shipment confirmation for shipped component items and receive a purchase order for the value-add parent item	Generate an inventory transfer for the parent item from the supplying location to the consuming location
Branch/plant	5	1	1 to 2 2 to 1	Receive a transfer purchase order at the receiving location in the supplying branch and generate an inventory transfer from the receiving location to the consuming location	Generate a transfer sales order from the supplying branch to the consuming branch and generate a transfer purchase order to the supplying branch	No transaction
Branch/plant	5	2	1 to 2 2 to 3 3 to 1	Generate an inventory transfer from the receiving location to the consuming location	Generate a transfer sales order from the supplying branch to the consuming branch and generate a transfer purchase order to the supplying branch	Receive a transfer purchase order at the receiving location in the supplying branch

► To set up kanban master records

Use one of the following navigations:

From the Product Data Management Setup menu (G3041), choose Kanban Master Revisions.

From the Kanban Management Setup menu (G30411), choose Kanban Master Revisions.

1. On Work With Kanban Master, complete the following fields and click Add:
    - Item Number
    - Consuming Branch
    - Consuming Location
    - Supplying Branch
    - Supplying Location

2. On Kanban Master Revisions, choose Add Row from the Form menu.
3. Complete the following fields:
    - Supplying Location B/P
    - Kanban ID

      You can leave the Kanban Size field blank if the size will be calculated by using the Kanban Size Calculation program (R30450).

    - Kanban UOM
    - Source Type
    - Phase
    - Calculation Method
4. Review the values in the following fields:
    - Kanban ID

      The system generates the Kanban by using next numbers.

    - Container Size

      This field is locked. The value that appears in this field is set up in the Kanban Size Calculation Parameter Definition program (P3018).
5. Complete the following optional fields:
    - Supplier

      You complete the supplier field if you use source type 3 (Supplier).

    - Line/Cell Identifier

      If the item is a rate schedule item, this field identifies the line where the item is manufactured.

    - Override

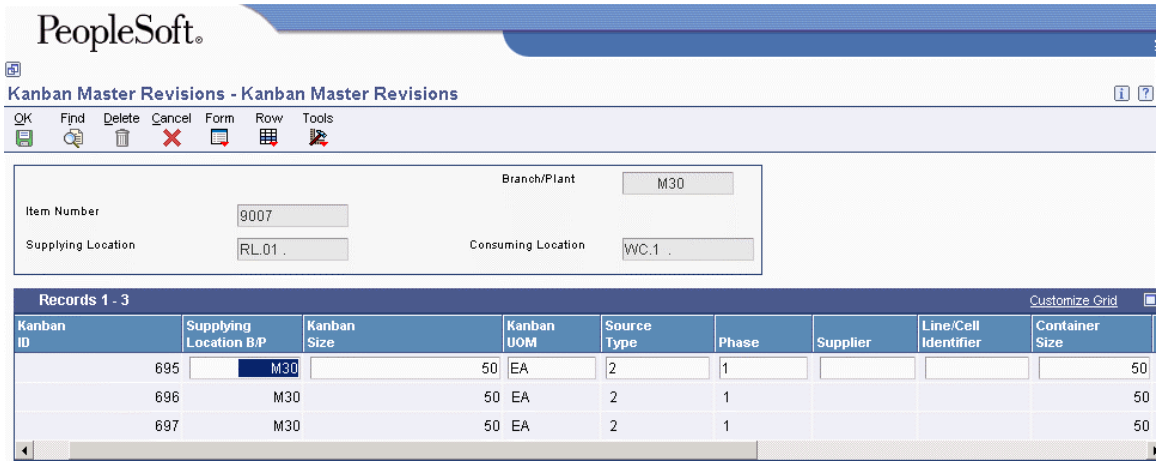
      If you activate the override option, the system does not update the record when you run the Kanban Size Calculation program (R30450).

    - Receipts

      If you are setting up a supplier kanban (source type 3) and you want the purchase order receipt process to be initiated by a check-in transaction, you must activate this option.

    - Related Kanban ID

      This field is used with multitier and re-order point.



6. Click OK.

Setting Up Kanban Size Calculation Definition

The Kanban Size Calculation Definition program (P3017) defines a kanban size calculation, also called a calculation method. You can enter a kanban size manually, or you can define a calculation method to be used by the Kanban Size Calculation program (R30450).

The calculation method that is used for determining kanban size, the number of kanban cards, and the quantity per card depends upon the following attributes:

- The methodologies that the inventory manager wants to adopt in reducing the work-in-process inventory levels (such as discrete versus rate-based, safety stock, multitier)
- The physical dimensions of the product and the holding bin
- The demand profile of the product
- The leadtime and shipment pattern of the product
- The cost of the product

The goal of sizing an ideal kanban is to ensure that the system never runs out of inventory while the inventory level remains as low as possible.

Generally, you perform kanban calculations during periodic item planning cycles when the time periods are long. You should run the Kanban Size Calculation program after you run material requirements planning (MRP), which is generally once per month. When demand fluctuations are high, kanban calculations, particularly the number of kanban cards in process, should be calculated more frequently (for instance, on a weekly basis). You might also need to insert an ad hoc card to cover a short-term spike.

The Kanban Size Calculation Definition program enables you to either use one of the default calculation methods provided by the system or define your own calculation method. A calculation identifier uniquely identifies each calculation method.

A calculation method consists of a description, business function, and defined set of parameters. The system provides four standard business functions. Each business function contains an equation that calculates the kanban size, and either the number of kanban cards or the quantity per card. The standard calculations provided by PeopleSoft can be found in source module B3003960.

The system enables you use custom programming to create custom equations, as well as the business function that is required to implement the calculations. Some restrictions apply.

After you identify the business function for a specific calculation method, you must define the parameters to use. You can define 16 parameters: 13 are standard and three are custom. When a parameter is to be used in a calculation, the user designates the parameter as either a kanban-specific (specific to a kanban ID) or a calculation-specific parameter. The user defined code (UDC) Kanban Parameter Usage (30/KP) is hard-coded and designates how a parameter is used in the kanban size calculation:

- 0 – Parameter Not Used
- 1 – Kanban Specific Parameter
- 2 – Calculation Specific Parameter

If you want a kanban to use a specific calculation method, you must link that kanban master record to the calculation method via the Calculation Method field in Kanban Master Revisions program (P3016). We recommend that you use the same calculation method to set up each kanban ID for the same kanban-controlled item, which eliminates any variance in kanban size.

Kanban Size Calculation Parameters

The Kanban Size Calculation Definition program (P3017) provides 16 parameters to define for a given calculation method. The program has 13 standard parameters and three custom parameters. When you use a parameter, you designate it as either a kanban-specific (specific to a kanban ID) or a calculation-specific parameter. The user defined code (UDC) Kanban Parameter Usage (30/KP) is hard-coded and specifies how a parameter is used in the kanban size calculation.

The system provides the following parameters:

Periods in MRP window

This parameter defines the number of time buckets that the system uses to calculate the demand for kanban size.

The system counts the number of time buckets from a defined start date to arrive at the end of a time horizon. You enter the start date in a processing option for the Kanban Size Calculation program (R30450). If you do not specify a date, the system uses the material requirements planning (MRP) generation date as the start date.

It is recommended that the MRP Planning Horizon periods in the MRP/MPS Requirements Planning program (R3482) be set the same as the Periods in MRP Window in the Kanban Size Calculation Parameter Definition program (P3018).

Days built per period

This parameter allows you to define the days built per week or month in the Kanban Size Calculation Parameter Definition program.

The days built per week or month are the number of working days in a week or month, on average. The Kanban Size Calculation program divides the demand in a weekly bucket by the value in the days built per week parameter to determine an average daily demand. Similarly, the program divides the demand in a monthly bucket by the value in the days built per month parameter to determine an average daily demand.

Scan delta days

This parameter defines the number of days between a kanban card checkout action and the day on which the supplier receives the notification of the checkout.

For example, if a kanban card is scanned at 9:00 am one day, and the supplier receives an EDI 862 transaction the next day through a nightly batch program, the scan delta days parameter would be 1.

Leadtime delivery (days)

This parameter is the time duration between when the goods leave the supplier and when they arrive at the work center.

Vendor split percent

This parameter is the percent of demand to which a particular vendor caters.

You specify the vendor in the kanban master record. When a feeder work center is the source of the kanban, then this number indicates the fraction of demand that the particular work center satisfies.

The Kanban Size Calculation program multiplies this value by the calculated demand to determine the demand per supplier.

For a kanban master record with the same supplying branch, consuming branch, supplying location, consuming location, and item number, the vendor split percentage will be the same for all of the records. The first record's vendor split percentage will be applied to all of the records.

You can have different vendors for different kanban IDs with the same supplying branch, consuming branch, supplying location, consuming location, and item number combinations. The first record's vendor split percentage should be the highest possible, as set up in the Kanban Size Calculation Parameter Definition program. Thus, subsequent records would be covered even if they have lower vendor split percentages set up in the Kanban Size Calculation Parameter Definition program.

Standard pack size

This parameter is the standard shipment size for an item coming from a supplier.

When you specify this value, the Kanban Size Calculation program rounds up the calculated kanban size to the closest multiple of this number.

Safety stock

This parameter is the quantity kept on hand to cover fluctuations in demand.

The Kanban Size Calculation program adds this value to the calculated demand.

Demand split percent

This parameter defines the demand for a kanban item at its consuming location, expressed as a percentage of the total demand for the same item at all locations in the branch/plant over a period of time.

When the consuming location on the kanban is the only location in which the item is used, then the demand split percent is 100 percent.

When multiple consuming locations exist, this parameter identifies the percent of demand from one location. For instance, 40 percent of the demand is planned by this kanban, and 60 percent of the demand is planned by another kanban.

The Kanban Size Calculation program multiplies this value by the demand for the item to determine the demand at the consuming location.

For a kanban master record with the same supplying branch, consuming branch, supplying location, consuming location, and item number, the demand split percentage will be the same for all the records. The first record's demand split percentage will be applied to all of the records.

You can have different demand split percentages for different kanban IDs for the same supplying branch, consuming branch, supplying location, consuming location, and item number. The first record's demand split percentage should be the highest possible, as set up in the Kanban Size Calculation Parameter Definition program. Thus, subsequent records with the same supplying branch, consuming branch, supplying location, consuming location, and item number will be covered, even if they have lower demand split percentages set up in the Kanban Size Calculation Parameter Definition program.

Container size

This parameter defines the kanban movement quantity. For example, if the kanban is a physical container, the container size identifies how much the container can hold.

Minimum quantity boundary

This parameter defines the minimum quantity that can be ordered by a single kanban trigger.

When the Kanban Size Calculation program calculates the kanban size, and the calculated size is less than the minimum quantity, then the system uses the minimum quantity as the size of the kanban.

Maximum quantity boundary

This parameter defines the maximum quantity that a single kanban trigger can order.

When the Kanban Size Calculation program calculates the kanban size, and the calculated size is greater than the maximum quantity, then the software uses the maximum quantity as the size of the kanban.

Minimum number of cards

This parameter defines the minimum number of kanban cards in the cycle. Each kanban card represents a container. Each kanban should have at least one card.

For fixed container size calculations, the Kanban Size Calculation program calculates the number of cards, and, if the calculated value is less than the specified minimum number of cards, the system uses the minimum number of cards.

For calculations that use a fixed number of cards, the minimum number of cards should equal the maximum number of cards.

Maximum number of cards

This parameter defines the maximum number of cards in the cycle. Each kanban card represents a container. Each kanban should have at least one card.

For fixed container size calculations, the Kanban Size Calculation program calculates the number of cards, and, if the number of cards that the program calculates exceeds the maximum number of cards, then the system uses the value that represents the maximum number of cards.

For calculations that use a fixed number of cards, the minimum number of cards should equal the maximum number of cards.

Custom parameter 1

This parameter is a user-definable, custom parameter.

To use this parameter, you must modify or create the supporting business function.

Custom parameter 2

This parameter is a user-definable, custom parameter.

To use this parameter, you must modify or create the supporting business function.

Custom parameter 3

This parameter is a user-definable, custom parameter.

To use this parameter, you must modify or create the supporting business function.

Standard Kanban Equations

Software calculation methods that you use to determine your kanban size have associated business functions. The standard business functions contain one of the four standard size-calculation equations that the system provides.

You can customize the existing kanban sizing calculations or create your own through custom programming. You can also enter a kanban size manually instead of using a calculation method.

Kanban Equation 1 – Fixed Container Size and High Demand

This equation calculates the number of cards when the kanban quantity is fixed to the container size. Use this equation when item demand fluctuates significantly.

$$\text{Kanban size} = \text{High Daily Demand} * (\text{Leadtime Delivery}(\text{Days})) + \text{Scan Delta Days}) + \text{Safety Stock}$$

High daily demand is the highest period demand found in the Periods in MRP Window, multiplied by the vendor split percent, multiplied by the demand split percent for the consuming location, divided by days built per period.

The system then calculates the number of kanban cards by dividing the kanban size by the container size.

Kanban Equation 2 – Fixed Container Size and Average Demand

This equation calculates the number of cards when the kanban quantity is fixed to the container size and demand is based on the average daily demand.

$$\text{Kanban size} = \text{Average Daily Demand} * (\text{Leadtime Delivery}(\text{Days}) + \text{Scan Delta Days}) + \text{Safety Stock}$$

Average daily demand is the average found in the Periods in MRP Window, multiplied by the demand split percent, multiplied by the vendor split percent for the consuming location, divided by the days built per period.

The system calculates the number of kanban cards by dividing the kanban size by the container size.

Kanban Equation 3 – Fixed Number of Cards and High Demand

This equation calculates the kanban quantity for a fixed number of containers when an item has high demand.

$$\text{Kanban size} = \text{High Daily Demand} * (\text{Leadtime Delivery}(\text{Days}) + \text{Scan Delta Days}) + \text{Safety Stock}$$

High daily demand is the highest period demand found in the Periods in MRP Window, multiplied by the vendor split percent, multiplied by the demand split percent for the consuming location, divided by days built per period.

The quantity per container or container size is calculated by dividing the kanban size by the number of cards.

Kanban Equation 4 – Fixed Number of Cards and Average Demand

This equation calculates the kanban quantity for a fixed number of containers with demand based on the average daily demand.

$$\text{Kanban size} = \text{Average Daily Demand} * (\text{Leadtime Delivery}(\text{Days}) + \text{Scan Delta Days}) + \text{Safety Stock}$$

Average daily demand is the average found in the Periods in MRP Window, multiplied by the demand split percent, multiplied by the vendor split percent for the consuming location, divided by the days built per period.

The system calculates the quantity per container or Container Size by dividing the kanban size by the number of cards.

Manual Entry of Kanban Sizes

The system lets you to enter the kanban quantity and number of containers manually. You enter this kanban information when you set up a kanban master record.

If you manually enter the kanban size on the Kanban Master Revisions form, ensure that the quantity that you enter is sufficiently large enough to supply the material that is consumed, according to the replenishment leadtime that is defined for the item.

To prevent the system from overriding the user-specified kanban size, enter 1 in the Override field on the Kanban Master Revisions form.

When you use the manual entry method, the system performs no calculations.

▶ To set up a kanban size calculation definition

From the Kanban Management Setup menu (G30411), choose Kanban Size Calculation Definition.

1. On Work With Kanban Calculation Methods, click Add.
2. On Kanban Size Calculation Revisions, complete the following fields:
   - Calculation Method
   - Description

     Enter a description of the calculation method.

   - Function Name

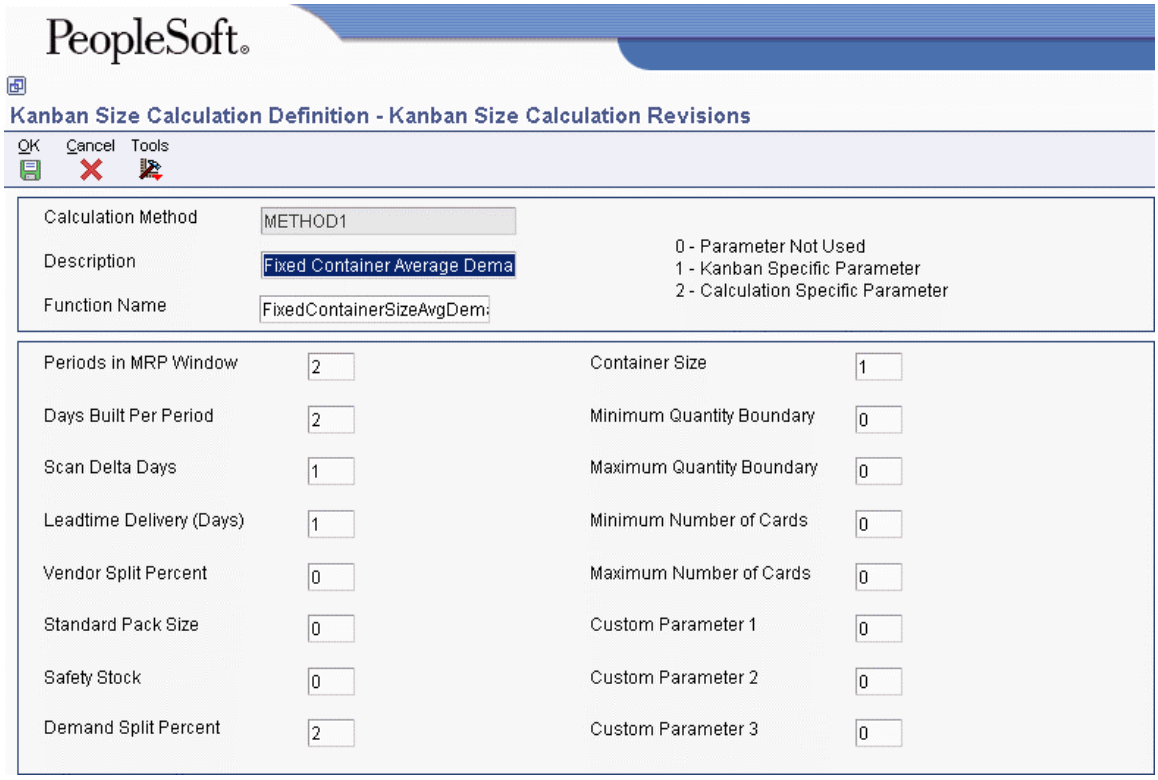
     Select the business function that this calculation method will use. The system verifies that the business function exists.
3. Select the parameters used in the calculation by completing the following fields to define the parameter as kanban specific, calculation specific, or not used:

   Note

   By default, each parameter is designated as not used.

   - Periods in MRP Window
   - Days Built Per Period
   - Scan Delta Days
   - Leadtime Delivery (Days)
   - Vendor Split Percent
   - Standard Pack Size
   - Safety Stock
   - Demand Split Percent
   - Container Size

- Minimum Quantity Boundary
- Maximum Quantity Boundary
- Minimum Number of Cards
- Maximum Number of Cards
- Custom Parameter 1
- Custom Parameter 2
- Custom Parameter 3



4. Click OK.

Defining Values for Kanban Calculation Parameters

Parameters are defined as kanban-specific or calculation-specific for each calculation method in the Kanban Size Calculation Definition program (P3017). After you define a calculation method, you use the Kanban Size Calculation Parameter Definition program (P3018) to define the specific value used by each parameter.

Kanban-Specific Parameters

The system stores values for calculation method parameters that you defined as kanban-specific parameters (specific to the kanban ID). When you use the Kanban Size Calculation Parameter Definition program (P3018) to enter default values, the system displays the following:

- Calculation method
- Kanban ID
- Parameters identified as kanban-specific parameters for the calculation method

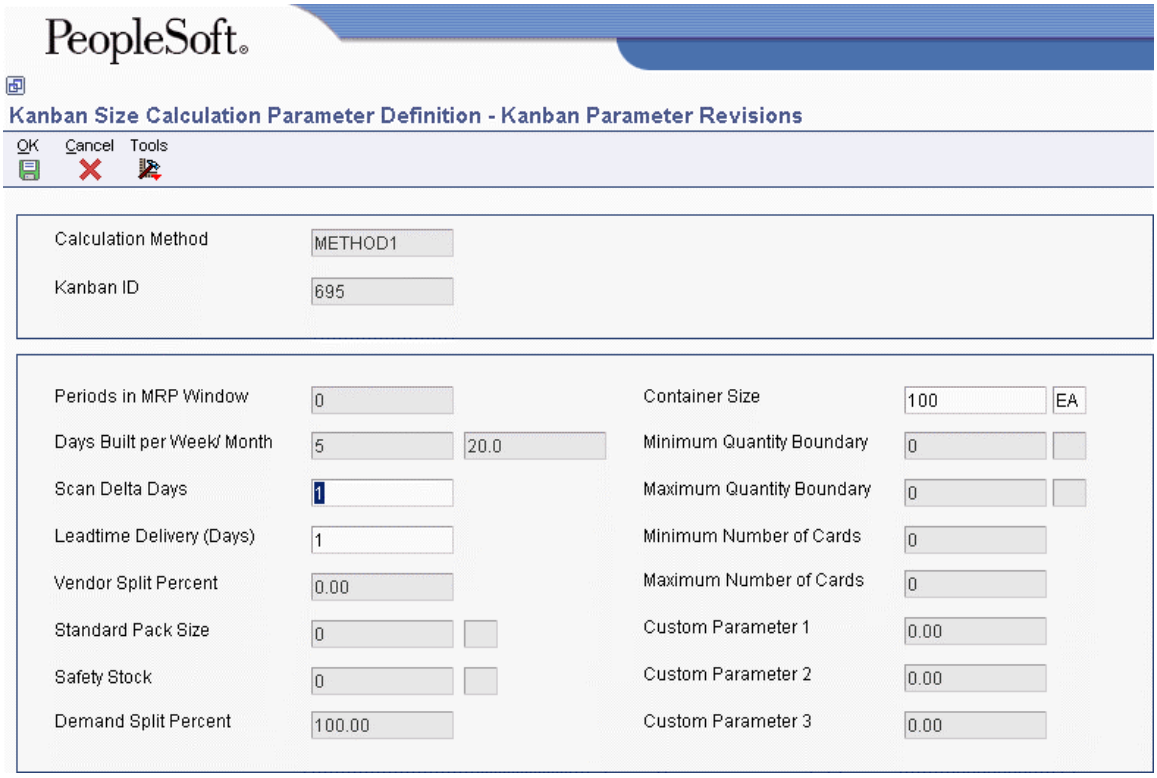
The system enables you to enter or revise values for parameters designated as kanban-specific parameters for a calculation method.

The Kanban Size Calculation program (R30450) uses the value of each parameter from the kanban-specific record.

► To define kanban-specific parameters

From the Kanban Management Setup menu (G30411), choose Kanban Size Calculation Parameter Definition.

1. On Work With Kanban Size Calculation, complete the following fields for kanban specific parameters and click Find:
   - Calculation Method
   - Kanban ID
2. Choose the calculation method and kanban ID combination and click Select.



3. On Kanban Parameter Revisions, complete the value field for each parameter that is identified as a kanban-specific parameter.

Note

The value fields for parameters that were not defined as calculation-specific are disabled, so you cannot enter values in them.

4. Click OK.

Calculation-Specific Parameters

The system stores values for calculation method parameters that are defined as calculation-specific parameters. When you use the Kanban Size Calculation Parameter Definition program (P3018) to enter default values, the system displays the following:

- Calculation method
- Parameters identified as calculation-specific parameters for the calculation method

The system enables you to enter or revise values for parameters that are designated as calculation-specific parameters for a calculation method.

The Kanban Size Calculation program (R30450) uses the value of each parameter from the calculation-specific record.

► **To define calculation-specific parameters**

From the Kanban Management Setup menu (G30411), choose Kanban Size Calculation Parameter Definition.

1. On Work With Kanban Size Calculation, complete the following field and click Find:
   - Calculation Method
2. Choose the calculation method and click Select.
3. On Kanban Parameter Revisions, complete the value field for each parameter that is identified as a calculation-specific parameter.

Note

The value fields for parameters that were not defined as calculation-specific are disabled, and you cannot enter values in them.

4. Click OK.

Generating Kanbans

From the Kanban Management Setup menu (G30411), choose Kanban Size Calculation.

After you set up the item in the Kanban Master Revisions program (P3016), define the calculation method in the Kanban Size Calculation Definition program (P3017), and define parameter values in the Kanban Size Calculation Parameter Definition program (P3018), you can use the Kanban Size Calculation program (R30450) to calculate the size of a kanban. If you already entered a kanban size manually, you can prevent the system from updating the information that you entered by entering 1 in the Override field on the Kanban Master Revisions form.

When you generate kanbans, you define the processing options as follows:

- Specify whether the Kanban Size Calculation program runs in proof or final mode
- Print kanban cards
- Print an exception report for customization purposes.
- Update the Kanban Master table (F3016), if you are running the program in final mode
- Specify a range, expressed as a percentage, within which the system does not adjust the size of the kanban.
- Specify the source of the demand (such as forecasts, sales orders, planned orders, firm orders, and rate schedules)
- Specify the aggregation of demand
- Specify the start date to use for the demand calculation

When you run the Kanban Size Calculation batch program, you use data selection criteria to select records from the Kanban Master table. When you have kanban records (kanban IDs) that have the same item number, consuming branch/plant, consuming location, supplying branch/plant, and supplying location, divide the demand by the number of similar kanban records so that the demand is distributed evenly among the records.

Kanban size is calculated using the following formula:

$$\text{Kanban Size} = \left[\text{Demand} * \left(\text{Scan Delta Days} + \text{Lead Time Delivery Days}\right)\right] + \text{Safety Stock}$$

After you run the Kanban Size Calculation program, the system updates the Kanban Master and Kanban Card Detail (F30161) tables with the new kanban size, container size, and number of cards, based on the calculation method that you specified.

The system calculates kanban size for the first record for which you defined kanban-specific values. For kanban-specific records, use the first record's calculation values for the kanban size calculation when subsequent records have the same item number, consuming branch/plant, consuming location, supplying branch/plant, and supplying location. Subsequent records that are similar have the same calculation values and kanban sizes. The kanban size is based on the Calculation Method specified in the Kanban Size Definition program.

After you run the Kanban Size Calculation program, a report displays the new calculated kanban size, container size, number of cards, and previous kanban size.

You can run the Kanban Size Calculation program in either proof mode or final mode. When you run the program in proof mode, it displays only the calculated size and does not update the Kanban Master table. When you run the program in final mode, it displays the calculated size and updates the Kanban Master table.

Processing Options for Kanban Size Calculation (R30450)

Process
1. Enter a '1' to calculate Kanban Sizes.
2. Mode
    Blank = Proof Mode
    1 = Final Mode

3. Enter a '1' to print Kanban cards.
4. Enter a '1' to print Kanban Exception Report.
5. Enter the range, expressed as a percentage, above or below which the Kanban should not be changed.
('15' = plus or minus 15%)
Filter Control
Demand
6. Kanban Demand

Blank = Use Planning time fence
1 = Use the sum of the included demands
2 = Use the highest value among the included demands
a. Forecasts

Blank = Do not include
1 = Include
b. Sales Orders

Blank = Do not include
1 = Include
c. Firm Work Orders

Blank = Do not include
1 = Include
d. Planned Orders

Blank = Do not include
1 = Include
e. Rate Schedules

Blank = Do not include
1 = Include
7. Start date for demand calculation

Blank = Use MRP Generation Date

Example: Kanban Size Calculation Using Standard Equations

This example illustrates the calculation of each of the four standard kanban equations.

Prerequisite Setup

The demand profile for the item is as follows:

Date	Source	Quantity
06-Oct	FC	100
08-Oct	FWO	300
15-Oct	SO	200
17-Oct	SO	350
06-Nov	FC	150

The MPS Regeneration program (R3482) ran for 5 days, 4 weeks, and 3 months. The resulting time series is as follows:

Date	Demand Type	Demand As Of Date	Comment
06-Oct	FC	100	
07-Oct			
08-Oct	FWO	300	
09-Oct			
10-Oct			
17-Oct	SO	550	
24-Oct			
31-Oct			8 periods in MRP Window
07-Nov	FC	150	
28-Nov			
31-Dec			
30-Jan			

The calculation method has been set up via the Kanban Size Calculation Definition program (P3017). The calculation method has the following calculation-specific parameter values, as defined in the Kanban Size Calculation Parameter Definition program (P3018).

Parameter	Parameter Value
Periods in MRP Window	8
Days built per week	5
Days built per month	20
Scan delta days	1
Leadtime delivery (days)	2
Vendor split percent	100
Safety stock	50
Demand split percent	100
Container size	25

Demand Calculation

Forecasts and sales orders are the demand types that will be included in the demand calculation. The demand aggregation is the sum of individual demands.

So, because this item has a sales order, a forecast, and a planned order for a particular period, the demand at the end of that period is the sum of the sales order and forecast quantities.

High Daily Demand

Maximum demand occurs in the weekly period ending 19 October.

Maximum demand = 550 units.

Adjusted maximum demand = 550 units/ 5 Days Built per Week = 110 units/day

Average Daily Demand

Number of months in the chosen time horizon = 0

Sum of all monthly demands = 0

Number of weeks in the chosen time horizon = 3 weeks

Sum of all weekly demands = 550 units

Number of days in the chosen time horizon = 5

Sum of all daily demands = 100 units

$$\text{Total demand} = (\text{number of months} * \text{sum of all monthly demands}) + (\text{number of weeks} * \text{sum of all weekly demands}) + (\text{number of days} * \text{sum of all daily demands})$$

$$\text{Total demand} = (0 * 0) + (3 * 550) + (5 * 100) = 2150$$

$$\text{Total number of days} = (\text{number of months} * \text{days built per month}) + (\text{number of weeks} * \text{days built per week}) + (\text{number of days})$$

$$\text{Total number of days} = (0 * 20) + (3 * 5) + (5) = 20$$

$$\text{Average daily demand} = \text{total demand} \div \text{total number of days} = 2150 \div 20 = 107.5 \text{ units/day}$$

Kanban Size Calculations

Kanban Equation 1 - Fixed Container Size and High Demand

$$\text{Kanban size} = \text{high daily demand} * (\text{leadtime delivery}(\text{days}) + \text{scan delta days}) + \text{safety stock}$$

$$\text{Kanban size} = 110 * (2 + 1) + 50 = 380 \text{ units}$$

$$\text{Number of cards} = \text{kanban size} \div \text{container size} = 380 \div 25 = 15.2 = 16 \text{ cards}$$

Quantity per container = container size = 25 units

Note: To create a fewer number of cards, increase the container size in the Kanban Size Calculation Parameter Definition program.

Kanban Equation 2 – Fixed Container Size and Average Demand

$$\text{Kanban size} = \text{average daily demand} * (\text{leadtime delivery}(\text{days}) + \text{scan delta days}) + \text{safety stock}$$

$$\text{Kanban Size} = 107.5 * (2 + 1) + 50 = 372.5 = 373 \text{ units}$$

$$\text{Number of cards} = \text{kanban size} \div \text{container size} = 373 \div 25 = 14.92 = 15 \text{ cards}$$

Quantity per container = container size = 25 units

Note: To create a fewer number of cards, increase the container size in the Kanban Size Calculation Parameter Definition program.

Kanban Equation 3 – Fixed Number of Cards and High Demand

The number of cards is fixed at 10 in the Kanban Size Calculation Parameter Definition program.

The maximum and minimum number of cards are the same in the Kanban Size Calculation Parameter Definition program for the fixed number of cards.

$$\text{Kanban size} = \text{high daily demand} * (\text{leadtime delivery}(\text{days}) + \text{scan delta days}) + \text{safety stock}$$

$$\text{Kanban size} = 110 * (2 + 1) + 50 = 380 \text{ units}$$

$$\text{Container size} = \text{kanban size} \div \text{number of cards} = 380 \div 10 = 38 \text{ (quanity per card or container size)}$$

Note: To create a larger container size, decrease the number of cards in the Kanban Size Calculation Parameter Definition program.

Kanban Equation 4 – Fixed Number of Cards and Average Demand

The number of cards is fixed at 10 in the Kanban Size Calculation Parameter Definition program.

$$\text{Kanban size} = \text{average daily demand} * (\text{leadtime delivery}(\text{days}) + \text{scan delta days}) + \text{safety stock}$$

$$\text{Kanban Size} = 107.5 * (2 + 1) + 50 = 372.5 = 373 \text{ units}$$

$$\text{Container size} = \text{kanban size} \div \text{number of containers} = 373 \div 10 = 37.3 = 38 \text{ units}$$

Note: To create a larger container size, decrease the number of cards in the kanban Size Calculation parameter Definition program.

Example: Kanban Size Calculation Using Processing Options

This example illustrates the calculation of kanban size using the processing option on the Demand tab of the Kanban Size Calculation program (R30450).

Sum of Included Demands

The processing option on the Demand tab in the Kanban Size Calculation program is set to 1 – Sum of Included Demands.

Kanban standard equation 2 – fixed container size and average demand – is used to calculate the kanban size and number of kanban cards.

Prerequisite Setup

Forecasts and sales orders were entered for 9 time periods. Verify that the MRP Time Periods processing option in the MPS Regeneration program (R3482) is set to 9 periods and the Periods in MRP Window field in the Kanban Size Calculation Parameter Definition program (P3018) is set to 9.

The MRP Regeneration program ran for 5 days, 3 weeks, and 1 month. The resulting time series is as follows:

Date	FSCU Quantity	SOU Quantity	Sum of Included Demands
02 – Feb	100	30	130
03 – Feb	200	40	240
04 – Feb	300	50	350
05 – Feb	300	50	350
06 – Feb	200	100	300
13 – Feb	200	100	300
20 – Feb	300	200	500
27 – Feb	250	200	450
31 - Mar	100	200	300

The calculation method has been setup via the Kanban Size Calculation Definition program (P3017). The calculation method has the following calculation-specific parameter values, as defined in the Kanban Size Calculation Parameter Definition program.

Parameter	Parameter Value
Periods in MRP window	9
Days built per week	5
Days built per month	20
Scan delta days	1
Leadtime delivery (days)	2
Vendor split percent	0
Safety stock	50
Demand split percent	100
Container size	50
Min kanban size	20
Max kanban size	60

Average Daily Demand

Number of months in the chosen time horizon = 1

Sum of all monthly demands = 300 units

Number of weeks in the chosen time horizon = 3 weeks

Sum of all weekly demands = 300 + 500 + 450 = 1250 units

Number of days in the chosen time horizon = 5

Sum of all daily demands = 130 + 240 + 350 + 350 + 300 = 1370 units

$$\text{Total demand} = (\text{number of months} * \text{sum of all monthly demands}) + (\text{number of weeks} * \text{sum of all weekly demands}) + (\text{number of days} * \text{sum of all daily demands})$$

$$\text{Total demand} = (1 * 300) + (3 * 1250) + (5 * 1370) = 10900$$

$$\text{Total number of days} = (\text{number of months} * \text{days built per month}) + (\text{number of weeks} * \text{days built per week}) + (\text{number of days})$$

$$\text{Total number of days} = (1 * 20) + (3 * 5) + (5) = 40$$

$$\text{Average daily demand} = \text{total demand} \div \text{Total number of days} = 10900 \div 40 = 272.5 \text{ units/day}$$

Kanban Size Calculation

Kanban Equation 2 – Fixed Container Size and Average Demand

Because the demand split percentage is 100 percent, the average daily demand will remain the same.

The Kanban Master table (F3016) includes three kanban records for the same supplying branch, supplying location, consuming branch, consuming location, and item number. The demand has to be distributed evenly among the records.

$$\text{Average daily demand} = (\text{average daily demand}) \div (\text{number of similar kanban records})$$

Average daily demand = 272.5/3 = 91

$$\text{Kanban size} = \text{average daily demand} * (\text{leadtime delivery(days)} + \text{scan delta days}) + \text{safety stock}$$

$$\text{Kanban size} = 91 * (2 + 1) + 50 = 323 \text{ units}$$

The maximum kanban size is defined as 60 in the Kanban Size Calculation Parameter Definition program. Therefore, the kanban size is taken as 60, because 323 is greater than 60.

$$\text{Number of cards} = \text{kanban size} \div \text{container size} = 60 \div 50 = 1.2 = 2 \text{ cards}$$

Highest Value of Included Demands

The processing option on the Demand tab in the Kanban Size Calculation program is set to 2 – Highest Value of Included Demands.

Kanban standard equation 2 – fixed container size and average demand – is used to calculate the kanban size and number of kanban cards.

Prerequisite Setup

Forecasts and sales orders were entered for 9 time periods. Verify that the MRP Time Periods processing option in the MPS Regeneration program (R3482) is set to 9 periods and that the Periods in MRP Window field in the Kanban Size Calculation Parameter Definition program (P3018) is set to 9.

The MRP Regeneration program ran for 5 days, 3 weeks, and 1 month. The resulting time series is as follows:

Date	FSCU Quantity	SOU Quantity	Highest Value
02 – Feb	100	30	100
03 – Feb	200	40	200
04 – Feb	300	50	300
05 – Feb	300	50	300
06 – Feb	200	100	200
13 – Feb	200	100	200
20 – Feb	300	200	300
27 – Feb	250	200	250
31 - Mar	100	200	200

The calculation method has been set up via the Kanban Size Calculation Definition program. The calculation method has the following calculation-specific parameter values, as defined in the Kanban Size Calculation Parameter Definition program.

Parameter	Parameter Value
Periods in MRP window	9
Days built per week	5
Days built per month	20
Scan delta days	1
Leadtime delivery (days)	2
Vendor split percent	0
Safety stock	50
Demand split percent	100
Container size	50
Minimum kanban size	20
Maximum kanban size	60

Average Daily Demand

Number of months in the chosen time horizon = 1

Sum of all monthly demands = 200 units

Number of weeks in the chosen time horizon = 3 weeks

Sum of all weekly demands = 200 + 300 + 250 = 750 units

Number of days in the chosen time horizon = 5

Sum of all daily demands = 100 + 200 + 300 + 300 + 200 = 1100 units

$$\text{Total demand} = (\text{number of months} * \text{sum of all monthly demands}) + (\text{number of weeks} * \text{sum of all weekly demands}) + (\text{number of days} * \text{sum of all daily demands})$$

$$\text{Total demand} = (1 * 200) + (3 * 750) + (5 * 1100) = 7950$$

$$\text{Total number of days} = (\text{number of months} * \text{days built per month}) + (\text{number of weeks} * \text{days built per week}) + (\text{number of days})$$

$$\text{Total number of days} = (1 * 20) + (3 * 5) + (5) = 40$$

$$\text{Average Daily Demand} = \text{Total demand} \div \text{Total number of days} = 7950 \div 40 = 198.75 \text{ units/day}$$

Kanban Size Calculation

Kanban Equation 2 – Fixed Container Size and Average Demand

Because the demand split percentage is 100 percent, the average daily demand will remain the same.

The Kanban Master table contains three kanban records for the same supplying branch, supplying location, consuming branch, consuming location, and item number. The demand has to be distributed evenly among the records.

$$\text{Average daily demand} = (\text{average daily demand}) \div (\text{number of similar kanban records})$$

Average daily demand = 198.75/3 = 67

$$\text{Kanban size} = \text{average daily demand} * (\text{leadtime delivery(days)} + \text{scan delta days}) + \text{safety stock}$$

$$\text{Kanban size} = 67 * (2 + 1) + 50 = 251 \text{ units}$$

The Maximum kanban size is defined as 60 in the Kanban Size Calculation Parameter Definition program. Therefore, the Kanban Size is taken as 60, because 251 is greater than 60.

$$\text{Number of cards} = \text{kanban size} \div \text{container size} = 60 \div 50 = 1.2 = 2 \text{ cards}$$

Processing Kanban Transactions by Item

Use one of the following navigations:

From the Daily Processing - Repetitive menu (G3115), choose Kanban Consumption.

From the Daily Processing - Repetitive menu (G3115), choose Kanban Supply.

A single program, Kanban Processing (P3157), manages the electronically implemented kanbans by using two modes. One mode processes kanban consumption by item, while the other mode processes kanban supply by item. Use the consumption mode to access kanbans at a consuming location, and the supply mode to access kanbans at a supplying location by specifying one or a combination of the following criteria:

- Item
- Location
- Supplier
- Kanban identification

The Kanban Processing program has a processing option that you use to specify whether the program uses kanban consumption mode or kanban supply mode. User defined code 31/KS specifies the kanban status as follows:

- 1 – Check in
- 2 – Check out
- 3 – Complete
- 4 - Destroyed

Kanban consumption mode allows you to access all kanbans at a specified consuming location. After you locate items, depending on the status of each item, you can assign one of the following statuses at a consuming location:

- Checked-in (1)
- Checked-out (2)

Kanban supply mode allows you to access all kanbans that need replenishment for items that are stored or produced at a specified supplying location. After you locate items, depending on the status of each item, you can assign one of the following statuses at a supplying location:

- Checked-in (1)
- Completed (3)

Kanban check-out occurs when the kanban container is empty and requires replenishment. You use the kanban check out function to initiate the replenishment transaction. For example, if your system is set up to do so, you might scan the kanban card to check it out.

After you check out the kanban, the software initiates a replenishment action that depends on the source type of the kanban. The system uses both the supplying and consuming locations in the kanban definition to electronically process subsequent material movements, which can include inventory issues to orders and inventory transfers.

You check in a kanban to designate that the materials are available for use. Depending on your individual business practices, you can check the kanban in when the materials become available at the supplying location, or you can wait until the kanban materials have arrived at the consuming location to process the check-in transaction in the software.

In a two-phase kanban, a third kanban status, Complete, indicates that the refill is complete at the supplying location and the kanban can be checked in. Because only inventory transfer transactions occur for source type 2 kanbans, two-phase kanbans do not have a Complete status.

Source Type 1: Work Order and Rate Schedule Kanbans

A source type 1 kanban is used when the replenishment that must occur requires manufacturing activity. This activity can be either a work order to a work center or a rate schedule quantity to a dedicated production line.

The determination of whether you will produce these items with work orders or rate schedules is a fundamental business process decision, and the software determines which document type to create (and the program to call to create the order) by the order policy code value that you set in the additional system information of the related branch/plant record. If you want your kanban to generate rate schedule orders for your item, you must use an order policy code value of 5.

All kanban containers can be re-used once they have been checked in, so the records do not have to be managed unless business process or demand information dictates that you do so.

When you perform a check-out transaction for a source type 1 kanban, the system creates a manufacturing order and updates the Order Number and Order Type fields in the detail area. For multicontainer kanbans, the system generates orders only when the last card is checked out.

To simplify the process of managing orders and their paperwork, you can set a processing option for the Kanban Processing program (P3157) to specify that the system run the Order Processing batch program (R31410) automatically when Source type 1 kanbans are checked out. Provided that the required manufacturing information has been set up correctly, the software processes the kanban-generated order to attach parts list and routing information to the order header. The work order start date is forward-scheduled. For the start date to be calculated correctly, the scan delta days and leadtime delivery (days) in the Kanban Size Calculation Parameter Definition program (P3018) must be set up for the kanban ID. Pick lists for required components can also be generated if you are using Advanced Warehousing functionality.

If the item is a rate-schedule item, the system searches for an existing open rate that meets the kanban requirement, and then creates a new rate if one does not exist. For the system to use an existing rate, the following conditions must be met at the time that the kanban is checked out:

- The start date for the existing rate is less than or equal to the date on which you have checked out the kanban.
- The requested date for the existing rate is greater than or equal to the date on which you have checked out the kanban.
- The exiting rate does not meet or exceed the closed rate status that you entered in the processing options of the version of the Kanban Processing program that you are using to process the check-out transaction.

If all of these conditions are met, the software then determines whether the line and cell identifier in the kanban master is the same as the line and cell for the existing rate.

After the software validates this information and finds a rate to match all criteria, it adds the kanban quantity to the open rate schedule and aggregates it on the same day as the kanban is checked out.

Note

The system does not use the default period information in the line and item relationships to spread the kanban order quantity. With kanban check-outs for rate scheduled items, the system assumes that the kanban demand is due on the same day that it is checked out. Rate quantities, however, can be further managed using the Line Scheduling Workbench (P3153) and Line Sequencing Workbench (P3156) programs n the Daily Processing – Repetitive menu (G3115).

Typically, you use the supply mode of the Kanban Processing program to initiate movement of replenished materials from the supplying location to the consuming location. For the manufacturing order that was created by the kanban check-out action, the check-in action initiates a super backflush completion transaction. This activity assumes a one-phase kanban. If this kanban is a two-phase kanban, you must perform the Complete transaction to initiate the work order or rate schedule super backflush transactions.

During the check-in transaction, you complete all of the order completion process steps and transfer the resulting subassembly inventory from the supplying location to the consuming location, each of which would typically be an inventory location at a specific work center or strategic location on a production line. The Work Order Completion Detail form contains information about the location where the material is completed, and the system retrieves this information from the kanban master record. The supplying location in the kanban master record is always the default location where the work order completions occur. From this location, the system automatically transfers the materials by using an inventory transfer function.

For any kanban-generated manufacturing order, the software can interactively or blindly process the related work order issues, hours, quantities, and work order completions. In blind mode, the Super Backflush program (P31123) initiates all of these transactions, and no forms appear for you to use to review or revise any of the related order data. You specify whether to use interactive or blind mode processing in the processing options of the Kanban Processing program.

Note

Because the two versions of the Kanban Processing program work independently, you must set the processing options of each to process transactions according to your business process decisions.

The Work Order Inventory Issues program (P31113) can automatically suggest the proper issue quantity for your kanban-generated work order if the following information is set up in the software:

- The issue code for all components that you want to issue automatically is set to U in the bill of material or work order parts list, which is derived from the bill of material. The U issue code is required for super backflush work order completions. Even if you set up the Work Order Inventory Issues program so that it does not validate the issue code type, the software does not suggest the issue quantity for the work order transaction. If you are processing all of these transactions blindly during kanban check-in, invalid issues are recorded.
- The last operation in the item's routing has a pay code of M or B. You use the M pay code if you want to record only material during super backflush. You use the B pay point code if you want to record material and labor. If you do not set up your routing correctly, the software does not issue materials when the work order or rate schedule is completed.

- The processing of the Work Order Inventory Issues program (P31113) is set to suggest issue quantities that are based upon the work order or rate schedule quantity completed.

The system retrieves this information from the bill of material, which subsequently becomes the work order parts list. The Work Order Inventory Issues program can be set to both validate the issue code type (manual issue, backflush, and so on) and suggest the issue quantity, based upon the order quantity. Order yield and shrink can also be applied, if required.

Note

If you do not use the U issue code type in your bill of material (or parts list), the software does not suggest issue quantities, regardless of the processing option setting in the Work Order Inventory Issues program. If you are executing material issues blindly, the system records incorrect issues in the Item Ledger File table (F4111).

The Hours and Quantities program (P311221) provides order hours and order quantity information for manufacturing accounting. When you generate a manufacturing order by using a kanban check-out transaction, the system uses the standard hours in the routing and the kanban order quantity to calculate the required order hours. The system uses the calculated hours for the order to update the hours and quantities information for the kanban order. As a separate process, you then update hours and quantities information for manufacturing accounting batch programs.

On the Work Order Completion Detail form, you can create or review lot and location identifiers for kanban-generated work order completions when location control in the branch/plant constants is inactive. Lot and serial numbers are subsidiary location identifiers in the Item Location File table (F41021). If you activate the Location Control option in the branch constants, you cannot create new location records during transaction processing. When you use location and lot information during work order or rate schedule completions, all location information carries through to the inventory transfer.

When manufacturing orders are completed, whether by a kanban transaction or manual shop floor management processing activities, the related transactions for work order inventory issues and work order completions are recorded in the Item Ledger File table (F4111). Hours and quantities transactions are recorded in the Work Order Time Transactions table (F31122). The inventory transfer for the kanban materials movement is also recorded in the Item Ledger File table. The following table lists the default document types for these transactions:

Transaction	Default Document Type
Work order inventory issue	IM
Hours and quantities entries	IH
Work order completions	IC
Inventory transfer	IT

Note

You can change these document types during system setup. These document types are shipped with the software.

Source Type 2: Inventory Transfer Kanbans

When a Source type 2 (inventory) kanban container is emptied of all items, the consuming location checks it out to return it to a raw materials inventory location, which could be a storeroom or a materials staging area from which production inventory requirements enter into the system. This staging area, or supermarket, location is used to manage raw and in-process inventory (RIP). When the empty container is replenished, a stockperson—for example—checks it in. The check-in indicates to the software that the kanban has been filled, and an inventory transfer transaction is triggered to denote movement of the inventory from the raw material location to the shop floor. In practice, the material moves to its physical consuming location at the work center.

The transactions that occur are inventory transfers which are noted by an IT document type in the Item Ledger File table (F4111). When inventory is transferred from one location to another, the item ledger records it as a debit to the from location and a credit to the to location. A subtraction and an addition record appear for all inventory transfers so that inventory records remain balanced.

You can set up a source type 1 kanban as a 2-phase kanban, but no additional transactions occur during a Complete transaction for a kanban of this type.

Source Type 3: Supplier Kanbans

You use a source type 3 kanban when you must buy materials from a supplier and have them moved directly to the location at which they will be consumed. The kanban consumption mode of the Kanban Processing program has a processing option that you can set so that the system creates a purchase order and calls a version of Purchase Orders program (P4310). Depending on how you set the processing options, the kanban check-out transaction can trigger one of the following software actions:

- A search for an existing open purchase order that the system can use to refill this kanban
- A search for an open blanket purchase order from which a purchase order release can refill the kanban
- The creation a new purchase order for the kanban requirement

When the kanban is checked in, the kanban status changes to 1 to indicate that the supplier has filled the order and the purchase order receipt can be processed. An OV transaction appears in the Item Ledger File table when a purchase order is received. An OV transaction indicates that an open purchase order voucher has not been matched and closed for accounting. The system creates a PV transaction when the open voucher has been matched.

Note

If you want the system to automatically initiate the purchase order receipts process when you perform a check-in or complete transaction for a source type 3 kanban, you must activate the Receipts option in the related Kanban Master record.

When you check out a supplier kanban, the system uses the unit of measure that you have defined in the kanban master for the purchase order detail line, regardless of the way in which the Unit of Measure processing option is set in the Purchase Orders program (P4310). The kanban unit of measure is the unit of measure that the system uses for the purchasing transaction. When the inventory transfer occurs, it also appears in the kanban unit of measure.

When you enter a lot number on the detail line of a kanban purchase order prior to the check-in transaction, the system does not carry the lot number through to the following:

- The detail transaction line of the Kanban ID when you check it in to process the purchase order receipt
- The Item Ledger File table when the OV record is created
- The inventory transfer that moves the materials from the supplying location to the consuming location

These actions occur regardless of whether the kanban is one-phase or two-phase. The results are the same in both situations.

Source type 3 kanbans can also be used to release quantity from blanket purchase orders that are open and valid for the kanban check-out requirements. You cannot create blanket purchase orders with a kanban check-out transaction. You must set up specific information in the software before you can release from blanket purchase orders with kanban check-out transactions.

Source Type 4: Outside Assembly Kanbans

You can use a source type 4 kanban when you have a value-added manufacturing process that you choose to outsource. As part of the outsourcing process, you provide the outside assembly supplier with the required materials (raw materials or subassembly parts). This situation, for example, could be the case because your company can provide the raw materials or subassembly parts at a lower overall cost than can the outsourcing supplier. In either situation, you use the outside assembly kanban to create a sales order to sell all of the outside process items to your outsource supplier; and, as part of the same kanban process, you use a purchase order to buy back the value-added (perhaps finished) product. This process, while similar to an outside operation purchase order that is used in shop floor transactions, offers more direct control and visibility of inventory than the outside operation purchase order. The sales order transaction relieves inventory balances for all components of the outsource assembly while the purchase order transaction increments inventory for the outsourced parent item.

To control which items are shipped via sales order and acquired via purchase order when a source type 4 kanban is checked out, you create a bill of material for the parent item. This bill of material lists the following:

- The required outsource component items, which appear as individual detail lines within a sales order document
- The parent item of the bill of material, which is the value-added item that you are buying back from the supplier

When you check in a one-phase source type 4 kanban, the system performs a shipment confirmation transaction, a purchase order receipt transaction, and an inventory transfer transaction that moves the material from the supplying location to the consuming location that is specified in the kanban master record. If the kanban is two-phase, you must move the kanban to a Complete status before checking it in. The Complete status transaction ship confirms the sales order for the component items and performs the purchase order receipt for the parent item.

Note

When you set up kanban items that are used for outside processing, you must use a stocking type of 9 and a special handling code of O for all of the items that are involved in these transactions. Such a transaction includes the parent item of the related bill of material.

You should not include source type 4 kanbans when you run the Kanban Size Calculation program (R30450). Because the Description 2 column of the stocking type definition in the user defined code table 41/I is intentionally blank for stocking type 9, the system does not consider these items purchased or manufactured. Material requirements planning (MRP) does not plan these items. You will not see a time series for these items in the MPS/MRP/DRP Summary File table (F3413).

Source Type 5: Interbranch Transfer Kanbans

For a source type 5 kanban, the system generates sales transfer orders. When you check out a kanban that is supplied by a branch/plant, the system creates a sales order to the branch/plant for the end-item and a transfer order for the end-item to be used at check-in.

The sales side of the transfer order has one detail line that contains the following information:

- The Item Number field contains the kanban item.
- The Branch/Plant field represents the kanban that supplies the branch.
- The Quantity Ordered field represents the kanban size.
- The Location field displays the kanban supplying location.

The purchase side of the transfer order has one detail line that contains the following information:

- The Item Number field contains the kanban item.
- The Branch/Plant field represents the kanban consuming branch.
- The Quantity Ordered field represents the kanban size.
- The Location field displays the kanban consuming location.

After the last card is checked in using the kanban supply mode of the Kanban processing program, the system receives the purchase order that was created at check-out and completes the inventory transfer.

The purchase order is received to the location that is specified in the Transfer Order Receipt Location field in the processing options of the Kanban Processing program (P3157).

Note

If the system finds errors while receiving the purchase order, the order will be processed.

Ad hoc kanban cards work the same as regular kanban cards for all source types. However, an additional status is required for ad hoc cards. When you check in an ad hoc card, the system changes the status to 4 (destroyed) for a one-phase kanban. When the ad hoc card is completed, the system changes the kanban status to 4 (destroyed) for a two-phase kanban.

The Kanban Processing program contains a Row menu option to initiate an ad hoc card when it has a destroyed status (the kanban status is 4). This situation allows you to re-use the ad hoc card for the same supplying branch, consuming branch, supplying location, consuming location, and item number.

When you initiate the ad hoc card, the system changes the status from 4 (Destroyed) to 1 (check in). This situation means that the ad hoc card is ready for use. The Initiate Ad hoc Row menu is enabled only when the kanban status is set to 4 and you highlight that particular record in the detail area.

When using lot or serial numbers, the lot number on any kanban entered at the time of check-in must be a valid lot number that exists in the lot master record, and that lot must have a defined expiration date. The lot number entered here updates both the Lot To and Lot From fields on the resulting inventory transfer.

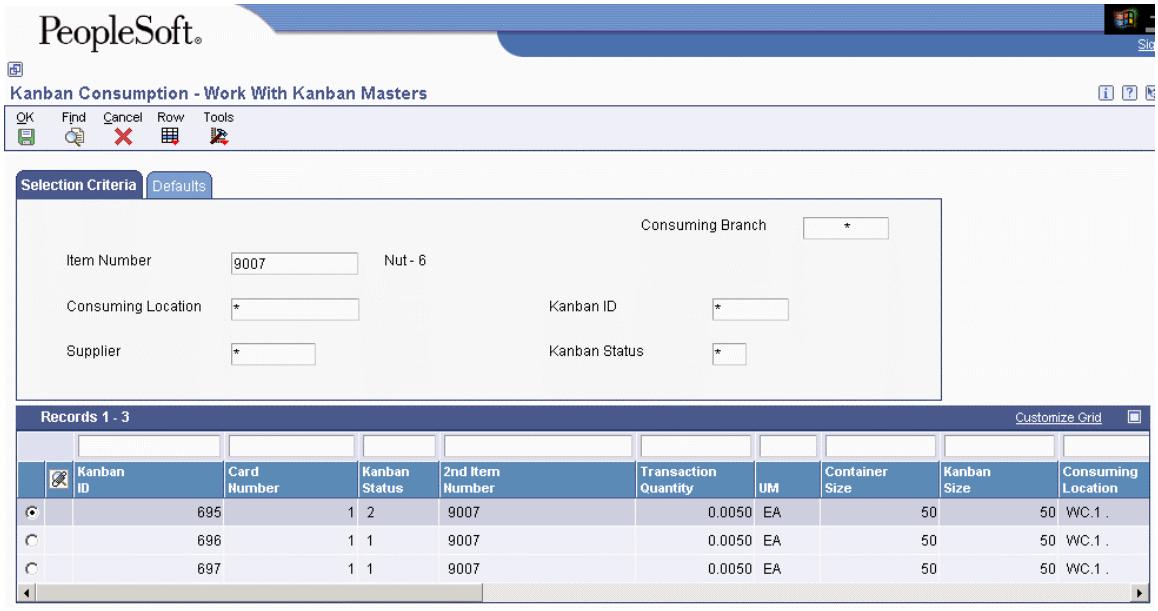
The kanban master record does not have fields that are associated with lot or serial numbers. You can indicate only inventory locations that are valid in the Item Location File table.

▶ To process kanban consumption by item

From the Daily Processing - Repetitive menu (G3115), choose Kanban Consumption.

1. On Work With Kanban Masters, complete the following fields and click Find:
   - Consuming Branch
   - Item Number
2. To check out a kanban, select the detail line that represents the kanban container that you want to process, and then choose Check Out from the Row menu.

   If you have the processing option set up to do so, the system prompts you to confirm the transaction. When the check-out transaction has been processed, the kanban status is 2 (checked out).



3. To check in a kanban that was supplied by the production line (and for which a rate or work order was created), choose the Defaults tab and complete the following fields:
   - Shift
   - Employee Number
4. Choose the appropriate Kanban ID record, and then choose Check In from the Row menu.

Note

If the kanban card is an adhoc card, the system updates the kanban transaction status to Destroyed and indicates that you should physically destroy the adhoc kanban card.

5. To check out a kanban, choose the appropriate Kanban ID record, and then choose Check out from the Row menu.

   The system displays a confirmation form that permits you to confirm or cancel your kanban transaction.

► **To process kanban supply by item**

From the Daily Processing - Repetitive menu (G3115), choose Kanban Supply.

1. On Work With Kanban Masters, complete the following fields and click Find:
   - Supplying Branch
   - Item Number
2. Choose the Defaults tab, and then complete the following fields to check in a kanban that was supplied by the production line (and for which a rate schedule or work order was created):
   - Shift
   - Employee Number
3. Choose the appropriate Kanban record, and then choose Check In from the Row menu.
4. Click OK.

Ad hoc Kanban Cards

When an abnormal spike in demand occurs, you can insert an ad hoc kanban card for a single cycle to ensure that the in-process inventory will cover the demand.

You use the Kanban Master Revisions program (P3016) to add an ad hoc card. For a unique combination of supplying branch, consuming branch, supplying location, and consuming location, you can have one ad hoc kanban ID. You must have at least one non-ad hoc kanban ID that exists for the combination of supplying branch, supplying location, consuming location, consuming branch, and item number. An ad hoc kanban ID cannot be the first (or only) kanban ID that you have for an item.

You can set the quantity of the ad hoc kanban to be any number. The quantity definition of the ad hoc kanban is not dictated by the detail information for the parent kanban. Ad hoc kanban information is excluded from the Kanban Size Calculation (R30450) and the Kanban Replenishment Capacity (P3019) programs because the demand is uncertain and not planned.

Note

You can have only one ad hoc kanban for each unique combination of supplying branch, consuming branch, consuming location, supplying location, and item number. If two cards exist for an ad hoc kanban in the kanban master, the system represents it as two containers during kanban processing.

When an ad hoc kanban record exists, the system denotes its existence with a Y value in the Ad Hoc Card Exists field of both the kanban master and the Kanban Processing program (P3157). The number of cards for the ad hoc kanban dictates the number of records in the Kanban Card Detail table (F30161). As with other multicontainer kanbans, each container is represented as a separate record in the detail table.

Upon check in, the kanban transaction status is set to Destroyed (kanban status 4).

You can initiate the ad hoc kanban after it is destroyed. You do this initiation by selecting the ad hoc kanban record and then choosing Initiate Ad Hoc from the Row menu. The Initiate Ad Hoc option is available for selection only when the kanban that you selected is an ad hoc kanban. When you select the Initiate Ad Hoc option, the system changes the status of the ad hoc kanban to 1(checked in).

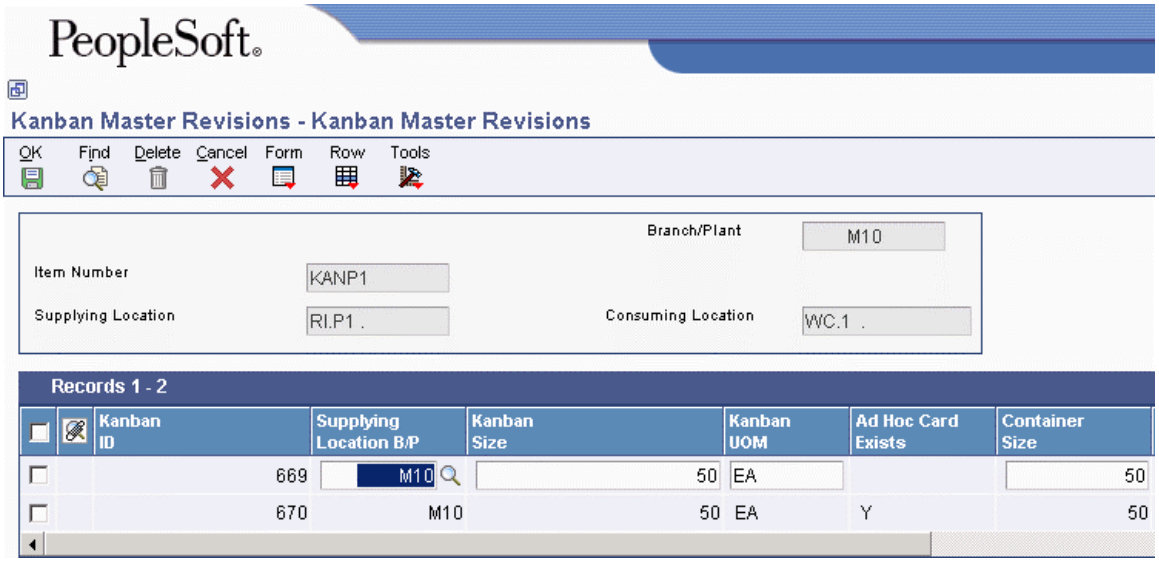
The kanban master maintains the information that identifies any kanban as an ad hoc card. The system maintains ad hoc card information in the Kanban Master table (F3016), even when the card has a status of Destroyed (kanban status 4).

▶ To add an adhoc kanban card

From the Kanban Management Setup menu (G30411), choose Kanban Master Revisions.

1. On Work With Kanban Master, enter any combination of required information to locate an existing kanban master record, and then click Find.
2. Choose the kanban master record for which you want to add an adhoc kanban.
3. On Kanban Master Revisions, choose Insert Ad Hoc from the Form menu.

   The system generates a new adhoc kanban card that includes the same detail information as the first kanban record. To customize the adhoc kanban record to your demand needs, you can override its information.



Note

You must set the related processing option of the Kanban Master Revisions program (P3016) to allow adhoc card creation.

Kanban Transactions

To support tight integration between kanban and replenishment transactions, the software must retain a relationship between the physical status of the kanban and any resulting transactions in the software. The relationship exists between the kanban and replenishment transaction so that, when the status of the kanban changes, the system is updated accordingly.

For example, when a source type 1 kanban is checked out, the system generates the associated work order to replenish the kanban. To increase the integration between kanbans and the orders that they generate, you can process the Complete transaction for the kanban from the related order completion or receipt program. For example, you can perform a Complete transaction for a work order kanban by using the Work Order Completions program (P31114).

This functionality only applies to two-phase kanbans.

Work Order Completions and Super Backflush for Kanban

For any source type 1 kanban, regardless of whether it is 1-phase or 2-phase, you can perform completions for a kanban-generated work order either interactively or blindly at the time that you check in the kanban or mark it as complete. The method that you use to process completions depends on the way in which the processing options are set in the version of the Kanban Processing program (P3157) that you are using. Typically, you use the Kanban Supply version of the Kanban Processing program to check in kanbans for which work orders or rate schedules exist, but you can also use the Kanban Consumption version to perform kanban check-in transactions. However, you must use the Kanban Supply version to perform Complete transactions for kanban orders.

Note

You should verify that the processing options of the Kanban Processing program that you are using for check-in and completion transactions are set according to your business process. These versions work independently, and the software processes are dictated by the processing option settings of each version.

You can also use the Super Backflush program (P31123) or the Work Order Completions program (P31114) to process the completion of a kanban-generated work order. This situation will move the status of the Kanban ID from checked out (2) to complete (3). For check in, you must always use the Kanban Processing program (P3157).

The system allows you to complete a kanban card from work order completions and super backflush, provided that it has the following characteristics:

- The kanban is a source type 1- or 2-phase kanban.
- The kanban is checked out; hence, a work order is associated with the kanban.
- The manufacture of the kanban subassembly is completed by the production cell.

When you attempt to complete a work order through work order completions or super backflush, the system determines whether the work order was generated by a kanban transaction. The system performs a backflush (if it is set up to do so), updates inventory for the completed item, updates inventory for the components, initiates the kanban complete transaction, and updates the kanban status to Checked In.

You must have the bill of material or generated parts list for the kanban work order (or rate schedule) set up to backflush order inventory. To do this activity, you must use either the B or U issue code type. If you are backflushing work order inventory when the order is complete by .using the Completion with Backflush version of the Work Order Completions program, then you must have the following set up:

- The parts list items must have an issue code type of B
- The work order routing must have at least the last operation step with a pay point code of B or M.

If you are using the Super Backflush program to backflush materials, then you must have the following itemsset up:

- The parts list items must have an issue code type of U.
- The work order routing must have at least the last operation step set up with a pay point code of M or B.

Caution

The setup of your system becomes especially critical when you process work order completion activities blindly during kanban complete transactions. If you do not have the proper setup, materials might not be properly accounted for when kanban transactions are processed.

See Also

- *Completions* in the *Shop Floor Management Guide*

Purchase Order Receipts for Kanban

The system allows you to check in a kanban card from purchase order receipts. The kanban must be a source type 3, two-phase kanban that is checked out.

When you attempt to receive a purchase order through the Purchase Order Receipts program (P4312), the system determines whether the purchase order is generated from a kanban. A check-out process at a specific location within the enterprise initiates kanban records. Thus, the kanban receipt must identify the consuming location to facilitate subsequent movement of the kanban. You enter the purchase order receipt for the kanban and confirm the quantity received.

When you approve the receipt, the system updates inventory, creates a receipt record, creates general ledger entries, initiates the check-in transaction, and updates the kanban status to Completed.

When the order quantity is not met, such as when the supplier overships or undership, the system updates the purchase order and kanban record, and cancels any remainder.

See Also

- *Receipt Processing* in the *Procurement Guide*

Blanket Order Releases with Kanban

You can enter a blanket order when you have an agreement with a supplier to purchase a certain quantity or amount of goods over a period of time. You must enter the entire quantity or amount on the blanket order and the negotiated the price for those items.

Each time that you are ready to use a portion of the goods on your blanket order, you can create a purchase order to release that quantity from the blanket order. In order to release quantity from an open blanket order using kanban processing, you must set up the system in the following manner:

- Set the Create Purchase Order processing option on the Kanban Consumption program (P3157) to create a new purchase order upon kanban check-out. You can do this with a processing option value of 1 or 2.
- Set the Blanket Releases processing option on the Processing tab of the Purchase Order Entry program (P4310) to release from blanket orders. You can do this with a processing option value of 1 or 2.
- Indicate the Purchase Order Entry version that you have set up to perform blanket order releases in the processing options of the Kanban Consumption program.
- Set up the version of the Purchase Order Inquiry program (P3160W) with the document type that you use for the blanket orders from which you release quantity during kanban processing. If you do not indicate the document type for blanket orders in the processing options of this program, you cannot perform blanket order releases using kanban processing.

Note

The Purchase Order Inquiry program is not a Procurement system program. You use this program only in association with kanban processing. By using this program, you can set up the software to process blanket orders that are separate from other purchasing orders in the system. For example, you can use a different blanket order document type for kanban-specific blanket orders that you negotiate for a 6-month period instead of a 1-year period.

If you do not set up all of these criteria to release the quantity from an open blanket order, the system creates a new purchase order for the kanban quantity every time that you check out the related kanban.

If you have more than one valid blanket order from which the kanban quantity can be released, the system displays the Work With Open Blanket Orders form so that you can choose the open blanket order from which you want to release the kanban transaction quantity. When you release a quantity from a blanket purchase order to create a purchase order, the original blanket order number (and related document type) is referenced in the detail line of the purchase order that you create.

► To release quantity from a blanket order using kanban processing

From the Daily Processing – Repetitive menu (G3115), choose Kanban Consumption.

1. On Work With Kanban Masters, complete any of the following fields and click Find:
   - Consuming Branch
   - Item Number

- Consuming Location
- Supplier
- Kanban ID
- Kanban Status

2. Select the supplier (source type 3) kanban master record.

   The kanban that you select must be a kanban (and related item number) for which you have at least one open blanket order.

3. Choose Check Out from the Row menu.
4. On Work With Open Blanket Orders, choose the blanket order from which you want to release the kanban transaction quantity.
5. Click Select.
6. If you have the option to confirm kanban transactions activated, choose OK on the Confirmation selection form.
7. On Work With Kanban Masters, review the purchase order document number and related order document type that the system generated.

   The system displays only the purchase order document type for blanket order releases in the kanban transaction record. Neither the blanket order document number nor the blanket order document type appears in the kanban transaction record.

Note

When you are ready to check in the kanban to designate container fulfillment, the process becomes the same as the check-in process for any other supplier (source type 3) kanban. If you have a 1-phase kanban, the system performs the purchase order receipt and the inventory transfer when you check in the kanban. If you have a 2-phase kanban, you must perform a completion transaction to process the purchase order receipt of the kanban-generated purchase order, and then check in the kanban to initiate the inventory transfer that dispositions the material from the supplying location to the consuming location.

Processing Options for Purchase Order Inquiry (P3160W)

Default

Enter in the following:

Order Type

From Status

Thru Status

Currency Code

Processing

Enter in the following:

1. Enter a '1' if the above Status Codes are based on Last Status. If left blank, the Next Status will be used.

2. Enter the value to specify which date will be checked against the date range. If left

blank, Request Date is used.

3. Enter a '1' to make the costs non-display. If left blank, the cost will be displayed.

Versions

Enter in the following:

Enter the version for PO Receipt Routing (P43250). If left blank, ZJDE0001 will be used.

What You Should Know About Purchase Order Inquiry (P3160W) Processing Options

Default tab

Use the first processing option to specify the document type that you associate with the blanket purchase orders from which you will release quantity using kanban processing. If you choose to create a new document type to represent blanket orders, whether for kanban processing or otherwise, you must set up that document type in the Document Type Maintenance program (P40040).

Use the second and third processing options to specify the valid statuses of the blanket orders that you use in blanket order releases. The statuses that you indicate here must also be set up in the order activity rules for the document type that you specified in the first processing option.

Use the last processing option on this tab to indicate a currency value, if it is different from the base system currency.

Processing tab

Use the first processing option to indicate whether you want the status codes on the Default tab to be the next status or the last status of the blanket order. The system uses these statuses to find only those blanket orders that are within the status limits that you indicate. The system does not use these statuses for purchase orders that are created by kanban processing.

Use the second processing option to select the order date that you want the software to use when searching for open blanket orders. You should set this processing option to match your business process for blanket orders because it prevents valid blanket orders from appearing during kanban processing when you search using the wrong date.

Use the last processing option to display or hide cost information in the orders that the system displays for blanket release.

Versions tab

Use this processing option to indicate the version of the Receipt Routing Movement and Disposition program that you want to use, if it is different from the pristine version (ZDJE0001). In order to use receipts routing for purchased items, you must set up the following:

- Set up the item branch record of the kanban item so that it invokes receipts routing during purchasing receipts
- Set up the receipts routing definition and associate it to the item record of the kanban

See Also

- *Working with Blanket Orders* in the *Procurement Guide*

Processing Options for Kanban Processing (P3157)

Mode

1. Enter a '1' to set mode to Kanban Supply. If left blank, Kanban Consumption mode is assumed.

2. Enter a '1' to prompt the confirmation of a transaction.

3. Enter Kanban Status to display, if left blank all statuses are displayed.

Defaults

1. Item Number(Optional).

2. Location(Optional).

3. Enter number of hours equivalent to one day. Default is 8.

4. Enter the Closed Status for a rate schedule or work order. (Default is '99').

5. Bill of Material Type. If left blank, 'M' is used.

6. Employee Number (Optional).

7. Transfer Order Receipt Location

Process

1. Enter a '1' to automatically call Work Order Processing (R31410) when a work order is created.

2. Enter a '1' to perform a blind execution of Hours & Quantities.

3. Enter a '1' to perform a blind execution of Material Issues.

4. Enter a '1' to perform a blind execution of Work Order Completions.

5. Enter a '1' to perform a blind execution of Shipment Confirmation.

6. Enter a '1' to perform a blind execution of Inventory Transfers.

Purchasing

1. Create Purchase Order

Blank - Use PO already created

1 - Create a new PO

2 - Find existing PO and if none exists
create a new PO

2. Enter a '1' to trigger an EDI 862 Transaction

Versions

Enter the version for the following programs. If left blank ZJDE0001 is used unless specified otherwise.

1. Rate Header Maintenance (P3109)

2. Part Availability (P30205)

3. Work Order Entry (P48013)

4. Work Order Processing (R31410)

5. Open Orders Inquiry (P3160W)

6. Purchase Orders Entry (P4310)

7. Purchase Order Print (R43500). Used to generate an EDI 862 transaction. If left blank,

XJDE0011 is used.

8. Purchase Order Receipts (P4312). To be called in blind mode. If left blank, ZJDE0008 is used.

9. Super Backflush (P31123)

10. Hours & Quantities (P311221)

11. Material Issues (P31113)

12. Work Order Completions (P31114)

13. Inventory Transfers (P4113)

14. Sales Order Entry (P4210)

15. Shipment Confirmation(P4205)

What You Should Know About Kanban Processing (P3157) Processing Options

Mode tab

Use the first processing option to specify whether the version of the program is to be used for check-out (consumption) or for check-in (supply).

Enter 1 in the transaction confirmation processing option to specify that the system displays a confirmation message when it performs the transaction.

Enter a kanban status in the kanban status processing option if you would like to restrict the kanbans that you review to a particular status.

Defaults tab

You can review information for a single item by entering the item number in the Item Number processing option. You can review information for a single location by entering the location in the Location processing option.

Use the Closed Status processing option to search for open orders.

Use the Bill of Material Type processing option to specify the bill type to use when creating a work order.

For completion and check-in transactions that record work order and rate schedule completions by calling the Super Backflush program (P31123), you can indicate the default employee number to use for the detail completion lines and hours and quantities information.

For Type 5 kanbans, you can indicate a default location to which the order transfers will be received.

Process tab

To specify that the program run when a work order is created at the checkout of the last card or container in the kanban, enter 1 in the Work Order Processing (R31410) field.

When you enter 1 in the Hours_Quantities, Material Issues, Work Order Completions, Shipment Confirmation, and Inventory Transfers processing options, the programs execute in the background; otherwise they appear. The Hours_Quantities, Material Issues, and Work Order Completions processing options for this program override the processing options for the version of the Super Backflush program (P31123) that you are using.

Purchasing tab

When you enter 1 in the Create a Purchase Order field, the system creates a purchase order when you check out the last card or container in the kanban. When you enter 2 in the processing option, the system checks for an open purchase order that meets the checkout requirements before it creates a new purchase order.

You can enter 1 or 2 in the processing option to automatically release a kanban quantity from an open blanket order.

You can set a processing option to trigger an EDI 862 transaction.

Versions tab

The processing options on this tab allow you to define the versions that you want to use. If you leave the processing options blank, the system uses the ZJDE0001 version. The versions of the Work Order Completions (P31114), Material Issues (P31113), and Hours_Quantities (P311221) programs that you enter here override the versions that you enter for the version of Super Backflush program that you are using.

Insufficient Inventory Identification

The Kanban Replenishment Capacity program (R30470) allows you to track the production capacity of a kanban and compare it to the demand pattern of the item on the kanban for a period of time that you specify. The demand is taken as the raw demand from the material requirements planning (MRP) time series. The system calculates the production capacity of a kanban, based on a kanban ID, assuming that the check-out is completed on the start date specified. It then calculates the demand for the specified period of time. The system writes all kanbans that cannot meet the demand to a new table and displays an alert. The system clears the Kanban Replenishment Capacity table (F3019) every time that you run the Kanban Replenishment Capacity program.

The system uses the following equation to calculate the inventory shortfall or excess:

$$\text{Kanban capacity} = \text{kanban size} * \text{number of cycles} * \text{number of kanban records (that are similar)}$$

$$\text{Number of cycles} = [\text{number of months} * \text{number of weeks} * \text{number of days}] \div [\text{Scan Delta Days} + \text{Lead Time Delivery (Days)}]$$

If the item number, consuming branch/plant, consuming location, supplying branch/plant, and supplying location are the same, then the kanban capacity and demand are the same for those records.

The number of units by which the inventory exceeds or falls short of the demand is then associated with each kanban master. The system provides a report of the total kanban capacity compared to the total kanban demand.

When the demand exceeds the production capacity, it leads to an inventory shortfall. A shortfall of inventory indicates that the demand taken into account during the kanban size calculation is different from the demand taken into account during the shortfall measurement. The inventory manager can react to the shortfall based on the quantity by which the system falls short of inventory and the nature of the increase in demand. When the inventory falls short by a small quantity, the inventory manager might choose not to react at all. When the shortfall is too high, then the inventory manager might react to it based on the nature of the increase in demand. When the increase in demand is a temporary spike, then the inventory manager can add an adhoc card to the system. When the demand is permanent, then the inventory manager might run the Kanban Size Calculation program (R30450) to update the sizes.

Note

When the system identifies an inventory starvation situation, the kanban size is too low. Also, when a lot of adhoc cards appear in the system, the size calculation is a poor representation of the demand. In these instances, the inventory manager should run the Kanban Size Calculation program to adjust the kanban size.

Processing Options for Kanban Replenishment Capacity (R30470)

Defaults

1. Start Date

Blank = Use MRP Generation Date

2. End Date

(Required)

Versions

Enter the version for the following program

If left blank, version XJDE0001 will be used

3. Kanban Size Calculation (R30450)

Multitier Kanban Transactions

Many manufacturing facilities operate several manufacturing lines (or cells) that consume the same part, where the part operates as a kanban. The assembly line kanbans trigger replenishment through a central store, which, in turn, triggers a consolidated replenishment from a supplier. These multitier kanban transactions are triggered by a kanban reorder point set up for the source location.

An inventory kanban (primary kanban) can be tiered with another (secondary) kanban. You set up tiered kanbans to form a kanban chain. All links of the chain, other than the one farthest from the point of consumption, have to be inventory-replenished (source type 2) kanbans.

Note

The system requires that the primary kanban be source type 2 to enable the secondary kanban to be associated. The last kanban in the multitier chain can be any source type.

When a source type 2 kanban is slated to generate multitier kanban requests from the supplying location, the system maintains the information about the secondary kanban in the Related Kanban ID field in the kanban master record.

When you check in a primary kanban of source type 2, and a related kanban is set up, the following events occur:

- The line or cell operator checks in the source type 2 kanban.
- The system updates inventory to indicate that it is being transferred to the line.
- The system decrements inventory at the source location.
- The system performs a re-order point assessment on the source location.

  When the sourcing location is at or below the defined reorder point, the system creates a replenishment kanban trigger that is based on the item and consuming location. The system checks out the secondary kanban to fill the re-order point trigger. The system checks out a secondary tier kanban only when a primary tier kanban of source type 2 is checked in and the reorder point is triggered at the consuming location of the secondary kanban.

  Note

  You should enter 1 in the Create Purchase Order processing option on the Purchasing tab of the processing options for the Kanban Processing (P3157) program. The system cannot process this program for multitier kanbans when a value of Blank or 2 appears in this processing option.

  When the sourcing location is above the defined reorder point, the system does not create a replenishment trigger.

You are required to set up replenishment reorder points for the secondary kanban. The Fixed Putaway Locations program (P46012) manages kanban replenishment points for fixed locations. When you choose the Kanban option, location and normal replenishment point information appears in the detail area.

Note

For kanban-controlled items, enter 4 in the processing option on the Display tab. This value causes the system to display the Normal Replenishment Point field that is used with kanban.

The system ensures that the reorder point that you entered is in the primary unit of measure for the kanban item. If you try to enter a different unit of measure, the system displays an error message.

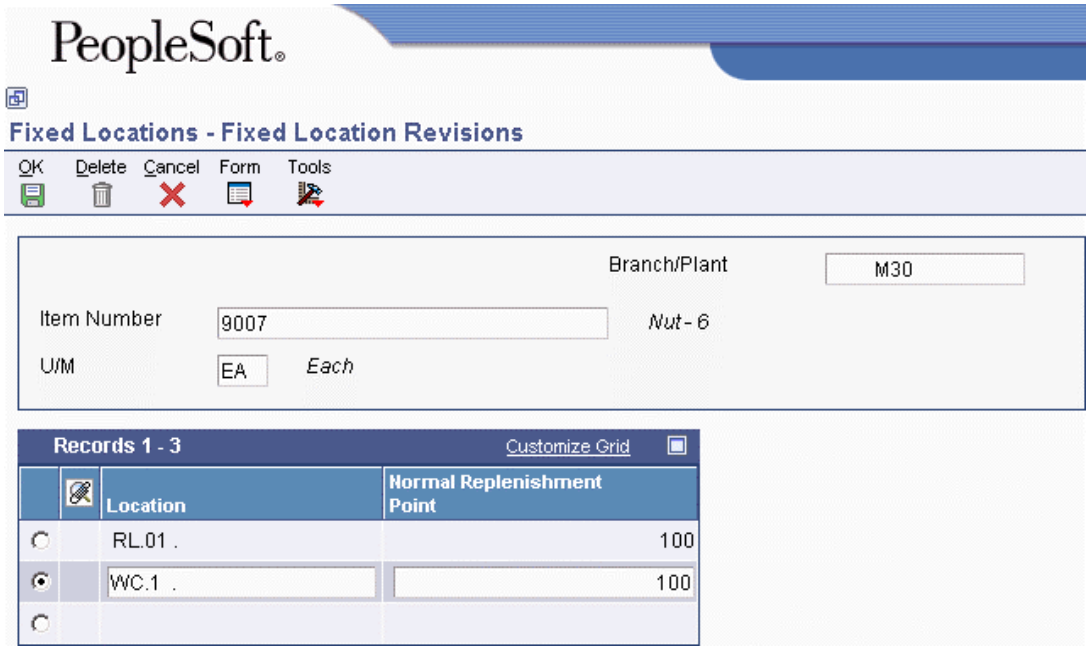
Note

Although this discussion centers on a two-tier kanban, a kanban with more than two tiers follows the same pattern.

▶ To define a kanban reorder point

From the Kanban Management Setup menu (G30411), choose Fixed Locations.

1. On Work With Fixed Locations, click the Kanban option, and then click Add.
2. On Fixed Location Revisions, complete the following fields and click OK:
   - Branch/Plant
   - Item Number
   - U/M
   - Location
   - Normal Replenishment Point



Planning for Kanban Management

In the current business environment, you might want to present the supplier of procured kanban items with the demand schedule for the item. To support the generation of a demand schedule, Material Requirements Planning (MRP) must first generate the component demand for kanban-controlled items. Nonprocured kanban-controlled items also use this demand to calculate size.

MRP Schedule Generation for Kanban Management

When you run a material requirements planning (MRP) generation, the system explodes the component demand and stores them in time series buckets. When the component item is kanban-controlled, the system generates the planning schedule and associated planning messages. However, you cannot view or process these messages. You run kanban-controlled items in MRP only to generate the demand. All replenishment action for kanban-controlled items should originate from the Kanban Processing program (P3157).

A kanban sourced by a work center creates a work order or a rate schedule that generates component demand requirements in MRP. MRP creates planning messages for a kanban-controlled item and its components. You cannot use messages generated for a kanban-controlled item to initiate replenishment.

A kanban sourced by an outside supplier initiates replenishment through a purchase order. MRP generates Order messages for such items, but they cannot be processed.

When the MRP generation is complete, MRP messages for kanban items do not appear in the MRP Detail Message Review program (P3411). The system does not allow the processing of messages for kanban items in the MRP Detail Message Review program (P3411) or the MRP/MPS Detail Message Processing program (R3411).

Note

The system does not differentiate the messages for kanban items from messages for regular items in any way other than disallowing processing.

All other MRP processing, such as pegging, time series, multiplant, min, and max, works the same way for kanban-controlled items as it does for regular items.

When MRP generation is complete, you can generate the demand schedule and send information to the supplier.

Demand Schedule Generation for Kanban Management

When material requirements planning (MRP) generation is complete, the planner runs the demand schedule extraction to generate the supplier item demand schedule. The system processes the MRP messages that it generates for both kanban-controlled and nonkanban items.

Before you can successfully use supplier release scheduling (SRS) for kanban-controlled items, you must define the demand by running the MPS Regeneration program (R3482) or inputting a manual (adhoc) release schedule.

Note

You do not need to create a blanket order for kanban-controlled items. You do not need to set up the supplier release master record in the Enter/Change Supplier Info program (P4321) because the kanban master identifies the supplier for the kanban-controlled item.

When SRS is set up, the system generates the demand schedule in the Vendor Schedule Quantity File table (F3430).

Each time, the system verifies whether an item is kanban-controlled, but it does not generate releases or purchase orders, neither blanket nor nonblanket, for kanban-controlled items, even when a supplier is commitment for the item.

The purchase order is released at the time of kanban check-out. If an outbound transaction (EDI 862) is set up, the system publishes it.

The Release Supplier Schedule program (R34410) ignores release generation for kanban-controlled items.

You can set a processing option that allows you to publish the demand schedule in the form of an outbound transaction (EDI 830).

See Also

- *Sending Shipping Schedules (862/DELJIT)* in the *Data Interface for Electronic Data Interchange Guide* for more information about kanban-related EDI transactions

Kanban Capacity Self-Service for Planners

To accurately account for kanban-controlled items, planners must first run material requirements planning (MRP) generation and then run the kanban size calculations. Then the planner can use the self-service portal to access information about kanban capacity.

The kanban self-service portal is restricted to internal users only, particularly to item planners who use the tool for easier viewing of kanban requirements. The portal also restricts the planner to changing only the capacity of a kanban.

When in the self-service portal, the planner can review information about kanbans. For instance, the portal alerts the planner about the number of kanbans in which capacity does not meet demand or in which capacity is greater than demand.

The planner's goal is to make the kanban size proportional to demand. Thus, the capacity should be equal to the size of the kanban.

► To adjust kanban size (self-service)

From PeopleSoft EnterpriseOne portal, choose View Kanban Capacity.

1. On View Kanban Capacity, review the capacity versus demand information.
2. Choose a record that you want to work with, and then click Edit in the Action.
3. On Edit Kanban Size, either enter a kanban size manually or click the Calculate Size button.

   Use the Calculate Size button to have the system calculate the size based on the defined equation and parameter values.

4. Click OK.

   The View Kanban Capacity form appears and displays the changes. On View Kanban Capacity, an asterisk appears in the Capacity column heading. The record for which the kanban size was edited displays the capacity in red. A note indicates that the capacity has changed and that you should run the Kanban Replenishment Capacity program (R30470) again before the changes take effect.

5. Click Cancel on Edit Kanban Size to return to the View Kanban Capacity form without saving your changes.

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.
rélevé 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 rélevé 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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