

PeopleSoft®

PeopleSoft EnterpriseOne Kanban Management 8.11 PeopleBook

November 2004

PeopleSoft EnterpriseOne Kanban Management 8.11 PeopleBook
SKU E1_FMS8.11AKM-B 1104

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About This PeopleBook Preface

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

This preface discusses:

- PeopleSoft application prerequisites.
- PeopleSoft application fundamentals.
- Documentation updates and printed documentation.
- Additional resources.
- Typographical conventions and visual cues.
- Comments and suggestions.
- Common elements in PeopleBooks.

Note. PeopleBooks document only page elements, such as fields and check boxes, that require additional explanation. If a page element is not documented with the process or task in which it is used, then either it requires no additional explanation or it is documented with common elements for the section, chapter, PeopleBook, or product line. Elements that are common to all PeopleSoft applications are defined in this preface.

PeopleSoft Application Prerequisites

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

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

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

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

PeopleSoft Application Fundamentals

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

The application fundamentals PeopleBook consists of important topics that apply to many or all PeopleSoft applications across one or more product lines. Whether you are implementing a single application, some combination of applications within the product line, or the entire product line, you should be familiar with the contents of the appropriate application fundamentals PeopleBooks. They provide the starting points for fundamental implementation tasks.

Documentation Updates and Printed Documentation

This section discusses how to:

- Obtain documentation updates.
- Order printed documentation.

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'll find a variety of useful and timely materials, including updates to the full PeopleSoft documentation that is delivered on your PeopleBooks CD-ROM.

Important! 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, <https://www.peoplesoft.com/corp/en/login.jsp>

Ordering Printed Documentation

You can order printed, bound volumes of the complete PeopleSoft documentation that is delivered on your PeopleBooks CD-ROM. PeopleSoft makes printed documentation available for each major release shortly after the software is shipped. Customers and partners can order printed PeopleSoft documentation by using any of these methods:

- Web
- Telephone
- Email

Web

From the Documentation section of the PeopleSoft Customer Connection website, access the PeopleBooks Press website under the Ordering PeopleBooks topic. The PeopleBooks Press website is a joint venture between PeopleSoft and MMA Partners, the book print vendor. Use a credit card, money order, cashier's check, or purchase order to place your order.

Telephone

Contact MMA Partners at 877 588 2525.

Email

Send email to MMA Partners at peoplesoftpress@mmapartner.com.

See Also

PeopleSoft Customer Connection, <https://www.peoplesoft.com/corp/en/login.jsp>

Additional Resources

The following resources are located on the PeopleSoft Customer Connection website:

Resource	Navigation
Application maintenance information	Updates + Fixes
Business process diagrams	Support, Documentation, Business Process Maps
Interactive Services Repository	Interactive Services Repository
Hardware and software requirements	Implement, Optimize + Upgrade, Implementation Guide, Implementation Documentation & Software, Hardware and Software Requirements
Installation guides	Implement, Optimize + Upgrade, Implementation Guide, Implementation Documentation & Software, Installation Guides and Notes
Integration information	Implement, Optimize + Upgrade, Implementation Guide, Implementation Documentation and Software, Pre-built Integrations for PeopleSoft Enterprise and PeopleSoft EnterpriseOne Applications
Minimum technical requirements (MTRs) (EnterpriseOne only)	Implement, Optimize + Upgrade, Implementation Guide, Supported Platforms
PeopleBook documentation updates	Support, Documentation, Documentation Updates
PeopleSoft support policy	Support, Support Policy
Prerelease notes	Support, Documentation, Documentation Updates, Category, Prerelease Notes
Product release roadmap	Support, Roadmaps + Schedules
Release notes	Support, Documentation, Documentation Updates, Category, Release Notes
Release value proposition	Support, Documentation, Documentation Updates, Category, Release Value Proposition
Statement of direction	Support, Documentation, Documentation Updates, Category, Statement of Direction

Resource	Navigation
Troubleshooting information	Support, Troubleshooting
Upgrade documentation	Support, Documentation, Upgrade Documentation and Scripts

Typographical Conventions and Visual Cues

This section discusses:

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

Typographical Conventions

This table contains the typographical conventions that are used in PeopleBooks:

Typographical Convention or Visual Cue	Description
Bold	Indicates PeopleCode function names, business function names, event names, system function names, method names, language constructs, and PeopleCode reserved words that must be included literally in the function call.
<i>Italics</i>	Indicates field values, emphasis, and PeopleSoft or other book-length publication titles. In PeopleCode syntax, italic items are placeholders for arguments that your program must supply. We also use italics when we refer to words as words or letters as letters, as in the following: Enter the letter <i>O</i> .
KEY+KEY	Indicates a key combination action. For example, a plus sign (+) between keys means that you must hold down the first key while you press the second key. For ALT+W, hold down the ALT key while you press the W key.
Monospace font	Indicates a PeopleCode program or other code example.
“ ” (quotation marks)	Indicate chapter titles in cross-references and words that are used differently from their intended meanings.

Typographical Convention or Visual Cue	Description
... (ellipses)	Indicate that the preceding item or series can be repeated any number of times in PeopleCode syntax.
{ } (curly braces)	Indicate a choice between two options in PeopleCode syntax. Options are separated by a pipe ().
[] (square brackets)	Indicate optional items in PeopleCode syntax.
& (ampersand)	When placed before a parameter in PeopleCode syntax, an ampersand indicates that the parameter is an already instantiated object. Ampersands also precede all PeopleCode variables.

Visual Cues

PeopleBooks contain the following visual cues.

Notes

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

Note. Example of a note.

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

Important! Example of an important note.

Warnings

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

Warning! Example of a warning.

Cross-References

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

Country, Region, and Industry Identifiers

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

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

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

Country Identifiers

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

Region Identifiers

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

- Asia Pacific
- Europe
- Latin America
- North America

Industry Identifiers

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

- USF (U.S. Federal)
- E&G (Education and Government)

Currency Codes

Monetary amounts are identified by the ISO currency code.

Comments and Suggestions

Your comments are important to us. We encourage you to tell us what you like, or what you would like to see changed about 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 send email comments to doc@peoplesoft.com.

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

Common Elements Used in PeopleBooks

Address Book Number

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

As If Currency Code	Enter the three-character code to specify the currency that you want to use to view transaction amounts. This code allows you to view the transaction amounts as if they were entered in the specified currency rather than the foreign or domestic currency that was used when the transaction was originally entered.
Batch Number	Displays a number that identifies a group of transactions to be processed by the system. On entry forms, you can assign the batch number or the system can assign it through the Next Numbers program (P0002).
Batch Date	Enter the date in which a batch is created. If you leave this field blank, the system supplies the system date as the batch date.
Batch Status	Displays a code from user-defined code (UDC) table 98/IC that indicates the posting status of a batch. Values are: <i>Blank:</i> Batch is unposted and pending approval. <i>A:</i> The batch is approved for posting, has no errors and is in balance, but it has not yet been posted. <i>D:</i> The batch posted successfully. <i>E:</i> The batch is in error. You must correct the batch before it can post. <i>P:</i> The system is in the process of posting the batch. The batch is unavailable until the posting process is complete. If errors occur during the post, the batch status changes to E. <i>U:</i> The batch is temporarily unavailable because someone is working with it, or the batch appears to be in use because a power failure occurred while the batch was open.
Branch/Plant	Enter a code that identifies a separate entity as a warehouse location, job, project, work center, branch, or plant in which distribution and manufacturing activities occur. In some systems, this is called a business unit.
Business Unit	Enter the alphanumeric code that identifies a separate entity within a business for which you want to track costs. In some systems, this is called a branch/plant.
Category Code	Enter the code that represents a specific category code. Category codes are user-defined codes that you customize to handle the tracking and reporting requirements of your organization.
Company	Enter a code that identifies a specific organization, fund, or other reporting entity. The company code must already exist in the F0010 table and must identify a reporting entity that has a complete balance sheet.
Currency Code	Enter the three-character code that represents the currency of the transaction. PeopleSoft EnterpriseOne provides currency codes that are recognized by the International Organization for Standardization (ISO). The system stores currency codes in the F0013 table.
Document Company	Enter the company number associated with the document. This number, used in conjunction with the document number, document type, and general ledger date, uniquely identifies an original document. If you assign next numbers by company and fiscal year, the system uses the document company to retrieve the correct next number for that company.

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

Document Number

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

Document Type

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

P: Accounts payable documents.

R: Accounts receivable documents.

T: Time and pay documents.

I: Inventory documents.

O: Purchase order documents.

S: Sales order documents.

Effective Date

Enter the date on which an address, item, transaction, or record becomes active. The meaning of this field differs, depending on the program. For example, the effective date can represent any of these dates:

- The date on which a change of address becomes effective.
- The date on which a lease becomes effective.
- The date on which a price becomes effective.
- The date on which the currency exchange rate becomes effective.
- The date on which a tax rate becomes effective.

Fiscal Period and Fiscal Year

Enter a number that identifies the general ledger period and year. For many programs, you can leave these fields blank to use the current fiscal period and year defined in the Company Names & Number program (P0010).

G/L Date (general ledger date)

Enter the date that identifies the financial period to which a transaction will be posted. The system compares the date that you enter on the transaction to the fiscal date pattern assigned to the company to retrieve the appropriate fiscal period number and year, as well as to perform date validations.

PeopleSoft EnterpriseOne Kanban Management Preface

This preface discusses:

- PeopleSoft products
- PeopleSoft application fundamentals
- Common elements used in this PeopleBook

PeopleSoft Products

This PeopleBook refers to these PeopleSoft products:

- Inventory Management
- Product Data Management
- Shop Floor Management
- Product Costing and Manufacturing Accounting
- Requirements Planning
- Sales Order Management
- Procurement
- Warehouse Management

PeopleSoft Application Fundamentals

The *PeopleSoft EnterpriseOne Kanban Management PeopleBook* provides you with implementation and process information for the kanban management solution. However, additional, essential information describing the set up and design of the system resides in companion documentation. The companion documentation consists of important topics that apply to many or all PeopleSoft EnterpriseOne manufacturing product lines.

Essential information describing the set up and design of the system appears in a companion volume of documentation called *Product Data Management*.

See Also

PeopleSoft EnterpriseOne Product Data Management PeopleBook

Common Elements Used in this PeopleBook

Calculation method	Specify the business function and defined set of parameters used to determine kanban size, number of kanban cards, and quantity per card.
Consuming Branch	Represents a branch/plant or work center, usually defined as a business unit. The default value comes from the Default Location and Printers table.
Consuming Location and Consuming Loc (consuming location)	Specify 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.
Kanban ID	Displays a unique identifier for a kanban master record, which can represent one or more physical containers. The Kanban ID is generated from Next Numbering.
Phase	Indicate the method that the system uses to transfer completed units from the supplying location to the consuming location. Values are: <i>1</i> : One-phase transfer. The completion of the kanban and transfer of inventory are performed simultaneously. <i>2</i> : Two-phase transfer. The kanban is completed and then the inventory is transferred.
Supplying Branch and Supplying Location B/P (supplying location branch/plant)	Enter a number that identifies a branch, plant, work center, or business unit.
UM (unit of measure) and U/M (unit of measure)	Enter a user-defined code (00/UM) that indicates the quantity in which to express an inventory item, for example, CS (case) or BX (box).

CHAPTER 1

Getting Started with PeopleSoft Kanban Management

This chapter provides an overview of PeopleSoft Kanban Management and discusses:

- PeopleSoft Kanban Management business processes
- Kanban integrations
- Kanban implementation

PeopleSoft EnterpriseOne Kanban Management Overview

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

With the PeopleSoft Kanban Management System, you can:

- 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 ad hoc kanban cards to support a spike in demand.

PeopleSoft Kanban Management Integrations

The PeopleSoft Kanban Management system integrates with these PeopleSoft EnterpriseOne systems:

- Inventory Management
- Product Data Management
- Shop Floor Management
- Product Costing and Manufacturing Accounting

- Requirements Planning
- Sales Order Management
- Procurement
- Warehouse Management

PeopleSoft Kanban Management is one of many systems that you use for Supply Chain Management. Supply Chain Management enables you to coordinate the 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 the business operations. It is a manufacturing system that formalizes the activities of company and operations planning, as well as the execution of those plans. We discuss integration considerations in the implementation chapters in this PeopleBook. Supplemental information about third-party application integrations is located on the PeopleSoft Customer Connection website.

Inventory Management

Inventory Management supplies the basic information about each item, such as part number, description, unit of measure, stocking type, location, and lot control information. It enables 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.

Product Data Management

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

Shop Floor Management

Shop Floor Management 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

Product Costing and Manufacturing Accounting uses bills of material, routing instructions, and work center information to calculate total material, labor, machining, and overhead costs for each primary unit of the parent item.

Requirements Planning

Requirements Planning 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

Sales Order Management enables you to generate sales orders for outside assembly work and transfer orders between branch/plants.

Procurement

Procurement enables you to automatically generate purchase orders for outside operations on the routing instructions and to transfer orders between branch/plants.

Warehouse Management

Warehouse Management enables you to originate picking requests through manufacturing systems, which further enhances the automated method of tracking inventory movement within a warehouse.

PeopleSoft Kanban Management Implementation

This section provides an overview of the steps required to implement the PeopleSoft Kanban Management system.

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

Global Implementation Steps

Before you can implement PeopleSoft Kanban Management, you must complete several global implementation steps. Global implementation steps are completed by users of many different systems, and are not specific to PeopleSoft Kanban Management. Depending on the features and functionality that the organization uses, you might find that it is not necessary to complete all of these steps. This table lists the suggested global implementation steps for all PeopleSoft EnterpriseOne manufacturing products:

Step	Reference
1. Set up global UDC tables.	PeopleSoft EnterpriseOne Tools 8.94 Foundation PeopleBook
2. Set up fiscal date patterns.	<i>PeopleSoft EnterpriseOne Financial Management Solutions Application Fundamentals 8.11 PeopleBook</i> , "Setting Up an Organization," Setting Up Fiscal Date Patterns
3. Set up companies.	<i>PeopleSoft EnterpriseOne Financial Management Solutions Application Fundamentals 8.11 PeopleBook</i> , "Setting Up an Organization," Setting Up Companies
4. Set up business units.	<i>PeopleSoft EnterpriseOne Financial Management Solutions Application Fundamentals 8.11 PeopleBook</i> , "Setting Up an Organization," Setting Up Business Units
5. Set up next numbers.	<i>PeopleSoft EnterpriseOne Financial Management Solutions Application Fundamentals 8.11 PeopleBook</i> , "Setting Up System Next Numbers"
6. Set up accounts, and the chart of accounts. (Optional)	<i>PeopleSoft EnterpriseOne Financial Management Solutions Application Fundamentals 8.11 PeopleBook</i> , "Setting Up Accounts," Creating the Chart of Accounts
7. Set up the General Accounting Constants.	<i>PeopleSoft EnterpriseOne General Accounting 8.11 PeopleBook</i> , "Setting Up the General Accounting System," Setting Up Constants for General Accounting
8. Set up multicurrency processing, including currency codes and exchange rates.	<i>PeopleSoft EnterpriseOne Multicurrency Processing 8.11 PeopleBook</i>

Step	Reference
9. Set up ledger type rules. (Optional)	<i>PeopleSoft EnterpriseOne Financial Management Solutions Application Fundamentals 8.11 PeopleBook, "Setting Up Ledger Type Rules for General Accounting"</i>
10. Set up address book records.	<i>PeopleSoft EnterpriseOne Address Book 8.11 PeopleBook, "Entering Address Book Records"</i>
11. Set up default location and printers	PeopleSoft EnterpriseOne Tools 8.94 Foundation PeopleBook
12. Set up branch/plant constants.	<i>PeopleSoft EnterpriseOne Inventory Management 8.11 PeopleBook, "Setting Up the Inventory Management System," Defining Branch/Plant Constants</i>
13. Set up Manufacturing/Distribution AAIs.	<i>PeopleSoft EnterpriseOne Inventory Management 8.11 PeopleBook, "Setting Up the Inventory Management System," Setting Up AAIs in Distribution Systems</i>
14. Set up document types.	<i>PeopleSoft EnterpriseOne Inventory Management 8.11 PeopleBook, "Setting Up the Inventory Management System," Setting Up Document Type Information</i>
15. Set up shop floor calendars.	<i>PeopleSoft EnterpriseOne Shop Floor Management 8.11 PeopleBook, "Setting Up Shop Floor Management," Setting Up a Shop Floor Calendar</i>
16. Set up manufacturing constants.	<i>PeopleSoft EnterpriseOne Product Data Management 8.11 PeopleBook, "Setting Up Product Data Management," Setting Up Manufacturing Constants</i>

PeopleSoft Kanban Management Implementation Steps

This table lists the implementation steps for the PeopleSoft Kanban Management system.

Step	Reference
1. Set up kanban item records	Chapter 3, "Setting Up Kanban Management," Setting Up Kanban Item Records, page 11
2. Set up kanban master records	Chapter 3, "Setting Up Kanban Management," Setting Up Kanban Master Records, page 12
3. Set up kanban size calculation definition	Chapter 3, "Setting Up Kanban Management," Setting Up Kanban Size Calculation Definition, page 22
4. Define values for kanban calculation parameters	Chapter 3, "Setting Up Kanban Management," Defining Values for Kanban Calculation Parameters, page 31
5. Generate kanbans	Chapter 3, "Setting Up Kanban Management," Generating Kanbans, page 33
6. Define a kanban reorder point	Chapter 6, "Setting Up Multitier Kanban Transactions," Defining a Kanban Reorder Point, page 68

CHAPTER 2

Understanding PeopleSoft Kanban Management

This chapter discusses:

- Kanban Management and kanbans.
- Kanban Management terms and concepts.
- Kanban Management tables.

Kanban Management and Kanbans

PeopleSoft Kanban Management enables you to streamline the day-to-day functions of the shop floor and associated departments. Kanbans are execution tools that you use when the 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.

PeopleSoft EnterpriseOne kanbans enable you to pull material from 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 the 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 Terms and Concepts

This section discusses terms that apply to PeopleSoft 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 center 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.
Ad hoc 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 enables 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.
Checkout	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.
Checkin	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.

Kanban Management Tables

These tables are used throughout PeopleSoft Kanban Management:

Table	Description
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.

Table	Description
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 PeopleSoft Kanban Management.

CHAPTER 3

Setting Up Kanban Management

This chapter provides an overview of Kanban Management setup and discusses how to:

- Set up kanban item records.
- Set up kanban master records.
- Set up kanban size calculation definition.
- Define values for kanban calculation parameters.
- Generate kanbans.

Understanding Kanban Management Setup

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

In the Inventory Management system, branch/plant constants enable you to customize how you process daily transactions for each branch/plant in the 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 the 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 the 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 the 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 using 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 enable 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 the 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 the 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 select 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.

Integration with Demand Flow® Manufacturing (DFM) provides support for DFM kanbans in base manufacturing. DFM kanbans include raw and in process (RIP) (source type 0) and dual card (source type 6) replenishment sources.

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

PeopleSoft EnterpriseOne Inventory Management 8.11 PeopleBook, “Setting Up the Inventory Management System,” Defining Branch/Plant Constants

PeopleSoft EnterpriseOne Product Data Management 8.11 PeopleBook, “Setting Up Bills of Material”

PeopleSoft EnterpriseOne Product Data Management 8.11 PeopleBook, “Entering Work Centers and Routing Instructions”

PeopleSoft EnterpriseOne Shop Floor Management 8.11 PeopleBook, “Setting Up Shop Floor Management,” Setting Up Manufacturing Constants

PeopleSoft EnterpriseOne Shop Floor Management 8.11 PeopleBook, “Working with Completions”

PeopleSoft EnterpriseOne Procurement 8.11 PeopleBook, “Processing Special Orders,” Working with Blanket Orders

PeopleSoft EnterpriseOne Sales Order Management 8.11 PeopleBook, “Entering Additional Orders, Holding and Releasing Orders”

PeopleSoft EnterpriseOne Demand Flow® Manufacturing 8.11 PeopleBook, “Managing Kanban in a Demand Flow® Environment”

Setting Up Kanban Item Records

As with all items, you must set up an item record in both the F4101 and 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 the 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 (UDC) table is 41/I.

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

On the Additional System Information form (Plant Manufacturing tab) of the item branch record, you must select 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 F4102 table, 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

This section provides overviews of Kanban master records, Kanban processing, and Kanban processing logic, and discusses how to:

Understanding 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 F3016 table has a unique kanban ID. Each of these kanban records can have multiple containers or cards. The records also appear in the 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 select the source type from the 31/RS Replenishment Source UDC table:

- DFM Raw and In Process (RIP) - Source Type 0
Supports material movement in the RIP. Valid locations are not required.
- Work center - Source Type 1
- Inventory - Source Type 2
- Supplier - Source Type 3
- Outside assembly - Source Type 4
- Transfer Order - Source Type 5
- DFM Dual Card - Source Type 6

Note. For Demand Flow® Manufacturing (DFM), the check in and check out of kanban cards triggers item completions.

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, enables 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 decide 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 F30006 table 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.

For kanbans associated with Demand Flow® Manufacturing, the kanban sizes calculated in DFM populate the kanban size field in base manufacturing. The override flag in the F3016 table is set to 1 for DFM imported kanban records. This prevents the Kanban Size Calculation program (R30450) in PeopleSoft EnterpriseOne from recalculating the kanban size and overriding the DFM calculated kanban sizes.

See *PeopleSoft EnterpriseOne Demand Flow® Manufacturing 8.11 PeopleBook*, “Managing Kanban in a Demand Flow® Environment,” Understanding DFM Kanban Management.

DFM kanbans in RIP (source type 0) function within a raw and in process area and require no check in or check out. Type 0 kanbans are optional since they perform no transactions. Inventory (source type 2) and Supplier (source type 3) kanbans are checked in to the first-in-RIP location. Once transactions are successfully completed, inventory balances are reflected in the first-in-RIP location. RIP kanbans pull inventory physically from the first-in-RIP location and item completions is performed which reduces the inventory balances in the first-in-RIP location.

Dual card kanbans (source type 6), specify the number of cards that require check in before replenishment is performed. The transactions are supported by item completions.

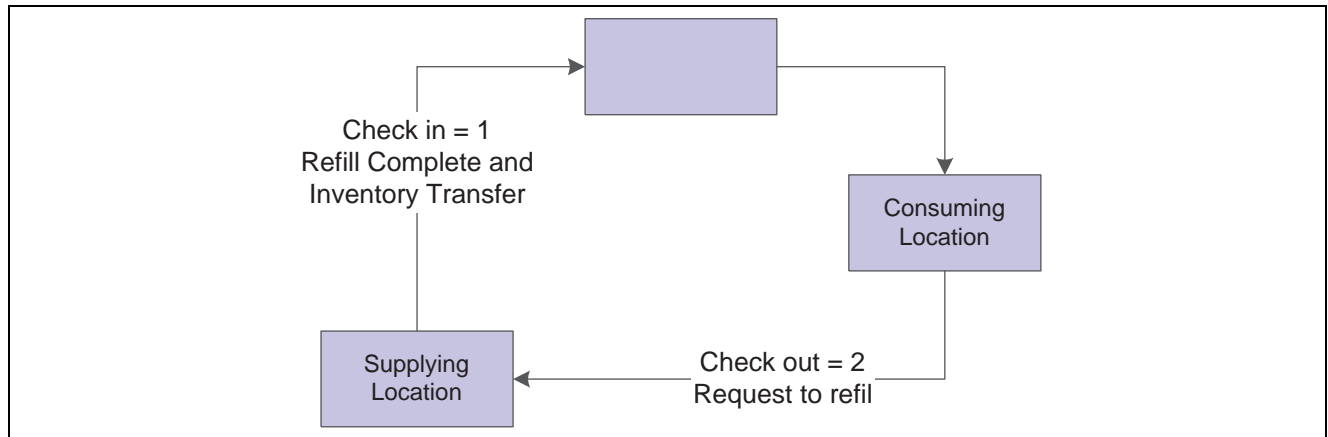
Only internal users can maintain kanban records. When you change to the kanban quantity, number of cards, or leadtime, you can set up the system to initiate workflow to advise the supplier. All users can review kanban records. Each supplier can review only the procurement kanban master records for that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

Understanding 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

This One Phase Kanban graphic illustrates:



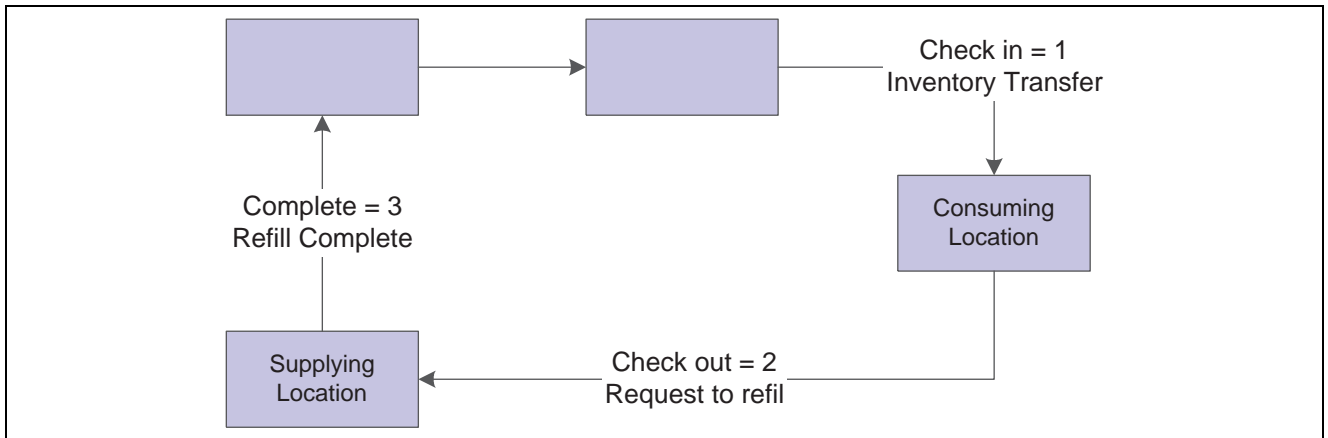
One Phase Kanban

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.

This Two Phase Kanban graphic illustrates:



Two Phase Kanban

You can process kanbans for:

- 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:

- 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.

For Demand Flow® Manufacturing, a raw and in process (RIP) (source type 0) kanban supports material movement within the RIP without requiring valid locations. The DFM dual card kanban (source type 6) triggers kanban replenishment from a machine cell. For a dual card kanban, the number of cards must be checked out from the consuming location for the replenishment to be triggered. A Phase I DFM kanban check in triggers lean completions and an inventory transfer. A Phase II DFM Kanban complete status triggers lean completions and check in triggers an inventory transfer.

Understanding Kanban Processing Logic

This table outlines the kanban processing logic:

Source	Source Type	Phase	Status Sequence	Check-in (1) Transactions	Check-out (2) Transactions	Complete (3) Transactions
DFM raw and in process (RIP)	0	1	1 to 2 2 to 1	No transactions within the RIP	No transactions within the RIP	Not applicable in a one-phase kanban
Work center	1	1	1 to 2 2 to 1	Complete to the supplying location using super backflush transactions <i>and</i> 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

Source	Source Type	Phase	Status Sequence	Check-in (1) Transactions	Check-out (2) Transactions	Complete (3) Transactions
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 <i>and</i> 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, <i>no</i> transactions occur

Source	Source Type	Phase	Status Sequence	Check-in (1) Transactions	Check-out (2) Transactions	Complete (3) Transactions
Outside assembly (subcontract)	4	1	1 to 2 2 to 1	Create a sales order for the related bill of material component items <i>and</i> create a purchase order for the related bill of material parent item	Process a shipment confirmation for the shipped component items <i>and</i> receive a purchase order for the value-add parent item <i>and</i> 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 <i>and</i> create a purchase order for the related bill of material parent item	Process a shipment confirmation for shipped component items <i>and</i> 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

Source	Source Type	Phase	Status Sequence	Check-in (1) Transactions	Check-out (2) Transactions	Complete (3) Transactions
Branch/plant	5	1	1 to 2 2 to 1	Receive a transfer purchase order at the receiving location in the supplying branch <i>and</i> 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 <i>and</i> 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 <i>and</i> generate a transfer purchase order to the supplying branch	Receive a transfer purchase order at the receiving location in the supplying branch
DFM dual card	6	2	1 to 6 6 to 2 2 to 3 3 to 1	Generates an inventory transfer and if Phase I generates an item completion transaction	Waits for the number of cards to be checked out before the Kanban is checked out	Generates an item completion transaction

Forms Used to Set Up Kanban Master Records

Form Name	Form ID	Navigation	Usage
Kanban Master Revisions - Work With Kanban Master	W3016A	Product Data Management Setup (G3041), Kanban Management Setup (G3041), Kanban Master Revisions	Edit and add kanban master records.
Kanban Master Revisions - Kanban Master Revisions	W3016B	Select a row on the Work With Kanban Master form and click Select.	Edit a kanban master record.
Kanban Master Revisions - Kanban Master Revisions	W3016B	Input header information on Work With Kanban Master and click Add.	Add a kanban master record.

Setting Up Kanban Master Records

Access the Kanban Master Revisions - Work With Kanban Master form. Input header information and click Add.

Kanban Master Revisions - Kanban Master Revisions form

Kanban Size

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

Source Type

Enter a code from user-defined code 31/RS that indicates the type of supplying location for a kanban. Values are:

- 0: DFM Raw and In Process (RIP)
- 1: Work center
- 2: Inventory
- 3: Supplier
- 4: Outside assembly
- 5: Transfer Order
- 6: DFM Dual Card

Container Size	Displays the capacity of a container in a kanban-controlled environment. The value that appears in this field is set up in the Kanban Size Calculation Parameter Definition program (P3018).
Supplier	(Optional) Identifies an entry in the Address Book system, such as employee, applicant, participant, customer, supplier, tenant, or location. You complete the supplier field if you use source type 3 (Supplier).
Line/Cell Identifier	(Optional) Defines a production line or cell. Detailed work center operations can be defined inside the line or cell. If the item is a rate schedule item, this field identifies the line where the item is manufactured. For DFM items, the Line Design ID populates this field.
Override	(Optional) Locks the kanban size and quantity to prevent changes by the kanban calculation program. Values are: <i>0</i> : The system recalculates the size of the kanban. Blank: The system does not recalculate the size of the kanban. If you activate the override option, the system does not update the record when you run the Kanban Size Calculation program (R30450).
Receipts	(Optional) Indicates whether the system runs the receipts process at kanban check-in time. Values are: <i>0</i> : The system does not run the receipt process. Blank: The system runs the receipt process. 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.
Number of Cards	Define the number of cards for a kanban. Each card represents a container. The kanban size divided by the container size equals the number of cards. For example, a kanban of 100 might be made up of 4 containers, each holding 25 components. Therefore, the kanban has 4 cards: 1 of 4, 2 of 4, 3 of 4, and 4 of 4.
Related Kanban ID	(Optional) Identifies the second kanban assigned to an item in a specified branch/plant, consuming location, or supplying location. This field is used with multitier and reorder point.
Ad Hoc Card Exists	Indicates the presence of an ad hoc kanban card. The card may be active or inactive. If you insert an ad hoc kanban card when an inactive ad hoc card exists, the inactive card is activated.
Number of Dual Cards	Enter the number of cards needed to trigger the kanban check out transaction for a dual card kanban. For example, there may be five kanbans in use between the supplying and consuming locations, and the number of dual cards is three. Thus, three kanbans must be checked out to trigger replenishment.

Setting Up Kanban Size Calculation Definition

This section provides overviews of the Kanban Size Calculation Definition program, Kanban size calculation parameters, and standard Kanban equations, and discusses how to set up a Kanban size calculation definition.

Understanding the Kanban Size Calculation Definition Program

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 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 a 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 the system 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, you designate the parameter as either a kanban-specific (specific to a kanban ID) or a calculation-specific parameter. The Kanban Parameter Usage UDC (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 using 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.

Understanding 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 Kanban Parameter Usage UDC (30/KP) is hard-coded and specifies how a parameter is used in the kanban size calculation.

The system provides the parameters:

Parameter	Description
Periods in MRP window	<p>This parameter defines the number of time buckets that the system uses to calculate the demand for kanban size.</p> <p>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.</p> <p>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).</p>
Days built per period	<p>This parameter enables you to define the days built per week or month in the Kanban Size Calculation Parameter Definition program.</p> <p>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.</p>
Scan delta days	<p>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.</p> <p>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.</p>
Leadtime delivery (days)	<p>This parameter is the time duration between when the goods leave the supplier and when they arrive at the work center.</p>

Parameter	Description
Vendor split percent	<p>This parameter is the percent of demand to which a particular vendor caters.</p> <p>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.</p> <p>The Kanban Size Calculation program multiplies this value by the calculated demand to determine the demand per supplier.</p> <p>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.</p> <p>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.</p>
Standard pack size	<p>This parameter is the standard shipment size for an item coming from a supplier.</p> <p>When you specify this value, the Kanban Size Calculation program rounds up the calculated kanban size to the closest multiple of this number.</p>
Safety stock	<p>This parameter is the quantity kept on hand to cover fluctuations in demand.</p> <p>The Kanban Size Calculation program adds this value to the calculated demand.</p>

Parameter	Description
Demand split percent	<p>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.</p> <p>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.</p> <p>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.</p> <p>The Kanban Size Calculation program multiplies this value by the demand for the item to determine the demand at the consuming location.</p> <p>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.</p> <p>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.</p>
Container size	<p>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.</p>
Minimum quantity boundary	<p>This parameter defines the minimum quantity that can be ordered by a single kanban trigger.</p> <p>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.</p>
Maximum quantity boundary	<p>This parameter defines the maximum quantity that a single kanban trigger can order.</p> <p>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.</p>
Minimum number of cards	<p>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.</p> <p>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.</p> <p>For calculations that use a fixed number of cards, the minimum number of cards should equal the maximum number of cards.</p>

Parameter	Description
Maximum number of cards	<p>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.</p> <p>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.</p> <p>For calculations that use a fixed number of cards, the minimum number of cards should equal the maximum number of cards.</p>
Custom parameter 1	<p>This parameter is a user-definable, custom parameter.</p> <p>To use this parameter, you must modify or create the supporting business function.</p>
Custom parameter 2	<p>This parameter is a user-definable, custom parameter.</p> <p>To use this parameter, you must modify or create the supporting business function.</p>
Custom parameter 3	<p>This parameter is a user-definable, custom parameter.</p> <p>To use this parameter, you must modify or create the supporting business function.</p>

Understanding Standard Kanban Equations

Software calculation methods that you use to determine the 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 the 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.

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

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.

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

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.

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

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.

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

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.

Form Used to Set Up a Kanban Size Calculation Definition

Form Name	Form ID	Navigation	Usage
Kanban Size Calculation Revisions	W3017B	Kanban Management Setup (G30411), Kanban Size Calculation Definition Click the Add button on the Work With Kanban Calculation Methods form.	Set up a Kanban size calculation definition.

Setting Up a Kanban Size Calculation Definition

Access the Kanban Size Calculation Revisions form.

Kanban Size Calculation Definition - Kanban Size Calculation Revisions

OK Cancel Tools

Description

Function Name

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

Periods in MRP Window	<input type="text" value="1"/>	Container Size	<input type="text" value="1"/>
Days Built Per Period	<input type="text" value="1"/>	Minimum Quantity Boundary	<input type="text" value="1"/>
Scan Delta Days	<input type="text" value="1"/>	Maximum Quantity Boundary	<input type="text" value="1"/>
Leadtime Delivery (Days)	<input type="text" value="1"/>	Minimum Number of Cards	<input type="text" value="1"/>
Vendor Split Percent	<input type="text" value="1"/>	Maximum Number of Cards	<input type="text" value="1"/>
Standard Pack Size	<input type="text" value="1"/>	Custom Parameter 1	<input type="text" value="0"/>
Safety Stock	<input type="text" value="1"/>	Custom Parameter 2	<input type="text" value="0"/>
Demand Split Percent	<input type="text" value="1"/>	Custom Parameter 3	<input type="text" value="0"/>

Kanban Size Calculation Revisions

Function Name

Identify the actual name of the function. It must follow standard ANSI C naming conventions. For example, no space between words. Select the business function that this calculation method will use. The system verifies that the business function exists.

Periods in MRP Window

Specify the usage level of the Periods in MRP Window parameter in the Kanban Size Calculation program (R30450). Calculation-specific parameters have values that apply to all kanbans using a particular size calculation method. Kanban-specific parameters have values that apply to a specific kanban using a particular size calculation method. Values are:

- 0: Parameter is not used.
- 1: Parameter is kanban specific.
- 2: Parameter is calculation specific.

Scan Delta Days

Specify the usage level of the Scan Delta Days parameter in the Kanban Size Calculation program (R30450). Calculation-specific parameters have values that apply to all kanbans using a particular size calculation method. Kanban-specific parameters have values that apply to a specific kanban using a particular size calculation method. Values are:

- 0: Parameter is not used.
- 1: Parameter is kanban specific.
- 2: Parameter is calculation specific.

Leadtime Delivery (Days)	<p>Specify the usage level of the Leadtime Delivery (Days) parameter in the Kanban Size Calculation program (R30450). Calculation-specific parameters have values that apply to all kanbans using a particular size calculation method. Kanban-specific parameters have values that apply to a specific kanban using a particular size calculation method. Values are:</p> <p><i>0</i>: Parameter is not used.</p> <p><i>1</i>: Parameter is kanban specific.</p> <p><i>2</i>: Parameter is calculation specific.</p>
Vendor Split Percent	<p>Specify the usage level of the Vendor Split Percent parameter in the Kanban Size Calculation program (R30450). Calculation-specific parameters have values that apply to all kanbans using a particular size calculation method. Kanban-specific parameters have values that apply to a specific kanban using a particular size calculation method. Values are:</p> <p><i>0</i>: Parameter is not used.</p> <p><i>1</i>: Parameter is kanban specific.</p> <p><i>2</i>: Parameter is calculation specific.</p>
Standard Pack Size	<p>Specify the usage level of the Standard Pack Size parameter in the Kanban Size Calculation program (R30450). Calculation-specific parameters have values that apply to all kanbans using a particular size calculation method. Kanban-specific parameters have values that apply to a specific kanban using a particular size calculation method. Values are:</p> <p><i>0</i>: Parameter is not used.</p> <p><i>1</i>: Parameter is kanban specific.</p> <p><i>2</i>: Parameter is calculation specific.</p>
Safety Stock	<p>Specify the usage level of the Safety Stock parameter in the Kanban Size Calculation program (R30450). Calculation-specific parameters have values that apply to all kanbans using a particular size calculation method. Kanban-specific parameters have values that apply to a specific kanban using a particular size calculation method. Values are:</p> <p><i>0</i>: Parameter is not used.</p> <p><i>1</i>: Parameter is kanban specific.</p> <p><i>2</i>: Parameter is calculation specific.</p>
Demand Split Percent	<p>Specify the usage level of the Demand Split Percent parameter in the Kanban Size Calculation program (R30450). Calculation-specific parameters have values that apply to all kanbans using a particular size calculation method. Kanban-specific parameters have values that apply to a specific kanban using a particular size calculation method. Values are:</p> <p><i>0</i>: Parameter is not used.</p> <p><i>1</i>: Parameter is kanban specific.</p> <p><i>2</i>: Parameter is calculation specific.</p>
Container Size	<p>Specify the usage level of the Container Size parameter in the Kanban Size Calculation program (R30450). Calculation-specific parameters have values that apply to all kanbans using a particular size calculation method.</p>

Kanban-specific parameters have values that apply to a specific kanban using a particular size calculation method. Values are:

0: Parameter is not used.

1: Parameter is kanban specific.

2: Parameter is calculation specific.

Minimum Number of Cards

Specify the usage level of the Minimum Number of Cards parameter in the Kanban Size Calculation program (R30450). Calculation-specific parameters have values that apply to all kanbans using a particular size calculation method. Kanban-specific parameters have values that apply to a specific kanban using a particular size calculation method. Values are:

0: Parameter is not used.

1: Parameter is kanban specific.

2: Parameter is calculation specific.

Maximum Number of Cards

Specify the usage level of the Maximum Number of Cards parameter in the Kanban Size Calculation program (R30450). Calculation-specific parameters have values that apply to all kanbans using a particular size calculation method. Kanban-specific parameters have values that apply to a specific kanban using a particular size calculation method. Values are:

0: Parameter is not used.

1: Parameter is kanban specific.

2: Parameter is calculation specific.

Minimum Quantity Boundary

Specify the usage level of the Minimum Quantity Boundary parameter in the Kanban Size Calculation program (R30450). Calculation-specific parameters have values that apply to all kanbans using a particular size calculation method. Kanban-specific parameters have values that apply to a specific kanban using a particular size calculation method. Values are:

0: Parameter is not used.

1: Parameter is kanban specific.

2: Parameter is calculation specific.

Maximum Quantity Boundary

Indicate the level of usage of the Maximum Quantity Boundary parameter in the Kanban Size Calculation program.

Calculation specific parameters have values that apply to all kanbans using a particular size calculation method. Kanban specific parameters have values that apply to a specific kanban using a particular size calculation method. Values are:

0: Parameter is not used.

1: Parameter is kanban specific.

2: Parameter is calculation specific.

Custom Parameter 1

(Optional) Specify the usage level of Custom Parameter 1 in the Kanban Size Calculation program (R30450). Calculation-specific parameters have values that apply to all kanbans using a particular size calculation method.

Kanban-specific parameters have values that apply to a specific kanban using a particular size calculation method. Values are:

0: Parameter is not used.

1: Parameter is kanban specific.

2: Parameter is calculation specific.

Custom Parameter 2

(Optional) Specify the usage level of Custom Parameter 2 in the Kanban Size Calculation program (R30450). Calculation-specific parameters have values that apply to all kanbans using a particular size calculation method. Kanban specific parameters have values that apply to a specific kanban using a particular size calculation method. Values are:

0: Parameter is not used.

1: Parameter is kanban specific.

2: Parameter is calculation specific.

Custom Parameter 3

(Optional) Specify the usage level of Custom Parameter 3 in the Kanban Size Calculation program (R30450). Calculation-specific parameters have values that apply to all kanbans using a particular size calculation method. Kanban-specific parameters have values that apply to a specific kanban using a particular size calculation method. Values are:

0: Parameter is not used.

1: Parameter is kanban specific.

2: Parameter is calculation specific.

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.

This section provides an overview of kanban- and calculation-specific parameters and discusses how to define kanban and calculation-specific parameters.

Understanding Kanban Calculation Parameters

This section discusses:

- Kanban-specific parameters.
- Calculation-specific parameters.

Kanban-Specific 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.

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:

- 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.

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:

- 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.

Forms Used to Define Kanban Calculation Parameters

Form Name	Form ID	Navigation	Usage
Kanban Parameter Revisions	W3018B	Kanban Management Setup (G30411), Kanban Size Calculation Parameter Definition Select the calculation method and kanban ID combination on the Work With Kanban Size Calculation form, and click the Select button.	Define kanban-specific parameters.
Kanban Parameter Revisions	W3018B	Kanban Management Setup (G30411), Kanban Size Calculation Parameter Definition Select a calculation method on the Work With Kanban Size Calculation form, and click the Select button.	Define calculation-specific parameters.

Defining Kanban-Specific Parameters

Access the Kanban Parameter Revisions form.

Kanban Size Calculation Parameter Definition - Kanban Parameter Revisions i

Cancel Tools

Calculation Method

Kanban ID

Periods in MRP Window	<input type="text" value="4.0000"/>	Container Size	<input type="text" value="500"/> EA
Days Built per Week/ Month	<input type="text" value="5"/> <input type="text" value="20.0"/>	Minimum Quantity Boundary	<input type="text" value="500"/> EA
Scan Delta Days	<input type="text" value="1"/>	Maximum Quantity Boundary	<input type="text" value="500"/> EA
Leadtime Delivery (Days)	<input type="text" value="5"/>	Minimum Number of Cards	<input type="text" value="1"/>
Vendor Split Percent	<input type="text" value="100.00"/>	Maximum Number of Cards	<input type="text" value="9999"/>
Standard Pack Size	<input type="text" value="500"/> EA	Custom Parameter 1	<input type="text" value="0.00"/>
Safety Stock	<input type="text" value="0.0000"/> <input type="checkbox"/>	Custom Parameter 2	<input type="text" value="0.00"/>
Demand Split Percent	<input type="text" value="100.00"/>	Custom Parameter 3	<input type="text" value="0.00"/>

Kanban Parameter Revisions

Complete the value field for each parameter that is identified as a kanban-specific parameter. The value fields for parameters that were not defined as calculation-specific are disabled, so you cannot enter values in them.

Defining Calculation-Specific Parameters

Access the Kanban Parameter Revisions form.

Complete the value field for each parameter that is identified as a kanban-specific parameter. The value fields for parameters that were not defined as calculation-specific are disabled, so you cannot enter values in them. On Kanban Parameter Revisions, complete the value field for each parameter that is identified as a calculation-specific parameter.

Generating Kanbans

This section provides an overview of the kanban generation process and discusses how to:

- Set processing options for the Kanban Size Calculation program (R30450).
- Calculate kanban size using standard equations.
- Calculate kanban size using processing options.

Understanding the Kanban Generation Process

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.

For kanbans associated with Demand Flow® Manufacturing, the kanban sizes calculated in DFM populate the kanban size field in base manufacturing. The override flag in the F3016 table is set to *1* for DFM imported kanban records. This prevents the Kanban Size Calculation program (R30450) in PeopleSoft EnterpriseOne from recalculating the kanban size and overriding the DFM calculated kanban sizes

See *PeopleSoft EnterpriseOne Demand Flow® Manufacturing 8.11 PeopleBook*, “Managing Kanban in a Demand Flow® Environment,” Understanding DFM Kanban Management.

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:

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

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.

Setting Processing Options for Kanban Size Calculation (R30450)

Processing options enable you to specify the default processing for programs and reports.

Do not modify PeopleSoft EnterpriseOne demo versions, which are identified by ZJDE or XJDE prefixes. Copy these versions or create new versions to change any values, including the version number, version title, prompting options, security, and processing options.

Process

These processing options specify how the system performs processes and calculations when running the Kanban Size Calculation program.

- 1. Kanban Size** Use this processing option to specify whether to calculate kanban sizes. Values are:

 - Blank: Do not calculate kanban sizes.
 - I*: Calculate kanban sizes.
- 2. Mode** Use this processing option to specify proof or final mode. Values are:

 - Blank: Proof mode
 - I*: Final mode
- 3. Print Kanban Cards** Use this processing option to specify whether you want to print kanban cards. Values are:

 - Blank: Do not print kanban cards.
 - I*: Print kanban cards.
- 4. Print Kanban Exception Report** Use this processing option to specify whether to print the kanban exception report.

 - Blank: Do not print the kanban exception report.
 - I*: Print Kanban Exception Report.
- 5. Filter Control** Enter the range, expressed as a percentage, above or below which the kanban should not be changed. For example, a value of 15 means plus or minus 15 percent.

Demand

These processing options specify what demand to include in calculations when running the Kanban Size Calculation program

- 6. Kanban Demand** Use this processing option to specify what to use to calculate kanban demand. Values are:

 - Blank: Use Planning time fence.
 - I*: Use the sum of the included demands.
 - 2*: Use the highest value among the included demands.

- a. Forecasts** Use this processing option to specify whether to include forecasts. Values are:
Blank: Do not include
I: Include
- b. Sales Orders** Use this processing option to specify whether to include sales orders. Values are:
Blank: Do not include
I: Include
- c. Firm Work Orders** Use this processing option to specify whether to include firm work orders. Values are:
Blank: Do not include
I: Include
- d. Planned Orders** Use this processing option to specify whether to include planned orders. Values are:
Blank: Do not include
I: Include
- e. Rate Schedules** Use this processing option to specify whether to include rate schedules. Values are:
Blank: Do not include
I: Include
- 7. Start date for demand calculation** Use this processing option to specify a start date for demand calculation. If you leave this field blank, the system uses the MRP generation date.

Running the Kanban Size Calculation Program (R30450)

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

Calculating Kanban Size 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:

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:

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 using the Kanban Size Calculation Definition program (P3017). The calculation method has 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 is 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 is 0.

Sum of all monthly demands is 0.

Number of weeks in the chosen time horizon is 3.

Sum of all weekly demands is 550 units.

Number of days in the chosen time horizon is 5.

Sum of all daily demands is 100 units.

(Total demand) = (number of months * sum of all monthly demands) + (number of weeks * sum of all weekly demands) + (number of days * sum of all daily demands)

(Total demand) = (0 * 0) + (3 * 550) + (5 * 100) = 2150

(Total number of days) = (number of months * days build per month) + (number of weeks * days build per week) + (number of days)

(Total number of days) = (0 * 20) + (3 * 5) + (5) = 20

(Average daily demand) = (total demand) / (total number of days) = 2150/20 = 107.5 units/day

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.

(Kanban Size) = (High Daily Demand) * [(Leadtime Delivery (Days)) + (Scan Delta Days)] + (Safety Stock)

(Kanban Size) = 110 * (2 + 1) + 50 = 380 units

(Number of Cards) = (Kanban Size) / (Container Size) = 380 / 25 = 15.2 = 16 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

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.

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

$$(\text{Number of Cards}) = (\text{Kanban Size}) / (\text{Container Size}) = 373 / 25 = 14.92 = 15 \text{ cards}$$

$$(\text{Quantity per Container}) = (\text{Container Size}) = 25 \text{ units}$$

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

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

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

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

$$(\text{Container Size}) = (\text{Kanban Size}) / (\text{Number of Cards}) = 380 / 10 = 38 \text{ (quantity per card or container size)}$$

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

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

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

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

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

$$(\text{Container Size}) = (\text{Kanban Size}) / (\text{Number of Containers}) = 373 / 10 = 37.3 = 38 \text{ units}$$

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

Calculating Kanban Size 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:

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 set up using the Kanban Size Calculation Definition program (P3017). The calculation method has 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

Parameter	Parameter Value
Min kanban size	20
Max kanban size	60

Average Daily Demand

Number of months in the chosen time horizon is 1.

Sum of all monthly demands is 300 units.

Number of weeks in the chosen time horizon is 3.

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

Number of days in the chosen time horizon is 5.

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

(Total Demand) = (number of months * sum of all monthly demands) + (number of weeks * sum of all weekly demands) + (number of days * sum of all daily demands)

(Total Demand) = (1 * 300) + (3 * 1250) + (5 * 1370) = 10900

(Total number of days) = (number of months * days built per month) + (number of weeks * days build per week) + (number of days)

(Total number of days) = (1 * 20) + (3 * 5) + (5) = 40

(Average Daily Demand) = (Total Demand) / (Total number of days) = 10900 / 40 = 272.5 units/day

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.

(Average Daily Demand) = (average daily demand) / (number of similar kanban records)

(Average Daily Demand) = 272.5 / 3 = 91

(Kanban Size) = (Average Daily Demand) * [(Leadtime Delivery (Days)) + (Scan Delta Days)] + (Safety Stock)

(Kanban Size) = 91 * (2 + 1) + 50 = 323 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.

(Number of Cards) = (Kanban Size) / (Container Size) = 60 / 50 = 1.2 = 2 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:

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 using the Kanban Size Calculation Definition program. The calculation method has 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

Parameter	Parameter Value
Minimum kanban size	20
Maximum kanban size	60

Average Daily Demand

Number of months in the chosen time horizon is 1.

Sum of all monthly demands is 200 units.

Number of weeks in the chosen time horizon is 3.

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

Number of days in the chosen time horizon is 5.

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

(Total Demand) = (number of months * sum of all monthly demands) + (number of weeks * sum of all weekly demands) + (number of days * sum of all daily demands)

(Total Demand) = (1 * 200) + (3 * 750) + (5 * 1100) = 7950

(Total number of days) = (number of months * days built per month) + (number of weeks * days built per week) + (number of days)

(Total number of days) = (1 * 20) + (3 * 5) + (5) = 40

(Average Daily Demand) = (Total Demand) / (Total number of days) = 7950 / 40 = 198.75 units/day

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.

(Average Daily Demand) = (Average Daily Demand) / (number of similar kanban records)

(Average Daily Demand) = 198.75/3 = 67

(Kanban Size) = (Average Daily Demand) * [(Leadtime Delivery (Days)) + (Scan Delta Days)] + (Safety Stock)

(Kanban Size) = 67 * (2 + 1) + 50 = 251 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.

(Number of Cards) = (Kanban Size) / (Container Size) = 60 / 50 = 1.2 = 2 cards

CHAPTER 4

Processing Kanban Transactions by Item

This chapter provides overviews of the Kanban Processing program and kanban processing transactions and discusses how to:

- Process kanban consumption by item.
- Add ad hoc kanban cards.
- Release quantity from a blanket order using kanban processing.

Understanding the Kanban Processing Program

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 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. UDC 31/KS specifies the kanban status as follows:

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

Kanban consumption mode enables 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 statuses at a consuming location:

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

Kanban supply mode enables 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 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 the 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 the 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 the kanban to generate rate schedule orders for the 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, certain 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 existing 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 in 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 the business process decisions.

The Work Order Inventory Issues program (P31113) can automatically suggest the proper issue quantity for the kanban-generated work order if 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 the 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 the 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 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 these 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 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 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 the 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 the 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 using a sales order and acquired using a 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 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 UDC 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 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 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 enables 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.

Understanding Kanban Transactions

This section discusses:

- Kanban and replenishment transactions.
- Work order completions and super backflush for kanban.
- Purchase order receipts for kanban.

Kanban and Replenishment 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 the 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 enables you to complete a kanban card from work order completions and super backflush, provided that it has these 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 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 items set 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*.

Important! The setup of the 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.

Purchase Order Receipts for Kanban

The system enables 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 underships, the system updates the purchase order and kanban record, and cancels any remainder.

See Also

PeopleSoft EnterpriseOne Shop Floor Management 8.11 PeopleBook, “Working with Completions”

PeopleSoft EnterpriseOne Procurement 8.11 PeopleBook, “Using Receipt Processing”

Processing Kanban Consumption by Item

This section discusses how to:

- Process kanban consumption by item.
- Process kanban supply by item.

Forms Used to Process Kanban by Item

Form Name	Form ID	Navigation	Usage
Work With Kanban Masters	W3157A	Daily Processing - Repetitive (G3115), Kanban Consumption Select the detail line that represents the kanban container that you want to process, and then select Check Out from the Row menu.	Process kanban consumption by item.
Work With Kanban Masters	W3157A	Daily Processing - Repetitive menu (G3115), Kanban Supply	Process kanban supply by item.

Processing Kanban Consumption by Item

Access the Work With Kanban Masters form.

Work With Kanban Masters form

To process kanban consumption by item:

1. To check out a kanban, select the detail line that represents the kanban container that you want to process, and then select 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).

2. To check in a kanban that was supplied by the production line (and for which a rate or work order was created), select the Defaults tab and complete the fields:

- Shift

- Employee Number
3. Select the appropriate Kanban ID record, and then select Check In from the Row menu.

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

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

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

Processing Kanban Supply by Item

Access the Work With Kanban Masters form.

To process kanban supply by item:

1. Select the Defaults tab, and then complete the 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
2. Select the appropriate Kanban record, and then select Check In from the Row menu.
3. Click OK.

Adding Ad Hoc Kanban Cards

This section provides an overview of ad hoc kanban cards and discusses how to add ad hoc kanban cards.

Understanding 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 I (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).

Form Used to Add Ad Hoc Kanban Cards

Form Name	Form ID	Navigation	Usage
Kanban Master Revisions	W3016B	Kanban Management Setup (G30411), Kanban Master Revisions Select a kanban master record on the Work With Kanban Master form.	Add an ad hoc kanban record.

Adding Ad Hoc Kanban Cards

Access the Kanban Master Revisions form.

The screenshot shows the 'Kanban Master Revisions - Kanban Master Revisions' form. At the top, there is a toolbar with icons for OK, Find, Delete, Cancel, Form, Row, and Tools. Below the toolbar, there are input fields for 'Item Number' (70026), 'Supplying Location' (B2), 'Branch/Plant' (DFM02), and 'Consuming Location' (A2). A table titled 'Records 1 - 5' is displayed below, with columns for Kanban ID, Supplying Location B/P, Kanban Size, Kanban UOM, Source Type, Phase, and Supplier. The table contains five rows of data, all with a Kanban Size of 1 and Source Type of 3.

Kanban ID	Supplying Location B/P	Kanban Size	Kanban UOM	Source Type	Phase	Supplier
2115	DFM02	1	EA	3	1	70
2116	DFM02	1	EA	3	1	70
2117	DFM02	1	EA	3	1	70
2118	DFM02	1	EA	3	1	70
2119	DFM02	1	EA	3	1	70

Kanban Master Revisions form

Insert Ad Hoc from the Form menu. The system then generates a new ad hoc kanban card that includes the same detail information as the first kanban record. To customize the ad hoc kanban record to the demand needs, you can override its information.

Note. You must set the related processing option of the Kanban Master Revisions program (P3016) to enable ad hoc card creation.

Releasing Quantity from a Blanket Order Using Kanban Processing

This section provides an overview of blank orders, lists prerequisites, and discusses how to:

- Release quantity from a blanket order.
- Set processing options for purchase order inquiry (P3160W).
- Set processing options for kanban processing (P3157).

Understanding Blanket Orders

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 price for those items.

Each time that you are ready to use a portion of the goods on the blanket order, you can create a purchase order to release that quantity from the blanket order.

Prerequisites

In order to release quantity from an open blanket order using kanban processing, you must set up the system in this 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 select 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.

Form Used to Release Quantity from a Blanket Order Using Kanban Processing

Form Name	Form ID	Navigation	Usage
Work With Open Blanket Orders	W3160WC	Daily Processing - Repetitive (G3115), Kanban Consumption Select the supplier (source type 3) kanban master record on the Work With Kanban Masters form, and select Check Out from the Row menu.	Release quantity from a blanket order using kanban processing. Note. The kanban that you select on the Work With Kanban Masters form must be a kanban (and related item number) for which you have at least one open blanket order.

Releasing Quantity from a Blanket Order Using Kanban Processing

Access the Work With Open Blanket Orders form.

To release quantity from a blanket order using kanban processing:

1. Select the blanket order from which you want to release the kanban transaction quantity.
2. Click the Select button.
3. If you have the option to confirm kanban transactions activated, select OK on the Confirmation selection form.
4. On Work With Kanban Masters form, 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 disposes the material from the supplying location to the consuming location.

Setting Processing Options for Purchase Order Inquiry (P3160W)

Processing options enable you to specify the default processing for programs and reports.

Do not modify PeopleSoft EnterpriseOne demo versions, which are identified by ZJDE or XJDE prefixes. Copy these versions or create new versions to change any values, including the version number, version title, prompting options, security, and processing options.

Default

These processing options specify the default information the system uses during Purchase Order Inquiry (P3160W).

Order Type	Specify the document type (UDC 00/DT) that you associate with the blanket purchase orders from which you will release quantity using kanban processing. If you 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).
From Status	Specify the valid statuses (UDC 40/AT) of the blanket orders that you use in blanket order releases. The statuses that you indicate must also be set up in the order activity rules for the document type that you specified in the first processing option.
Thru Status	Specify the valid statuses (UDC 40/AT) of the blanket orders that you use in blanket order releases. The statuses that you indicate must also be set up in the order activity rules for the document type that you specified in the first processing option.
Currency Code	Specify a currency code for the transaction, if it is different from the base system currency.

Processing

These processing options specify how the system processes and displays values within Purchase Order Inquiry (P3160W).

1. Status Code	Specify 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. Values are: <i>1</i> : The status codes on the Defaults tab are based on Last Status. Blank: Use the Next Status of the blanket order.
2. Date Checked Against the Date Range.	Specify the order date that you want the software to use when searching for open blanket orders. You should set this processing option to match the business process for blanket orders because it prevents valid blanket orders from appearing during kanban processing when you search using the wrong date. Values are: Blank: Requested date <i>1</i> : Transaction date <i>2</i> : Promised delivery date <i>3</i> : Original promised delivery date <i>4</i> : Receipt date

- 5: Cancel date
- 6: General ledger date

3. Display Costs

Specify whether you want the system to display or hide cost information in the orders that the system displays for blanket release. Values are:

- 1: Hide cost information.
- Blank: Display costs.

Versions

This processing option specifies the version of the PO Receipt Routing program used by Purchase Order Inquiry (P3160W).

PO Receipt Routing

Specify the version of the Receipt Routing Movement and Disposition program (P43250) 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 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

PeopleSoft EnterpriseOne Procurement 8.11 PeopleBook, “Processing Special Orders,” Working with Blanket Orders

Setting Processing Options for Kanban Processing (P3157)

Processing options enable you to specify the default processing for programs and reports.

Do not modify PeopleSoft EnterpriseOne demo versions, which are identified by ZJDE or XJDE prefixes. Copy these versions or create new versions to change any values, including the version number, version title, prompting options, security, and processing options.

Mode

These processing options specify the processing mode the system uses when running the Kanban Processing program.

1. Check-out and Check-in Mode

Specify whether the version of the program is to be used for check-out (consumption) or for check-in (supply). Values are:

- 1: Set mode to kanban supply.
- Blank: Use kanban consumption mode.

2. Display Confirmation Message

Specify whether the system displays a confirmation message when it performs the transaction. Values are:

- 1: Display confirmation message.
- Blank: Do not display confirmation message.

3. Kanban Status

Enter a kanban status if you want to restrict the kanbans that you review to a specified status.

Defaults

These processing options specify the default information the system uses during Kanban Processing (P3157).

- 1. Item Number (Optional)** Enter the item number to review information for an individual item. The number can be in short, long, or third item number format.
- 2. Location (Optional)** Enter a location number to review information for an individual location from which goods will be moved.
- 3. Hours Equivalent to One Day** Specify the number of working hours in a day. The default value is 8.
- 4. Closed Status** Enter a Closed Status code (UDC 00/SS) for a rate schedule or work order. The default value is 99.
- 5. Bill of Material Type** Specify a value from UDC 40/TB that designates the type of bill of material. You can define different types of bills of material for different uses. For example:
M: Standard manufacturing bill
RWK: Rework bill
SPR: Spare parts bill
 The system enters bill type M in the work order header when you create a work order, unless you specify another bill type. The system reads the bill type code on the work order header to know which bill of material to use to create the work order parts list. MRP uses the bill type code to identify the bill of material to use when it attaches MRP messages. Batch bills of material must be type M for shop floor management, product costing, and MRP processing.
- 6. Employee Number (Optional)** (Optional) Indicate the default employee number to use for the detail completion lines and hours and quantities information when performing completion and check-in transactions that record work order and rate schedule completions by calling the Super Backflush program (P31123).
- 7. Transfer Order Receipt Location** Specify the default location to which order transfers will be received for type 5 kanbans.

Process

These processing options specify how the system processes and displays values within Kanban Processing (P3157).

- 1. Work Order Processing** Specify whether the Work Order Processing program (R31410) runs when a work order is created at the checkout of the last card or container in the kanban.
I: Run Work Order Processing automatically.
 Blank: Run Work Order Processing manually.
- 2. Hours and Quantities** Specify whether you want the Hours and Quantities program to execute in the background, or if you want it to appear. The Hours and Quantities value overrides the processing options for the version of the Super Backflush program (P31123) that you are using. Values are:
I: Execute Hours and Quantities in the background.

Blank: Hours and Quantities appears and requires the interactive involvement for processing.

3. Material Issues

Specify whether you want the Material Issues program to execute in the background, or if you want it to appear. The Material Issues value overrides the processing options for the version of the Super Backflush program (P31123) that you are using. Values are:

1: Execute Material Issues in the background.

Blank: Material Issues appears and requires the interactive involvement for processing.

4. Work Order Completions

Specify whether you want the Work Order Completions program to execute in the background, or if you want it to appear. The Work Order Completions value overrides the processing options for the version of the Super Backflush program (P31123) that you are using. Values are:

1: Execute Work Order Completions in the background.

Blank: Work Order Completions appears and requires the interactive involvement for processing.

5. Shipment Confirmation

Specify whether you want the Hours and Quantities program to execute in the background, or if you want it to appear. Values are:

1: Execute Work Order Completions in the background.

Blank: Work Order Completions appears and requires the interactive involvement for processing.

6. Inventory Transfers

Specify whether you want the Inventory Transfers program to execute in the background, or if you want it to appear. Values are:

1: Execute Inventory Transfers in the background.

Blank: Inventory Transfers appears and requires the interactive involvement for processing.

Purchasing

These processing options specify the information the system uses to create purchase orders during Kanban Processing (P3157).

1. Create Purchase Order

Specify a value the system uses to create a purchase order for kanban-controlled items. 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. Values are:

Blank: Use purchase order already created.

1: Create a new purchase order.

2: Find existing purchase order. If none exists, create a new purchase order.

3: Find existing purchase order using Transaction Date Range. If none exists create a new purchase order.

- 2. Transaction Date Range** Search for an existing purchase order created between the Date - From and Date - Thru.
Date - From: Enter a date. If you leave the field blank, today's date will be used.
Date - Thru: Enter a date. If you leave the field blank, today's date will be used.
- 3. Edi 862 Transaction** Specify whether you want the system to automatically trigger an EDI 862 transaction. Values are:
Blank: Do not trigger an EDI 862 transaction.
I: Trigger an EDI 862 transaction.

Versions

These processing options specify the versions called by Kanban Processing (P3157). If you leave the processing options blank, the system uses the ZJDE0001 version unless otherwise specified.

- 1. Rate Header Maintenance (P3109)** Use this processing option to specify the version of the Rate Header Maintenance program (P3109) called by the Kanban Processing program (P3157).
- 2. Part Availability (P30205)** Use this processing option to specify the version of the Part Availability program (P30205) called by the Kanban Processing program (P3157).
- 3. Work Order Entry (P48013)** Use this processing option to specify the version of the Work Order Entry program (P48013) called by the Kanban Processing program (P3157).
- 4. Work Order Processing (R31410)** Use this processing option to specify the version of the Work Order Processing program (R31410) called by the Kanban Processing program (P3157).
- 5. Open Orders Inquiry (P3160W)** Use this processing option to specify the version of the Open Orders Inquiry program (P3160W) called by the Kanban Processing program (P3157).
- 6. Purchase Orders Entry (P4310)** Use this processing option to specify the version of the Purchase Orders Entry program (P4310) called by the Kanban Processing program (P3157).
- 7. Purchase Order Print (R43500)** Use this processing option to specify the version of the Purchase Order Print program (R43500) called by the Kanban Processing program (P3157). Used to generate an EDI 862 transaction. If left blank, XJDE0011 is used.
- 8. Purchase Order Receipts (P4312)** Use this processing option to specify the version of the Purchase Order Receipts program (P4312) called by the Kanban Processing program (P3157). To be called in blind mode. If left blank, ZJDE0008 is used.
- 9. Super Backflush (P31123)** Use this processing option to specify the version of the Super Backflush program (P31123) called by the Kanban Processing program (P3157).
- 10. Hours & Quantities (P311221)** Use this processing option to specify the version of the Hours & Quantities program (P311221) called by the Kanban Processing program (P3157).
- 11. Material Issues (P31113)** Use this processing option to specify the version of the Material Issues program (P31113) called by the Kanban Processing program (P3157).
- 12. Work Order Completions (P31114)** Use this processing option to specify the version of the Work Order Completions program (P31114) called by the Kanban Processing program (P3157).

- 13. Inventory Transfers (P4113)** Use this processing option to specify the version of the Inventory Transfers program (P4113) called by the Kanban Processing program (P3157).
- 14. Sales Order Entry (P4210)** Use this processing option to specify the version of the Sales Order Entry program (P4210) called by the Kanban Processing program (P3157).
- 15. Shipment Confirmation (P4205)** Use this processing option to specify the version of the Shipment Confirmation program (P4205) called by the Kanban Processing program (P3157).
- 16. DFM Item Completion (RF31011B)** Use this processing option to specify the version of the DFM Item Completion program (RF31011B) called by the Kanban Processing program (P3157). If left blank, then XJDE0001 is used.

CHAPTER 5

Identifying Insufficient Inventory

This chapter provides an overview of the Kanban Replenishment Capacity program (R30470) and discusses how to set processing options for Kanban Replenishment Capacity.

Understanding the Kanban Replenishment Capacity Program

The Kanban Replenishment Capacity program (R30470) enables 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 calculates the inventory shortfall or excess:

$$(\text{Kanban Capacity}) = (\text{Kanban Size}) \times (\text{Number of Cycles}) \times (\text{Number of kanban records that are similar})$$
$$(\text{Number of Cycles}) = [(\text{number of months}) \times (\text{number of weeks}) \times (\text{number of days})] / [(\text{Scan Delta Days}) + (\text{Lead Time Delivery (Days)})]$$

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 decide 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 ad hoc 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 ad hoc 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.

Setting Processing Options for Kanban Replenishment Capacity (R30470)

Processing options enable you to specify the default processing for programs and reports.

Do not modify PeopleSoft EnterpriseOne demo versions, which are identified by ZJDE or XJDE prefixes. Copy these versions or create new versions to change any values, including the version number, version title, prompting options, security, and processing options.

Defaults

These processing options specify the default information the system uses during Kanban Replenishment Capacity (R30470).

- 1. Start Date** Enter the start date for the order manually, or have the system calculate it using a backcheduling routine. The routine starts with the required date and offsets the total leadtime to calculate the appropriate start date.
- 2. End Date** Enter the date that an item is scheduled to arrive or that an action is scheduled for completion.

Versions

These processing options specify the versions called by Kanban Replenishment Capacity (R30470). If you leave the processing option blank, the system uses the XJDE0001 version.

- 3. Kanban Size Calculation (R30450)** Use this processing option to specify the version of the Kanban Size Calculation program (R30450) called by Kanban Replenishment Capacity (R30470).

CHAPTER 6

Setting Up Multitier Kanban Transactions

This chapter provides an overview of multitier kanban transactions and discusses how to define a kanban reorder point.

Understanding 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. A kanban reorder point set up for the source location triggers these multitier kanban transactions.

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, these 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 reorder point assessment on the source location.

When the quantity at the sourcing location is equal to or less than 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 reorder 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 quantity at the sourcing location is greater than 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 select 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.

Defining a Kanban Reorder Point

This section discusses how to define a kanban reorder point.

Form Used to Define a Kanban Reorder Point

Form Name	Form ID	Navigation	Usage
Fixed Location Revisions	W46012B	Kanban Management Setup (G30411), Fixed Locations Click the Kanban option on the Work With Fixed Locations form, and click the Add button.	Define a kanban reorder point.

Defining a Kanban Reorder Point

Access the Fixed Location Revisions form.

Fixed Locations - Fixed Location Revisions

OK Delete Cancel Form Tools

Branch/Plant: 27

Item Number: 2112 Custom Seat (FBB)

U/M: EA Each

Records 1 - 2		Customize Grid
	Location	Normal Replenishment Point
<input checked="" type="radio"/>	11.AAA.11	50.0000
<input type="radio"/>		

Fixed Location Revisions form

Complete the fields, and click OK:

- Branch/Plant
- Item Number
- U/M
- Location
- Normal Replenishment Point

CHAPTER 7

Planning for Kanban Management

This chapter provides an overview of planning for kanban management and discusses:

- MRP schedule generation for kanban management.
- Demand schedule generation for kanban management.

Understanding 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 (ad hoc) 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 enables you to publish the demand schedule in the form of an outbound transaction (EDI 830).

See Also

PeopleSoft EnterpriseOne Data Interface for Electronic Data Interchange 8.11 PeopleBook, “Processing EDI Purchase Order Documents,” Sending Shipping Schedules

CHAPTER 8

Using Kanban Capacity Self-Service for Planners

This chapter provides an overview of kanban capacity self-service for planners and discusses how to adjust kanban size.

Understanding 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 manage the kanban size in relation to the demand for the item. The capacity of the Kanban to meet the demand is governed by the size, number of cards, and the cycle time for replenishment. The planner should manage the kanban so that the capacity exceeds the demand.

Adjusting Kanban Size

This section discusses how to adjust kanban size using self-service.

Forms Used to Adjust Kanban Size

Form Name	Form ID	Navigation	Usage
View Kanban Capacity	W3019B	Kanban Management Setup (G30411), Kanban Replenishment Capacity	Review the capacity versus demand information.
Edit Kanban Size	W3017B	Kanban Management Setup (G30411), Kanban Replenishment Capacity Select a record on the View Kanban Capacity form, and click Edit in the Action field.	Adjust kanban size.

Adjusting Kanban Size Using Self-Service

Access the View Kanban Capacity form.

To adjust kanban size (self-service):

1. Review the capacity versus demand information.
2. Select a record that you want to work with, and then click Edit in the Action field.
3. On the Edit Kanban Size form, 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 the View Kanban Capacity form, 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 the Cancel button on the Edit Kanban Size form to return to the View Kanban Capacity form without saving the changes.

Glossary of PeopleSoft Terms

activity	A scheduling entity in PeopleSoft EnterpriseOne Form Design Aid that represents a designated amount of time on a calendar.
activity rule	The criteria by which an object progresses from one given point to the next in a flow.
add mode	A condition of a form that enables users to input data.
Advanced Planning Agent (APAg)	A PeopleSoft EnterpriseOne tool that can be used to extract, transform, and load enterprise data. APAg supports access to data sources in the form of relational databases, flat file format, and other data or message encoding, such as XML.
application server	A server in a local area network that contains applications shared by network clients.
as if processing	A process that enables you to view currency amounts as if they were entered in a currency different from the domestic and foreign currency of the transaction.
alternate currency	<p>A currency that is different from the domestic currency (when dealing with a domestic-only transaction) or the domestic and foreign currency of a transaction.</p> <p>In PeopleSoft EnterpriseOne Financial Management, alternate currency processing enables you to enter receipts and payments in a currency other than the one in which they were issued.</p>
as of processing	A process that is run as of a specific point in time to summarize transactions up to that date. For example, you can run various PeopleSoft EnterpriseOne reports as of a specific date to determine balances and amounts of accounts, units, and so on as of that date.
back-to-back process	A process in PeopleSoft EnterpriseOne Workflow Management that contains the same keys that are used in another process.
batch processing	<p>A process of transferring records from a third-party system to PeopleSoft EnterpriseOne.</p> <p>In PeopleSoft EnterpriseOne Financial Management, batch processing enables you to transfer invoices and vouchers that are entered in a system other than EnterpriseOne to PeopleSoft EnterpriseOne Accounts Receivable and PeopleSoft EnterpriseOne Accounts Payable, respectively. In addition, you can transfer address book information, including customer and supplier records, to PeopleSoft EnterpriseOne.</p>
batch server	A server that is designated for running batch processing requests. A batch server typically does not contain a database nor does it run interactive applications.
batch-of-one immediate	<p>A transaction method that enables a client application to perform work on a client workstation, then submit the work all at once to a server application for further processing. As a batch process is running on the server, the client application can continue performing other tasks.</p> <p>See also direct connect and store-and-forward.</p>
business function	A named set of user-created, reusable business rules and logs that can be called through event rules. Business functions can run a transaction or a subset of a transaction (check inventory, issue work orders, and so on). Business functions also contain the application programming interfaces (APIs) that enable them to be called from a form, a database trigger, or a non-EnterpriseOne application. Business functions can be combined with other business functions, forms, event rules, and other components to make up an application. Business functions can be created through

	event rules or third-generation languages, such as C. Examples of business functions include Credit Check and Item Availability.
business function event rule	See named event rule (NER).
business view	A means for selecting specific columns from one or more PeopleSoft EnterpriseOne tables whose data is used in an application or report. A business view does not select specific rows, nor does it contain any actual data. It is strictly a view through which you can manipulate data.
central objects merge	A process that blends a customer's modifications to the objects in a current release with objects in a new release.
central server	A server that has been designated to contain the originally installed version of the software (central objects) for deployment to client computers. In a typical PeopleSoft EnterpriseOne installation, the software is loaded on to one machine—the central server. Then, copies of the software are pushed out or downloaded to various workstations attached to it. That way, if the software is altered or corrupted through its use on workstations, an original set of objects (central objects) is always available on the central server.
charts	Tables of information in PeopleSoft EnterpriseOne that appear on forms in the software.
connector	Component-based interoperability model that enables third-party applications and PeopleSoft EnterpriseOne to share logic and data. The PeopleSoft EnterpriseOne connector architecture includes Java and COM connectors.
contra/clearing account	A general ledger account in PeopleSoft EnterpriseOne Financial Management that is used by the system to offset (balance) journal entries. For example, you can use a contra/clearing account to balance the entries created by allocations in PeopleSoft EnterpriseOne General Accounting.
Control Table Workbench	An application that, during the installation Workbench processing, runs the batch applications for the planned merges that update the data dictionary, user-defined codes, menus, and user override tables.
control tables merge	A process that blends a customer's modifications to the control tables with the data that accompanies a new release.
cost assignment	The process in PeopleSoft EnterpriseOne Advanced Cost Accounting of tracing or allocating resources to activities or cost objects.
cost component	In PeopleSoft EnterpriseOne Manufacturing Management, an element of an item's cost (for example, material, labor, or overhead).
cross segment edit	A logic statement that establishes the relationship between configured item segments. Cross segment edits are used to prevent ordering of configurations that cannot be produced.
currency restatement	The process of converting amounts from one currency into another currency, generally for reporting purposes. You can use the currency restatement process, for example, when many currencies must be restated into a single currency for consolidated reporting.
database server	A server in a local area network that maintains a database and performs searches for client computers.
Data Source Workbench	An application that, during the Installation Workbench process, copies all data sources that are defined in the installation plan from the Data Source Master and Table and Data Source Sizing tables in the Planner data source to the System-release number data source. It also updates the Data Source Plan detail record to reflect completion.

date pattern	A calendar that represents the beginning date for the fiscal year and the ending date for each period in that year in standard and 52-period accounting.
denominated-in currency	The company currency in which financial reports are based.
deployment server	A server that is used to install, maintain, and distribute software to one or more enterprise servers and client workstations.
detail information	Information that relates to individual lines in PeopleSoft EnterpriseOne transactions (for example, voucher pay items and sales order detail lines).
direct connect	A transaction method in which a client application communicates interactively and directly with a server application. See also batch-of-one immediate and store-and-forward.
Do Not Translate (DNT)	A type of data source that must exist on the iSeries because of BLOB restrictions.
dual pricing	The process of providing prices for goods and services in two currencies.
edit code	A code that indicates how a specific value for a report or a form should appear or be formatted. The default edit codes that pertain to reporting require particular attention because they account for a substantial amount of information.
edit mode	A condition of a form that enables users to change data.
edit rule	A method used for formatting and validating user entries against a predefined rule or set of rules.
Electronic Data Interchange (EDI)	An interoperability model that enables paperless computer-to-computer exchange of business transactions between PeopleSoft EnterpriseOne and third-party systems. Companies that use EDI must have translator software to convert data from the EDI standard format to the formats of their computer systems.
embedded event rule	An event rule that is specific to a particular table or application. Examples include form-to-form calls, hiding a field based on a processing option value, and calling a business function. Contrast with the business function event rule.
Employee Work Center	A central location for sending and receiving all PeopleSoft EnterpriseOne messages (system and user generated), regardless of the originating application or user. Each user has a mailbox that contains workflow and other messages, including Active Messages.
enterprise server	A server that contains the database and the logic for PeopleSoft EnterpriseOne or PeopleSoft World.
EnterpriseOne object	A reusable piece of code that is used to build applications. Object types include tables, forms, business functions, data dictionary items, batch processes, business views, event rules, versions, data structures, and media objects.
EnterpriseOne process	A software process that enables PeopleSoft EnterpriseOne clients and servers to handle processing requests and run transactions. A client runs one process, and servers can have multiple instances of a process. PeopleSoft EnterpriseOne processes can also be dedicated to specific tasks (for example, workflow messages and data replication) to ensure that critical processes don't have to wait if the server is particularly busy.
Environment Workbench	An application that, during the Installation Workbench process, copies the environment information and Object Configuration Manager tables for each environment from the Planner data source to the System-release number data source. It also updates the Environment Plan detail record to reflect completion.
escalation monitor	A batch process that monitors pending requests or activities and restarts or forwards them to the next step or user after they have been inactive for a specified amount of time.

event rule	A logic statement that instructs the system to perform one or more operations based on an activity that can occur in a specific application, such as entering a form or exiting a field.
facility	An entity within a business for which you want to track costs. For example, a facility might be a warehouse location, job, project, work center, or branch/plant. A facility is sometimes referred to as a <i>business unit</i> .
fast path	A command prompt that enables the user to move quickly among menus and applications by using specific commands.
file server	A server that stores files to be accessed by other computers on the network. Unlike a disk server, which appears to the user as a remote disk drive, a file server is a sophisticated device that not only stores files, but also manages them and maintains order as network user request files and make changes to these files.
final mode	The report processing mode of a processing mode of a program that updates or creates data records.
FTP server	A server that responds to requests for files via file transfer protocol.
header information	Information at the beginning of a table or form. Header information is used to identify or provide control information for the group of records that follows.
interface table	See Z tables.
integration server	A server that facilitates interaction between diverse operating systems and applications across internal and external networked computer systems.
integrity test	A process used to supplement a company's internal balancing procedures by locating and reporting balancing problems and data inconsistencies.
interoperability model	A method for third-party systems to connect to or access PeopleSoft EnterpriseOne.
in-your-face-error	In PeopleSoft EnterpriseOne, a form-level property which, when enabled, causes the text of application errors to appear on the form.
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.
jargon	An alternative data dictionary item description that PeopleSoft EnterpriseOne or People 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. This server provides middleware services for security and state maintenance, along with data access and persistence.
JDBNET	A database driver that enables heterogeneous servers to access each other's data.
JDEBASE Database Middleware	A PeopleSoft proprietary database middleware package that provides platform-independent APIs, along with client-to-server access.
JDECallObject	An API used by business functions to invoke other business functions.
jde.ini	A PeopleSoft file (or member for iSeries) that provides the runtime settings required for EnterpriseOne initialization. Specific versions of the file or member must reside on every machine running PeopleSoft EnterpriseOne. This includes workstations and servers.
JDEIPC	Communications programming tools used by server code to regulate access to the same data in multiprocess environments, communicate and coordinate between processes, and create new processes.

jde.log	The main diagnostic log file of PeopleSoft EnterpriseOne. This file is always located in the root directory on the primary drive and contains status and error messages from the startup and operation of PeopleSoft EnterpriseOne.
JDENET	PeopleSoft proprietary communications middleware package. This package is a peer-to-peer, message-based, socket-based, multiprocess communications middleware solution. It handles client-to-server and server-to-server communications for all PeopleSoft EnterpriseOne supported platforms.
Location Workbench	An application that, during the Installation Workbench process, copies all locations that are defined in the installation plan from the Location Master table in the Planner data source to the System data source.
logic server	A server in a distributed network that provides the business logic for an application program. In a typical configuration, pristine objects are replicated on to the logic server from the central server. The logic server, in conjunction with workstations, actually performs the processing required when PeopleSoft EnterpriseOne and World software runs.
MailMerge Workbench	An application that merges Microsoft Word 6.0 (or higher) word-processing documents with PeopleSoft EnterpriseOne records to automatically print business documents. You can use MailMerge Workbench to print documents, such as form letters about verification of employment.
master business function (MBF)	An interactive master file that serves as a central location for adding, changing, and updating information in a database. Master business functions pass information between data entry forms and the appropriate tables. These master functions provide a common set of functions that contain all of the necessary default and editing rules for related programs. MBFs contain logic that ensures the integrity of adding, updating, and deleting information from databases.
master table	See published table.
matching document	A document associated with an original document to complete or change a transaction. For example, in PeopleSoft EnterpriseOne Financial Management, a receipt is the matching document of an invoice, and a payment is the matching document of a voucher.
media storage object	Files that use one of the following naming conventions that are not organized into table format: Gxxx, xxxGT, or GTxxx.
message center	A central location for sending and receiving all PeopleSoft EnterpriseOne messages (system and user generated), regardless of the originating application or user.
messaging adapter	An interoperability model that enables third-party systems to connect to PeopleSoft EnterpriseOne to exchange information through the use of messaging queues.
messaging server	A server that handles messages that are sent for use by other programs using a messaging API. Messaging servers typically employ a middleware program to perform their functions.
named event rule (NER)	Encapsulated, reusable business logic created using event rules, rather than C programming. NERs are also called business function event rules. NERs can be reused in multiple places by multiple programs. This modularity lends itself to streamlining, reusability of code, and less work.
<i>nota fiscal</i>	In Brazil, a legal document that must accompany all commercial transactions for tax purposes and that must contain information required by tax regulations.
<i>nota fiscal factura</i>	In Brazil, a nota fiscal with invoice information. See also <i>nota fiscal</i> .

Object Configuration Manager (OCM)	In PeopleSoft EnterpriseOne, the object request broker and control center for the runtime environment. OCM keeps track of the runtime locations for business functions, data, and batch applications. When one of these objects is called, OCM directs access to it using defaults and overrides for a given environment and user.
Object Librarian	A repository of all versions, applications, and business functions reusable in building applications. Object Librarian provides check-out and check-in capabilities for developers, and it controls the creation, modification, and use of PeopleSoft EnterpriseOne objects. Object Librarian supports multiple environments (such as production and development) and enables objects to be easily moved from one environment to another.
Object Librarian merge	A process that blends any modifications to the Object Librarian in a previous release into the Object Librarian in a new release.
Open Data Access (ODA)	An interoperability model that enables you to use SQL statements to extract PeopleSoft EnterpriseOne data for summarization and report generation.
Output Stream Access (OSA)	An interoperability model that enables you to set up an interface for PeopleSoft EnterpriseOne to pass data to another software package, such as Microsoft Excel, for processing.
package	EnterpriseOne objects are installed to workstations in packages from the deployment server. A package can be compared to a bill of material or kit that indicates the necessary objects for that workstation and where on the deployment server the installation program can find them. It is point-in-time snap shot of the central objects on the deployment server.
package build	A software application that facilitates the deployment of software changes and new applications to existing users. Additionally, in PeopleSoft EnterpriseOne, a package build can be a compiled version of the software. When you upgrade your version of the ERP software, for example, you are said to take a package build. Consider the following context: “Also, do not transfer business functions into the production path code until you are ready to deploy, because a global build of business functions done during a package build will automatically include the new functions.” The process of creating a package build is often referred to, as it is in this example, simply as “a package build.”
package location	The directory structure location for the package and its set of replicated objects. This is usually \\deployment server\release\path_code\package\package name. The subdirectories under this path are where the replicated objects for the package are placed. This is also referred to as where the package is built or stored.
Package Workbench	An application that, during the Installation Workbench process, transfers the package information tables from the Planner data source to the System-release number data source. It also updates the Package Plan detail record to reflect completion.
PeopleSoft Database	See JDEBASE Database Middleware.
planning family	A means of grouping end items whose similarity of design and manufacture facilitates being planned in aggregate.
preference profile	The ability to define default values for specified fields for a user-defined hierarchy of items, item groups, customers, and customer groups.
print server	The interface between a printer and a network that enables network clients to connect to the printer and send their print jobs to it. A print server can be a computer, separate hardware device, or even hardware that resides inside of the printer itself.
pristine environment	A PeopleSoft EnterpriseOne environment used to test unaltered objects with PeopleSoft demonstration data or for training classes. You must have this environment so that you can compare pristine objects that you modify.

processing option	A data structure that enables users to supply parameters that regulate the running of a batch program or report. For example, you can use processing options to specify default values for certain fields, to determine how information appears or is printed, to specify date ranges, to supply runtime values that regulate program execution, and so on.
production environment	A PeopleSoft EnterpriseOne environment in which users operate EnterpriseOne software.
production-grade file server	A file server that has been quality assurance tested and commercialized and that is usually provided in conjunction with user support services.
program temporary fix (PTF)	A representation of changes to PeopleSoft software that your organization receives on magnetic tapes or disks.
project	In PeopleSoft EnterpriseOne, a virtual container for objects being developed in Object Management Workbench.
promotion path	<p>The designated path for advancing objects or projects in a workflow. The following is the normal promotion cycle (path):</p> <p>11>21>26>28>38>01</p> <p>In this path, <i>11</i> equals new project pending review, <i>21</i> equals programming, <i>26</i> equals QA test/review, <i>28</i> equals QA test/review complete, <i>38</i> equals in production, <i>01</i> equals complete. During the normal project promotion cycle, developers check objects out of and into the development path code and then promote them to the prototype path code. The objects are then moved to the productions path code before declaring them complete.</p>
proxy server	A server that acts as a barrier between a workstation and the internet so that the enterprise can ensure security, administrative control, and caching service.
published table	Also called a master table, this is the central copy to be replicated to other machines. Residing on the publisher machine, the F98DRPUB table identifies all of the published tables and their associated publishers in the enterprise.
publisher	The server that is responsible for the published table. The F98DRPUB table identifies all of the published tables and their associated publishers in the enterprise.
pull replication	One of the PeopleSoft methods for replicating data to individual workstations. Such machines are set up as pull subscribers using PeopleSoft EnterpriseOne data replication tools. The only time that pull subscribers are notified of changes, updates, and deletions is when they request such information. The request is in the form of a message that is sent, usually at startup, from the pull subscriber to the server machine that stores the F98DRPCN table.
QBE	An abbreviation for query by example. In PeopleSoft EnterpriseOne, the QBE line is the top line on a detail area that is used for filtering data.
real-time event	A service that uses system calls to capture PeopleSoft EnterpriseOne transactions as they occur and to provide notification to third-party software, end users, and other PeopleSoft systems that have requested notification when certain transactions occur.
refresh	A function used to modify PeopleSoft EnterpriseOne software, or subset of it, such as a table or business data, so that it functions at a new release or cumulative update level, such as B73.2 or B73.2.1.
replication server	A server that is responsible for replicating central objects to client machines.
quote order	In PeopleSoft EnterpriseOne Procurement and Subcontract Management, a request from a supplier for item and price information from which you can create a purchase order.

	In PeopleSoft EnterpriseOne Sales Order Management, item and price information for a customer who has not yet committed to a sales order.
selection	Found on PeopleSoft menus, a selection represents functions that you can access from a menu. To make a selection, type the associated number in the Selection field and press Enter.
Server Workbench	An application that, during the Installation Workbench process, copies the server configuration files from the Planner data source to the System-release number data source. It also updates the Server Plan detail record to reflect completion.
spot rate	An exchange rate entered at the transaction level. This rate overrides the exchange rate that is set up between two currencies.
Specification merge	A merge that comprises three merges: Object Librarian merge, Versions List merge, and Central Objects merge. The merges blend customer modifications with data that accompanies a new release.
specification	A complete description of a PeopleSoft EnterpriseOne object. Each object has its own specification, or name, which is used to build applications.
Specification Table Merge Workbench	An application that, during the Installation Workbench process, runs the batch applications that update the specification tables.
store-and-forward	The mode of processing that enables users who are disconnected from a server to enter transactions and then later connect to the server to upload those transactions.
subscriber table	Table F98DRSUB, which is stored on the publisher server with the F98DRPUB table and identifies all of the subscriber machines for each published table.
supplemental data	<p>Any type of information that is not maintained in a master file. Supplemental data is usually additional information about employees, applicants, requisitions, and jobs (such as an employee's job skills, degrees, or foreign languages spoken). You can track virtually any type of information that your organization needs.</p> <p>For example, in addition to the data in the standard master tables (the Address Book Master, Customer Master, and Supplier Master tables), you can maintain other kinds of data in separate, generic databases. These generic databases enable a standard approach to entering and maintaining supplemental data across PeopleSoft EnterpriseOne systems.</p>
table access management (TAM)	The PeopleSoft EnterpriseOne component that handles the storage and retrieval of use-defined data. TAM stores information, such as data dictionary definitions; application and report specifications; event rules; table definitions; business function input parameters and library information; and data structure definitions for running applications, reports, and business functions.
Table Conversion Workbench	An interoperability model that enables the exchange of information between PeopleSoft EnterpriseOne and third-party systems using non-PeopleSoft EnterpriseOne tables.
table conversion	An interoperability model that enables the exchange of information between PeopleSoft EnterpriseOne and third-party systems using non-PeopleSoft EnterpriseOne tables.
table event rules	Logic that is attached to database triggers that runs whenever the action specified by the trigger occurs against the table. Although PeopleSoft EnterpriseOne enables event rules to be attached to application events, this functionality is application specific. Table event rules provide embedded logic at the table level.
terminal server	A server that enables terminals, microcomputers, and other devices to connect to a network or host computer or to devices attached to that particular computer.

three-tier processing	The task of entering, reviewing and approving, and posting batches of transactions in PeopleSoft EnterpriseOne.
three-way voucher match	In PeopleSoft EnterpriseOne Procurement and Subcontract Management, the process of comparing receipt information to supplier's invoices to create vouchers. In a three-way match, you use the receipt records to create vouchers.
transaction processing (TP) monitor	A monitor that controls data transfer between local and remote terminals and the applications that originated them. TP monitors also protect data integrity in the distributed environment and may include programs that validate data and format terminal screens.
transaction set	An electronic business transaction (electronic data interchange standard document) made up of segments.
trigger	One of several events specific to data dictionary items. You can attach logic to a data dictionary item that the system processes automatically when the event occurs.
triggering event	A specific workflow event that requires special action or has defined consequences or resulting actions.
two-way voucher match	In PeopleSoft EnterpriseOne Procurement and Subcontract Management, the process of comparing purchase order detail lines to the suppliers' invoices to create vouchers. You do not record receipt information.
User Overrides merge	Adds new user override records into a customer's user override table.
variance	<p>In Capital Asset Management, the difference between revenue generated by a piece of equipment and costs incurred by the equipment.</p> <p>In EnterpriseOne Project Costing and EnterpriseOne Manufacturing Management, the difference between two methods of costing the same item (for example, the difference between the frozen standard cost and the current cost is an engineering variance). Frozen standard costs come from the Cost Components table, and the current costs are calculated using the current bill of material, routing, and overhead rates.</p>
Version List merge	The Versions List merge preserves any non-XJDE and non-ZJDE version specifications for objects that are valid in the new release, as well as their processing options data.
visual assist	Forms that can be invoked from a control via a trigger to assist the user in determining what data belongs in the control.
vocabulary override	An alternate description for a data dictionary item that appears on a specific PeopleSoft EnterpriseOne or World form or report.
wchar_t	An internal type of a wide character. It is used for writing portable programs for international markets.
web application server	A web server that enables web applications to exchange data with the back-end systems and databases used in eBusiness transactions.
web server	A server that sends information as requested by a browser, using the TCP/IP set of protocols. A web server can do more than just coordination of requests from browsers; it can do anything a normal server can do, such as house applications or data. Any computer can be turned into a web server by installing server software and connecting the machine to the internet.
Windows terminal server	A multiuser server that enables terminals and minimally configured computers to display Windows applications even if they are not capable of running Windows software themselves. All client processing is performed centrally at the Windows terminal server and only display, keystroke, and mouse commands are transmitted over the network to the client terminal device.

work day calendar	In EnterpriseOne Manufacturing Management, a calendar that is used in planning functions that consecutively lists only working days so that component and work order scheduling can be done based on the actual number of work days available. A work day calendar is sometimes referred to as planning calendar, manufacturing calendar, or shop floor calendar.
workflow	The automation of a business process, in whole or in part, during which documents, information, or tasks are passed from one participant to another for action, according to a set of procedural rules.
workgroup server	A server that usually contains subsets of data replicated from a master network server. A workgroup server does not perform application or batch processing.
XAPI events	A service that uses system calls to capture PeopleSoft EnterpriseOne transactions as they occur and then calls third-party software, end users, and other PeopleSoft systems that have requested notification when the specified transactions occur to return a response.
XML CallObject	An interoperability capability that enables you to call business functions.
XML Dispatch	An interoperability capability that provides a single point of entry for all XML documents coming into PeopleSoft EnterpriseOne for responses.
XML List	An interoperability capability that enables you to request and receive PeopleSoft EnterpriseOne database information in chunks.
XML Service	An interoperability capability that enables you to request events from one PeopleSoft EnterpriseOne system and receive a response from another PeopleSoft EnterpriseOne system.
XML Transaction	An interoperability capability that enables you to use a predefined transaction type to send information to or request information from PeopleSoft EnterpriseOne. XML transaction uses interface table functionality.
XML Transaction Service (XTS)	Transforms an XML document that is not in the PeopleSoft EnterpriseOne format into an XML document that can be processed by PeopleSoft EnterpriseOne. XTS then transforms the response back to the request originator XML format.
Z event	A service that uses interface table functionality to capture PeopleSoft EnterpriseOne transactions and provide notification to third-party software, end users, and other PeopleSoft systems that have requested to be notified when certain transactions occur.
Z table	A working table where non-PeopleSoft EnterpriseOne information can be stored and then processed into PeopleSoft EnterpriseOne. Interface tables also can be used to retrieve PeopleSoft EnterpriseOne data. Interface tables are also known as interface tables.
Z transaction	Third-party data that is properly formatted in interface tables for updating to the PeopleSoft EnterpriseOne database.

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