PeopleSoft®

EnterpriseOne Tools 8.94 PeopleBook: Workflow Tools

November 2004

EnterpriseOne Tools 8.94 PeopleBook: Workflow Tools
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Contents

About This PeopleBook

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.
Italics	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 *O*.
KEY+KEY	Indicates a key combination action. For example, a plus sign (+) between keys means that you must hold down the first key while you press the second key. For ALT+W, hold down the ALT key while you press the W key.
`Monospace font`	Indicates a PeopleCode program or other code example.
“ ” (quotation marks)	Indicate chapter titles in cross-references and words that are used differently from their intended meanings.

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:

Blank: Batch is unposted and pending approval.

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

D: The batch posted successfully.

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

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

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

Branch/Plant

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

Business Unit

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

Category Code

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

Company

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

Currency Code

Enter the three-character code that represents the currency of the transaction. 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.

EnterpriseOne Workflow Tools Preface

This preface discusses the Workflow Tools PeopleBook.

PeopleSoft Products

This PeopleSoft Book refers to this PeopleSoft product line: PeopleSoft EnterpriseOne Tools.

EnterpriseOne Workflow Tools

This PeopleBook covers Workflow Tools, a member of the EnterpriseOne Tools suite. Use EnterpriseOne Workflow Tools (Workflow) to automate the high-volume, formerly paper-based process into an email-based process flow across a network. Its chapters describe the tool in general and then defines its features and functionality.

CHAPTER 1

Getting Started

This chapter provides an overview of preparing to use EnterpriseOne Workflow Tool.

PeopleSoft Tools Workflow Tool Overview

EnterpriseOne Workflow Tools (Workflow) enables you to automate the high-volume, formerly paper-based process into an email-based process flow across a network. Documents, information, and tasks pass from one participant to another for action based on a set of procedural rules. The result is an automated and efficient process with minimal user involvement, which enables you to streamline the existing business processes, increase efficiency, and reduce process time. Moreover, Workflow uses the tools already in place in the EnterpriseOne system.

Other Sources of Information

In the planning phase of your 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 The PeopleBooks*, with information about where to find the most current version of each.

See Also

About These PeopleBooks Preface

Implementing Workflow Tools

To use Workflow with you EnterpriseOne applications, you must have EntepriseOne installed, and you must have a valid EnterpriseOne user account.

CHAPTER 2

Understanding Workflow

This chapter discusses:

- Why workflow is important.
- Workflow management: streamlining business.
- Workflow enhancement scenario.

Why Workflow is Important

In the past, companies benefited greatly from economies of scale, that is, the reduction of production costs that is achieved with increased output. These economies were possible because companies typically manufactured large quantities of standard products for relatively large and stable consumer groups. However, economies of scale are becoming less important in today's marketplace, due in large part to the increasing fragmentation of the consumer base. With so many products available, customers are more discriminating than ever and often expect highly complex services to go with the products that they purchase.

As a result, the definition of productivity as it relates to business success is changing rapidly and radically. Productivity is no longer defined simply as creating more with less. Increasingly, value is linked not only to sheer output but to innovation, or the ability to correctly anticipate and creatively respond to new and changing market opportunities. Today, a keen competitive advantage is enjoyed by those organizations with the flexible business infrastructures and tools in place to quickly develop new products and services and continuously outperform the time to market of their competitors.

The dependence of today's business enterprises on innovation and fast delivery of product cannot be overestimated. With the new emphasis on relentless innovation and the advantages that it breeds, successful companies are constantly searching for ways to reshape their corporate structures to streamline their business processes.

Workflow Management: Streamlining Business

Goods and services must be produced both faster and smarter through teamwork and efficiency. Only those companies with innovative staff, products, services, and short development cycles will prosper.

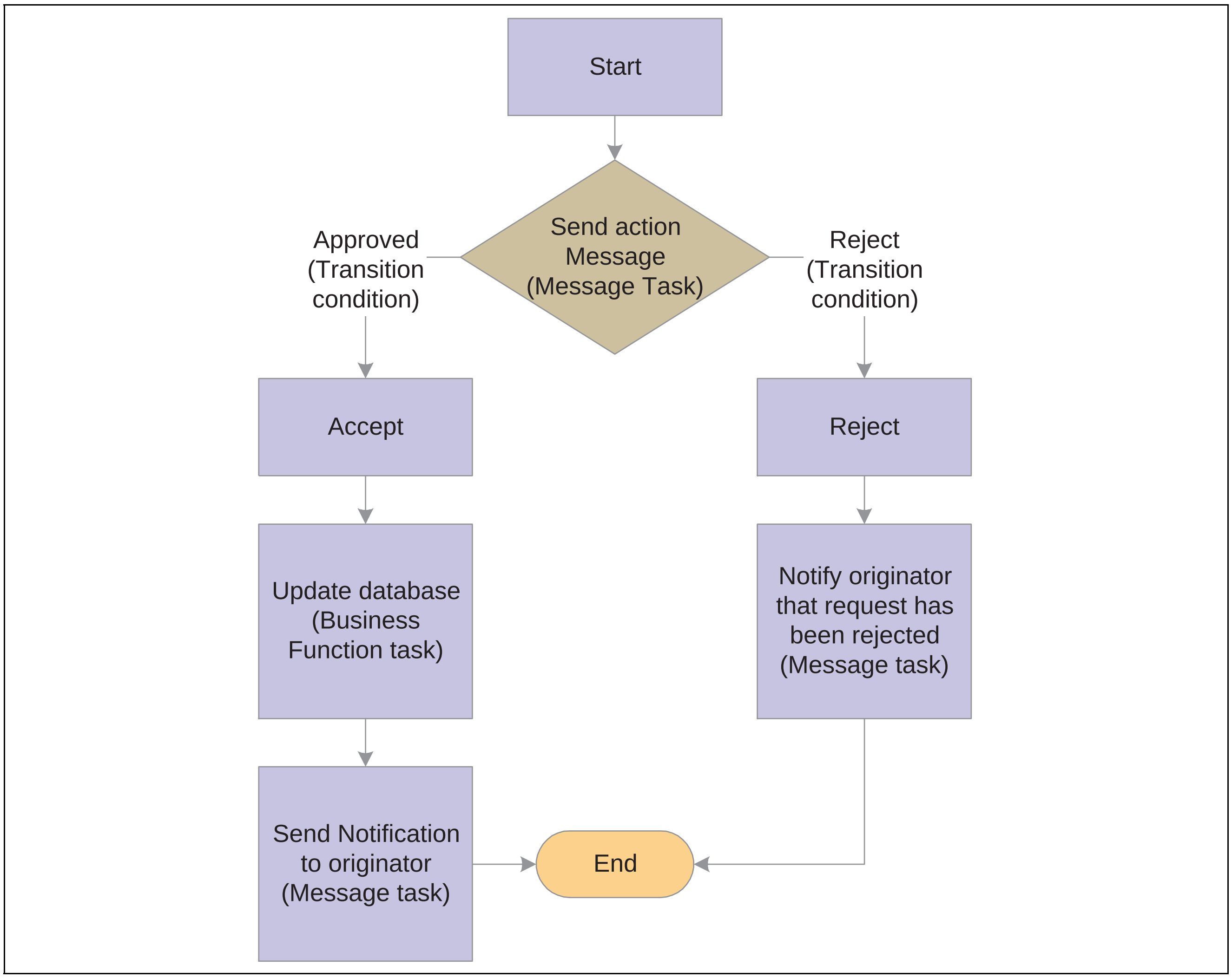
Workflow management, a strategy for automating business processes, is a powerful tool for translating the collaborative vision into real-world business applications with clear and measurable paybacks. The aim of workflow management is to streamline the components of various office systems by eliminating unnecessary tasks (and the costs associated with the performance of those tasks) and automating the remaining tasks in a process.

Workflow management is the effective application of information technologies to internal business processes in order to accelerate the collaborative and creative processes that drive innovation. The goal of workflow software technology is the creation of a single environment for managing the complexities multiple-office automation environments. As software has moved from individualized solutions with dedicated functionality to integrated groupware solutions, workflow has evolved as a metaphor for the efficient coordination of multiple workgroups using multiple technologies.

Most workflow products support two basic functions:

- Tools for mapping business processes, which might be defined sets of routes, roles, and rules for the movement of documents and tasks
- Implementation of those business processes through linkages with a company's computer network, shared databases, and email systems so that information can flow through the organization at a controlled and efficient pace

Following is an illustration of a basic workflow process for approving an increase to a customer's credit limit:



Basic Approval Workflow Process

The Benefits of Workflow

Because organizations are made up of a series of intricately intertwined business cycles, these cycles are a logical place to look first when attempting to streamline. According to the Workflow Management Coalition, almost 90 percent of all time that used to perform tasks within the business setting is classified as transfer time, whereas 10 percent is used for the actual performance of those tasks. The objective of workflow analysis is to redefine and then reconstruct the components of lengthy business cycles so that the time required to execute a task is minimized and the transfer time between tasks is eliminated entirely.

Other key benefits of workflow management include:

- Improved efficiency through the elimination of many unnecessary task steps
- Better business process control achieved by standardizing work methods and creating audit trails
- Improved customer service when consistency in the processes leads to greater predictability in levels of response to customers
- Flexibility bred from software control over processes, which enables their future redesign in response to changing business needs

Workflow Enhancement Scenario

This section provides an overview workflow enhancements scenarios and discusses:

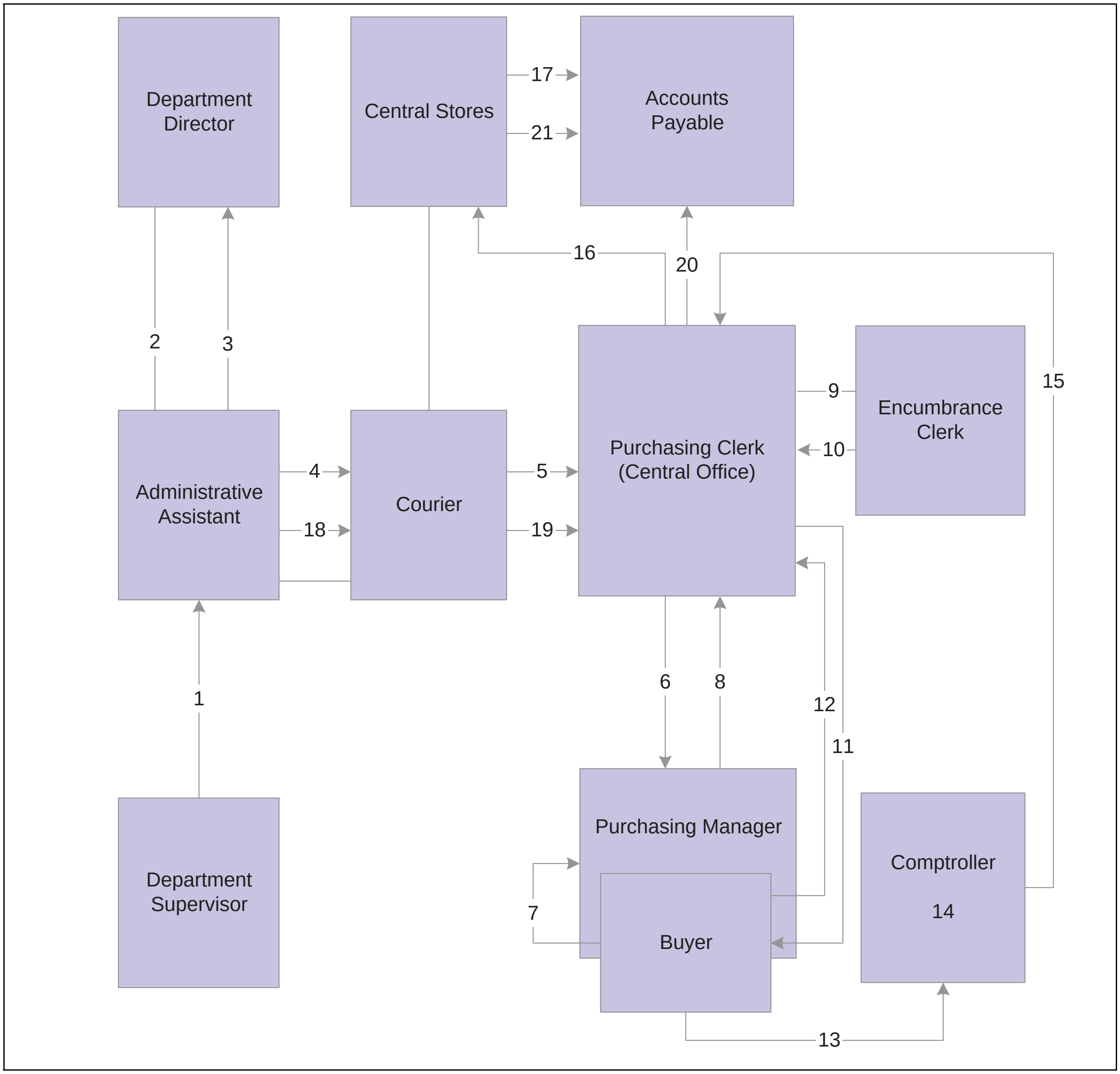
- Conventional workflow.
- Enhanced workflow with EnterpriseOne Workflow Tools.

Conventional Workflow

Information that is critical to a workflow process can be defined and stored in database tables, enabling a computer system to automate the flow of information and tasks. This automation minimizes the reliance on physical meetings to enter redundant data and to physically exchange paper. For example, using an automated workflow process, purchase orders and work orders can be processed to completion without a single printout. The defined workflow information might include order activity rules, workflow steps, and expenditure authorization requests, all of which can be routed automatically using email.

The following scenario demonstrates the savings in labor and time that can be achieved when EnterpriseOne Workflow Tools technology is applied to a typical business process like procurement.

The following graphic illustrates the paper trail of a typical procurement process that is not automated. The step-by-step tasks of this conventional workflow and the total time required to complete the procurement process are explained in the following graphic.



Typical Paper Trail Procurement Process

1. The department supervisor at a remote office fills out a requisition form to request goods.
2. The administrative assistant processes the requisition form, looks through two catalogs, and locates the items. The assistant then fills out the paper portion of the requisition and walks it to the department director.
3. The department director reviews the requisition, signs it, and puts it in an Out basket.
4. The administrative assistant retrieves the requisition and places it in a courier pack to the central office.
5. A courier drives to the remote office, picks up the courier pack, and delivers it to the purchasing clerk at the central office.
6. The purchasing clerk reviews the requisition, audits central stores, and sends the requisition to the purchasing manager if the item is in stock, or to the buyer if the item is not in stock.

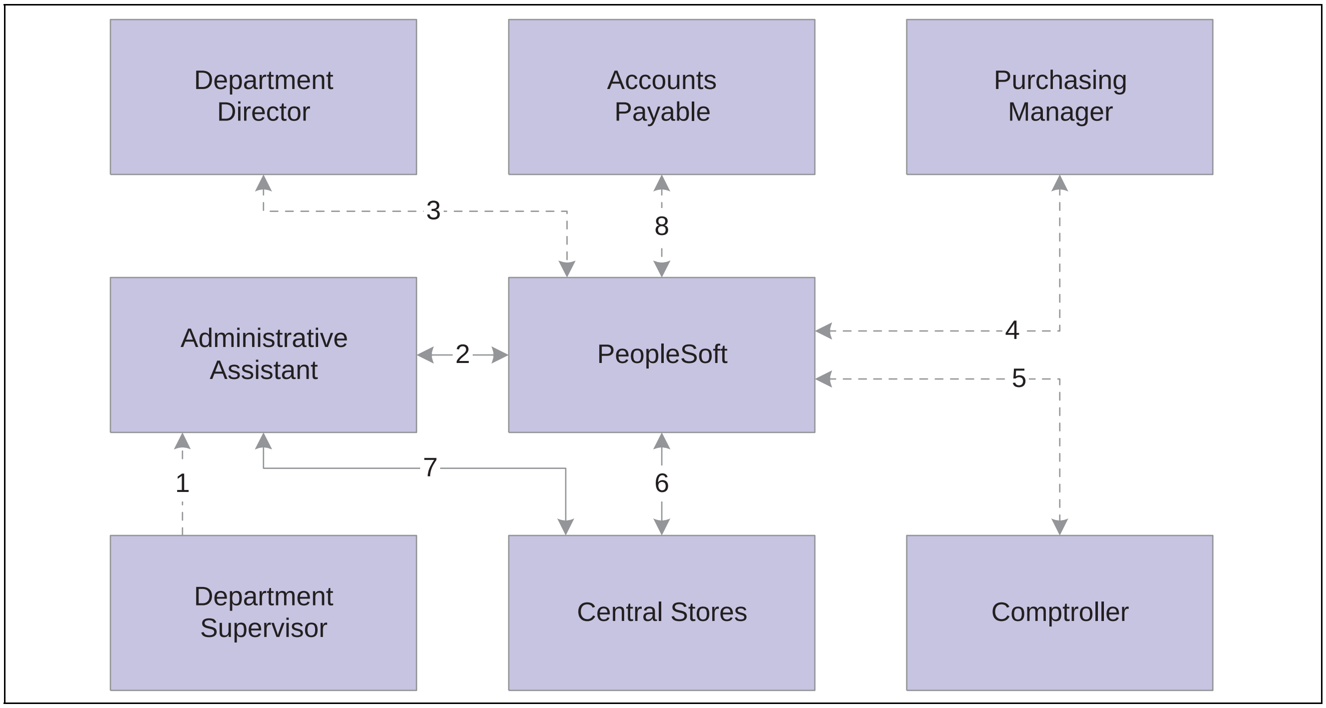
7. The buyer reviews the document, selects the supplier, calls for a quote, and passes the requisition to the purchasing manager.
8. The purchasing manager reviews, signs, and places the requisition in an Out basket.
9. The purchasing clerk retrieves the requisition and passes it to the encumbrance clerk.
10. The encumbrance clerk reviews the items, assigns account codes, and checks the budget. If funds are available, the requisition is passed back to the purchasing clerk.
11. The purchasing clerk sends the requisition to the comptroller if the item is in central stores, or to the buyer if it is not in stock and must be bought and delivered to central stores.
12. The clerk retrieves the purchase order and delivers it to the comptroller or buyer.
13. The buyer consolidates the requisition into a single purchase order per vendor and places the order in the out basket for delivery to the comptroller.
14. The comptroller reviews and signs the purchase order. At this step, the routing can take longer, based on the amount of the request and the level of authorization of the person approving the purchase.
15. The clerk retrieves the document and places it in interoffice mail. Another day passes.
16. A multipart document arrives one day later using interoffice mail in the purchasing department. The purchasing clerk tears out the white copy and sends the rest of the multipart form to central stores.
17. The purchasing clerk logs and files the white copy.
18. The central stores clerk retrieves the item from the shelf, tears out the pink copy, places it in the accounts payable stack, and ships the item and the remaining copies to the remote office.
19. The administrative assistant receives the item, tears out, logs, and files the blue copies, and places the green receiving and yellow accounts payable copy in a courier pack to go back to the central office.
20. A courier retrieves the pack and returns the green and yellow copies to the central office.
21. The purchasing clerk attaches the white original and green receiving copies to each other, puts them in the file, and sends the yellow copy to accounts payable.
22. The accounts payable clerk receives the invoice from central stores, retrieves the open yellow receiver copy from the file, and matches and enters the voucher.

Total time (in minutes) per item if the item is not in stock: 172.5

Total time (in minutes) per item if the item is in stock: 147.5

Enhanced Workflow with EnterpriseOne Workflow Tools

The following graphic illustrates how EnterpriseOne Workflow Tools enhances this workflow by reducing the paper trail, minimizing redundant data and data entry, and reducing errors or the need to redo work.



Workflow Enhancements

Using EnterpriseOne Workflow Tools, the organization streamlined its workflow process as described in the following steps:

1. The department supervisor fills out a requisition form to request goods.
2. The administrative assistant processes the requisition form online. The system checks the budget and automatically routes the request to the next approver based on the workflow table hierarchy and the amount of the item.
3. The department director reviews and approves the requisition online. The system automatically routes the requisition to the appropriate buyer or purchasing manager.
4. The purchasing manager consolidates the requisition with others for the same vendor into a purchase order. The system automatically routes the purchase order to the next approver.
5. The comptroller reviews and approves the purchase order as required.
6. The purchase order is automatically routed to central stores. A clerk takes the pick slip, retrieves the item from the shelf, and ships it for next-day delivery.
7. The administrative assistant receives the item on the next day.
8. The accounts payable clerk receives the invoice online and matches it to the open receipt that is also online. The system automatically creates a voucher.

Total time (in minutes): 27

CHAPTER 3

Understanding PeopleSoft EnterpriseOne Workflow Tools

This chapter discusses:

- EnterpriseOne Workflow Tools.
- Key concepts.
- EnterpriseOne Workflow Tools features.
- Components of an EnterpriseOne Workflow process.
- Example: A Workflow process.
- Planning for Workflow.

EnterpriseOne Workflow Tools

Using Workflow Tools, you can enable any application for workflow. This flexibility and ease of use enables you to use new, innovative business process ideas in the existing system without major system changes.

Workflow Tools enables you and your employees to access workflow messages or tasks from several places:

- Work Center.
- Employee Queue Manager.
- Third-party email systems.
- Work Item Manager (web client users only).

You can monitor the workflow processes and tasks in the following ways:

- As a Workflow administrator, from the Process Task Monitor.

  This monitor enables an administrator to override authority at the execution of certain tasks or to monitor the workflow for potential delays in workflow queues.
- Graphically, from the Process Modeler Server (sold separately).

  This product provides an HTML view of workflow process instances within the PeopleSoft Portal and provides Workflow administrators the ability to suspend, terminate, or resume any workflow process instance.
- As a user, from the Work Center, which displays action or error messages that require user interaction.

  For example, when a user receives notification that a document requires her review, the routing and the document appear within the Work Center.

The Workflow model is based on the following principles:

Routes	Routes define the path along which the Workflow engine moves work. This work could involve a message, batch process, business function, halt in the system, or form. Routing can be simple, meaning that it is typically sequential; or it can be complex, meaning that it involves joins or splits, parallel routing, or iterative routing (looping).
Rules	Rules define to whom or where the work should be routed. Rules define the conditions that must be met for the Workflow engine to progress from one step to the next. Rules can be contingent on predefined threshold values or can be as simple as moving to the next step in a process.

Key Concepts

The following table contains definitions of key concepts that are essential in understanding the EnterpriseOne Workflow Tools. Before you create a workflow process, you should familiarize yourself with the following concepts:

Workflow system All of the tools that facilitate the design of a workflow process, as well as the workflow engine.

Workflow engine All of the EnterpriseOne mechanisms that move the workflow process from one task to another.

Process definition A template or model of the workflow process. The process definition contains all the information about the tasks, transitions, and conditions that make up a workflow process. That is, the process definition defines each component of the process and defines each path that the process might follow.

Process instance An active process in the system. When an event rule activates a workflow process, the system creates a process instance. The process instance follows a path that is defined in the process definition. You can have several concurrent process instances of the same process in the system.

Note. If you are familiar with object-oriented programming, a process definition is comparable to a class and the process instance is comparable to an object.

Process version A specific workflow process definition. The system uses process versions to enable modification of processes without disrupting currently running process instances. Before you modify a process, you should copy the workflow process version to a new version number, edit the new version, and then make the new version active. Use this versioning mechanism during workflow development to enable process instances that started using the old version to finish using that same version.

PeopleSoft EnterpriseOne Workflow Tools Features

EnterpriseOne Workflow Tools (Workflow) enable you to do the following:

- Attach a workflow process with event rules to any event within an application, batch process, or named event rule (NER).

  You can also attach a workflow process through table event rules in Table Design Aid.
- Run conditional processing, which is logic that is contingent upon supplied criteria, such as quantity and dollar amount.

  This criteria can be any parameter that is used in the decision-making process that the system can evaluate.
- Create messages that are specific to the process by setting up message templates (text substitution messages) in the data dictionary.

Workflow also:

- Integrates seamlessly with EnterpriseOne interactive and batch applications.
- Offers multiple level approvals.
- Offers automatic escalation of messages which have not been acted upon.
- Offers manual escalation of processes in which the administrator can override or bypass certain tasks or users in the workflow process.
- Automatically time stamps all tasks within a process for auditing and improvement analysis through the Process Task Monitor (P98860) or Workflow Advanced Analysis (P98870).

All of the technology, rules, and principles explained above enable you to work more efficiently and reduce cycle time. The automated process reduces errors and generates less paperwork. Furthermore, Workflow helps you develop workflow-enabled applications or quickly and smoothly enable existing applications for workflow. You can attach a workflow process that sends a message or calls an application to any event within an application. All you have to do is attach a Start Process call to an event within an application to initiate the workflow process. Because this process is defined outside of the application, it offers you unlimited flexibility to incorporate your innovative ideas into the EnterpriseOne system.

Components of a PeopleSoft EnterpriseOne Workflow Process

This section provides an overview of the components of an EnterpriseOne workflow process, and describes the workflow tasks.

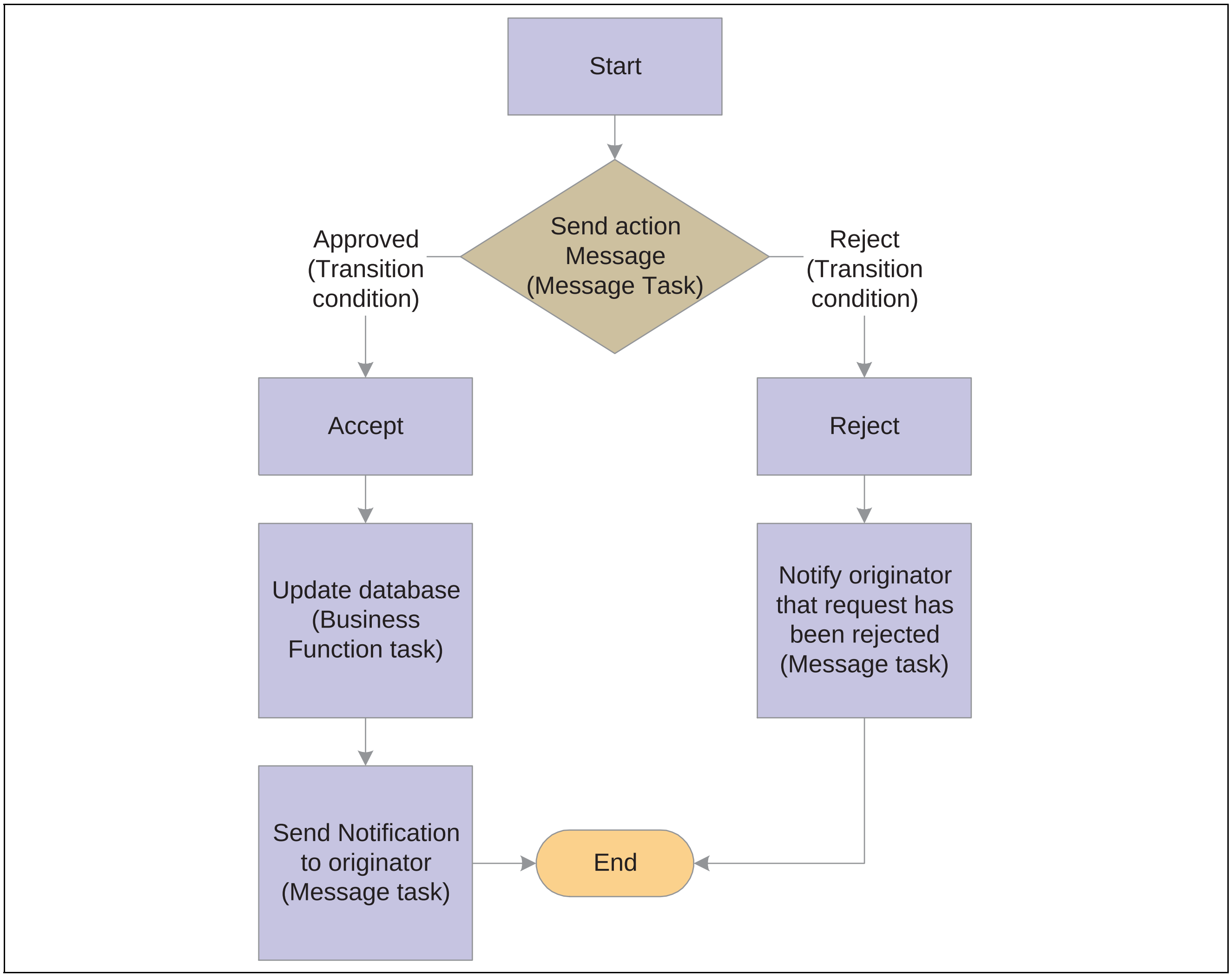
Components

A workflow process consists of tasks and transitions. A task represents an action that takes place in the workflow process, such as starting a workflow process, sending an approval message, or updating a table in a database. A transition links workflow tasks together. Transitions can contain transition conditions, which are logical criteria that determine which task will occur next in the workflow process.

The following graphic illustrates an EnterpriseOne workflow process. Each button represents a task in the process. The Start task begins the process when triggered by an event within an application, such as someone changing a customer’s credit limit. Based on that change, the system invokes a message task, which sends a message to a designated user (an approver) to review the change and either approve or reject it.

The lines in the graphic that are labeled Approved and Rejected illustrate transition conditions. If the approver approves the change, a business function updates the database with new information (such as the customer's new credit limit). The system then sends a message back to the originator, acknowledging that the changes were made. If the approver rejects the change, the system sends a message to the originator informing him or her that the request was rejected. The database remains unchanged if the request is rejected.

This illustration shows a workflow process.



Workflow Process

Workflow Tasks

The following tasks can be used in a workflow process:

Start A task that begins a workflow process when triggered by an event. This task is automatically included in the process when you create a workflow process.

End A task that completes a workflow process. As with Start, this task is automatically included in the process when you create a workflow process.

Batch application A task that starts an EnterpriseOne batch application.

Interactive application A task that starts an EnterpriseOne interactive application, such as Work With Journal Entries.

Business function A task that uses a business function for special logic processing, including any business functions that are written in C programming language or named event rules. For example, you can set up a business function task that updates the database if a user approves an active message.

Local subprocess A task that starts another workflow process, which includes its own set of tasks.

Message A task that generates a message. A message task can include the following items:

- A recipient specifying to whom the message will be sent.
- Recipient rules and recipient conditions containing the logic that can override the original recipient.
- A shortcut to the Generic Workflow Approval forms (P98805) or any other form.
- A message template containing boilerplate text and values that are substituted from data items within key data and additional data structures of the workflow process.
- Escalation options enabling the system to forward (escalate) unread messages after a certain period of time to another user. You add escalation to a message so that if the original recipient of the message is not available to respond to the message, another person will receive the message.

Windows executable A task that launches an executable program that you specify, such as a batch file or a virus scanner. Typically, this is a process without a user interface.

Halt A task that suspends the workflow process for a certain period. When a period of time has passed or when an event occurs, the process starts again. The process is permanently halted until some outside event restarts it. You specify the earliest date and time that the task can be restarted within the instance record.

Example: A Workflow Process

The Accounts Receivable application can detect when a user changes a customer's credit limit. This ability to detect a change enables an approval process to automatically route a message to the appropriate people for their approval or rejection.

In the following example, a user changes a customer's credit limit from 50,000 USD to 60,000 USD. The system displays a message box that notifies the user that the changes have been submitted for approval. The system does not reflect the new credit limit in the customer record until the change is approved.

This example shows the dialog box that explains that the changes are pending review.

The approver receives a message in the Credit Management Queue through the Employee Work Center. The message indicates that the change is pending approval.

To approve or reject the change, the approver clicks the Customer Credit Limit Was Changed message and clicks the Workflow Approval button, which opens a form used to approve or reject the message. This form also enables the approver to add supplemental information about the approval or rejection action for audit purposes.

If the approver rejects the change, the system retains the customer's old credit limit information and sends a message to the originator, informing her or him of the rejection, which completes the workflow process.

If the approver approves the change, a business function task initiates a named event rule (NER) that updates the database with the customer's new credit limit.

This example shows the Workflow Approval form.

The process sends a message to the user who originated the credit limit change, indicating that the credit limit change was approved.

Planning for Workflow

The workflow system enables a well-managed business to operate even more efficiently. The workflow system is essentially value-neutral, meaning that it does not substantially improve the efficiency of processes that are poorly designed originally. Therefore, before thinking about ways to better manage the internal workflows, your company should first consider some degree of business process reengineering. This planning process is vital for ensuring that the current business processes and management approaches are synchronized with today's volatile, competitive environment, and not a hindrance to flexibility and growth.

CHAPTER 4

Setting Up Workflow

This chapter provides an overview of setting up workflow.

Understanding How to Set Up Workflow

When you create a workflow process to send messages to individuals or to members of a distribution list, you can perform some initial tasks to make sure that the system is set up to properly distribute these messages. For example, if the recipients of a workflow message use a third-party email system, you will need to set up EnterpriseOne with external mail access. For users of the EnterpriseOne mail system, the Work Center, you might want to set up custom queues to organize and categorize messages sent by different workflow processes.

You might also need to set up a message template for your workflow process. A workflow process uses message templates to present messages that contain specific information or information that is substituted from data items within the process.

You can perform the following tasks before you begin creating a workflow process:

- Setting Up External Mail Access
- Setting Up Queues
- Setting Up Message Templates

Setting Up Workflow Components

This section provides overviews of external mail access, queues, and message templates and describes how to:

- Set up external mail access
- Enable sending external mail using SMTP
- Set up queues
- Set up message templates

See Also

Chapter 11, "Understanding Message and Workflow System Functions," page 79

External Mail Access

EnterpriseOne software provides an integrated mail system that enables users to communicate with external email software packages such as Microsoft Outlook or Lotus Notes. The system uses the Simple Mail Transfer Protocol (SMTP) to do this.

SMTP is a TCP/IP protocol for sending messages from one computer to another on a network. SMTP is used on the internet to route messages. In EnterpriseOne, the Send Message system function uses SMTP to route messages to external email addresses.

Benefits of Using an SMTP Server

The following are benefits of using an SMTP server:

- You can separate mail functions along client/server lines, which facilitates the creation of front-end client mail software that is independent of the back-end mail engine. An SMTP server is not dependent on what kind of external mail software is being used in your company.
- You can send messages to anyone with an external mail address by using the Send Message system function. You must pass a valid email address in the recipient field.

To enable sending external mail using SMTP:

1. the following lines to the [JDEMAIL] section in the jde.ini file of each Windows client:
2. Rule1=90|OPT|MAILSERVER=*smtp_server_name*

   The MAILSERVER setting identifies the name of the SMTP server responsible for sending messages. This setting must be equal to the name of the machine on which the SMTP service is running. This server name is the same as it is listed in the TCP/IP host file on the server.

   - Rule2=100|DEFAULT|OWMON=*address@your_company.com*

     When the Send Message system function is initiated from the Server Administration Workbench, the OWMON parameter is used to determine the From address for the mail message. Set this parameter to an appropriate mail address for your company.

   - Rule3=110|DEFAULT|JDE_SYSTEM=*address@your_company.com*

     When the Send Message system function is initiated within application or business function event rules, the JDE_SYSTEM parameter is used to determine the From address for the mail message. Set this parameter to an appropriate mail address for your company.

   - Rule4=120|DEFAULT|WORKFLOW_SYSTEM=*address@your_company.com*

     When the Send Message system function is initiated from an activity in a workflow process, the WORKFLOW_SYSTEM parameter is used to determine the From address for the mail message. Set this parameter to an appropriate mail address as the originator of a workflow message for your company.

   - Rule5=130|OPT|MERGELOCAL=1

     For current installations, the MERGELOCAL parameter setting should be equal to 1.

   - Rule6=140|OPT|UPDATELOCAL=0

     For current installations, the UPDATELOCAL parameter setting should be equal to 0.

Setting Up Queues

Queues categorize messages within the system and organize them in the Work Center. For example, messages can be categorized into queues for priority mail or submitted jobs. Through a queue, users can approve or reject certain activities in the process flow. You set up a queue in the same way as you set up any user defined code (UDC).

Workflow includes several predefined queues, but you might want to set up a custom queue for messages generated by workflow processes that you create. For example, you might want to set up a queue for messages generated by a credit limit approval process. This queue could gather any approval or rejection messages related to credit limits for customers. A user can then open that queue and act on the message contained within it.

Access User Defined codes.

To set up a queue:

From Workflow Management Setup (G0241), choose Workflow User Defined Codes (G02411), and then choose Employee Task Queues (P0004A).

1. On Work With User Defined Codes, click Add.
2. On User Defined Codes, complete the following fields in an empty row in the detail area and click OK:
   - Codes

     Enter a unique number for the queue.
   - Description 1
   - Description 2
   - Special Handling
   - Hard Coded

     Enter N in this field.

Codes
A list of valid codes for a specific user defined code list.

Description 1
A user defined name or remark.

Description 2
Additional text that further describes or clarifies a field in the system.

Special Handling
A code that indicates special processing requirements for certain user defined code values. The value that you enter in this field is unique for each user defined code type.

The system uses the special handling code in many ways. For example, special handling codes defined for Language Preference specify whether the language is double-byte or does not have uppercase characters. Programming is required to activate this field.

Hard Coded
A code that indicates whether a user defined code is hard-coded. Valid values are:

Y

The user defined code is hard-coded

N

The user defined code is not hard-coded

A check mark indicates that the user defined code is hard-coded.

Setting Up Message Templates

When you add a Message task (a task that sends messages to individuals or to members of a distribution list), you can choose to use a message template. Message templates enable you to send boilerplate text along with information that is substituted from data items used within the process.

You can create a new message template before you begin creating a workflow process or set up the template during creation of a Message task.

Use the following naming convention when creating message templates:

- LM*xxxxyyy*
- where LM identifies the message as a workflow message
- *xxxx* = the system code (use system codes 55 through 59 for customer-specific messages)
- *yyy* = a sequential number

Access OMW.

To set up a message template:

1. In OMW, highlight the project to which you want to add the message template, and the click Add.
2. On Add PeopleSoft Object to the Project, choose Data Item in the Control Table Objects area, and then click OK.
3. On the Data Dictionary Item Type dialog box, click Yes to add a glossary data item.
4. On Glossary Items, click the Item Specifications tab, and then complete the following fields:
   - Glossary Group

     Enter Y to identify the message as a workflow message. The system disables the Data Structure Template tab. This tab is used for creating error messages, not workflow messages.
   - Product Code
   - Product Code Report

     Enter a user defined code that specifies the system number for reporting and jargon.
   - Description
   - Error Level

     If this is an informative message, such as a message notifying a recipient that an employee's salary has been increased, enter.
5. Click the Item Glossary tab and enter the text for the message.

   If the message contains values that will be substituted by data items from your key data and additional data, leave a placeholder for them by using an ampersand (&) and the number of the value.
6. Click OK when you have finished setting up the message template.

Glossary Group	For EnterpriseOne, a code that indicates the type of data item. It is validated against user defined code table H98/DI. Items in glossary group D or S can be included in database tables. Items in other glossary groups (for example, error messages) cannot be added to a table. For World, a user defined code (98/GG) that specifies the type of data used to select data dictionary terms for printing.

The data item names for error messages are assigned automatically. If you need to assign your own error message numbers, use 4 digit numbers greater than ’5000’.

The data item name for a non-database field (used on a video or report but not in a file - glossary group U) must begin with a #, $ or @. For help text (glossary group H), the data dictionary Inquiry/Revision Program field may be used to specify the name of a follow-on item. To create your own messages for the IBM message file (glossary group J), begin the data item name with your own three characters (for example, CLT0001).

Product Code A user defined code (98/SY) that identifies a system. Valid values include:

01

Address Book

03B

Accounts Receivable

04

Accounts Payable

09

General Accounting

11

Multicurrency

Product Code Reporting A user defined code (98/SY) that specifies the system number for reporting and jargon purposes.

Error Level This field indicates the severity of the error message and to denote warning messages.

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CHAPTER 5

Creating a Workflow Process

This chapter provides an overview of the workflow process and describes how to:

- Create data structures.
- Create workflow process in OMW
- Design a workflow process.

Understanding how to Create a Workflow Process

A workflow process is an object in the PeopleSoft EnterpriseOne system. You create and manage a workflow process in Object Management Workbench (OMW) like any other object. When you create a workflow process, the system automatically adds it to your Default Project folder in OMW.

The following steps outline the high-level processes for creating a workflow process:

1. Create key and additional data structures for the workflow process.
2. Create the workflow process by naming it and assigning the appropriate data structures to it.
3. Use Workflow Modeler, a graphical design tool that you launch from OMW, to add and configure each component of the workflow process.
4. Attach the workflow process to the application from which you want the workflow process to start.

Some of the steps of the process can consist of several additional tasks. For example, when you add a Message task to a workflow process in Workflow Modeler, you might have to create distribution lists, add recipient rules, and create a message template.

See Also

Chapter 3, "Understanding PeopleSoft EnterpriseOne Workflow Tools," Components of a PeopleSoft EnterpriseOne Workflow Process, page 11

EnterpriseOne Tools 8.94 PeopleBook: Object Management Workbench, "Working with Objects"

Prerequisite

Before you begin creating workflow processes, do the following:

- See the Workflow Modeler Installation Guide for Workflow Modeler installation instructions. You must install Workflow Modeler before you can create and design a workflow process.
- Understand the concepts of EnterpriseOne development tools. See EnterpriseOne Tools and other topics in the Development Tools Guide for more information.

- Define your users and distribution lists in Address Book before setting up your workflow processes. See Address Book Maintenance in the Address Book Guide for information about entering address book profiles for new users.
- If you are going to integrate with a third-party email system, see Setting Up External Mail Access in the EnterpriseOne Workflow Tools Guide.

Creating Key and Additional Data Structures

This section provides an overview about creating key and additional data structures and describes how to create a data structure for key and additional data.

Understanding Key and Additional Data Structures

A workflow process requires the following two data structures:

- Key
- Additional

A key data structure contains the data items that make an instance of a process unique, similar to how the primary key in a table is the unique index in a table. Key data is the basis of the workflow process. You can use multiple data items in your key data structure.

An additional data structure contains all of the other data that the process, and any task within the process, needs to complete the process flow. Workflow can use the additional data structure to pass information to tasks within the process and to users. The system also uses additional data to track audit information. The parameters of the key and additional data structures are stored in the Process Instance table (F98860).

Another distinction between the two data structures is that the values in the key data structure do not change during the life of a process instance. The values in the additional data structure can change as the instance is executed.

Note. Do not include the same data items in both the key and additional data structures.

If key and additional data structures do not exist for your new workflow process, you can define new ones. You also can use existing key and additional data structures when you create a new workflow process, but this action is not recommended because of the interdependencies it will create.

Naming Conventions for Key and Additional Data Structures

Names of key and additional data structures begin with WF and use the following format:

- *WFxxxxyyyA* or *WFxxxxyyyB*
- Where
- *WF* indicates a key data or additional data selection
- *xxxx* specifies the system code
- Use codes 55 through 59 for customer-specific keys and additional data structures.
- *yyy* represents a sequential number
- *A* identifies key data

- *B* identifies additional data

Creating a Data Structure for Key Data or Additional Data

Access OMW.

To create a data structure for key data or additional data:

On the Cross Application Development Tools menu (GH902), choose Object Management Workbench.

1. On the Object Management Workbench form, click the project to which you want to add the data structure.

   Note. You should add the data structures to the same project in which you are creating a workflow process. See Adding Objects to Projects in the Object Management Workbench Guide for more information.

   ---

2. Click Add.
3. On Add PeopleSoft Object to the Project, click the Data Structure option under the Object Librarian Objects heading, and then click OK.
4. On Add Object, complete the following fields:
   - Object Name

     Use the data structure naming conventions to name the data structure.
   - Description
   - Product Code
   - Product System Code
   - Object Use
5. Click the Regular Data Structure option and then click OK.

   The system displays the Data Structure Design form.
6. On Data Structure Design, click the Design Tools tab and then click Data Structure Design.
7. On Data Structure, choose the data dictionary items you want to include in the key data or additional data, and drag them to Structure Members on the left.

   You can rename structure member items by clicking the data item and typing a new name.
8. When you are finished choosing data items, click OK.

   The data structure appears under your project in OMW.

   Note. After you create your key data and additional data structures, you can attach them to your workflow process. See To create a workflow process in the EnterpriseOne Workflow Tools Guide.

Creating a Workflow Process in OMW

This section provides an overview of naming workflow processes and describes how to create a workflow process in OMW.

Understanding how to Create a Workflow Process in OMW

Before you can design your workflow process in Workflow Modeler, you must create and add the workflow process as an object in OMW.

Naming Conventions for Workflow Processes

When you create a workflow process, you must name it. The name can be as many as 10 characters and should be in the following format:

- *Kxxxxyyyyy*
- Where:
- *K* designates a workflow process
- *xxxx* specifies a system code
- This value is typically two digits, but can be as many as four digits. Use codes 55 through 59 for customer-specific processes.
- *yyyyy* represents a sequential number
- This value is typically two digits, but can be as many as five digits.

You also must provide a description about the purpose of the workflow process. This description can be as many as 40 characters.

Creating a Workflow Process in OMW

Access OMW.

To create a workflow process in OMW:

From the Cross Application Development Tools menu (GH902), choose Object Management Workbench.

1. On Object Management Workbench, choose the project in which you want to create a workflow process and click Add.
2. On Add PeopleSoft Object to the Project, click Workflow Process under the Workflow heading and then click OK.
3. On Add Non-OL Object, complete the Process field.
   - Process

     Name the workflow process using the format *Kxxxxyyyyy*, where:

     K designates a workflow process

     xxxx specifies a system code

     This value can be as many as four digits. Use codes 55 through 59 for customer-specific processes.

     yyyyy = represents a sequential number
   - Version
   - Description

     Provide a description that indicates the purpose of the workflow process. This description can be as many as 40 characters.
   - Product Code

4. Choose a data structure for the key data by clicking the Search button in the Key Data Structure field.

Note. If you want to create a diagram of your workflow process in Workflow Modeler before you create these data structures, use existing data structures and then replace them with your own when you are ready to configure each component of the workflow process.

See Chapter 5, “Creating a Workflow Process,” Creating Key and Additional Data Structures, page 22.

5. On Data Structure Search and Select, type the name of the data structure in the Object Name field and then click Find.
6. Choose the data structure that you want to use for your key data and click Select.
7. On Add Non-OL Object, click the Search button in the Additional Data Structure field to choose a data structure for the additional data
8. On Data Structure Search and Select, type the name of the data structure in the Object Name field and then click Find.
9. Choose the data structure that you want to use for your additional data and click Select.
10. If you want the workflow engine to keep audit records of all instances of the workflow process, click the History Tracking option.

Note. PeopleSoft recommends that you choose the History Tracking option. When a workflow process is started, audit records are saved in the instance tables (F98860 and F98865) and can be used for historical analysis. If you do not choose this option, the audit records are deleted after the workflow process completes

Periodically, you can purge audit records that you no longer need using the Purge Completed Workflow Processes (R98860P) batch application.

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11. Click OK.
12. On Workflow Design, click OK to save the workflow process in OMW.

After you create the workflow process in OMW you need to design and configure each component of the workflow process.

See Chapter 5, “Creating a Workflow Process,” Designing a Workflow Process in Workflow Modeler, page 26.

Description	Glossary
Process	The unique identifier for a process. If no value is entered, a next number is assigned. Once assigned, the value cannot be changed.
Version	A number from 1 to 99999 that identifies a unique version of a workflow process.
Description	The description of the Workflow process.
Product Code	A user defined code (98/SY) that specifies the system number for reporting and jargon purposes.

Description	Glossary
Key Data Structure	A data structure, comprised of one or more data items, that serves as the key data for the workflow process. A process can be keyed by the data items from a workflow task. For example, the primary data structure of a credit limit revisions process would be the address book number of the customer whose credit limit was changed. To identify this key data to the system, you must create a data structure that contains these items and attach it to the process as the primary data structure.
Additional Data Structure	Tasks within a Workflow process often evaluate or use data that is passed from other tasks. To pass data between tasks, you must create a data structure that contains the data items that you want to be evaluated, and then attach that data structure to the process. For example, consider a task within the credit limit revisions process. As the process runs, the task uses the old and new credit limit values to determine to whom to send the approval messages.
History Tracking	The next available unique instance for the process.

Designing a Workflow Process in Workflow Modeler

This section provides overviews of designing a workflow process and using workflow modeler toolbar and describes how to open a new workflow process in Workflow Modeler.

Understanding how to Design a Workflow Process in Workflow Modeler

Workflow Modeler is a graphical design tool that you can use to design and configure each component of a workflow process. Workflow Modeler contains buttons that represent all of the tasks and transitions that make up a workflow process. You drag the buttons onto the Workflow Modeler workspace to create a diagram of a workflow process from beginning to end. After you add tasks and transitions, you can right-click any task or transition and choose one or more dialogs to configure that component of the process.

When you configure a new workflow process in Workflow Modeler, the Start and End tasks automatically appear in the Workflow Modeler workspace.

Using Workflow Modeler Toolbar

Workflow Modeler uses a dockable toolbar called Object Creation Tools, which contains the buttons needed for adding tasks and transitions to a workflow process. Each button in the toolbar is described below. You can use the hover help to identify each button.

Icon	Function
Default (pointer)	Allows you to move tasks and transitions in the graphical user interface.
Transition	Attaches one task to another, indicating flow within the process. You can add a transition condition to a transition. Transition conditions contain the logic for determining which task is acted upon next in the workflow process.

Icon	Function
Batch Application	Identifies the task as one that executes a batch process or report.
Interactive Application	Identifies the task as one that launches a PeopleSoft interactive application.
Business Function	Identifies the task as one that executes a business function for special logic processing. For example, the Update task in the Credit Limit Changed example is a business function that updates the database with changes.
Local Subprocess	Identifies the task as a workflow subprocess.
Message	Identifies the task as one that sends a message to a user or users.
Windows Executable	Identifies the task as one that launches an executable program, such as a word processing or spreadsheet application.
Halt	Identifies the task as one that halts all activity on the line beyond itself until the specified date occurs or the specified amount of time passes.

Note. The buttons at the bottom of the toolbar, including the Remote Subprocess button, are reserved for future use.

Opening a New Workflow Process in Workflow Modeler

Access OMW.

To open a new workflow process in Workflow Modeler:

Note. You must first create the workflow process in OMW before you can open it in Workflow Modeler.

1. In OMW, under the Objects menu in your project, click the workflow process and then click the Design button in the center column.
2. On Workflow Design, click the Design Tools tab and then click Start Workflow Modeler.
3. Upon opening Workflow Modeler, click OK on the following message:

   This is a reminder to save your workflow process using the File, Save menu option in Workflow Modeler before you exit.

   A diagram of the workflow process appears in the Workflow Modeler workspace, with the Start and End tasks automatically created for you.
4. On Workflow Modeler, use the buttons in the Object Creation Tools toolbar to add and configure the appropriate tasks and transitions to the workflow process.

Adding Tasks to a Workflow Process

This section provides an overview of adding tasks and the "and join" property and describes how to add a task to a workflow process.

Understanding how to Add Tasks

You can use Workflow Modeler to add the following tasks to the workflow process:

- Batch Application
- Interactive Application
- Business Function
- Local Subprocess
- Message
- Windows Executable
- Halt

Joining Tasks

Every task has an "and-join" property. This property only matters if a task has multiple transitions leading into it. If the and-join property is checked, it requires that each transition leading to the task must complete before the task will begin. If the and-join property is not checked, only one transition leading to the task must complete for the task to begin.

Prerequisite

Create a workflow process in OMW. See Creating a Workflow Process in the EnterpriseOne Workflow Tools Guide.

Adding a Task

Access Workflow Modeler.

To add a task:

In OMW, click the workflow process to which you want to add the task, and then click the Design Tools button. On Workflow Design, click the Design Tools tab, and then click Start Workflow Modeler.

1. In Workflow Modeler, click one of the following buttons, which represent the tasks that you can add to the process (the name of each task appears when you hover over the button):
   - Batch Application
   - Interactive Application
   - Business Function
   - Local Subprocess
   - Message
   - Windows Executable

- Halt

Note. The buttons at the bottom of the toolbar, including Remote Subprocess, are reserved for future use.

2. Drop the task onto the diagram by clicking anywhere in the diagram.

   The Workflow Task Revisions form appears with the name of the task that you are adding in the title bar.

3. On Workflow Task Revisions, complete the following fields:

   - Task

     Type the name of the task that you are adding to the workflow process. The name must contain no more than 10 alphanumeric characters.

   - Description

4. Complete the following optional fields if you want to include any customizable data:

   - Category Code 1
   - Category Code 2
   - Category Code 3

   Note. You must first customize the category codes with descriptions and values using the User Defined Codes (P0004A) program. See User Defined Codes in the Foundation Guide for more information about category codes and customizing UDCs.

5. If you want the task to be a Join task, select the And Join (Y/N) option.
6. Click OK.

   The task appears in the Workflow Modeler workspace.

   Note. After you add the task to the Workflow Modeler workspace, you must connect the task to other tasks by adding transitions and transition conditions. You must also configure the task by adding event rules and other data to the task.

Transitions and Transition Conditions

This section provides an overview of transitions and transition conditions and describes how to:

- Add a transition
- Create a transition condition
- Attach a transition condition

Understanding Transitions and Transition Conditions

A transition is the path between tasks. It connects one task to the next task in a workflow process. Transition conditions are user-defined rules that determine when the workflow process will continue to the next task. Transitions can contain transition conditions.

You can attach multiple transitions to a task. Each transition is a possible path that the workflow process may follow. The transition condition attached to each transition contains the criteria that determine if the process will follow that transition path. For example, a transition condition named IFAPPROVE might trigger the system to invoke a task that updates the database if a user approves a message, and then invoke a task that sends a message notifying the originator that the message was approved. A transition condition called IFREJECT might trigger the system to invoke a task that sends a message notifying the originator that a message was rejected.

Adding a Transition

Access Workflow Modeler.

To add a transition:

1. On Workflow Modeler, click the Transition button on the toolbar.
2. Click and drag the mouse from the task at which you want the transition to originate to the task to which you want the transition to connect.

   The transition appears in the workspace.

Creating a Transition Condition

Access Workflow Modeler.

To create a transition condition:

1. In Workflow Modeler, right-click anywhere in the background of the diagram. From the pop-up menu, choose Transition Conditions and then choose Add.

   Alternatively, you can create and attach a transition condition at the same time. To do so, right-click a transition and, from the pop-up menu, choose Transition Conditions, and then choose Add and Attach.
2. On Process Rule Revisions, type the name of the transition condition in the Rule field.
3. Complete the following optional fields and click OK:
   - Description
   - Category Code 1
   - Category Code 2
   - Category Code 3

   Note. Category codes are fields that you can customize to include additional data about the object.
4. On Criteria Design, create the rule and then click OK.

   The system returns to the Workflow Modeler.

   Note. If you chose Add as opposed to Add and Attach, you must attach this transition condition to a transition.

   See Chapter 5, "Creating a Workflow Process," Attaching a Transition Condition to a Transition, page 30.

Attaching a Transition Condition to a Transition

Access Workflow Modeler.

To attach a transition condition to a transition:

1. In Workflow Modeler, right-click the transition to which you want to attach the transition condition.
2. From the pop-up menu, choose Transition Conditions and then choose Select and Attach.

   Note. If you want to create a transition condition and attach it to a condition at the same time, choose Add and Attach from the pop-up menu. The Process Rule Revisions form will appear.

   See Chapter 5, "Creating a Workflow Process," Creating a Transition Condition, page 30.
3. Choose the transition condition that you want to attach to the task, and click Select.

   The system returns to Workflow Modeler with the name of the transition condition next to the transition.

Batch Application Tasks

This section provides an overview of batch application tasks and describes how to configure a batch application task.

Understanding Batch Application Tasks

A Batch Application task starts a EnterpriseOne batch application, such as a report or batch process. For example, you can create a task that runs the General Ledger Post Report (R09801) or the Leadtime Rollup batch process (R30822A).

Configuring a Batch Application Task

Access Workflow Modeler.

To configure a Batch Application task:

1. In Workflow Modeler, right-click the Batch Application task that you added to the diagram, and then choose Event Rules from the menu.
2. On Work With Applications, search for the batch process that you want to attach to the task and then highlight it.
3. In the Select Version area at the bottom of the form, choose one of the following options to determine how the UBE will be selected:
   - Yes

     Choose this option to select a particular version from the list of available versions.
   - No

     Choose this option if you want the users to choose the version at runtime.
4. Click Select.
5. If you chose Yes on Work with Versions, choose a version and then click Select.

   Note. If the batch process contains processing options, you must enter the required data for the processing options before continuing.

6. On UBE Interconnections, from the Available Objects list, choose the object that you want to pass. Click the > button to add the object to the Data Structure-Value column.

Note. You might not need to pass data in your workflow process. Whether you pass data in or receive data from a workflow process, the Batch Application task must have a report interconnect data structure to be able to call it.

The Include in Transaction option has no affect on the system. Do not use.

---

7. Indicate the direction of data flow between Value and Data Items by clicking the Directional arrow between the two columns.

   If you do not want data to pass between the task and the batch process, set all Direction values to W by clicking the button in the Dir field

---

Note. The values of the key data structure cannot change. Therefore, you cannot map a data item back to an item in the key data structure.

---

8. Click OK.

Using Interactive Application Tasks

This section provides an overview of interactive application tasks and describes how to configure an interactive application task.

Understanding Interactive Application Tasks

The Interactive Application task invokes a EnterpriseOne interactive application; for example, Work With Journal Entries.

Interactive Application tasks cannot be run on a server. They are only available on the Windows client, not the Web client.

Note. Because of the Windows-only limitation, instead of using an Interactive Application task, EnterpriseOne recommends that you include a shortcut to an interactive application in a Message task.

See Chapter 5, "Creating a Workflow Process," Using Message Tasks, page 37.

Configuring an Interactive Application Task

Access Workflow Modeler.

To configure an Interactive Application task:

1. In Workflow Modeler, right-click the Interactive Application task that you added to the diagram, and then choose Event Rules from the menu.
2. On Work With Applications, click the application that you want the task to invoke and click Select.
3. On Work With Forms, find and choose the form that you want to appear when the application launches, and click Select.

4. On Form Interconnections, from the Available Objects list, choose the data item from the key or attribute data structures that you want to pass to the form that you are calling. Click the > button to add the object to the Data Structure-Value column.
5. Indicate the direction of data flow between the Value and Data Item columns by clicking the Directional arrow between the two columns.
6. If you do not want data to pass between forms, set all Directional values to W by clicking the button in the Dir column.

   Note. The values of the key data structure cannot change. Therefore, you cannot map a data item back to an item in the key data structure.

7. Click OK.

Using Business Function Tasks

This section provides an overview of interactive application tasks and describes how to configure an interactive application task.

Understanding Business Function Tasks

A business function task attaches a business function for special logic processing, including any business functions written in C programming language or NERs written with event rules.

Prerequisite

Create a business function or an NER if one does not exist.

See *EnterpriseOne Tools 8.94 PeopleBook: Development Tools: APIs and Business Functions*, “Business Functions”.

Configuring a Business Application Task

Access Workflow Modeler.

To configure a Business Function task:

1. In Workflow Modeler, right-click the Business Function task that you added to the grid, and then choose Event Rules from the menu.
2. On Business Function Search, choose the business function that you want to attach to the Business Function task and then click Select.
3. On Business Functions, map the parameters that you want to pass to the data item.

   For example, map BF mnAddressNumber to mnAddressNumber and map BF mnCurrentCreditLimit to mnCurrentCreditLimit.

   The only values available to pass to the business function are those from the key and additional data selections. When you pass these values to the Data Item column of the form, you send the corresponding data items from the workflow key and additional data selections to the function.

Note. The values of the key data structure cannot change. Therefore, you cannot map a data item back to an item in the key data structure.

---

4. Click OK.

Using Local Subprocess Tasks

This section provides an overview of local subprocess tasks.

Understanding Local Subprocess Tasks

A Local Subprocess task starts another process, also referred to as a subprocess. A subprocess has its own set of tasks. When you add a Local Subprocess task, you are attaching an existing workflow process to the workflow process that you are creating.

Subprocesses are useful when you have groups of tasks common to multiple workflow processes or a subset of tasks that recur within the same workflow process. You can configure a Local Subprocess task so that the subprocess returns values to the parent workflow process.

Configuring a Local Subprocess Task

Access Workflow Modeler.

To configure a Local Subprocess task:

1. In Workflow Modeler, right-click the Local Subprocess task that you added to the grid, and then choose Event Rules from the menu.
2. On System Functions, define parameters for the following data items:
   - Process Name
   - Key Data Structure
   - Additional Data Structure
3. Click OK.

Using Windows Executable Tasks

This section provides an overview of the windows executable tasks and describes how to configure a windows executable task.

Understanding Windows Executable Tasks

A Windows Executable task starts a specific application, such as a word processing application or spreadsheet.

After a user closes the Windows application, the workflow process continues regardless of the data or information the user may have entered into the application. In other words, you cannot enforce users to perform any particular action in the application because the workflow process has no way to evaluate the data. As a result, PeopleSoft recommends using this task for launching applications that do not require user interaction, such as an application that automatically prints confirmation letters.

Note. Windows Executable tasks only work on the Windows client. Therefore, this task type will not work for users of the Web client.

Configuring a Windows Executable Task

Access Workflow Modeler.

To configure a Windows Executable task:

1. In Workflow Modeler, right-click the Windows Executable task that you added to the diagram, and then choose Event Rules from the menu.
2. For each data item, map the appropriate parameters.
3. When you are finished, click OK.

Using Halt Tasks

This section provides an overview of the windows executable tasks and describes how to configure a windows executable task.

Understanding Halt Tasks

A Halt task stops the workflow process and specifies a period of time that must pass before the process can continue.

For example, suppose you have a process for submitting a contract proposal to a client. The client has two weeks to accept the proposal or the contract is voided. After the contract is entered, the system activates a workflow process, using a Halt task, that puts the contract on hold for two weeks. At the end of the two weeks, when the workflow process resumes, a Business Function task checks the status of the contract. If the contract has been accepted, nothing happens. If the contract has not been accepted, the status is changed to Void and a notification is sent to the client.

When you set up a Halt task, you specify either hours and minutes or the date and time at which you want the process to resume.

If you add Halt tasks to your workflow process, you must run the Start Escalation Monitor batch process (R98810) regularly. You can run it manually or by using the Scheduler application. If you do not run the Start Escalation Monitor, the process will remain halted. The Start Escalation Monitor resumes the process after the date and time are met.

Configuring a Halt Task

Access Workflow Modeler.

To configure a halt task:

1. In Workflow Modeler, right-click the halt task that you added to the grid, and then choose Expiration from the menu.
2. On Expiration Information, complete the Hours and Minutes fields or the Date and Time fields with the values for when you want the system to move to the next task in the workflow process.
3. Click OK.

   For example, you enter 8 hours and 30 minutes in the Hours and Minutes fields. If the escalation monitor is run to check for expired activities 8 hours and 30 minutes from when that task within the process is started, the task is expired. The system expires the halted condition and moves to the next task.

   Note. A halt task has no event rule definition.

Setting Up Workflow Scheduler

The Workflow Scheduler enables you to escalate expired message and halt instances either automatically or manually. For automatic execution, Workflow Scheduler runs on the enterprise server where Workflow Modeler resides. You set the Scheduler to run as frequently or as infrequently as you want, though PeopleSoft® recommends that you execute the Workflow Scheduler no more that once an hour. The Workflow runtime kernel reads the F98865 table to determine the tasks which have either expired or require escalation. For manual execution, you run the Scheduler by clicking the Start Escalation Monitor button in OMW.

To set up and run Workflow Scheduler to run automatically

1. Open the jde.ini file located on the enterprise server.
2. In [WORKFLOW] section, change the following parameters to the appropriate values:
   - EscalationFrequency={seconds}

     This parameter is how frequently in seconds you want Workflow Scheduler to execute.
   - WRIUser=<username>

     This parameter is a valid user name assigned to an EnterpriseOne account.
   - WRIPassword=<userpassword>

     This parameter is a valid password assigned to an EnterpriseOne account.
   - WRIEnvironment=<userenv>

     This parameter is a valid environment assigned to an EnterpriseOne account.
   - WRIRole=<userrole>

     This parameter is a valid role assigned to an EnterpriseOne account.
   - RUNTIME_INTEROP=ON

     Ensure that this parameters is set to On.
   - NumberofAutoStartProcesses=1

     Ensure that this parameter is set to 1. You must define this parameter in the [JDENET_KERNEL_DEF13] section of the jde.ini file on the enterprise server.

Note. Workflow Scheduler runs within the workflow kernel process. If you want the Workflow Scheduler to start along with your Enterprise server, then you have to set NumberofAutoStartProcesses to at least 1. This will start the number of workflow kernels which you have specified.

Using Message Tasks

This section provides overviews of message tasks, contents of a workflow message, workflow message recipients, and describes how to:

- Add escalation rules to a messages task
- Add recipient rules a message task
- Add recipient rules to the escalation rules
- Delete escalation rules from a message task

Understanding Message Tasks

A Message task sends workflow messages to users in the system. You can create a Message task to send notification messages or messages that contain shortcuts to an interactive application such as a message approval form.

A workflow process can contain several different Message tasks. For example, a workflow process designed for approving credit limit increases can include Message tasks that send the following workflow messages:

- A request for a credit limit increase with a shortcut to the Credit Limit Approval form
- A notification of the approval of a credit limit increase
- A notification of the rejection of a credit limit increase

Note. You can also use the Send Message system function to send a message directly from an interactive or batch application, instead of using a Message task. There is typically no reason to create a workflow process that only contains a Message task.

To create a Message task, you must define the contents and the recipients of the message. You can also add logic that contains conditions for routing messages.

Understanding the Contents of a Workflow Message

When you create a Message task, you must define the contents of the message. You can include the following items in a workflow message:

- Subject line and message text

  You can enter the message text directly into the Message task or you can use a message template. A message template contains text that you enter, along with substituted values that are populated from the workflow process key and additional data selections. After you create the message template, you attach it to the event rules in the Message task.

  Alternatively, you can use a single object from the Available Objects list for the text of the message.

- Shortcut to an interactive application such as the Generic Workflow Approval Form (P98805)
- CC line

  You can enter people or distribution lists in the CC line so that the people listed there also receive the message.

- BCC

  You can enter people or distribution lists in the BCC line so that people listed there also receive the message, but the people listed in the Send To and CC lines cannot see who is listed on the BCC line.

Note. You can create a new message template using Workflow Messages (P92002).

See Chapter 4, "Setting Up Workflow," Setting Up Message Templates, page 18.

Prerequisite

Use a combination of Address Book number and structure type to specify the Message task recipient.

See Chapter 4, "Setting Up Workflow," Setting Up Message Templates, page 18.

If you are routing the message to a distribution list, determine which distribution list you want to send the message to. If necessary, first create the distribution list from Group Revisions (P02150).

See Chapter 5, "Creating a Workflow Process," Setting Up Distribution Lists, page 51.

If you are using a recipient rule, you must first create the recipient rule.

See Chapter 5, "Creating a Workflow Process," Adding a Recipient Rule, page 60.

If you are attaching a message template to a message, determine which message template the message will use. If necessary, first create the message template.

See Chapter 4, "Setting Up Workflow," Setting Up Message Templates, page 18.

Using Workflow Message Recipients

An integral part of creating a Message task involves determining to whom a message is sent. You can configure the event rules of a Message task to route messages to the following types of recipients:

- Members of a role

  EnterpriseOne software uses roles to define tasks and menus for different groups of users. Roles are created and maintained by a system administrator. If a role exists that contains the members that you want to include as the recipients of a workflow message, you can attach the role to the event rules of the Message task.

- Members of a distribution list

  Workflow uses distribution lists to group into categories for message routing purposes. You can further define how messages are routed to members of a distribution list by assigning routing criteria such as threshold values, escalation, and other conditional routing options.

  See Chapter 5, "Creating a Workflow Process," Understanding Distribution Lists, page 45.

  See Chapter 5, "Creating a Workflow Process," Setting Up Distribution Lists, page 51.

- Single recipient

  For workflow processes that are designed to send a message to a single user, enter the address book number of a user as the recipient.

  Note. If you use the address book number of a single user, you will have to revise the event rules of the workflow process every time a new person is responsible for handling the messages sent by the workflow process. PeopleSoft recommends that you enter a role for the recipient, even if the role contains only one member.

Using Workflow Message Recipients

Workflow can send messages to roles, to distribution lists that use group processing, to distribution lists that use hierarchical processing, or to single recipients. Workflow can send messages to these different recipients or groups of recipients regardless of whether the message recipient is specified in the event rules of a Message task, in a Recipient Rule, or in the Escalation event rules.

In all cases, the recipient is determined by the combination of two fields: the recipient address (address book number) and structure type. If you specify only the recipient address, the message is sent directly to the address book number, regardless of whether it is a role or a single recipient. If you specify only the structure type, the message is sent to the distribution list using hierarchical processing. If you specify the recipient address and structure type, the message is sent to a distribution list using group processing.

The three possible combinations of recipient address and structure type are detailed below.

Recipient Address Only

When you enter only a recipient address, Workflow sends the message directly to the address book number that you entered. This recipient address field is labeled Address Number in the Message task event rules and Address Book Number in the Recipient Rules form. Both field names refer to the same thing.

If you specify the recipient in the Message task event rules, make sure that you specify the structure type as Single Recipient-do not leave it blank. Blank is the Accounts Receivable structure type; therefore, specifying blank for the Structure Type field in the Message task event rules will result in your message being sent to the Accounts Receivable distribution list using group processing.

If you specify the recipient on the Recipient Rules form, leave the structure type blank. Single Recipient is not an available choice on the Recipient Rules form.

Note. If the address number is the parent number of a distribution list (for example, 7000 - the Accounting Group), the message is sent to only that address book number. Therefore, no members of that distribution list receive the message. You must fill in the structure type if you want to send to a distribution list.

Structure Type Only

When you enter a structure type but no recipient address, Workflow sends the message to a distribution list using hierarchical processing. Specifically, Workflow finds the address number for the person who originated the initial request, and then finds that person in the specified structure type. Next, it finds the parent of the originator and sends the message to that parent.

For example, suppose the message is to be sent to structure type WFS. The originator (for example, 7101 - Clerk #1) must be a member of structure type WFS. The system looks up Clerk#1 in structure type WFS and finds the parent. In this scenario, the message is sent to the manager of 7101, which is 7201 (Manager #1). If 7201 approves the message, the system then sends it to 7301. If 7301 approves the message, it then sends it to 7402 (Vice President #2), and so on up the distribution list (unless threshold values are used and the threshold value for one of the members is reached). The message is never sent to a level below or lateral to 7101, such as 7102 (Clerk #2) or 7202 (Manager #2).

If you specify the recipient in the Message task event rules, make sure that you specify the Address Book Number as blank. To do this, double-click Literal and then click OK without typing anything in the Single value field. This action places the characters "" in the Address Number field, which represents blank.

If you specify the recipient in the Recipient Rules form, you must enter 0 for the address book number. For an illustration and more information about distribution lists and hierarchical processing,

See Chapter 5, “Creating a Workflow Process,” Distribution Lists Used for Hierarchical Processing, page 50.

Recipient Address and Structure Type

When you specify both a recipient address and a structure type, Workflow sends the message to a distribution list using group processing. Specifically, Workflow determines to whom the message is sent based on the specified address book number; finds its direct children in the particular structure type and the groups to which they belong; and then sends the message to Group 1, and then to Group 2, and so on. The recipient address and structure type combination that you enter must be a valid combination in the Address Book Parent/Child table (F0150) for this process to work.

For example, suppose you enter Address Book number 7000 (Accounting Group) from the distribution list and structure type EML. If an approval message is sent to this group specifying that a customer's credit limit needs to be raised to 40,000 USD, the system first finds the employees within Group 1 of the Accounting Group distribution list and routes the message to them for approval. Routing continues for all groups in the list as long as the threshold values of the members of that list are less than or equal to 40,000 USD.

See Chapter 5, "Creating a Workflow Process," Creating a Distribution List for Group Processing, page 53.

Methods for Routing Messages

In addition to specifying a role, distribution list, or a single recipient as the message recipient, you can use the following rules to further define how messages are routed:

- Recipient rules

  You can attach one or more recipient rules to a Message task to override the recipient defined in the event rules of the Message task. A recipient rule will route messages to different recipients depending on whether certain criteria are met.

- Escalation rules

  Escalation rules will resend the message to a new recipient if the original recipient does not act on the message within a certain time. You set up escalation so that a workflow process continues if one of the original recipients of a workflow message does not respond.

See Also

Chapter 5, "Creating a Workflow Process," Adding Recipient Rules to the Escalation Rules, page 44

Chapter 5, "Creating a Workflow Process," Including Escalation Rules to a Message Task, page 43

Configuring a Message Task

Configuring a Message task involves defining event rules, which contain parameters that specify the content of the workflow message, the recipient of the message, and the conditions for sending messages.

Access Workflow Modeler.

To configure a Message task:

1. In Workflow Modeler, right-click the Message task and then choose Event Rules from the pop-up menu.

   Note. You must insert a value for every data item in the Parameters area.

2. On System Functions, complete a combination of the following fields to specify the recipient:

- Recipient

  Enter the address book number of the distribution list, role, or single recipient to whom the message will be sent. Leave this field blank to send to a distribution list using hierarchical processing.

  If you are using recipient rules to determine the recipient, use the <Use Recipient Rule> value for this field. If you use recipient rules, you must make sure that your recipient rules cover all conditions.

  If you are specifying a single recipient, you can enter an external email address as a literal. However, you cannot send a message that contains a shortcut to an external email address.

  Note. If you are specifying a single recipient, PeopleSoft recommends that you use a role instead of an individual's address book number, even if the role contains only one member. If you use a single user's address book number, you will have to revise the event rules of the workflow process every time a new person is responsible for handling the messages sent by the workflow process.

- Structure Type

  Enter the structure type of the distribution list to which the message will be sent. If the recipient is a role or single recipient, leave this field blank.

3. Specify the mailbox to which you want the message delivered in the Work Center.

   For example, you might choose the Credit Management queue for a credit limit approval message.

4. Highlight the Mailbox row.
5. In the Available Objects area, choose a mailbox (or queue).

   Note. You can use one of the existing queues in the system or create a new queue. If the Message task sends messages to an external messaging system, the workflow engine will ignore the value that you specify for the Mailbox.

   See Chapter 4, "Setting Up Workflow," Setting Up Queues, page 17.

6. To include a subject line in the message, highlight the Subject row and then choose the corresponding data item that contains the subject text, if applicable. You can also enter a subject as a literal value.

   If your message does not require a subject, choose <Blank>. You would most likely choose <Blank> when using a message template (a data dictionary message), which would already contain a subject line.

7. To add static text to the message, highlight the Text row and choose the corresponding data item that contains the text for the body of the message. You can also enter the text as a literal value. If you do not need to use the Text data item, choose <Blank>.

   Note. You can use the Text parameter to add supplemental text to a message template. This text will appear above the message template text when the user opens the message.

   ---

8. To attach a shortcut to a workflow message, highlight the Active row, and then perform the following steps. If you are not attaching a shortcut, choose <None> from the Available Objects area.

   Important! Attaching a shortcut to a message will suspend the workflow process until the message is acted upon.

   ---

9. In the Available Objects area, double-click <Define Active Message>.
10. On Work With Applications, in the Query by Example row, enter the application that you want the shortcut to launch, and then click Find.

For example, if you want to use the Generic Workflow Approval Form, enter P98805 and click Find.

11. On Work With Forms, double-click the row containing the form that you want to use.
12. On Form Interconnections, map the data structures to the appropriate available objects.

    See *EnterpriseOne Tools 8.94 PeopleBook: Development Tools: Form Design Aid*, "Working with Forms," Creating a Modal Form Interconnection.
13. Click OK.

    The system returns to the System Functions form.
14. To attach a message template, highlight the Message row, and then perform the following steps. If you are not using a message template, choose <None> from the Available Objects area.
15. In the Available Objects area, double-click <Define Message>.
16. On Text Substitution, enter the name of the message that you want to use in the Dictionary Item field and click Find.

    For example, you might enter LM1235 for the Credit Limit Approval message.
17. From the Available Objects list, choose each data item that contains the value that you want to substitute into the message and click OK.
18. For the Message Key parameter, choose <None> from the available objects.

    The workflow engine no longer uses this parameter, but it needs to be mapped.
19. After you have finished mapping all of the parameters for the Message task, click OK.

Adding Escalation Rules to a Message Task

You set up escalation so that a workflow process continues if one of the original recipients of a workflow message does not respond. To add escalation to a Message task, you must add escalation rules, which are conditions that will resend a message to a new recipient if the original recipient does not act on a message within a certain time.

When you use an escalation rule, you can attach a new message to the original message and then define to whom or to which distribution list the escalated message is sent. You must also activate the Check for Expired Tasks (R98810), which is a batch program that checks for Message tasks containing escalation and forwards any messages that have not been acted upon by the escalation recipient.

Escalation only works in the following instances:

- The original message contains a shortcut.
- The original recipient of the workflow message is part of a distribution list.

Note. While the system enables you to set up escalation rules even if the original recipient is a single recipient or a member of a role, the escalation rules will not work properly.

You can set up escalation rules so that an escalated message is sent to one of the following types of recipients:

- Distribution List

  The escalated message is sent to a distribution list. This requires that the original message be sent to a distribution list, and that the two lists have the same number of groups. This is because the message is escalated to members of the same group number in the next distribution list.
- Original Distribution List

If the original message is sent to a distribution list with multiple groups, then you can also set up the escalation to send the message up to the next group. In the above example, if the current message is sitting at group 1 (1001) while the message is escalated, it will be escalated to group 2 (1002 and 1003). To escalate the message to the next higher group, enter the address book number and the structure type of the original distribution list in the escalation rules.

- Single Recipient

  The escalated message is sent to one person only. The escalated message will be sent to the same person for all groups.

Note. Escalating messages to a single user is not recommended. If you use a single user's address book number, you will have to revise the workflow process's event rules every time a new person is responsible for handling the escalated message sent by the workflow process.

You cannot send a message that contains a shortcut to an external email address. Since escalated messages contain shortcuts, you cannot use an external email address as the recipient of an escalated message.

Including Escalation Rules to a Message Task

Access Process Modeler.

To include escalation rules to a Message task:

1. Right-click the Message task, choose Escalation, and then choose Add and Attach.
2. On Escalation Rules, complete the following fields:
   - Escalation Rule

     Type a unique name for the escalation rule.
   - Description
3. At this time, do not complete any of the fields in the grid and click OK to continue.

   The system returns you to the workflow diagram in Workflow Modeler.
4. Right-click the Message task, choose Escalation, and then choose Event Rules.
5. On System Functions, complete a combination of the following fields to specify the recipient of the escalated message:
   - Address Book Number

     Enter the address book number of the distribution list, role, or single recipient to whom the escalated message will be sent.

     Note. If you do not want to specify a default recipient, but instead will rely on recipient rules to determine the recipient, use the <Use Recipient Rule> value for the Address Book Number. If you use recipient rules, you must make sure that your recipient rules cover all conditions.

     See Chapter 5, "Creating a Workflow Process," Adding a Recipient Rule, page 60.
   - Structure Type

     Enter the structure type of the distribution list to which the escalated message will be sent. If the recipient is a role or single recipient, leave this field blank.
6. Specify the mailbox to which you want the escalated message delivered in the Work Center.

   For example, you might choose the Credit Management queue for a credit limit approval message.

7. Highlight the Mailbox row.
8. In the Available Objects area, choose a mailbox (or queue).

   Note. You can use one of the existing queues in the system or create a new queue.

   See Chapter 4, “Setting Up Workflow,” Setting Up Queues, page 17.
9. To include a subject line in the escalated message, highlight the Subject row and then choose the corresponding data item that contains the subject text, if applicable. You can also enter a subject as a literal value.

   If your message does not require a subject, choose <Blank>. You would most likely choose <Blank> when using a message template (a data dictionary message), which would already contain a subject line.
10. To add static text to the escalated message, highlight the Text row and choose the corresponding data item that contains the text for the body of the message. You can also enter the text as a literal value. If you do not need to use the Text data item, choose <Blank>.

    Note. You can use the Text parameter to add supplemental text to a message template. This text will appear above the message template text when the user opens the message.
11. For the Shortcut parameter, choose <None> from the Available Objects list.

    The escalated message uses the shortcut from the original message.
12. To attach a message template, highlight the Message row, and then perform the following steps. If you are not using a message template, choose <None> from the Available Objects area.
13. In the Available Objects area, double-click <Define Message>.
14. On Text Substitution, enter the name of the message that you want to use in the Dictionary Item field and click Find.

    For example, you might enter LM1235 for the Credit Limit Approval message.

    See Chapter 4, “Setting Up Workflow,” Setting Up Message Templates, page 18.
15. From the Available Objects list, choose each data item that contains the value that you want to substitute into the message and click OK.
16. For the Message Key parameter, choose <None> from the available objects.

    The workflow engine no longer uses this parameter, but it needs to be mapped.
17. After you have finished mapping all of the parameters for the escalated message, click OK.

Adding Recipient Rules to the Escalation Rules

Access Workflow Modeler.

To add recipient rules to the escalation rules:

Right-click the Message task, choose Escalation, and then choose Properties.

Complete the steps required to add a recipient rule.

See Chapter 5, “Creating a Workflow Process,” Adding a Recipient Rule, page 60.

Deleting Escalation Rules from a Message Task

Access Workflow Modeler.

To delete escalation from a Message task:

1. Right-click the Message task to which you added escalation.
2. From the pop-up menu, choose Escalation and then Delete.

Working with Distribution Lists

This section provides overviews of structure types, roles, and distribution list guidelines.

Understanding Distribution Lists

Workflow uses distribution lists to place employees into groups for message routing purposes. You assign users to a distribution list and then define the event rules of a Message task, or the recipient rules, to determine how messages will be sent to the members of that list.

Distribution lists are based on an address book number and a structure type. The address book number serves as the parent node of the distribution list. The members of the distribution list are then organized as children under this parent address book number. How you set up the children is dependent upon the type of processing that you want to use.

Workflow uses two different types of processing to route messages to members of a distribution list: group processing and hierarchical processing. Group processing sends messages to the members of a distribution list one group at a time. These groups are defined when you create the distribution list. Hierarchical processing sends messages to the members of a distribution list based on the organizational hierarchy defined in the distribution list.

Using Distribution Lists Used for Group Processing

When you can create a distribution list for group processing, you assign all the members as the direct children of the distribution list's address book number. You then divide the members of the distribution list into groups. For example, you might organize six members of a distribution list into Group 1, five members into Group 2, and two members into Group 3. When the system sends a message to this distribution list, it first sends the message to Group 1, then it sends the message to Group 2, and finally it sends the message to Group 3.

Note. PeopleSoft recommends using roles as the members of a distribution list using group processing rather than address book numbers of individuals. In general, this practice will results in easier maintenance of the list as people change positions within the enterprise.

When you use group processing, do not send a message to the parent address book number of the distribution list. Since this parent address book number is just a placeholder and not a user, the message will never be acted upon and, therefore, the workflow process will not complete.

Example: A Distribution List Used for Group Processing

The following example shows a distribution list with its members organized into groups for group processing. A message will be sent to everyone within each group in the distribution list, one group at a time, starting with Group 1.

Structure Type EML

Distribution List 7000

7101	Clerk #1	Group: 1
7102	Clerk #2	Group: 1
7103	Clerk #3	Group: 1
7104	Clerk #4	Group: 1
7201	Manager #1	Group: 2
7202	Manager #2	Group: 2
7203	Manager #3	Group: 2
7301	Director #1	Group: 3
7302	Director #2	Group: 3
7401	Vice President #1	Group: 4
7402	Vice President #2	Group: 4
7500	President	Group: 5

Group Processing Distribution List

Additional Routing Features for Distribution Lists

You can further define distribution lists in Workflow using the following features:

- Threshold values
- Routing options
- Escalation hours and minutes

Threshold Values

Workflow uses threshold values in conjunction with distribution lists to determine if a member of the list will be involved in a particular approval process. That is, the threshold value will determine whether a particular member has authority or if the members of the next higher group must also approve the message.

When you set up a distribution list, you can enter a threshold value for each employee on the list. If a particular workflow process contains a value that is below a member's threshold value, then the system does not send a message to that member.

For example, if you use the associated data item AG (Amount-Gross) and enter a threshold value of 30,000 USD, the system compares the AG data item of the workflow process against the threshold value. If a customer's credit limit amount has been increased, the system sends a notification message regarding the change to those people whose threshold value is less than or equal to the amount in the Amount-Gross field on the Credit Information form.

You can also use groups in conjunction with threshold values. For example, in Group 1, two members might have threshold values of 10,000 USD and two other members might have threshold values of 25,000 USD. Group 2 also has two members who have threshold values of 25,000 USD. If the system sends a message to the distribution list for a credit limit approval of 20,000 USD, the two members within Group 1 that have a threshold value of 10,000 USD receive the message.

Routing Options

You can specify conditional routing to control the path of approvals within a distribution list. These routing options are as follows:

Routing Option	Description
First Response	Indicates that if a Workflow message is sent to the members of a group within a distribution list and all members in that group have the same threshold value, then only one of them must respond. After the first response is received by the Workflow system, messages to the other members of that same group are deleted from their queues, and the approval process continues. For example, if Clerk 7101 from Group 1 responds to a message first, then messages are deleted from the other recipient queues for that group. The First Response routing option is normally used when members of a group have the same authority in the approval process. If you do not choose this option, all members of the group to which the Workflow message is sent must respond before the approval process continues.

Routing Option	Description
Higher Level Overrides	Indicates that a member in a higher-level group can approve a change through the Process Task Monitor. All lower-level approvals are marked as Bypassed in the monitor, and messages to other members are deleted from their queues. If you do not choose this option, then a member in the higher-level group cannot approve the change before the lower group approves it. For example, if the Vice President (7401) approves a change through the monitor, all the messages that were sent to others within the distribution list below the Vice President are deleted from their queues. If the Vice President is the last person who needs to approve the message, then the message is complete; if not, the message goes to the next highest group member.
Authorization Required	Indicates that if a member in the distribution list initiates a Workflow transaction (such as a salary increase), it requires authorization from a higher-level member. The higher-level member receives the message regardless of the threshold value of the higher-level member. If you do not choose this option, no higher-level person is required to act on the message if it is below the threshold value. For example, if Manager #2 (7202) approves a salary increase for himself, his employee information is not updated with that change unless his supervisor authorizes or approves the Workflow message.

Escalation Hours and Minutes

Along with threshold values and routing options, you can also add escalation hours and minutes for each employee on a distribution list. Escalation hours and minutes specify the amount of time that the recipient has to respond before a message is escalated to another recipient.

If you categorize members of a distribution list into groups, you must add the same escalation hours and minutes for each member within one group. For example, if one member of Group 1 has 8 escalation hours and 30 escalation minutes assigned to him, then all other members of Group 1 must have 8 escalation hours and 30 escalation minutes assigned to them.

Example: Using Additional Routing Features with Group Processing

The following example shows a distribution list designed for group processing. All of its members are organized into groups. Notice that each member is assigned a threshold value. The scenarios that follow the illustration describe how messages would be routed based on various criteria.

Structure Type EML

Distribution List 7000

7101	Clerk #1	Group: 1	Threshold: 0
7102	Clerk #2	Group: 1	Threshold: 0
7103	Clerk #3	Group: 1	Threshold: 0
7104	Clerk #4	Group: 1	Threshold: 0
7201	Manager #1	Group: 2	Threshold: 20,000
7202	Manager #2	Group: 2	Threshold: 23,000
7203	Manager #3	Group: 2	Threshold: 26,000
7301	Director #1	Group: 3	Threshold: 30,000
7302	Director #2	Group: 3	Threshold: 30,000
7401	Vice President #1	Group: 4	Threshold: 40,000
7402	Vice President #2	Group: 4	Threshold: 30,000
7500	President	Group: 5	Threshold: 50,000

Group Processing for Distribution Lists

Scenario 1

A message with a value of 25,000 is first sent to Group 1 (members 7101, 7102, 7103, and 7104) because their threshold values are less than 25,000. If any of these recipients reject the message, the Message task completes and the message is not sent to the other groups. However, if all of these members approve the message, it is sent to Manager #1 and Manager #2 in Group 2 (members 7201 and 7202) for their approval because they are in the next highest group on the distribution list and have threshold values that are less than 25,000. Manager #3 and members in groups 3, 4, and 5 (members 7301, 7302, 7401, 7402, and 7500) do not receive the message because their threshold values are greater than 25,000.

An exception is if the message originator is a member of the distribution list to which the message is sent. In this case, the message is sent to the first group above the originator's group. For example, a message that is sent by 7202 and has a value of 35,000 is first sent to Group 3 (members 7301 and 7302) because these members are in the group above 7201. Only after both 7301 and 7302 accept the message does the Message task complete. The system does not need to send the message to the next group (Group 4) because the value in the message does not meet the threshold values assigned to that group. The thresholds for the next group (Group 4) are greater than 35,000.

Scenario 2

Manager #1 (7201) enters a credit limit increase request for 24,000 USD. Since Manager #1 is in Group 2 of the distribution list, the system will start looking at the next group, Group 3. Because this value is under the threshold value for Group 3, no message will be sent. The following two exceptions to this scenario exist:

- If Authorization Required is turned on in this distribution list, then the message will be sent to Group 3 even though the credit limit request of 24,000 is smaller than the threshold value of Group 3.
- If the originator is in the highest group, then the system starts looking at the level of the originator since there is no higher level at which to start. For example, if the president enters a credit limit increase request for 24,000, the system starts checking threshold value criteria against Group 5. In this case, no message will be sent because 24,000 is smaller than the threshold value of Group 5.

  See Chapter 14, "Understanding Distribution List Scenarios," Distribution List Scenarios, page 89.

Distribution Lists Used for Hierarchical Processing

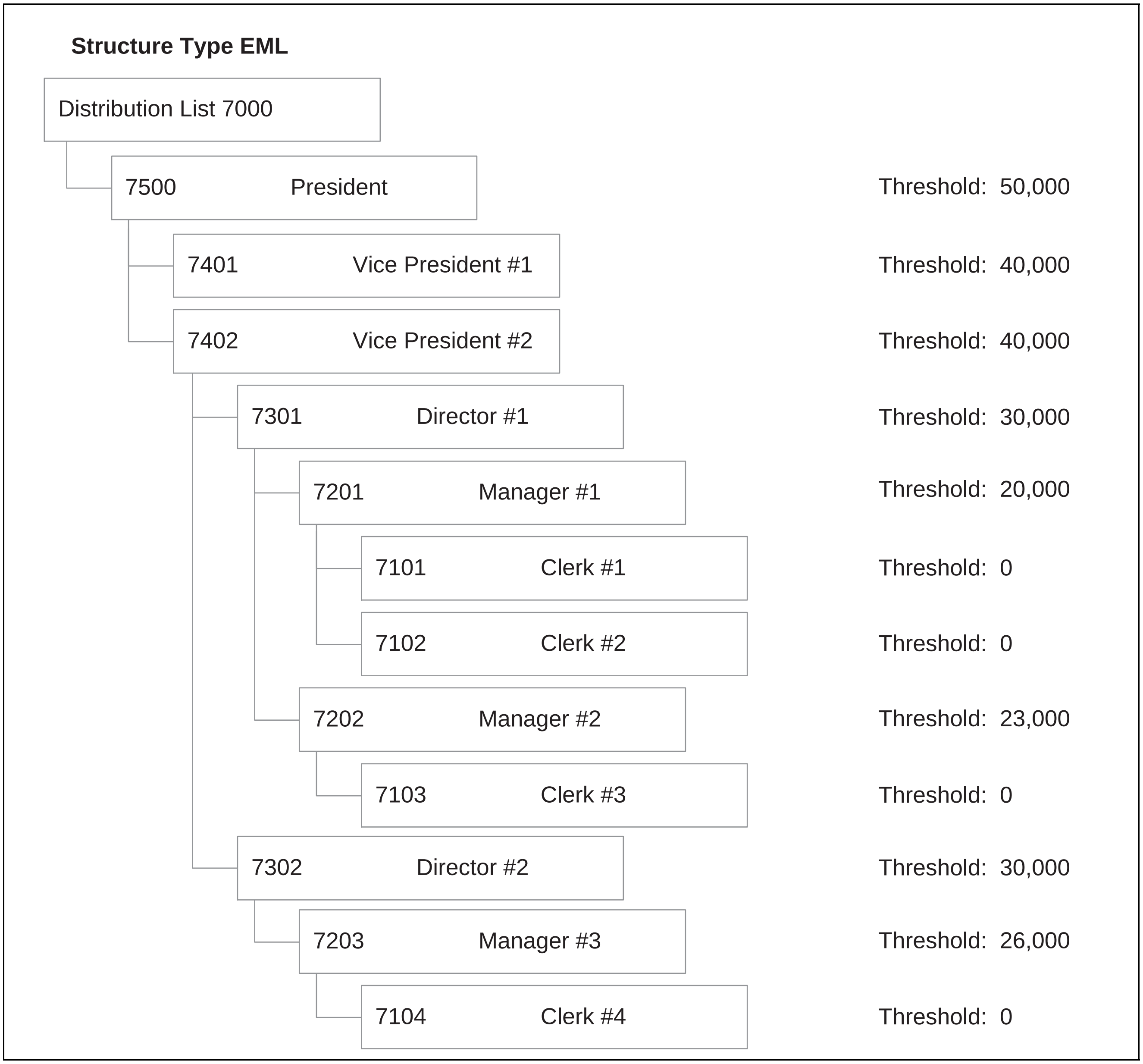
You can arrange distribution lists into a hierarchical or organizational tree structure, such as the president and all vice presidents within the company, with the employees listed under each of the parents. Hierarchical processing sends messages to the parents within the distribution list, one parent at a time, based on the originator's position in the hierarchy. After the first-level parent in the list receives the message, the system then determines whether the members above that parent should receive the message based on threshold value. If no threshold values exist for the members beneath a particular parent, the message is sent to all members beneath that parent.

Note. In a distribution list that uses hierarchical processing, the originator of a message must be a member of the distribution list. The message routing always starts with the parent of the originator.

For hierarchical processing, you cannot include an individual in more than one distribution list of the same structure type. This inclusion can result in circular or ambiguous hierarchies that Workflow is unable to reconcile.

Example: A Distribution List Used for Hierarchical Processing

In the following example, each member of the distribution list has only one direct parent. A message with a value of 45,000 that is sent by 7102 (Clerk #2) is first sent to 7201 (the manager of Clerk #1). If this manager approves the message, then 7301 (Director #1) receives the message. After 7301 approves it, the message is sent to 7402. The Message task is then complete because the parent of 7402 (7500) has a threshold value of 50,000, which is greater than the value of the message, which is 45,000. If any parent within this structure rejects the message, the Message task completes.



Hierarchical Processing Distribution List

Setting Up Distribution Lists

This section provides overviews of structure types, roles, and distribution list guidelines.

Understanding how to Set Up Distribution Lists

You set up distribution lists to route messages to certain groups of employees. When you create a distribution list, you first add a parent address book number using Address Book (P01012). Next, you use Group Revisions (P02150) to add members to the distribution list as children of the parent address book number. Finally, you attach the distribution list to a Message task. When a workflow process invokes a Message task, Workflow uses the distribution list that is attached to the Message task to determine to whom the message is sent.

Before you create a distribution list, you must decide whether the distribution list will use group processing or hierarchical processing. Also, if you do not want to use an existing structure type for the distribution list, you must add one to the system using the User Defined Codes (P0004A) program.

For group processing, create a distribution list in which all members are first-level children of the address book number of the distribution list. You can then arrange members into groups.

For hierarchical processing, create a distribution list that reflects the hierarchical structure of the organization. For example, multiple managers might have multiple employees. PeopleSoft recommends setting up a new structure type for each distribution list that uses hierarchical processing.

You can use Work With Distribution lists to view all the distribution lists of which a child is a member.

Prerequisite

Before you complete the tasks in this section:

- Set up the address number of the distribution list in Address Book. Assign search type M (Mail Distribution List) to the distribution list when you add the distribution list to the Address Book.
- Make sure that all members that you want to include in the distribution list are entered into the address book.
- Set up a structure type using the User Defined Codes (P0004A) program. PeopleSoft recommends setting up a new structure type for each distribution list that uses hierarchical processing. Structure types are added to xx/xx.
- Understand the two ways in which distribution lists can be processed and decide which type of processing you want to use (group processing or hierarchical processing). This choice will determine how you will create your distribution list. See Distribution Lists in the EnterpriseOne Workflow Tools Guide for more information.

Structure Types

Structure types are used to identify and categorize distribution lists. Every distribution list is identified by a unique address book number (the parent number for the distribution list) and a structure type. For example, you can set up a structure type of SAL for salary changes, and then set up a distribution list of employees involved in the salary change approval process.

You can use the predefined structure types of WFS, ORG, or EML to identify the distribution list as a Workflow group, an Organizational group, or email. However, you typically add your own structure types by adding to the xx/xx UDC values using the User Defined Codes program (P0004A).

Roles

In addition to assigning individual users to a distribution list, you can also assign one or more roles to a distribution list using group processing. In EnterpriseOne software, roles are assigned to groups of users that share similar tasks. When sending a workflow message to a distribution list that includes a role, all users assigned to that role receive the message. Only one person in the role needs to act on the message in order for it to advance to the next group.

You can only assign a role to a distribution list used for group processing.

Note. For a distribution list using group processing, PeopleSoft recommends using roles rather than individual address book numbers for members of the list. Roles are easier to maintain as people change positions within the enterprise.

Do not assign a role to a distribution list for hierarchical processing. If an individual in a role is included in more than one list of the same structure type, this inclusion can result in circular or ambiguous hierarchies that Workflow is unable to reconcile.

Distribution List Guidelines

Consider the following guidelines when creating distribution lists:

- Do not include an individual in more than one list of the same structure type. A user cannot appear twice in one structure type if the list is used with hierarchical processing.
- Threshold values assigned to members of a group must be higher than the threshold values assigned to members of the next lower group. For example, the members of Group 2 must have higher threshold values than the highest threshold value in Group 1.
- Depending on how you set up distribution lists and threshold values, situations might arise for which an action message is not sent to any member of a distribution list. In these cases, the application developer, workflow process designer, or both should take steps to ensure that a process instance completes successfully. Specifically, developers must code for the possibility that an action message is not sent and the approval code field in the additional data structure is not updated.

  Use one of the following two options to enable a process to complete successfully, even when no action messages are sent:
- Make sure all additional data structure variables used to store action message results (the approve or reject response) are initialized with an appropriate default value. For example, use A for automatic approval and R for automatic rejection.
- Make sure that any conditional rule that evaluates action message response variables after the action message task considers values other than A or R. For example, if the approval code variable is not initialized, the field may have a blank value (‘ ’) by default.

  See Chapter 14, “Understanding Distribution List Scenarios,” Distribution List Scenarios, page 89.

  See Chapter 5, “Creating a Workflow Process,” Adding Escalation Rules to a Message Task, page 42.

Creating a Distribution List for Group Processing

Access Workflow Tool.

To create a distribution list for group processing:

From Workflow Management Setup (G0241), choose Group Revisions (P02150). Alternatively, you can access this application from OMW by choosing a workflow process, clicking Design, and then clicking Group Revisions on the Workflow Operations tab.

1. On Work With Distribution Lists, complete the following fields:
   - Parent Number

     Click the Search button and then choose the address book number of the distribution list to which you want to add members.

- Structure Type

  Click the Search button and then choose a structure type from the list.

  Note. Do not leave this field blank. Every distribution list must have a structure type. Blank is the value for the Accounts Receivable structure type.

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2. From the Form menu, choose Revise Parent.
3. On Address Parent/Child Revisions, complete the following fields.
   - Group

     Enter a group number for each member. Group numbers must be sequential, starting with one.
   - Address Number

     Enter the address book number of the individual that you want to add to the distribution list.
4. If you will be using threshold values, complete the following fields:
   - Associated Data Item

     You must use a data item that is also included in the additional data structure of the workflow process. The system compares the value for this data item against the threshold values of the distribution list members to determine to whom messages are sent.
   - Threshold Value

     Enter the threshold value for each member of the distribution list.

     Important! If you want to make sure a message is sent, enter at least one threshold value in the distribution list that is lower than or equal to any value that could be entered into the associated data item. Otherwise, if the value in the associated data item is lower than the lowest threshold value in the distribution list, the process does not have anywhere to send the message because all of the possible recipients are out of the specified threshold range.

     ---
5. If you are adding escalation to a Message task, complete the following fields to assign hours and minutes to each member of the distribution list.
   - Escalation Hours
   - Escalation Minutes

     These values determine when a message will be escalated.

     Note. Escalation hours and minutes must be the same for all members of a group. For example, if members 7101, 7102, 7103, and 7104 are all members of Group 1, then each of these members must have the same escalation hours and minutes.

     ---
6. If you want to specify a period of time during which the members of the distribution list can receive a message, complete the following fields:
   - Begin Eff Date
   - End Eff Date

     The workflow engine will not send messages to members of the distribution list unless the current date falls between the beginning effective date and the ending effective date that you specify in these fields.
7. Specify the routing options by choosing one or more of the following options:

- First Response
- Higher Level Override
- Authorization Required

8. Click OK.

Description	Glossary
Parent Number	The address book number of the parent company. The system uses this number to associate a particular address with a parent company or location. Any value that you enter in this field updates the Address Organizational Structure Master table (F0150) for the blank structure type. This address number must exist in the Address Book Master table (F0101) for validation purposes. Examples of address book records that would have a parent number include: Subsidiaries with parent companies Branches with a home office Job sites with a general contractor --- FORM SPECIFIC --- The Address Book number of the primary level in a hierarchy, or reporting relationship. A parent in one hierarchy can be a child in another hierarchy. A hierarchy can be organized by business unit, employee, or position. For example, you can create a hierarchy that shows the reporting relationships between employees and supervisors.
Structure Type	A user defined code (01/TS) that identifies a type of organizational structure that has its own hierarchy in the Address Book system (for example, email). When you create a parent/child relationship for the Accounts Receivable system, the structure type must be blank. --- FORM SPECIFIC --- Identifies the type of distribution list, such as WFS for workflow, ORG for group, and EML for email.
Associated Data Item	The data item used to retrieve the formatting information that the system uses on the Threshold Value.
Threshold Value	A value that is assigned to individuals within a distribution list to determine if the individuals will be included in the approval of a workflow task. This value can be any numeric value, such as an amount, quality, or percentage.

Description	Glossary
First Response	If this option is turned on, only one member of a distribution list must respond to the workflow message. When the first response is received by the workflow system, the system cancels the messages that were sent to the other members of the group and marks the task as complete. If this option is turned off, all members of the group to which the workflow message was sent must respond before the system marks the task as complete.
Higher Level Override	If this option is turned on and a person in a higher level group manually approves a workflow transaction (by a workbench program), then all lower level groups will be marked as bypassed. If this option is turned off and a person in a higher level group manually approves the transaction, the action is logged and all lower level groups are still required to approve the transaction.
Authorization Required	If this option is turned on and a person in the distribution list enters a workflow transaction that goes through the distribution list, the next higher person must be sent the message, even if the threshold has not been reached for the higher person. If this option is turned off, no higher person is required to see the message as long as it is below the threshold.

Creating a Distribution List for Hierarchical Processing

Access Workflow Tool.

To create a distribution list for hierarchical processing:

From Workflow Management Setup (G0241), choose Group Revisions (P02150). Alternatively, you can access this application from OMW by choosing a workflow process, clicking Design, and then clicking Group Revisions on the Workflow Operations tab.

1. On Work With Distribution Lists, complete the following fields:
   - Parent Number

     Click the Search button and then choose the address book number of the distribution list to which you want to add members.
   - Structure Type

     Click the Search button and then choose a structure type from the list.

     Note. Do not leave this field blank. Every distribution list must have a structure type. Blank is the value for the Accounts Receivable structure type.
2. From the Form menu, choose Revise Parent.
3. On Address Parent/Child Revisions, complete the following fields:

- Group

  Hierarchical processing ignores values in the Group field. However, PeopleSoft recommends that you assign each member to group 1.

- Address Number

  Enter the address book number of the individual that you want to add to the distribution list.

4. If you will be using threshold values, complete the following fields:

   - Associated Data Item

     You must use a data item that is also included in the additional data structure of the workflow process. The system compares the value for this data item against the threshold values of the distribution list members to determine to whom message are sent.

   - Threshold Value

     Enter the threshold value for each member in the distribution list.

   Important! If you want to make sure a message is sent, enter at least one threshold value in the distribution list that is lower than or equal to any value that could be entered into the associated data item. Otherwise, if the value in the associated data item is lower than the lowest threshold value in the distribution list, the process does not have anywhere to send the message because all of the possible recipients are out of the specified threshold range.

   ---

5. If you are adding escalation to a Message task, complete the following fields to assign hours and minutes to each member of the distribution list.

   - Escalation Hours
   - Escalation Minutes

   These values determine when a message will be escalated.

   Note. Escalation hours and minutes must be the same for all members of a group. For example, if members 7101, 7102, 7103, and 7104 are all members of group 1, then each of these members must have the same escalation hours and minutes.

   ---

6. If you want to specify a period of time during which the members of the distribution list can receive a message, complete the following fields:

   - Begin Eff Date
   - End Eff Date

   The workflow engine will not send messages to the members of the distribution list unless the current date falls between the beginning effective date and the ending effective date that you specify in these fields.

7. Specify the routing options by choosing one or more of the following options:

   - First Response
   - Higher Level Override
   - Authorization Required

8. Click OK.
9. To add a level beneath the member that you just added (for example, if you added a vice president and you want to add directors beneath the vice president), do the following:
10. Return to Work With Distribution Lists and choose the vice president you just added in the tree.

You might need to click Find to refresh the display.

11. Click Add, and then enter the directors.

    Each time you add another level to the distribution list, you choose the parent address book number and then click Add to add children under that parent. You can also enter the parent's address book number and the structure type, click Find, and then choose Revise parent from the Form menu.

Viewing the Distribution Lists of which a Child is a Member

Access Workflow Tool.

To view the distribution lists of which a child is a member:

From Workflow Management Setup (G0241), choose Group Revisions (P02150). Alternatively, you can access this application from OMW by choosing a workflow process, clicking Design, and then clicking Group Revisions on the Workflow Operations tab.

1. On Work With Distribution Lists, complete the following fields:
   - Parent Number

     Enter the address book number of the child for which you want to view all distribution lists.
   - Structure Type
2. Select the Parents option, and then click Find:

   The system displays the name of each distribution list of which the child is a member. In the following example, Dominique Abbot is a member of the Engineering and Accounts Receivable Department distribution lists.

Working with Recipient Rules

This section provides and overview of recipient rules and describes how to:

- Add a recipient rule
- Work with properties
- Delete tasks and transitions
- Detach and delete transition conditions
- Replace a task

Understanding Recipient Rules

You can specify the recipients of a workflow message in the event rules of a Message task. Another way to specify the recipients is to attach a recipient rule to the Message task. A recipient rule can contain a recipient (either a single recipient, a role or a distribution list) and a recipient condition. A Message task can have one or more recipient rules.

Just as in the event rules of a Message task, the recipient in a recipient rule is defined by the combination of the address book number and the structure type. If the structure type is blank, the recipient is a single recipient or a role. If the structure type is not blank, the recipient is a distribution list.

If you attach a recipient rule to a Message task that already has a recipient assigned to the event rules of the Message task, the recipient in the event rules is the default recipient. If the recipient condition for any of the recipient rules is correct, that recipient rule will override the event rules of the Message task. If none of the recipient conditions is true, the recipient in the event rules is used.

Understanding Recipient Conditions

A recipient condition contains a statement that Workflow evaluates to determine whether or not to route messages to a particular recipient. For example, you might set up a recipient condition named ACCTG that uses customer address book numbers as the criterion to determine where to send messages. You could add logic to the recipient condition to tell the system that if the customer number is equal to a range of 1 through 3001, and then send messages for those customers to the accounting department distribution list.

When you add a recipient condition in the Workflow Modeler, the recipient condition has no affect on the workflow process until you attach it to a recipient rule. You can add a recipient condition to a recipient rule at any time when you are creating a workflow process.

Note. If you add multiple recipient rules to a Message task, the system does not evaluate them in any particular order. The first recipient criterion that evaluates to true is the recipient rule that will be used.

Example: Using Recipient Conditions

You have an accounting department distribution list and a payroll department distribution list, and you want messages to be sent to one or the other based on a rule. You set up a two recipient condition called IFACCTG and IFPAYR. These recipient conditions would use the address book numbers of the customers as the criteria for determining where to send messages. IFACCTG would specify that if the customer number is equal to a range of 1 through 3001, then messages regarding those customers should be sent to the accounting department's distribution list.

Prerequisite

Before you complete the tasks in this section:

- See Understanding Workflow Message Recipients in the EnterpriseOne Workflow Tools Guide for information on how to use a combination of Address Book Number and Structure type to specify the recipient in the recipient rule.
- If it does not already exist, you must first create the recipient condition. See Recipient Conditions in the EnterpriseOne Workflow Tools Guide.
- If you are attaching a distribution list to the recipient rule, you must first create the distribution list. See Setting Up Distribution Lists in the EnterpriseOne Workflow Tools Guide.

Adding a Recipient Condition

Access Workflow Tool.

To add a recipient condition:

1. Right-click the background of the Workflow Modeler diagram, choose Recipient Conditions, and then choose Add.
2. On Process Rule Revisions, complete the following fields:
   - Rule

     Type a name for the recipient condition. The name can be up to 10 characters in length.

- Description

  Type a description for the purpose of the recipient condition.
- Category Code 1
- Category Code 2
- Category Code 3

  Note. Category codes are optional fields that you can customize to include additional data about the object.

  ---

3. Click OK.
4. On Criteria Design, enter the criteria that will make up the recipient condition and click Save.

Note. If the Message task specifies Use Recipient Rules as the recipient, make sure that all values sent to the recipient rules are covered by the recipient conditions. Otherwise, you might have a value that does not satisfy any conditions, and no message will be sent.

Adding a Recipient Rule

When you add a recipient rule, you must define it using the following information:

- Recipient condition
- Recipient, which is defined by the following:
- Address book number
- Structure type

Note. If you attach a recipient rule to a Message task that already specifies the recipient in its event rules, the recipient rule overrides the recipient in the event rules.

If you add multiple recipient rules to a message task, the system does not evaluate them in any particular order. The first recipient criterion that evaluates to true is the recipient rule that will be used.

To add a recipient rule:

1. On Workflow Modeler, right-click the Message task, and then choose Recipient Rules from the menu.
2. On Workflow Recipient Rule Revisions, complete the Recipient Condition field.

   Enter the name of the recipient condition that you want to use. Click the Search button to view recipient conditions.
3. On Workflow Recipient Rule Revisions, complete a combination of the following fields to specify the recipient:
   - Address Book Number

     Enter the address book number of the distribution list, role, or single recipient to whom the message will be sent. Leave this field blank to send to a distribution list using hierarchical processing.
   - Structure Type

     Enter the structure type of the distribution list to which the message will be sent. If the recipient is a role or single recipient, leave this field blank.

Working with Existing Workflow Processes

As your business processes change, you can change your workflow processes accordingly. Workflow Modeler displays diagrams of your existing workflow processes and enables you to modify them through the Workflow Modeler interface. You also can display workflow processes that are shipped with EnterpriseOne software. You can customize existing workflow processes to meet the needs of your business processes, rather than changing your business processes to conform to the software.

Occasionally, when you attempt to open an existing workflow process, the system might detect that another instance of the workflow process is running. The system will not enable you to edit a workflow process with an active instance, although you can view a read-only version of the workflow process. In most cases, you should copy the workflow process version to a new version number, edit the new version, and then make the new version active. Doing so acts as a versioning mechanism during your workflow development, enabling process instances that started using the old version to finish using that same version.

The system will open a read-only version of the workflow process if any of the following conditions are true:

- The version of the workflow process is running or historical instance records for that version exist.

  Editing a workflow process version introduces the possibility of invalidating historical data, which would prevent process instances from completing properly or prevent the accurate analysis of historical data. Therefore, you must run the Purge Completed Processes UBE (R98860P) before editing a process version. All active instances must be terminated before running this UBE to enable the historical data to be completely purged.

- The version of the workflow process you are trying to edit is active.

  In Object Management Workbench, you must change the workflow status to inactive before you can edit it.

- Someone else is editing the current workflow process.

  If any version of the workflow process is open for editing on another workstation, then the system will not enable you to edit the process.

- The system crashed while the workflow process in question was open for editing.

  In case of a system crash, the system enables you to open the workflow process on which you were working in read-only mode, in a mode that preserves the data but does not preserve the formatting, or as it was in its previously saved version.

Modify the Properties of a Workflow Process

Workflow Modeler enables you to change some of the properties of a task or a transition condition.

Access OMW.

To modify the properties of a workflow process:

1. On the Object Management Workbench form, choose the workflow process and then click the Design button in the center-column toolbar.
2. On Workflow Design, click the Summary tab.
3. On the Summary tab, you can modify the following information:
   - Description
   - Product Code
   - History Tracking

4. If you want to use a different data structure for key data or additional data, click the Data tab and then click the Search button in either of the following fields:
   - Key Data
   - Additional Data
5. Click the Category tab and complete the appropriate fields if you want to include any customizable data in the properties.
   - Category Code 1
   - Category Code 2
   - Category Code 3

   Note. You must first customize the category codes with descriptions and values using the User Defined Codes (P0004A) program.

   ---
6. If you want to include an attachment, click the Attachment tab. In the left panel, right-click, choose New, and then choose one of the following types of attachments:
   - Text
   - Image
   - OLE
   - Shortcut
   - URL/File

   Note. Any attachment that you include does not transfer when moving the workflow process from one environment to another.

   ---
7. Click OK.

Changing the Properties of a Task

Access Workflow Modeler.

To change the properties of a task:

1. In Workflow Modeler, right-click a task and then click Properties.
2. On Workflow Task Revisions, you can change the following items:
   - Description
   - Category Code 1
   - Category Code 2
   - Category Code 3
   - And Join (Y/N)
3. Click OK to return to the workflow diagram in Workflow Modeler.

Changing the Properties of a Transition Condition

Access Workflow Modeler.

To change the properties of a transition condition:

1. In Workflow Modeler, right-click the transition.
2. From the pop-up menu, choose Transition Conditions and then Properties.
3. On Process Rule Revisions, you can change the following items:
   - Description
   - Category Code 1
   - Category Code 2
   - Category Code 3
4. Click OK to return to the workflow diagram in Workflow Modeler.

Deleting Tasks and Transitions from a Workflow Process

When you delete a task from a workflow process, any transitions that are attached to the task are deleted as well. Therefore, if you want to delete only the task, you should first move all transitions attached to the task to another location in the diagram.

When you delete a transition that was defined with a transition condition, the transition condition still exists in the system. You must delete this transition condition separately.

Access Workflow Modeler.

To delete a task or transition from a workflow process:

1. In Workflow Modeler, right-click the task or transition that you want to delete.
2. Click Delete.

   Note. You cannot delete Start and End tasks.

Detaching Transition Conditions

When you detach a transition condition, you remove it from the transition, but the transition condition is still available for use in other transitions. When you delete a transition condition, the system removes that transition condition from the system and the transition condition no longer appears in the list of available transition conditions in the Transition Condition Search and Select form.

Note. Before you delete a transition condition, you must detach it from all transitions. If you delete a transition condition that is still attached to a transition, the name of the transition condition still appears next to the transition, giving the impression that it still exists in the workflow process. However, the transition condition is no longer functional.

To detach a transition condition:

1. In Workflow Modeler, right-click the transition from which you want to detach the transition condition.
2. From the pop-up menu, choose Transition Conditions and then Detach.

   The system removes the transition condition from the transition, but the transition condition is still available for use in other transitions.

Deleting a Transition Condition

Access Workflow Modeler.

To delete a transition condition:

1. In Workflow Modeler, right-click anywhere on the background of the workflow process diagram.
2. From the pop-up menu, choose Transition Conditions and then Delete.
3. On Transition Condition Search and Select, click the transition condition that you want to delete and then click Select.

   The system deletes the transition condition.

Replacing a Task

In Workflow Modeler, if you want to change the type of task that you are using in your process, you must first add a new task using the buttons in the toolbar. Move the transition lines from the task that you are replacing to your new task. You then can delete the old task.

CHAPTER 6

Validating a Workflow Process Version

This chapter provides an overview about validating a workflow process version and describes how to validate a workflow process version.

Understanding how to Validate a Workflow Process Version

After you use Workflow Modeler to create the tasks within the process and you add transition conditions and distribution lists, you must validate the workflow process version. When validating a version, the system verifies that the version contains start and end points. It also verifies that all tasks that need event rules contain event rules, and that transitions exist among all the tasks.

You must validate a workflow process version before you can activate it in the system. You cannot activate a process that contains errors.

Validating a Workflow Process Version

Access OMW.

To validate a workflow process version:

1. Find the workflow process version that you want to validate in Object Management Workbench.
2. Move the workflow process version to a project folder.
3. Click the workflow process version and then click the Design button in the center column.
4. On Workflow Design, click the Design Tools tab and then click Validate workflow.

   If the version contains no errors, the message Workflow is VALID appears. You can now attach the workflow process version to an application.
5. If the version contains errors, a dialog box appears with a list of errors. Click Start Workflow Modeler to open the version in Workflow Modeler and correct the errors.

CHAPTER 7

Understanding Activating a Workflow Process Version

You must make a version of a workflow process active in the system before you can attach it to an application. Additionally, only one version of a workflow process can be active at a time. This active version is the one that will be used if a workflow process is started. However, once a process is started it will continue running with the version it started with, regardless of the status of that version.

Note. Once a workflow process is made active in the system, you cannot modify it.

CHAPTER 8

Activating a Workflow Process Version

This chapter provides an overview of activating a workflow process version and describes how to:

- Activate or Deactivate a Workflow Process Version
- Attach a Workflow Process to an Application

Understanding how to Activate a Workflow Process Version

You must make a version of a workflow process active in the system before you can attach it to an application. Additionally, only one version of a workflow process can be active at a time. This active version is the one that will be used if a workflow process is started. However, once a process is started it will continue running with the version it started with, regardless of the status of that version.

Note. Once a workflow process is made active in the system, you cannot modify it. See Working with Existing Workflow Processes in the EnterpriseOne Workflow Tools Guide for information on how to modify existing workflow processes.

You cannot activate a process if it contains errors. Therefore, you must validate the workflow process before you activate it.

See Chapter 6, "Validating a Workflow Process Version," page 65.

Activating or Deactivating a Workflow Process Version

Access OMW.

To activate or deactivate a workflow process version:

1. Find the workflow process version in Object Management Workbench.
2. Move the workflow process version to a project folder.
3. Click the workflow process version, and then click the Design button in the center column.
4. On Workflow Design, click the Design Tools tab and then click Change Workflow Status to toggle between inactive and active.

Attaching a Workflow Process to an Application

This section provides an overview of attaching a workflow process and describes how to:

- Attach the Start Process to an Application
- Attach a Message Form to an Application

Understanding how to Attach a Workflow Process to an Application

After you create, validate, and activate a workflow process, you attach it to an event within an application using Event Rules in Form Design Aid (FDA). You only need to define the system function Start Process in an application to attach a workflow process. The Start Process system function invokes the tasks within the process.

You can also attach workflow processes in Event Rules within Report Design Aid (RDA), Table Design Aid (TDA), or through named event rules (NER).

Important! You should not attach a workflow process that initiates interactive applications or executables through RDA, TDA, or NER because they typically run on the server; therefore, no one sees the applications initiated by the process. Use discretion when designing processes that run on servers, including processes that will be started by interactive applications running on the Web.

The following tasks explain how to attach the process called CREDLIMIT to an application and how to call a *pending approval* message that appears within the application when a user makes a change to a customer's credit limit. The example used is specific to the Credit Limit Revisions process; the way in which you attach your processes varies.

See Also

Chapter 11, "Understanding Message and Workflow System Functions," Workflow System Functions, page 79

EnterpriseOne Tools 8.94 PeopleBook: Development Tools: Event Rules and System Functions, "Using Event Rules Design"

Prerequisite

Understand how to attach event rules to applications.

See *EnterpriseOne Tools 8.94 PeopleBook: Development Tools: Event Rules and System Functions*.

Attaching the Start Process to an Application

Access OMW.

To attach the Start Process to an application:

1. From the Object Management Workbench, find and check out the application to which you want to attach the workflow process.
2. Click the Design button in the center column.
3. On Interactive Application Design, click the Design Tools tab.
4. Click Start Form Design Aid.
5. Find the form to which you want to attach the Start Process.

6. Open the event rules for the form, position the cursor where you want to add the Start Process, and click the System Function button.
7. On System Functions, click the Function Selection tab, double-click the Workflow folder, and then choose Start Process.
8. Click the Parameter Mapping tab and double-click Choose Process.
9. On Process Search and Select, find the process that you want to attach to the application and click OK.

   The Workflow engine only runs an active process version. Even if you have two versions for a process, such as with CREDLIMIT version 1 and CREDLIMIT version 2, it will run the active version.
10. On System Functions, choose the Key Data Structure data item, and double-click the Define Mapping object.
11. On Data Structure Mapping, map the Key Data Structure to the corresponding object in the Available Objects list.
12. Repeat steps 10 and 11 to map the Additional Data Structure, and then click OK.

Attaching a Message Form to an Application

You can attach a form interconnection event rule that calls a message form. For example, you might want the system to call a form that notifies a user that the requested changes are made and pending approval from others.

To attach a form interconnection:

1. On Event Rules, click the Form Interconnect button.
2. On Work With Applications, find and choose the application that you want to use.
3. On Work With Forms, choose the form that you want to use.
4. On Form Interconnections, map the appropriate parameters, if applicable.

   In the Credit Limit Revisions example, the form that is called when a user makes a change to a customer's credit limit is for informational purposes only; you do not need to pass any values to this form.

CHAPTER 9

Understanding Synchronous and Asynchronous Processing

This chapter discusses:

- Synchronous and Asynchronous Processing
- System Functions for Synchronous and Asynchronous Processing
- Transaction Processing

Synchronous and Asynchronous Processing

EnterpriseOne Workflow Tools can execute a workflow process either synchronously or asynchronously. Asynchronous processing enables various workflow processes to run at the same time. By starting a workflow process asynchronously, you are simply running the workflow in the background of the calling application.

Although asynchronous workflow processes might process faster, synchronous processing is sometimes preferred. If a calling application depends on information from the workflow process, you should run the workflow process synchronously to ensure that the calling application gets the information it needs from the workflow process before the workflow finishes and the application closes.

A workflow process runs asynchronously by default, with the following exceptions:

- When it contains a form interconnect or run executable activity
- When it is run from a batch application
- When the workflow process is specifically designed to run synchronously

In the first two cases, the system forces the workflow to run synchronously. In the third case, the designer specifically chooses for the workflow to run synchronously.

System Functions for Synchronous and Asynchronous Processing

You can use the system functions *Start Process* and *Complete Activity* for asynchronous processing. You can use the system functions *Start Process In Line* and *Complete Activity In Line* for synchronous processing.

If an application depends on a workflow process to complete before continuing with subsequent event rule logic, then you must use *Start Process In Line*.

The *Start Process* and *Complete Activity* system functions run asynchronously in interactive applications, named event rules (NER), and table event rules (TER).

The *Start Process In Line* and *Complete Activity In Line* system functions run synchronously in interactive applications, named event rules (NER), and table event rules (TER).

Workflow processes in batch applications and subprocess tasks within a workflow always run synchronously, so only the *Start Process In Line* and *Complete Activity In Line* system functions are available in Report Design Aid and subprocess task definition. All event rules for existing batch applications that call *Start Process* and *Complete Activity* continue to be displayed as they are, but the workflow processes run synchronously.

Several system functions for workflow processing are available. Refer to the online APIs for more information about specific system functions.

Transaction Processing

If a named event rule that is included in a transaction calls any workflow system function, regardless of whether the workflow processes are synchronous or asynchronous, the workflow process is not included in the transaction. Therefore, the workflow process is permanently written to the tables even if the transaction rolls back.

CHAPTER 10

Workflow Processing Location

This chapter provides overviews of troubleshooting workflow environments and describes how to run the Workflow Environmental Diagnostic tool.

Understanding Workflow Processing Location

Workflow can run either on the client or the server. The location for workflow processing is determined by the default Object Configuration Manager mapping for business functions. An exception is that when the logon environment is local, the workflow must run locally; this is because, in this case, the server cannot write to or update a database on a client workstation.

Troubleshooting Workflow Environmental Issues

The Workflow Environmental Diagnostic (W98895A) application (hereafter called Diagnostic Tool) is a tool that enables you to troubleshoot issues that may affect how your workflow processes run on Windows client or enterprise server machines. The Diagnostic Tool detects environmental setup issues that can cause your workflow processes to fail, such as incorrect OCM mappings and database settings.

In addition to checking the workflow system for environmental setup errors, the Diagnostic Tool gives you the option to perform the following operations:

- Troubleshoot an active version of a workflow process.

  If no active version is found, the tool will continue to check the other environmental settings.
- Verify SMTP settings for message delivery

You can run the Diagnostic Tool on the client workstation, the enterprise server, or both. When you run the tool over both the client and server, the tool compares the data source of each workflow table between the client and server for any discrepancies. It also detects any discrepancies between the JAS configuration settings on the client and server.

The Diagnostic Tool performs the following validations:

- Validates accessibility to the following workflow tables:

F98800	F98865
F98810	F98870
F98811	F98840

F98820	F0150 (Distribution List)
F98830	F0101 (Address Book)
F98845	F0111 (Address Book)
F98850	F01131 (PPAT)
F98860	F01133 (PPAT)
F98861	F01131M (PPAT)

- Validates that the following tables are mapped to the same data source:

  Workflow definition tables: F98800, F98810, F98811, F98820, F98830, F98845, F98850

  Workflow instance tables: F98860, F98861, F98865, F98870

  Distribution list tables: F0150, F98840

- Validates that the following media objects and corresponding database tables are mapped to the same data source:

  GT98800A, F98800

  GT98865A, F98865

  GT01131, F01131

- Validates the table format for the current release

  Verifies that all workflow tables have the valid number of columns in the current release, both in the physical database, as well as the Enterprise One Table Specifications.

  Verifies that the F98840 table contains three columns in the primary index and not two columns as in the previous EnterpriseOne 8.0 release.

- Validates the Binary LOB flag setting for an AS/400 data source

  Verifies that workflow tables have been correctly set up to have a LOB setting instead of the former AS/400 chaining solution. This test is performed only for tables containing a Binary LOB mapped to an AS/400 data source.

- Validates a workflow process (optional)

  Validates a selected workflow process or an active version of that process.

  Returns the number of awaiting instances of a process.

  Checks to see if the sequence numbers are out of sync between the workflow definition tables and the number of instances.

- Validates template substitution

  Verifies that the alpha description and glossary for message template LM0033 exists and that text substitution can be performed. Template LM0033 is used as an example to verify that data dictionary specifications are accessible.

- Validates access to workflow specs (F98811)

  Uses spec encapsulation APIs to access a F98811 workflow spec record.

- Validates SMTP setup (optional)

Verifies that sending an email to a specified email address works.

- Validates JAS Configuration

  Retrieves the JAS configuration from the Install Planner tables (in EnterpriseOne 9.0 and successive releases).

- Validates Kernel configuration (only on server)

  Checks the server jde.ini to verify that there is one valid workflow kernel definition.

  Checks the dispatchDLLName and dispatchDLLFunction in the server jde.ini file to see if it matches the settings for the specific supported platform.

Interpreting the Results

This section provides an overview for interpreting the results and describes how to run the Workflow Environmental Diagnostic tool.

Interpreting the Results

The Workflow Environmental Diagnostic tool generates a report listing the various errors or issues that the tool detects. You can print the report or email the report to another user.

The following is an example of how some of the errors appear on the report. You should work with your system administrator to help interpret and resolve any issues that the Diagnostic Tool detects.

- Table access error

```
Error:JDB_OpenTable failed. Possible Reason could be missing or damaged specs for⇒
 the table.Cannot determine whether table is missing or empty.Empty TableJDB_Close⇒
Table failed.Warning:Empty TableFailed to access table
```

- Data source consistency

```
Error / Warning:Data Source inconsistency.
```

- Table format

```
Error:Expected no. of columns for current release is <n>. Wrong specs found for⇒
 table.The Primary Index<ID_F98840_ORGANIZATIONAL_MODEL> for table F98840 has 3⇒
 columns. No. of columns in the specs for this Index is <n>.
```

Running the Workflow Environmental Diagnostic Tool

Access the Workflow Environmental Diagnostic tool from the Workflow Advanced and Technical Operations menu.

To run the Workflow Environmental Diagnostic tool:

1. On Workflow Environmental Diagnostic, choose one of the following options:
   - Windows Client Only

     Performs all validations except the Kernel validation.

   - Enterprise Server Only

     Performs all validations.

- Both Client and Server (includes comparison)

  Checks the data source of each workflow table between the client and server for any discrepancies, and detects discrepancies between the JAS configuration settings.

2. If you want to validate a particular workflow process, enter the process name and version in the following fields:
   - Workflow Process to Validate
   - Process Version to Validate (or 0 for Active Version)
3. To verify that the messaging system is properly set up, in the Mail Test (optional) area, enter an email address in the Email Address field.

   After you run the Diagnostic Tool, if a message is sent to the specified email address, then the messaging system settings are correct.
4. Click Run Diagnostic

   The Diagnostic Tool validates the environmental settings and performs any additional tasks that you specified above. After the test is complete, the Diagnostic Tool generates a report that appears in the Workflow Environmental Diagnostic Output form.

   On Workflow Environmental Diagnostic Output, you can copy and paste the report to any text editor or you can email the report to a user's address book number or to an email address.
5. To email the report, complete the Send To (Address Book Number or Email Address) field and then click Send.

CHAPTER 11

Understanding Message and Workflow System Functions

Following are the available Message and Workflow system functions and a description of each. Refer to the system function documentation in the online API guide for more information about these system functions.

Note. Workflow Admin system functions are intended only for use by workflow administrative applications developed and maintained by PeopleSoft. Therefore, they are not listed here.

Message System Functions

Message system functions include the following:

Delete Message	Removes a message that was created using Send Message.
Forward Message	Automatically forwards a message using a system function.
Send Message	Sends a message through the EnterpriseOne mail system.
Template Substitution	Enables the user to fill the message template with the substitution values and then receive the completed message template back in a text string. The output string can be displayed on the screen or printed on a report as generic text.
Update Message	Modifies information associated with a message that has already been added using Send Message.

Workflow System Functions

Workflow system functions include the following:

Complete Activity	Completes an activity instance
Complete Activity In Line	Completes an activity instance and resumes the workflow process in line
Get Activity Instance For Key	Retrieves the active workflow activity instance information for a given key
Get Process Instance Attributes	Retrieves the key and attribute data structures for a given process instance
Get Process Instance For Key	Retrieves the workflow process instance for a given key

Start Composer Process	Obsolete
Start Process	Starts a workflow process
Start Process In Line	Starts a workflow process in line for synchronous processing
Update Process Instance Attributes	Updates the attributes for a given process instance
Update Process Instance Attribute Single	Updates a single process attribute for a given process instance

CHAPTER 12

Configuring Shortcuts

This chapter provides an overview of shortcuts and describes how to configure them.

Understanding how to Configure Shortcuts

While working in EnterpriseOne, users can email other users a shortcut to an application or form. More often, shortcuts are sent to recipients automatically as part of a workflow process. For example, a workflow process might automatically send a manager a shortcut to an approval application after a user enters a sales order. The recipient (in this example, the manager) double-clicks the shortcut to access the corresponding application.

If more than one server is dedicated to workflow tasks, you can configure to which server a shortcut is routed. For example, a user is developing a workflow process. The workflow process contains a shortcut to a new application that resides only on the user's workstation. The user wants to test the new application before making it available to everyone, so she wants the shortcut to access the new application located on her workstation. By default, the shortcut sent by the workflow process routes users to a deployment server, not to the user's workstation. You can configure EnterpriseOne to route shortcuts to any server (in this example, the user's workstation).

Note. Shortcut configurations are specific to an EnterpriseOne user or EnterpriseOne role. When a user creates a shortcut, EnterpriseOne verifies that a specific configuration exists for the user. If a configuration is specified for the user, then the shortcut is routed to the server named in that configuration. If a configuration is not found for the user, EnterpriseOne finds all the roles the user logged in as and then searches for a configuration that is assigned to one of those roles. If a configuration is specified for a role the user has used, then the shortcut is routed to the server named in the configuration. If a configuration is not found for the role, then EnterpriseOne routes the shortcut to the default server listed in the jde.ini file.

When you configure the shortcut to access a server other than the default server, your changes are stored in the F986101 table (OCM) located on a server you specify when you create the configuration. If you do not create a configuration, then EnterpriseOne, after checking the F986101 table, routes the shortcut to the server specified in the jde.ini file located on the recipient's server.

Your configurations are stored as records, and six record types exist. When a user sends a shortcut, EnterpriseOne first searches for and uses the most specific record type. EnterpriseOne eliminates each record type if it is not found, and then progresses to the next, less specific record type. Records are comprised of the user or role, and the service. The following list shows the different combinations that comprise the record types. They are listed from most specific to least specific.

- specific user, specific service
- role, specific service
- user, default service
- role, default service

- *public, specific service
- *public, specific service

Configuring a Shortcut

Access Environment/Service Configuration.

To configure a shortcut:

Use the PeopleSoft menus to navigate to the Environment/Service Configuration (GH9053) menu. Double-click Environment/Service Configuration. You cannot use the Fast Path to navigate to this application.

1. On Environment/Service Configuration, choose the OCM table you want to update.

   The OCM table is the table to which you add or modify workflow records. The OCM table that you choose in this step is the one that is affected when you configure shortcut mapping.
2. Click Select.
3. On Environment/Server Configuration - [Work with Service Configuration], click Add.

   When you add a record to the OCM table, you cannot modify it.
4. On Environment/Server Configuration - [Service Configuration Revisions], complete the following fields:
   - Environment

     The environment on which the user sending the shortcut is logged in.
   - Service Name
   - User/Role

     The user who is sending the shortcut.
   - Server

     The logical server name of the web server on which the user sending the shortcut is logged in. You must enter a logical web server name rather than the physical server name. The logical server name is a shortcut to the server, and is set up in the deployment location tables. The physical server name is the actual path to the server. Do not enter the physical server name.
   - Port Number

     The port number associated with the logical server. The port number you enter will help identify the physical server name on the deployment server.
5. Click OK.

CHAPTER 13

Using the Workflow Demonstration

This chapter provides an overview of the workflow demonstration and describes how to:

- Set up the workflow demo
- Activate a workflow demo
- Show a workflow demo in workflow modeler
- View a workflow demo email messages

Understanding the Workflow Demonstration

The Workflow Demonstration (demo) is a set of EnterpriseOne objects that enable you to demonstrate EnterpriseOne Workflow functionality with minimum setup. The workflow demo simulates a sales order entry workflow consisting of email authorization, distribution list processing, and text substitution in workflow messaging. In addition to providing a quick and easy platform for demonstrating EnterpriseOne Workflow functionality, you also can use the workflow demo to show how to develop workflow systems in EnterpriseOne using EnterpriseOne best practices guidelines.

Using the Workflow Demo

This section provides overviews on setting up, activating, using, showing, and viewing the workflow demo and describes how to:

- Set up the workflow demo
- Activate a workflow demo
- Use a workflow demo
- Show a workflow demo in workflow modeler
- View a workflow demo email m

Setting Up the Workflow Demo

You set up the workflow demo using the setup application named P99WFSET. The setup application guides you through a list of setup steps, which are explained in the following list. PeopleSoft recommends that you complete these steps in the order shown:

1. Create a set of address book numbers to be used in the workflow demo. The setup application contains the Create Default Users button that, when clicked, creates address book numbers 990000 through 990005 in the Address Book Master table (F0101). If the address book numbers do not already exists.
2. Create a set of default data for the workflow demo. The setup application contains the Create Default Data button that, when clicked, creates usable items in the Workflow Demo Item table (F99WFITM).
3. Choose a distribution list to receive approval email messages. The setup application contains the Set Up Distribution List button that, when clicked, enables you to choose the distribution list to which you want approval email messages sent.
4. Set up the mailbox to which approval email messages are sent to be publicly viewable. The setup application contains the Set Up Queue button that, when clicked, enables you to make the Electronic Workbench mailbox publicly viewable.

The following are workflow demo objects:

Table Name	Description
B99WFDEM	This object contains all of the business function logic used by the workflow demo, such as updating sales order status and calculating margin.
F99DTL	This table is populated with the records that are entered as the demo sales order line items. You must ensure that this table exists and was generated. For more information about generating tables, see the Object Management Workbench documentation.
F99HDR	This table is populated with the records that are entered into the demo sales order header. You must ensure that this table exists and was generated. For more information about generating tables, see the Object Management Workbench documentation.
F99WFITM	This table is populated with the demo items you use in the demo workflow. These items are created during set up. You must ensure that this table exists and has been generated. For more information about generating tables, see the Object Management Workbench documentation.
GT99HDR	This is a media object data structure where all of the approval comments are stored and from which all approval comments are retrieved.
P99WF1	This object is one of two workflow demos. P99WF1 demonstrates basic workflow functionality. The workflow is a simple approval process.
P99WF2	This object is one of two workflow demos. P99WF2 displays how all the processes can be handled in the workflow process, such as how margins are calculated and how approvals are determined.
P99WFAPR	This object is the application you use to approve or reject the requests for approval.
P99WFSET	This object is a guide to the set up necessary to use the workflow demos. Use this object to set up address book numbers, demo items, and distribution lists.
K99WF1	This object is a set of workflow instructions that P99WF1 executes. This workflow process is started and run when you submit a sales order for approval in object P99WF1. You use the Workflow Modeler to view this object.
K99WF2	This object is a set of workflow instructions that P99WF2 executes. This workflow process is started and run when you submit a sales order for approval in object P99WF2. You use the Workflow Modeler to view this object.

Table Name	Description
WF99KEY	This data structure is the primary data structure used to identify each workflow instance as unique.
WF99ADD	This data structure is the additional data structure used to store any information not in the primary data structure.
WFDEMO	This data item is a text template used for all messages used by the workflow demo.

To set up the workflow demo:

1. In the Fast Path, type P99WFSET to access the workflow demo setup application.
2. On Workflow Demo Setup, click Create Default Users.

   Workflow adds demo users to the Address Book Master table (F0101).
3. Click Create Default Data.

   Workflow adds demo data to the Demonstration Item table (F99WFITM).
4. Click Set Up Distribution List.
5. On Work with Distribution Lists, choose the distribution list to which you want workflow email messages sent.

   Notice that the Parent Number defaults to the 990000 distribution list, which was created when you clicked Create Default Users.
6. Click Set Up Queue.

   By default, all emails are sent to the Electronic Workbench. Clicking Set Up Queue enables you to view publicly the mailbox where messages are sent.
7. On Work with Workflow Message Security, click Add.
8. On Workflow Message Security Revisions, select the Public Security option.
9. In the grid, find Electronic Workbench and ensure that the value in the Authority Y/N column is Y.
10. Click OK.

    Your workflow demo data is now set up and ready to use.

Activating a Workflow Demo

Before you run a workflow demo, you must ensure that the workflow demos are in active status so that the workflow sends email messages to the distribution lists you specify. If, however, you want to edit the workflow demo in Workflow Modeler, you must change the status so that it is inactive. If the workflow demo is at active status in Workflow Modeler, the workflow demo is read-only.

Access OMW.

To activate a workflow demo:

1. On the Search tab, complete the following fields:
   - Category

     From the drop-down menu, choose Workflow.

- Search Type

  From the drop-down menu, choose Process Name|Process Version.

- Search

  Type K99WF1 or K99WF2, depending on the workflow demo process you want to display.

2. Click the workflow demo, and then click the left arrow to move it to a project.
3. On the left side of the screen, click the workflow demo, and then click the Design button.
4. Click the Design Tools tab.
5. Click the Change Workflow Status button so that the workflow status is Active.
6. Click OK.

Using a Workflow Demo

You use a workflow demo to show how a workflow process is completed. The workflow demo process shows how recipients receive email messages that contain a request to approve a step in the workflow process. The workflow demo uses items whose margins determine if email messages are sent. If an email message is approved, the message continues through the distribution list. If someone on the distribution list rejects the approval request, the workflow demo discontinues and sends a message to the workflow demo originator that their request for approval is denied.

To use a workflow demo:

1. In the Fast Path, type P99WF1 or P99WF2.

   P99WF1 demonstrates basic workflow functionality. The workflow is a simple approval process. P99WF2 displays how all the processes can be handled in the workflow process, such as how margins are calculated and how approvals are determined.

2. On Work With Demo Sales Orders, click Add.
3. On Add New Demo Sales Orders, complete the following fields:

   - Entered By

     Enter a user listed in the address book or search for one using the Search feature.

   - Customer Number

     Enter a customer number or search for one using the Search feature.

4. Click OK.
5. On Demo Sales Order Detail, click the Item Number field, and then click the Search button.
6. On Demo Item Search & Select, click Find.
7. Choose an item from the grid and then click Select.
8. On Demo Sales Order Detail, complete the following fields in the grid:

   - Order Quantity
   - Unit Price

   Note. Margins must be less than 25 percent for the workflow demo to require approval. Adjust the unit price to change the margin.

9. If you are using the workflow demo P99WF1, then click the line below the item you chose to view the margin percentage.

   You might have to scroll to the right of the screen to view the margin column.

10. Click OK.

    Workflow sends a message for approval to the distribution list you chose in the "To set up the workflow demo" task.

Showing a Workflow Demo in Workflow Modeler

You show a graphical representation of a workflow demo through the Workflow Modeler, and you launch the Workflow Modeler from EnterpriseOne. To edit a workflow demo in Workflow Modeler, ensure that the workflow is at an inactive status. Otherwise, the workflow demo appears as read-only.

Access OMW.

To show the workflow demo in Workflow Modeler:

1. On the Search tab, complete the following fields:
   - Category

     From the drop-down menu, choose Workflow.
   - Search Type

     From the drop-down menu, choose Process Name|Process Version.
   - Search

     Type K99WF1 or K99WF2, depending on the workflow demo process you want to display.
2. Click the workflow demo, and then click the left arrow to move it to a project.
3. On the left side of the screen, click the workflow demo, and then click the Design button.
4. Click the Design Tools tab.
5. Click Start Workflow Modeler.

   Workflow Modeler launches and displays the workflow demo in a read-only format.

Viewing a Workflow Demo Email Messages

By default, all workflow demo email messages are sent through EnterpriseOne internal email, which can be read using the EnterpriseOne Work Center. The person to whom you are sending the email messages must have a valid address book number in the Address Book Master table (F0101). The user who is logged into EnterpriseOne during the demo must also have a valid address book number. EnterpriseOne can be configured to send the demo email messages to external email applications. For information about how to send messages to external email applications, see the Foundation documentation.

Access Work Center.

To view workflow demo email messages:

1. On Employee Work Center, in the Address/NumberUser/Role field, type the number that is associated with the distribution list you chose in the "To set up the workflow demo" task.
2. In the Tickler Date field, type today’s date.
3. Click Find.

4. Expand the Queues menu, expand the Electronic Workbench menu, and then click the email message.

   The workflow demo message displays in the right-hand pane.

5. Click Approve, and then click OK.

   If all users in the group approve, the workflow demo email message is sent to the next group of users on the distribution list.

   If you reject the workflow demo email message, the workflow completes without requesting further approval, and a message is sent to the workflow originator explaining that the workflow was rejected.

CHAPTER 14

Understanding Distribution List Scenarios

This chapter discusses:

- Group processing scenarios
- Hierarchical processing scenarios

Distribution List Scenarios

There are several scenarios that illustrate how Workflow processes use group processing or hierarchical processing to send messages to distribution lists. These scenarios follow the same Credit Limit example that is used throughout this guide. Each scenario includes the set up used for a specific workflow process and the results that occur when that set up is used.

Prerequisite

You should understand how to create a Message task and how to attach a distribution list to a Message task. You should also understand the difference between group processing and hierarchical processing.

For more information, see the following topics in the EnterpriseOne Workflow Tools Guide:

- Creating a Workflow Process
- Message Tasks
- Distribution Lists

Group Processing Scenarios

This section discusses examples that illustrate how a workflow process uses group processing to route messages to members of a distribution list.

Scenario 1: Group Processing

This scenario illustrates how group processing sends messages to members of a distribution list.

Setup

The following information illustrates a typical distribution list setup for the Credit Limit example.

A/B #	Description	Group #	Threshold Value
7101	Clerk #1	1	5000
7102	Clerk #2	1	5000
7103	Clerk #3	1	10000
7201	Manager #1	2	10000
7202	Manager #2	2	15000
7203	Manager #3	2	20000
7301	Director #1	3	20000
7302	Director #2	3	25000
7303	Director #3	3	25000
7401	VP #1	4	30000
7402	VP #2	4	30000
7501	President	5	31000

Results

The following results illustrate to which A/B numbers that messages would be passed. The value passed is the dollar amount used to determine which address book numbers receive the message. The address book numbers to the right are the result.

Value Passed												
4500	Not sent to list											
9500	7101	7102										
14500	7101	7102	7103	7201								
19500	7101	7102	7103	7201	7202							
24500	7101	7102	7103	7201	7202	7203	7301					
29500	7101	7102	7103	7201	7202	7203	7301	7302	7303			
30500	7101	7102	7103	7201	7202	7203	7301	7302	7303	7401	7402	
31500	7101	7102	7103	7201	7202	7203	7301	7302	7303	7401	7402	7501

Scenario 2: Group Processing

This scenario uses the same setup as Scenario 1 except that all threshold values are 0.

Setup

A/B #	Description	Group #	Threshold Value
7101	Clerk #1	1	0
7102	Clerk #2	1	0
7103	Clerk #3	1	0
7201	Manager #1	2	0
7202	Manager #2	2	0
7203	Manager #3	2	0
7301	Director #1	3	0
7302	Director #2	3	0
7303	Director #3	3	0
7401	VP #1	4	0
7402	VP #2	4	0
7501	President	5	0

Results

No matter what value is passed, the process goes through the entire distribution structure. Every address book number gets a message.

Scenario 3: Group Processing

In this scenario of group processing, all members are in the same group and have the same threshold values.

Setup

Each group level in the distribution list is set to 1. A threshold value of 100 is used for each person.

Group	Name	Threshold Value
1	Tom	100
1	Barb	100

Group	Name	Threshold Value
1	Tim	100
1	Dan	100

Results

Every address book number is given a message if the amount sent is greater than the threshold.

Data Value	Sent to All #s in Group
90	Did Not Send
110	Yes

Scenario 4: Group Processing with Higher Level Overrides

This scenario shows how group processing routes messages to a distribution list with threshold values and higher level overrides.

Setup

The value passed in is 31500.

A/B #	Description	Group #	Threshold Value
7101	Clerk #1	1	5000
7102	Clerk #2	1	5000
7103	Clerk #3	1	10000
7201	Manager #1	2	10000
7202	Manager #2	2	15000
7203	Manager #3	2	20000
7301	Director #1	3	20000
7302	Director #2	3	25000
7303	Director #3	3	25000
7401	VP 1	4	30000
7402	VP 2	4	30000
7501	President	5	31000

Results

After Group #1 approves the message, all address book numbers above Group #1 show up in Process Task Monitor in an awaiting status except for Manager #1 and Manager #2, which show an unopened status.

At this point, a user of higher group number can come in and override the workflow process to continue to the next task. For example, in this scenario, if you log on to the EnterpriseOne system as President and do a higher level override on Clerk #1, all users display as bypassed, and the process ends as expected.

Scenario 5: Group Processing with First Response

This scenario uses the same setup as Scenario 1. It uses group processing and the originator of the process is not included in the distribution list. This scenario shows what would happen if the First Response option was checked during the distribution list setup.

Setup

A/B #	Description	Group #	Threshold Value
7101	Clerk #1	1	5000
7102	Clerk #2	1	5000
7103	Clerk #3	1	10000
7201	Manager #1	2	10000
7202	Manager #2	2	15000
7203	Manager #3	2	20000
7301	Director #1	3	20000
7302	Director #2	3	25000
7303	Director #3	3	25000
7401	VP #1	4	30000
7402	VP #2	4	30000
7501	President	5	31000

Results

At a specific group level, the first individual to respond dictates how the process continues. For example, the response might tell the process to end the task or to move on to the next higher group level in the distribution list.

Note. The First Response option is not necessary when using hierarchical processing of distribution lists. In hierarchical processing, if you have a situation where a clerk has two managers directly above him or her, both managers receive the message. The first manager to respond dictates how the process proceeds.

Hierarchical Processing Scenarios

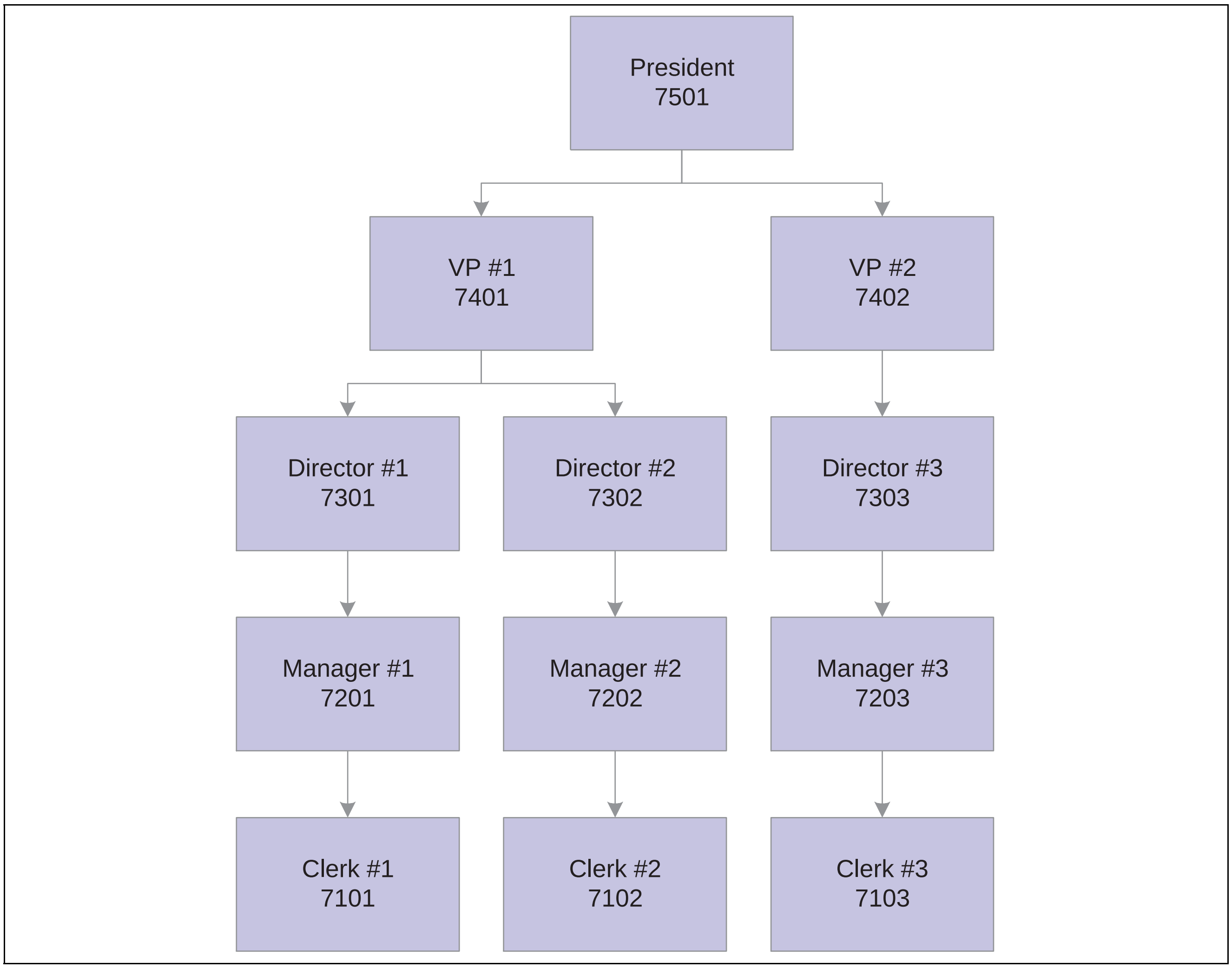
This section discusses hierarchical processing scenarios.

Scenario 6: Hierarchical Processing

This scenario illustrates how hierarchical processing of a distribution list sends messages to members of a distribution list with threshold values. The originator is in the distribution list. If the originator is not in the distribution list, the workflow process ends in error.

Setup

Threshold values are denoted in parentheses. The originator is 7101.



Setup for Distribution List

Results

If the value passed is lower than the originator's threshold or the originator's manager's threshold, the workflow will not send the message. To prevent this situation, set a default value for the messages that are not sent. For the Credit Limit scenario, you would probably accept the value passed amount because it is not a significant amount.

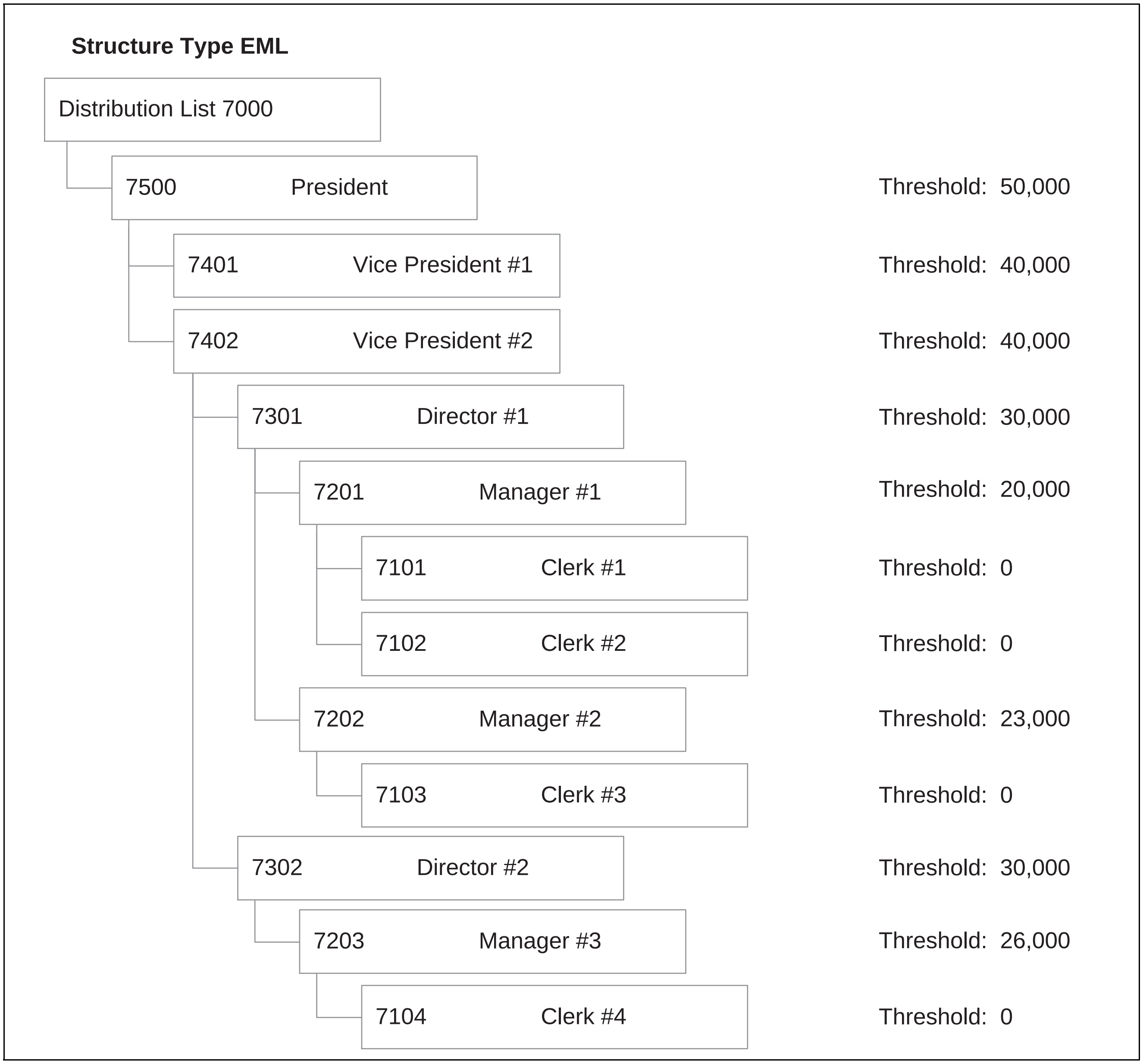
Value Passed				
4500	Not sent to list			
9500	Not sent to list			
14500	7201			
19500	7201			
24500	7201	7301		
29500	7201	7301		
30500	7201	7301	7401	
31500	7201	7301	7401	7501

Scenario 7: Hierarchical Processing

This scenario illustrates how hierarchical processing routes messages to a distribution list with threshold values all set to 0. The originator is in the distribution list.

Setup

The originator is Clerk #1.



Distribution List Setup

Results

Since there are no threshold values, the workflow process sends a message to all of the members.

Value Passed				
4500	7201	7301	7401	7501
9500	7201	7301	7401	7501
14500	7201	7301	7401	7501
19500	7201	7301	7401	7501

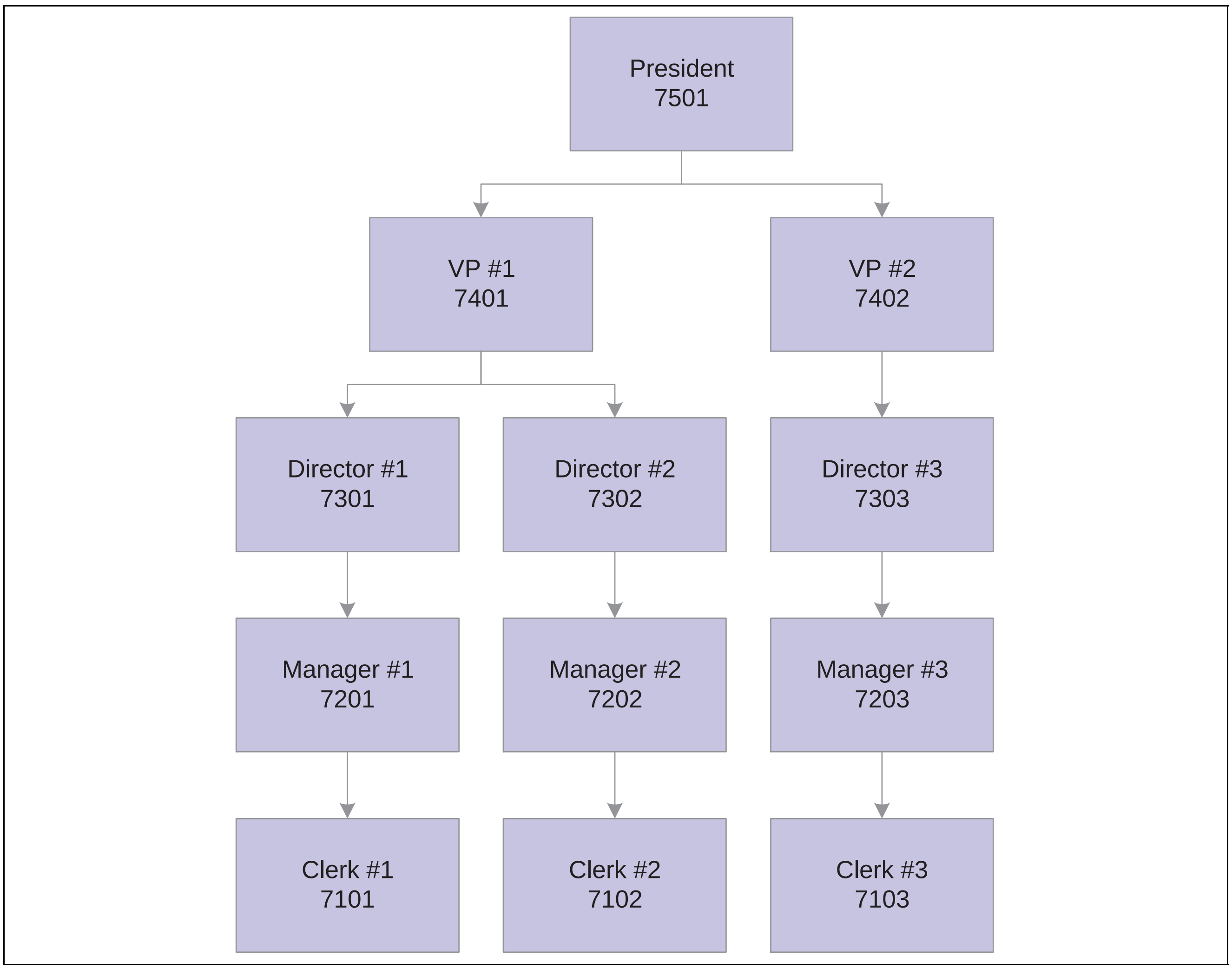
Value Passed				
24500	7201	7301	7401	7501
29500	7201	7301	7401	7501
30500	7201	7301	7401	7501
31500	7201	7301	7401	7501

Scenario 8: Hierarchical Processing with Higher Level Overrides

This scenario demonstrates higher level overrides in a distribution list with threshold values. The originator is in the distribution list.

Setup

Threshold values are in parentheses. The originator is Clerk #1. The value passed in by the workflow is 31500.



Distribution List Setup

Results

When the message is first sent, all address book numbers show up in the Process Task Monitor in an awaiting status except for Manager #1, which shows in an unopened status.

At this point, a user of higher group number can override the workflow process to continue to the next task. For example, in this scenario, if you sign into the EnterpriseOne system as President and do a higher level override on Manager #1, all users display as bypassed, and the process ends as expected.

Glossary of PeopleSoft Terms

absence entitlement — This element defines rules for granting paid time off for valid absences, such as sick time, vacation, and maternity leave. An absence entitlement element defines the entitlement amount, frequency, and entitlement period.

absence take — This element defines the conditions that must be met before a payee is entitled to take paid time off.

academic career — In PeopleSoft Enterprise Campus Solutions, all course work that a student undertakes at an academic institution and that is grouped in a single student record. For example, a university that has an undergraduate school, a graduate school, and various professional schools might define several academic careers—an undergraduate career, a graduate career, and separate careers for each professional school (law school, medical school, dental school, and so on).

academic institution — In PeopleSoft Enterprise Campus Solutions, an entity (such as a university or college) that is independent of other similar entities and that has its own set of rules and business processes.

academic organization — In PeopleSoft Enterprise Campus Solutions, an entity that is part of the administrative structure within an academic institution. At the lowest level, an academic organization might be an academic department. At the highest level, an academic organization can represent a division.

academic plan — In PeopleSoft Enterprise Campus Solutions, an area of study—such as a major, minor, or specialization—that exists within an academic program or academic career.

academic program — In PeopleSoft Enterprise Campus Solutions, the entity to which a student applies and is admitted and from which the student graduates.

accounting class — In PeopleSoft Enterprise Performance Management, the accounting class defines how a resource is treated for generally accepted accounting practices. The Inventory class indicates whether a resource becomes part of a balance sheet account, such as inventory or fixed assets, while the Non-inventory class indicates that the resource is treated as an expense of the period during which it occurs.

accounting date — The accounting date indicates when a transaction is recognized, as opposed to the date the transaction actually occurred. The accounting date and transaction date can be the same. The accounting date determines the period in the general ledger to which the transaction is to be posted. You can only select an accounting date that falls within an open period in the ledger to which you are posting. The accounting date for an item is normally the invoice date.

accounting split — The accounting split method indicates how expenses are allocated or divided among one or more sets of accounting ChartFields.

accumulator — You use an accumulator to store cumulative values of defined items as they are processed. You can accumulate a single value over time or multiple values over time. For example, an accumulator could consist of all voluntary deductions, or all company deductions, enabling you to accumulate amounts. It allows total flexibility for time periods and values accumulated.

action reason — The reason an employee's job or employment information is updated. The action reason is entered in two parts: a personnel action, such as a promotion, termination, or change from one pay group to another—and a reason for that action. Action reasons are used by PeopleSoft Human Resources, PeopleSoft Benefits Administration, PeopleSoft Stock Administration, and the COBRA Administration feature of the Base Benefits business process.

action template — In PeopleSoft Receivables, outlines a set of escalating actions that the system or user performs based on the period of time that a customer or item has been in an action plan for a specific condition.

activity — In PeopleSoft Enterprise Learning Management, an instance of a catalog item (sometimes called a class) that is available for enrollment. The activity defines such things as the costs that are associated with the offering, enrollment limits and deadlines, and waitlisting capacities.

In PeopleSoft Enterprise Performance Management, the work of an organization and the aggregation of actions that are used for activity-based costing.

In PeopleSoft Project Costing, the unit of work that provides a further breakdown of projects—usually into specific tasks.

In PeopleSoft Workflow, a specific transaction that you might need to perform in a business process. Because it consists of the steps that are used to perform a transaction, it is also known as a step map.

address usage — In PeopleSoft Enterprise Campus Solutions, a grouping of address types defining the order in which the address types are used. For example, you might define an address usage code to process addresses in the following order: billing address, dormitory address, home address, and then work address.

adjustment calendar — In PeopleSoft Enterprise Campus Solutions, the adjustment calendar controls how a particular charge is adjusted on a student's account when the student drops classes or withdraws from a term. The charge adjustment is based on how much time has elapsed from a predetermined date, and it is determined as a percentage of the original charge amount.

administrative function — In PeopleSoft Enterprise Campus Solutions, a particular functional area that processes checklists, communication, and comments. The administrative function identifies which variable data is added to a person's checklist or communication record when a specific checklist code, communication category, or comment is assigned to the student. This key data enables you to trace that checklist, communication, or comment back to a specific processing event in a functional area.

admit type — In PeopleSoft Enterprise Campus Solutions, a designation used to distinguish first-year applications from transfer applications.

agreement — In PeopleSoft eSettlements, provides a way to group and specify processing options, such as payment terms, pay from a bank, and notifications by a buyer and supplier location combination.

allocation rule — In PeopleSoft Enterprise Incentive Management, an expression within compensation plans that enables the system to assign transactions to nodes and participants. During transaction allocation, the allocation engine traverses the compensation structure from the current node to the root node, checking each node for plans that contain allocation rules.

alternate account — A feature in PeopleSoft General Ledger that enables you to create a statutory chart of accounts and enter statutory account transactions at the detail transaction level, as required for recording and reporting by some national governments.

analysis database — In PeopleSoft Enterprise Campus Solutions, database tables that store large amounts of student information that may not appear in standard report formats. The analysis database tables contain keys for all objects in a report that an application program can use to reference other student-record objects that are not contained in the printed report. For instance, the analysis database contains data on courses that are considered for satisfying a requirement but that are rejected. It also contains information on courses captured by global limits. An analysis database is used in PeopleSoft Enterprise Academic Advisement.

AR specialist
Abbreviation for *receivables specialist.* In PeopleSoft Receivables, an individual in who tracks and resolves deductions and disputed items.

arbitration plan
In PeopleSoft Enterprise Pricer, defines how price rules are to be applied to the base price when the transaction is priced.

assessment rule
In PeopleSoft Receivables, a user-defined rule that the system uses to evaluate the condition of a customer's account or of individual items to determine whether to generate a follow-up action.

asset class
An asset group used for reporting purposes. It can be used in conjunction with the asset category to refine asset classification.

attribute/value pair
In PeopleSoft Directory Interface, relates the data that makes up an entry in the directory information tree.

audience
In PeopleSoft Enterprise Campus Solutions, a segment of the database that relates to an initiative, or a membership organization that is based on constituent attributes rather than a dues-paying structure. Examples of audiences include the Class of '65 and Undergraduate Arts & Sciences.

authentication server
A server that is set up to verify users of the system.

base time period
In PeopleSoft Business Planning, the lowest level time period in a calendar.

benchmark job
In PeopleSoft Workforce Analytics, a benchmark job is a job code for which there is corresponding salary survey data from published, third-party sources.

billing career
In PeopleSoft Enterprise Campus Solutions, the one career under which other careers are grouped for billing purposes if a student is active simultaneously in multiple careers.

bio bit or bio brief
In PeopleSoft Enterprise Campus Solutions, a report that summarizes information stored in the system about a particular constituent. You can generate standard or specialized reports.

book
In PeopleSoft Asset Management, used for storing financial and tax information, such as costs, depreciation attributes, and retirement information on assets.

branch
A tree node that rolls up to nodes above it in the hierarchy, as defined in PeopleSoft Tree Manager.

budgetary account only
An account used by the system only and not by users; this type of account does not accept transactions. You can only budget with this account. Formerly called "system-maintained account."

budget check
In commitment control, the processing of source transactions against control budget ledgers, to see if they pass, fail, or pass with a warning.

budget control
In commitment control, budget control ensures that commitments and expenditures don't exceed budgets. It enables you to track transactions against corresponding budgets and terminate a document's cycle if the defined budget conditions are not met. For example, you can prevent a purchase order from being dispatched to a vendor if there are insufficient funds in the related budget to support it.

budget period
The interval of time (such as 12 months or 4 quarters) into which a period is divided for budgetary and reporting purposes. The ChartField allows maximum flexibility to define operational accounting time periods without restriction to only one calendar.

business event	In PeopleSoft Receivables, defines the processing characteristics for the Receivable Update process for a draft activity. In PeopleSoft Sales Incentive Management, an original business transaction or activity that may justify the creation of a PeopleSoft Enterprise Incentive Management event (a sale, for example).
business unit	A corporation or a subset of a corporation that is independent with regard to one or more operational or accounting functions.
buyer	In PeopleSoft eSettlements, an organization (or business unit, as opposed to an individual) that transacts with suppliers (vendors) within the system. A buyer creates payments for purchases that are made in the system.
campus	In PeopleSoft Enterprise Campus Solutions, an entity that is usually associated with a distinct physical administrative unit, that belongs to a single academic institution, that uses a unique course catalog, and that produces a common transcript for students within the same academic career.
catalog item	In PeopleSoft Enterprise Learning Management, a specific topic that a learner can study and have tracked. For example, "Introduction to Microsoft Word." A catalog item contains general information about the topic and includes a course code, description, categorization, keywords, and delivery methods. A catalog item can have one or more learning activities.
catalog map	In PeopleSoft Catalog Management, translates values from the catalog source data to the format of the company's catalog.
catalog partner	In PeopleSoft Catalog Management, shares responsibility with the enterprise catalog manager for maintaining catalog content.
categorization	Associates partner offerings with catalog offerings and groups them into enterprise catalog categories.
category	In PeopleSoft Enterprise Campus Solutions, a broad grouping to which specific comments or communications (contexts) are assigned. Category codes are also linked to 3C access groups so that you can assign data-entry or view-only privileges across functions.
channel	In PeopleSoft MultiChannel Framework, email, chat, voice (computer telephone integration [CTI]), or a generic event.
ChartField	A field that stores a chart of accounts, resources, and so on, depending on the PeopleSoft application. ChartField values represent individual account numbers, department codes, and so forth.
ChartField balancing	You can require specific ChartFields to match up (balance) on the debit and the credit side of a transaction.
ChartField combination edit	The process of editing journal lines for valid ChartField combinations based on user-defined rules.
ChartKey	One or more fields that uniquely identify each row in a table. Some tables contain only one field as the key, while others require a combination.
checkbook	In PeopleSoft Promotions Management, enables you to view financial data (such as planned, incurred, and actual amounts) that is related to funds and trade promotions.
checklist code	In PeopleSoft Enterprise Campus Solutions, a code that represents a list of planned or completed action items that can be assigned to a staff member, volunteer, or unit. Checklists enable you to view all action assignments on one page.

class	In PeopleSoft Enterprise Campus Solutions, a specific offering of a course component within an academic term. See also *course.*
Class ChartField	A ChartField value that identifies a unique appropriation budget key when you combine it with a fund, department ID, and program code, as well as a budget period. Formerly called *sub-classification.*
clearance	In PeopleSoft Enterprise Campus Solutions, the period of time during which a constituent in PeopleSoft Contributor Relations is approved for involvement in an initiative or an action. Clearances are used to prevent development officers from making multiple requests to a constituent during the same time period.
clone	In PeopleCode, to make a unique copy. In contrast, to *copy* may mean making a new reference to an object, so if the underlying object is changed, both the copy and the original change.
cohort	In PeopleSoft Enterprise Campus Solutions, the highest level of the three-level classification structure that you define for enrollment management. You can define a cohort level, link it to other levels, and set enrollment target numbers for it. See also *population*and *division*.
collection	To make a set of documents available for searching in Verity, you must first create at least one collection. A collection is set of directories and files that allow search application users to use the Verity search engine to quickly find and display source documents that match search criteria. A collection is a set of statistics and pointers to the source documents, stored in a proprietary format on a file server. Because a collection can only store information for a single location, PeopleSoft maintains a set of collections (one per language code) for each search index object.
collection rule	In PeopleSoft Receivables, a user-defined rule that defines actions to take for a customer based on both the amount and the number of days past due for outstanding balances.
comm key	See *communication key.*
communication key	In PeopleSoft Enterprise Campus Solutions, a single code for entering a combination of communication category, communication context, communication method, communication direction, and standard letter code. Communication keys (also called *comm keys* or *speed keys*) can be created for background processes as well as for specific users.
compensation object	In PeopleSoft Enterprise Incentive Management, a node within a compensation structure. Compensation objects are the building blocks that make up a compensation structure's hierarchical representation.
compensation structure	In PeopleSoft Enterprise Incentive Management, a hierarchical relationship of compensation objects that represents the compensation-related relationship between the objects.
condition	In PeopleSoft Receivables, occurs when there is a change of status for a customer's account, such as reaching a credit limit or exceeding a user-defined balance due.
configuration parameter catalog	Used to configure an external system with PeopleSoft. For example, a configuration parameter catalog might set up configuration and communication parameters for an external server.
configuration plan	In PeopleSoft Enterprise Incentive Management, configuration plans hold allocation information for common variables (not incentive rules) and are attached to a node without a participant. Configuration plans are not processed by transactions.

constituents In PeopleSoft Enterprise Campus Solutions, friends, alumni, organizations, foundations, or other entities affiliated with the institution, and about which the institution maintains information. The constituent types delivered with PeopleSoft Enterprise Contributor Relations Solutions are based on those defined by the Council for the Advancement and Support of Education (CASE).

content reference Content references are pointers to content registered in the portal registry. These are typically either URLs or iScripts. Content references fall into three categories: target content, templates, and template pagelets.

context In PeopleCode, determines which buffer fields can be contextually referenced and which is the current row of data on each scroll level when a PeopleCode program is running.

In PeopleSoft Enterprise Campus Solutions, a specific instance of a comment or communication. One or more contexts are assigned to a category, which you link to 3C access groups so that you can assign data-entry or view-only privileges across functions.

In PeopleSoft Enterprise Incentive Management, a mechanism that is used to determine the scope of a processing run. PeopleSoft Enterprise Incentive Management uses three types of context: plan, period, and run-level.

control table Stores information that controls the processing of an application. This type of processing might be consistent throughout an organization, or it might be used only by portions of the organization for more limited sharing of data.

cost profile A combination of a receipt cost method, a cost flow, and a deplete cost method. A profile is associated with a cost book and determines how items in that book are valued, as well as how the material movement of the item is valued for the book.

cost row A cost transaction and amount for a set of ChartFields.

course In PeopleSoft Enterprise Campus Solutions, a course that is offered by a school and that is typically described in a course catalog. A course has a standard syllabus and credit level; however, these may be modified at the class level. Courses can contain multiple components such as lecture, discussion, and lab.

See also *class.*

course share set In PeopleSoft Enterprise Campus Solutions, a tag that defines a set of requirement groups that can share courses. Course share sets are used in PeopleSoft Enterprise Academic Advisement.

current learning In PeopleSoft Enterprise Learning Management, a self-service repository for all of a learner's in-progress learning activities and programs.

data acquisition In PeopleSoft Enterprise Incentive Management, the process during which raw business transactions are acquired from external source systems and fed into the operational data store (ODS).

data elements Data elements, at their simplest level, define a subset of data and the rules by which to group them.

For Workforce Analytics, data elements are rules that tell the system what measures to retrieve about your workforce groups.

dataset A data grouping that enables role-based filtering and distribution of data. You can limit the range and quantity of data that is displayed for a user by associating dataset rules with user roles. The result of dataset rules is a set of data that is appropriate for the user's roles.

delivery method In PeopleSoft Enterprise Learning Management, identifies the primary type of delivery method in which a particular learning activity is offered. Also provides default values for the learning activity, such as cost and language. This is primarily used to help learners search the catalog for the type of delivery from which they learn best. Because PeopleSoft Enterprise Learning Management is a blended learning system, it does not enforce the delivery method.

In PeopleSoft Supply Chain Management, identifies the method by which goods are shipped to their destinations (such as truck, air, rail, and so on). The delivery method is specified when creating shipment schedules.

delivery method type In PeopleSoft Enterprise Learning Management, identifies how learning activities can be delivered—for example, through online learning, classroom instruction, seminars, books, and so forth—in an organization. The type determines whether the delivery method includes scheduled components.

directory information tree In PeopleSoft Directory Interface, the representation of a directory's hierarchical structure.

division In PeopleSoft Enterprise Campus Solutions, the lowest level of the three-level classification structure that you define in PeopleSoft Enterprise Recruiting and Admissions for enrollment management. You can define a division level, link it to other levels, and set enrollment target numbers for it.

See also *population* and *cohort*.

document sequencing A flexible method that sequentially numbers the financial transactions (for example, bills, purchase orders, invoices, and payments) in the system for statutory reporting and for tracking commercial transaction activity.

dynamic detail tree A tree that takes its detail values—dynamic details—directly from a table in the database, rather than from a range of values that are entered by the user.

edit table A table in the database that has its own record definition, such as the Department table. As fields are entered into a PeopleSoft application, they can be validated against an edit table to ensure data integrity throughout the system.

effective date A method of dating information in PeopleSoft applications. You can predate information to add historical data to your system, or postdate information in order to enter it before it actually goes into effect. By using effective dates, you don't delete values; you enter a new value with a current effective date.

EIM ledger Abbreviation for *Enterprise Incentive Management ledger.* In PeopleSoft Enterprise Incentive Management, an object to handle incremental result gathering within the scope of a participant. The ledger captures a result set with all of the appropriate traces to the data origin and to the processing steps of which it is a result.

elimination set In PeopleSoft General Ledger, a related group of intercompany accounts that is processed during consolidations.

entry event In PeopleSoft General Ledger, Receivables, Payables, Purchasing, and Billing, a business process that generates multiple debits and credits resulting from single transactions to produce standard, supplemental accounting entries.

equitization In PeopleSoft General Ledger, a business process that enables parent companies to calculate the net income of subsidiaries on a monthly basis and adjust that amount to increase the investment amount and equity income amount before performing consolidations.

equity item limit In PeopleSoft Enterprise Campus Solutions, the amounts of funds set by the institution to be awarded with discretionary or gift funds. The limit could be reduced by amounts equal to such things as expected family contribution (EFC) or parent contribution. Students are packaged by Equity Item Type Groups and Related Equity Item Types. This limit can be used to assure that similar student populations are packaged equally.

event

A predefined point either in the Component Processor flow or in the program flow. As each point is encountered, the event activates each component, triggering any PeopleCode program that is associated with that component and that event. Examples of events are FieldChange, SavePreChange, and RowDelete.

In PeopleSoft Human Resources, also refers to an incident that affects benefits eligibility.

event propagation process

In PeopleSoft Sales Incentive Management, a process that determines, through logic, the propagation of an original PeopleSoft Enterprise Incentive Management event and creates a derivative (duplicate) of the original event to be processed by other objects. Sales Incentive Management uses this mechanism to implement splits, roll-ups, and so on. Event propagation determines who receives the credit.

exception

In PeopleSoft Receivables, an item that either is a deduction or is in dispute.

exclusive pricing

In PeopleSoft Order Management, a type of arbitration plan that is associated with a price rule. Exclusive pricing is used to price sales order transactions.

fact

In PeopleSoft applications, facts are numeric data values from fields from a source database as well as an analytic application. A fact can be anything you want to measure your business by, for example, revenue, actual, budget data, or sales numbers. A fact is stored on a fact table.

financial aid term

In PeopleSoft Enterprise Campus Solutions, a combination of a period of time that the school determines as an instructional accounting period and an academic career. It is created and defined during the setup process. Only terms eligible for financial aid are set up for each financial aid career.

forecast item

A logical entity with a unique set of descriptive demand and forecast data that is used as the basis to forecast demand. You create forecast items for a wide range of uses, but they ultimately represent things that you buy, sell, or use in your organization and for which you require a predictable usage.

fund

In PeopleSoft Promotions Management, a budget that can be used to fund promotional activity. There are four funding methods: top down, fixed accrual, rolling accrual, and zero-based accrual.

gap

In PeopleSoft Enterprise Campus Solutions, an artificial figure that sets aside an amount of unmet financial aid need that is not funded with Title IV funds. A gap can be used to prevent fully funding any student to conserve funds, or it can be used to preserve unmet financial aid need so that institutional funds can be awarded.

generic process type

In PeopleSoft Process Scheduler, process types are identified by a generic process type. For example, the generic process type SQR includes all SQR process types, such as SQR process and SQR report.

gift table

In PeopleSoft Enterprise Campus Solutions, a table or so-called *donor pyramid* describing the number and size of gifts that you expect will be needed to successfully complete the campaign in PeopleSoft Contributor Relations. The gift table enables you to estimate the number of donors and prospects that you need at each gift level to reach the campaign goal.

GL business unit

Abbreviation for *general ledger business unit.* A unit in an organization that is an independent entity for accounting purposes. It maintains its own set of accounting books.

See also *business unit*.

GL entry template

Abbreviation for *general ledger entry template.* In PeopleSoft Enterprise Campus Solutions, a template that defines how a particular item is sent to the general ledger. An item-type maps to the general ledger, and the GL entry template can involve multiple general ledger accounts. The entry to the general ledger is further controlled by high-level flags that control the summarization and the type of accounting—that is, accrual or cash.

GL Interface process

Abbreviation for *General Ledger Interface process.* In PeopleSoft Enterprise Campus Solutions, a process that is used to send transactions from PeopleSoft Enterprise Student Financials to the general ledger. Item types are mapped to specific general ledger accounts, enabling transactions to move to the general ledger when the GL Interface process is run.

group

In PeopleSoft Billing and Receivables, a posting entity that comprises one or more transactions (items, deposits, payments, transfers, matches, or write-offs).

In PeopleSoft Human Resources Management and Supply Chain Management, any set of records that are associated under a single name or variable to run calculations in PeopleSoft business processes. In PeopleSoft Time and Labor, for example, employees are placed in groups for time reporting purposes.

incentive object

In PeopleSoft Enterprise Incentive Management, the incentive-related objects that define and support the PeopleSoft Enterprise Incentive Management calculation process and results, such as plan templates, plans, results data, user interaction objects, and so on.

incentive rule

In PeopleSoft Sales Incentive Management, the commands that act on transactions and turn them into compensation. A rule is one part in the process of turning a transaction into compensation.

incur

In PeopleSoft Promotions Management, to become liable for a promotional payment. In other words, you owe that amount to a customer for promotional activities.

initiative

In PeopleSoft Enterprise Campus Solutions, the basis from which all advancement plans are executed. It is an organized effort targeting a specific constituency, and it can occur over a specified period of time with specific purposes and goals. An initiative can be a campaign, an event, an organized volunteer effort, a membership drive, or any other type of effort defined by the institution. Initiatives can be multipart, and they can be related to other initiatives. This enables you to track individual parts of an initiative, as well as entire initiatives.

inquiry access

In PeopleSoft Enterprise Campus Solutions, a type of security access that permits the user only to view data.

See also *update access.*

institution

In PeopleSoft Enterprise Campus Solutions, an entity (such as a university or college) that is independent of other similar entities and that has its own set of rules and business processes.

item

In PeopleSoft Inventory, a tangible commodity that is stored in a business unit (shipped from a warehouse).

In PeopleSoft Demand Planning, Inventory Policy Planning, and Supply Planning, a noninventory item that is designated as being used for planning purposes only. It can represent a family or group of inventory items. It can have a planning bill of material (BOM) or planning routing, and it can exist as a component on a planning BOM. A planning item cannot be specified on a production or engineering BOM or routing, and it cannot be used as a component in a production. The quantity on hand will never be maintained.

In PeopleSoft Receivables, an individual receivable. An item can be an invoice, a credit memo, a debit memo, a write-off, or an adjustment.

item shuffle

In PeopleSoft Enterprise Campus Solutions, a process that enables you to change a payment allocation without having to reverse the payment.

joint communication — In PeopleSoft Enterprise Campus Solutions, one letter that is addressed jointly to two people. For example, a letter might be addressed to both Mr. Sudhir Awat and Ms. Samantha Mortelli. A relationship must be established between the two individuals in the database, and at least one of the individuals must have an ID in the database.

keyword — In PeopleSoft Enterprise Campus Solutions, a term that you link to particular elements within PeopleSoft Student Financials, Financial Aid, and Contributor Relations. You can use keywords as search criteria that enable you to locate specific records in a search dialog box.

KPI — An abbreviation for *key performance indicator.* A high-level measurement of how well an organization is doing in achieving critical success factors. This defines the data value or calculation upon which an assessment is determined.

LDIF file — Abbreviation for *Lightweight Directory Access Protocol (LDAP) Data Interchange Format file.* Contains discrepancies between PeopleSoft data and directory data.

learner group — In PeopleSoft Enterprise Learning Management, a group of learners who are linked to the same learning environment. Members of the learner group can share the same attributes, such as the same department or job code. Learner groups are used to control access to and enrollment in learning activities and programs. They are also used to perform group enrollments and mass enrollments in the back office.

learning components — In PeopleSoft Enterprise Learning Management, the foundational building blocks of learning activities. PeopleSoft Enterprise Learning Management supports six basic types of learning components: web-based, session, webcast, test, survey, and assignment. One or more of these learning component types compose a single learning activity.

learning environment — In PeopleSoft Enterprise Learning Management, identifies a set of categories and catalog items that can be made available to learner groups. Also defines the default values that are assigned to the learning activities and programs that are created within a particular learning environment. Learning environments provide a way to partition the catalog so that learners see only those items that are relevant to them.

learning history — In PeopleSoft Enterprise Learning Management, a self-service repository for all of a learner's completed learning activities and programs.

ledger mapping — You use ledger mapping to relate expense data from general ledger accounts to resource objects. Multiple ledger line items can be mapped to one or more resource IDs. You can also use ledger mapping to map dollar amounts (referred to as *rates*) to business units. You can map the amounts in two different ways: an actual amount that represents actual costs of the accounting period, or a budgeted amount that can be used to calculate the capacity rates as well as budgeted model results. In PeopleSoft Enterprise Warehouse, you can map general ledger accounts to the EW Ledger table.

library section — In PeopleSoft Enterprise Incentive Management, a section that is defined in a plan (or template) and that is available for other plans to share. Changes to a library section are reflected in all plans that use it.

linked section — In PeopleSoft Enterprise Incentive Management, a section that is defined in a plan template but appears in a plan. Changes to linked sections propagate to plans using that section.

linked variable — In PeopleSoft Enterprise Incentive Management, a variable that is defined and maintained in a plan template and that also appears in a plan. Changes to linked variables propagate to plans using that variable.

LMS — Abbreviation for *learning management system.* In PeopleSoft Enterprise Campus Solutions, LMS is a PeopleSoft Student Records feature that provides a common set of interoperability standards that enable the sharing of instructional content and data between learning and administrative environments.

load	In PeopleSoft Inventory, identifies a group of goods that are shipped together. Load management is a feature of PeopleSoft Inventory that is used to track the weight, the volume, and the destination of a shipment.
local functionality	In PeopleSoft HRMS, the set of information that is available for a specific country. You can access this information when you click the appropriate country flag in the global window, or when you access it by a local country menu.
location	Locations enable you to indicate the different types of addresses—for a company, for example, one address to receive bills, another for shipping, a third for postal deliveries, and a separate street address. Each address has a different location number. The primary location—indicated by a *1*—is the address you use most often and may be different from the main address.
logistical task	In PeopleSoft Services Procurement, an administrative task that is related to hiring a service provider. Logistical tasks are linked to the service type on the work order so that different types of services can have different logistical tasks. Logistical tasks include both preapproval tasks (such as assigning a new badge or ordering a new laptop) and postapproval tasks (such as scheduling orientation or setting up the service provider email). The logistical tasks can be mandatory or optional. Mandatory preapproval tasks must be completed before the work order is approved. Mandatory postapproval tasks, on the other hand, must be completed before a work order is released to a service provider.
market template	In PeopleSoft Enterprise Incentive Management, additional functionality that is specific to a given market or industry and is built on top of a product category.
mass change	In PeopleSoft Enterprise Campus Solutions, mass change is a SQL generator that can be used to create specialized functionality. Using mass change, you can set up a series of Insert, Update, or Delete SQL statements to perform business functions that are specific to the institution. See also *3C engine*.
match group	In PeopleSoft Receivables, a group of receivables items and matching offset items. The system creates match groups by using user-defined matching criteria for selected field values.
MCF server	Abbreviation for *PeopleSoft MultiChannel Framework server.* Comprises the universal queue server and the MCF log server. Both processes are started when *MCF Servers* is selected in an application server domain configuration.
merchandising activity	In PeopleSoft Promotions Management, a specific discount type that is associated with a trade promotion (such as off-invoice, billback or rebate, or lump-sum payment) that defines the performance that is required to receive the discount. In the industry, you may know this as an offer, a discount, a merchandising event, an event, or a tactic.
meta-SQL	Meta-SQL constructs expand into platform-specific Structured Query Language (SQL) substrings. They are used in functions that pass SQL strings, such as in SQL objects, the SQLExec function, and PeopleSoft Application Engine programs.
metastring	Metastrings are special expressions included in SQL string literals. The metastrings, prefixed with a percent (%) symbol, are included directly in the string literals. They expand at run time into an appropriate substring for the current database platform.
multibook	In PeopleSoft General Ledger, multiple ledgers having multiple-base currencies that are defined for a business unit, with the option to post a single transaction to all base currencies (all ledgers) or to only one of those base currencies (ledgers).
multicurrency	The ability to process transactions in a currency other than the business unit's base currency.

national allowance In PeopleSoft Promotions Management, a promotion at the corporate level that is funded by nondiscretionary dollars. In the industry, you may know this as a national promotion, a corporate promotion, or a corporate discount.

need In PeopleSoft Enterprise Campus Solutions, the difference between the cost of attendance (COA) and the expected family contribution (EFC). It is the gap between the cost of attending the school and the student's resources. The financial aid package is based on the amount of financial need. The process of determining a student's need is called *need analysis.*

node-oriented tree A tree that is based on a detail structure, but the detail values are not used.

pagelet Each block of content on the home page is called a pagelet. These pagelets display summary information within a small rectangular area on the page. The pagelet provide users with a snapshot of their most relevant PeopleSoft and non-PeopleSoft content.

participant In PeopleSoft Enterprise Incentive Management, participants are recipients of the incentive compensation calculation process.

participant object Each participant object may be related to one or more compensation objects.

See also *compensation object.*

partner A company that supplies products or services that are resold or purchased by the enterprise.

pay cycle In PeopleSoft Payables, a set of rules that define the criteria by which it should select scheduled payments for payment creation.

payment shuffle In PeopleSoft Enterprise Campus Solutions, a process allowing payments that have been previously posted to a student's account to be automatically reapplied when a higher priority payment is posted or the payment allocation definition is changed.

pending item In PeopleSoft Receivables, an individual receivable (such as an invoice, a credit memo, or a write-off) that has been entered in or created by the system, but hasn't been posted.

PeopleCode PeopleCode is a proprietary language, executed by the PeopleSoft application processor. PeopleCode generates results based upon existing data or user actions. By using business interlink objects, external services are available to all PeopleSoft applications wherever PeopleCode can be executed.

PeopleCode event An action that a user takes upon an object, usually a record field, that is referenced within a PeopleSoft page.

PeopleSoft Internet Architecture The fundamental architecture on which PeopleSoft 8 applications are constructed, consisting of a relational database management system (RDBMS), an application server, a web server, and a browser.

performance measurement In PeopleSoft Enterprise Incentive Management, a variable used to store data (similar to an aggregator, but without a predefined formula) within the scope of an incentive plan. Performance measures are associated with a plan calendar, territory, and participant. Performance measurements are used for quota calculation and reporting.

period context In PeopleSoft Enterprise Incentive Management, because a participant typically uses the same compensation plan for multiple periods, the period context associates a plan context with a specific calendar period and fiscal year. The period context references the associated plan context, thus forming a chain. Each plan context has a corresponding set of period contexts.

person of interest A person about whom the organization maintains information but who is not part of the workforce.

personal portfolio In PeopleSoft Enterprise Campus Solutions, the user-accessible menu item that contains an individual's name, address, telephone number, and other personal information.

plan In PeopleSoft Sales Incentive Management, a collection of allocation rules, variables, steps, sections, and incentive rules that instruct the PeopleSoft Enterprise Incentive Management engine in how to process transactions.

plan context In PeopleSoft Enterprise Incentive Management, correlates a participant with the compensation plan and node to which the participant is assigned, enabling the PeopleSoft Enterprise Incentive Management system to find anything that is associated with the node and that is required to perform compensation processing. Each participant, node, and plan combination represents a unique plan context—if three participants are on a compensation structure, each has a different plan context. Configuration plans are identified by plan contexts and are associated with the participants that refer to them.

plan template In PeopleSoft Enterprise Incentive Management, the base from which a plan is created. A plan template contains common sections and variables that are inherited by all plans that are created from the template. A template may contain steps and sections that are not visible in the plan definition.

planned learning In PeopleSoft Enterprise Learning Management, a self-service repository for all of a learner's planned learning activities and programs.

planning instance In PeopleSoft Supply Planning, a set of data (business units, items, supplies, and demands) constituting the inputs and outputs of a supply plan.

population In PeopleSoft Enterprise Campus Solutions, the middle level of the three-level classification structure that you define in PeopleSoft Enterprise Recruiting and Admissions for enrollment management. You can define a population level, link it to other levels, and set enrollment target numbers for it.

See also *division* and *cohort*.

portal registry In PeopleSoft applications, the portal registry is a tree-like structure in which content references are organized, classified, and registered. It is a central repository that defines both the structure and content of a portal through a hierarchical, tree-like structure of folders useful for organizing and securing content references.

price list In PeopleSoft Enterprise Pricer, enables you to select products and conditions for which the price list applies to a transaction. During a transaction, the system either determines the product price based on the predefined search hierarchy for the transaction or uses the product's lowest price on any associated, active price lists. This price is used as the basis for any further discounts and surcharges.

price rule In PeopleSoft Enterprise Pricer, defines the conditions that must be met for adjustments to be applied to the base price. Multiple rules can apply when conditions of each rule are met.

price rule condition In PeopleSoft Enterprise Pricer, selects the price-by fields, the values for the price-by fields, and the operator that determines how the price-by fields are related to the transaction.

price rule key In PeopleSoft Enterprise Pricer, defines the fields that are available to define price rule conditions (which are used to match a transaction) on the price rule.

primacy number In PeopleSoft Enterprise Campus Solutions, a number that the system uses to prioritize financial aid applications when students are enrolled in multiple academic careers and academic programs at the same time. The Consolidate Academic Statistics process uses the primacy number indicated for both the career and program at the institutional level to determine a student's primary career and program. The system also uses the number to determine the primary student attribute value that is used when you extract data to report on cohorts. The lowest number takes precedence.

primary name type — In PeopleSoft Enterprise Campus Solutions, the name type that is used to link the name stored at the highest level within the system to the lower-level set of names that an individual provides.

process category — In PeopleSoft Process Scheduler, processes that are grouped for server load balancing and prioritization.

process group — In PeopleSoft Financials, a group of application processes (performed in a defined order) that users can initiate in real time, directly from a transaction entry page.

process definition — Process definitions define each run request.

process instance — A unique number that identifies each process request. This value is automatically incremented and assigned to each requested process when the process is submitted to run.

process job — You can link process definitions into a job request and process each request serially or in parallel. You can also initiate subsequent processes based on the return code from each prior request.

process request — A single run request, such as a Structured Query Report (SQR), a COBOL or Application Engine program, or a Crystal report that you run through PeopleSoft Process Scheduler.

process run control — A PeopleTools variable used to retain PeopleSoft Process Scheduler values needed at runtime for all requests that reference a run control ID. Do not confuse these with application run controls, which may be defined with the same run control ID, but only contain information specific to a given application process request.

product category — In PeopleSoft Enterprise Incentive Management, indicates an application in the Enterprise Incentive Management suite of products. Each transaction in the PeopleSoft Enterprise Incentive Management system is associated with a product category.

programs — In PeopleSoft Enterprise Learning Management, a high-level grouping that guides the learner along a specific learning path through sections of catalog items. PeopleSoft Enterprise Learning Systems provides two types of programs—curricula and certifications.

progress log — In PeopleSoft Services Procurement, tracks deliverable-based projects. This is similar to the time sheet in function and process. The service provider contact uses the progress log to record and submit progress on deliverables. The progress can be logged by the activity that is performed, by the percentage of work that is completed, or by the completion of milestone activities that are defined for the project.

project transaction — In PeopleSoft Project Costing, an individual transaction line that represents a cost, time, budget, or other transaction row.

promotion — In PeopleSoft Promotions Management, a trade promotion, which is typically funded from trade dollars and used by consumer products manufacturers to increase sales volume.

prospects — In PeopleSoft Enterprise Campus Solutions, students who are interested in applying to the institution.

In PeopleSoft Enterprise Contributor Relations, individuals and organizations that are most likely to make substantial financial commitments or other types of commitments to the institution.

publishing — In PeopleSoft Enterprise Incentive Management, a stage in processing that makes incentive-related results available to participants.

rating components In PeopleSoft Enterprise Campus Solutions, variables used with the Equation Editor to retrieve specified populations.

record group A set of logically and functionally related control tables and views. Record groups help enable TableSet sharing, which eliminates redundant data entry. Record groups ensure that TableSet sharing is applied consistently across all related tables and views.

record input VAT flag Abbreviation for *record input value-added tax flag.* Within PeopleSoft Purchasing, Payables, and General Ledger, this flag indicates that you are recording input VAT on the transaction. This flag, in conjunction with the record output VAT flag, is used to determine the accounting entries created for a transaction and to determine how a transaction is reported on the VAT return. For all cases within Purchasing and Payables where VAT information is tracked on a transaction, this flag is set to Yes. This flag is not used in PeopleSoft Order Management, Billing, or Receivables, where it is assumed that you are always recording only output VAT, or in PeopleSoft Expenses, where it is assumed that you are always recording only input VAT.

record output VAT flag Abbreviation for *record output value-added tax flag.*

See *record input VAT flag.*

recname The name of a record that is used to determine the associated field to match a value or set of values.

recognition In PeopleSoft Enterprise Campus Solutions, the recognition type indicates whether the PeopleSoft Enterprise Contributor Relations donor is the primary donor of a commitment or shares the credit for a donation. Primary donors receive hard credit that must total 100 percent. Donors that share the credit are given soft credit. Institutions can also define other share recognition-type values such as memo credit or vehicle credit.

reference data In PeopleSoft Sales Incentive Management, system objects that represent the sales organization, such as territories, participants, products, customers, channels, and so on.

reference object In PeopleSoft Enterprise Incentive Management, this dimension-type object further defines the business. Reference objects can have their own hierarchy (for example, product tree, customer tree, industry tree, and geography tree).

reference transaction In commitment control, a reference transaction is a source transaction that is referenced by a higher-level (and usually later) source transaction, in order to automatically reverse all or part of the referenced transaction's budget-checked amount. This avoids duplicate postings during the sequential entry of the transaction at different commitment levels. For example, the amount of an encumbrance transaction (such as a purchase order) will, when checked and recorded against a budget, cause the system to concurrently reference and relieve all or part of the amount of a corresponding pre-encumbrance transaction, such as a purchase requisition.

regional sourcing In PeopleSoft Purchasing, provides the infrastructure to maintain, display, and select an appropriate vendor and vendor pricing structure that is based on a regional sourcing model where the multiple ship to locations are grouped. Sourcing may occur at a level higher than the ship to location.

relationship object In PeopleSoft Enterprise Incentive Management, these objects further define a compensation structure to resolve transactions by establishing associations between compensation objects and business objects.

remote data source data Data that is extracted from a separate database and migrated into the local database.

REN server Abbreviation for *real-time event notification server* in PeopleSoft MultiChannel Framework.

requester In PeopleSoft eSettlements, an individual who requests goods or services and whose ID appears on the various procurement pages that reference purchase orders.

reversal indicator In PeopleSoft Enterprise Campus Solutions, an indicator that denotes when a particular payment has been reversed, usually because of insufficient funds.

role Describes how people fit into PeopleSoft Workflow. A role is a class of users who perform the same type of work, such as clerks or managers. Your business rules typically specify what user role needs to do an activity.

role user A PeopleSoft Workflow user. A person's role user ID serves much the same purpose as a user ID does in other parts of the system. PeopleSoft Workflow uses role user IDs to determine how to route worklist items to users (through an email address, for example) and to track the roles that users play in the workflow. Role users do not need PeopleSoft user IDs.

roll up In a tree, to roll up is to total sums based on the information hierarchy.

run control A run control is a type of online page that is used to begin a process, such as the batch processing of a payroll run. Run control pages generally start a program that manipulates data.

run control ID A unique ID to associate each user with his or her own run control table entries.

run-level context In PeopleSoft Enterprise Incentive Management, associates a particular run (and batch ID) with a period context and plan context. Every plan context that participates in a run has a separate run-level context. Because a run cannot span periods, only one run-level context is associated with each plan context.

search query You use this set of objects to pass a query string and operators to the search engine. The search index returns a set of matching results with keys to the source documents.

search/match In PeopleSoft Enterprise Campus Solutions and PeopleSoft Enterprise Human Resources Management Solutions, a feature that enables you to search for and identify duplicate records in the database.

seasonal address In PeopleSoft Enterprise Campus Solutions, an address that recurs for the same length of time at the same time of year each year until adjusted or deleted.

section In PeopleSoft Enterprise Incentive Management, a collection of incentive rules that operate on transactions of a specific type. Sections enable plans to be segmented to process logical events in different sections.

security event In commitment control, security events trigger security authorization checking, such as budget entries, transfers, and adjustments; exception overrides and notifications; and inquiries.

serial genealogy In PeopleSoft Manufacturing, the ability to track the composition of a specific, serial-controlled item.

serial in production In PeopleSoft Manufacturing, enables the tracing of serial information for manufactured items. This is maintained in the Item Master record.

service impact In PeopleSoft Enterprise Campus Solutions, the resulting action triggered by a service indicator. For example, a service indicator that reflects nonpayment of account balances by a student might result in a service impact that prohibits registration for classes.

service indicator In PeopleSoft Enterprise Campus Solutions, indicates services that may be either withheld or provided to an individual. Negative service indicators indicate holds that prevent the individual from receiving specified services, such as check-cashing privileges or registration for classes. Positive service indicators designate special services that are provided to the individual, such as front-of-line service or special services for disabled students.

session
In PeopleSoft Enterprise Campus Solutions, time elements that subdivide a term into multiple time periods during which classes are offered. In PeopleSoft Contributor Relations, a session is the means of validating gift, pledge, membership, or adjustment data entry . It controls access to the data entered by a specific user ID. Sessions are balanced, queued, and then posted to the institution's financial system. Sessions must be posted to enter a matching gift or pledge payment, to make an adjustment, or to process giving clubs or acknowledgements.

In PeopleSoft Enterprise Learning Management, a single meeting day of an activity (that is, the period of time between start and finish times within a day). The session stores the specific date, location, meeting time, and instructor. Sessions are used for scheduled training.

session template
In PeopleSoft Enterprise Learning Management, enables you to set up common activity characteristics that may be reused while scheduling a PeopleSoft Enterprise Learning Management activity—characteristics such as days of the week, start and end times, facility and room assignments, instructors, and equipment. A session pattern template can be attached to an activity that is being scheduled. Attaching a template to an activity causes all of the default template information to populate the activity session pattern.

setup relationship
In PeopleSoft Enterprise Incentive Management, a relationship object type that associates a configuration plan with any structure node.

share driver expression
In PeopleSoft Business Planning, a named planning method similar to a driver expression, but which you can set up globally for shared use within a single planning application or to be shared between multiple planning applications through PeopleSoft Enterprise Warehouse.

single signon
With single signon, users can, after being authenticated by a PeopleSoft application server, access a second PeopleSoft application server without entering a user ID or password.

source key process
In PeopleSoft Enterprise Campus Solutions, a process that relates a particular transaction to the source of the charge or financial aid. On selected pages, you can drill down into particular charges.

source transaction
In commitment control, any transaction generated in a PeopleSoft or third-party application that is integrated with commitment control and which can be checked against commitment control budgets. For example, a pre-encumbrance, encumbrance, expenditure, recognized revenue, or collected revenue transaction.

speed key
See *communication key.*

SpeedChart
A user-defined shorthand key that designates several ChartKeys to be used for voucher entry. Percentages can optionally be related to each ChartKey in a SpeedChart definition.

SpeedType
A code representing a combination of ChartField values. SpeedTypes simplify the entry of ChartFields commonly used together.

staging
A method of consolidating selected partner offerings with the offerings from the enterprise's other partners.

standard letter code
In PeopleSoft Enterprise Campus Solutions, a standard letter code used to identify each letter template available for use in mail merge functions. Every letter generated in the system must have a standard letter code identification.

statutory account
Account required by a regulatory authority for recording and reporting financial results. In PeopleSoft, this is equivalent to the Alternate Account (ALTACCT) ChartField.

step	In PeopleSoft Sales Incentive Management, a collection of sections in a plan. Each step corresponds to a step in the job run.
storage level	In PeopleSoft Inventory, identifies the level of a material storage location. Material storage locations are made up of a business unit, a storage area, and a storage level. You can set up to four storage levels.
subcustomer qualifier	A value that groups customers into a division for which you can generate detailed history, aging, events, and profiles.
Summary ChartField	You use summary ChartFields to create summary ledgers that roll up detail amounts based on specific detail values or on selected tree nodes. When detail values are summarized using tree nodes, summary ChartFields must be used in the summary ledger data record to accommodate the maximum length of a node name (20 characters).
summary ledger	An accounting feature used primarily in allocations, inquiries, and PS/nVision reporting to store combined account balances from detail ledgers. Summary ledgers increase speed and efficiency of reporting by eliminating the need to summarize detail ledger balances each time a report is requested. Instead, detail balances are summarized in a background process according to user-specified criteria and stored on summary ledgers. The summary ledgers are then accessed directly for reporting.
summary time period	In PeopleSoft Business Planning, any time period (other than a base time period) that is an aggregate of other time periods, including other summary time periods and base time periods, such as quarter and year total.
summary tree	A tree used to roll up accounts for each type of report in summary ledgers. Summary trees enable you to define trees on trees. In a summary tree, the detail values are really nodes on a detail tree or another summary tree (known as the *basis* tree). A summary tree structure specifies the details on which the summary trees are to be built.
syndicate	To distribute a production version of the enterprise catalog to partners.
system function	In PeopleSoft Receivables, an activity that defines how the system generates accounting entries for the general ledger.
TableSet	A means of sharing similar sets of values in control tables, where the actual data values are different but the structure of the tables is the same.
TableSet sharing	Shared data that is stored in many tables that are based on the same TableSets. Tables that use TableSet sharing contain the SETID field as an additional key or unique identifier.
target currency	The value of the entry currency or currencies converted to a single currency for budget viewing and inquiry purposes.
tax authority	In PeopleSoft Enterprise Campus Solutions, a user-defined element that combines a description and percentage of a tax with an account type, an item type, and a service impact.
template	A template is HTML code associated with a web page. It defines the layout of the page and also where to get HTML for each part of the page. In PeopleSoft, you use templates to build a page by combining HTML from a number of sources. For a PeopleSoft portal, all templates must be registered in the portal registry, and each content reference must be assigned a template.
territory	In PeopleSoft Sales Incentive Management, hierarchical relationships of business objects, including regions, products, customers, industries, and participants.
3C engine	Abbreviation for *Communications, Checklists, and Comments engine.* In PeopleSoft Enterprise Campus Solutions, the 3C engine enables you to automate business processes that involve additions, deletions, and updates to communications, checklists,

and comments. You define events and triggers to engage the engine, which runs the mass change and processes the 3C records (for individuals or organizations) immediately and automatically from within business processes.

3C group
: Abbreviation for *Communications, Checklists, and Comments group.* In PeopleSoft Enterprise Campus Solutions, a method of assigning or restricting access privileges. A 3C group enables you to group specific communication categories, checklist codes, and comment categories. You can then assign the group inquiry-only access or update access, as appropriate.

TimeSpan
: A relative period, such as year-to-date or current period, that can be used in various PeopleSoft General Ledger functions and reports when a rolling time frame, rather than a specific date, is required. TimeSpans can also be used with flexible formulas in PeopleSoft Projects.

trace usage
: In PeopleSoft Manufacturing, enables the control of which components will be traced during the manufacturing process. Serial- and lot-controlled components can be traced. This is maintained in the Item Master record.

transaction allocation
: In PeopleSoft Enterprise Incentive Management, the process of identifying the owner of a transaction. When a raw transaction from a batch is allocated to a plan context, the transaction is duplicated in the PeopleSoft Enterprise Incentive Management transaction tables.

transaction state
: In PeopleSoft Enterprise Incentive Management, a value assigned by an incentive rule to a transaction. Transaction states enable sections to process only transactions that are at a specific stage in system processing. After being successfully processed, transactions may be promoted to the next transaction state and “picked up” by a different section for further processing.

Translate table
: A system edit table that stores codes and translate values for the miscellaneous fields in the database that do not warrant individual edit tables of their own.

tree
: The graphical hierarchy in PeopleSoft systems that displays the relationship between all accounting units (for example, corporate divisions, projects, reporting groups, account numbers) and determines roll-up hierarchies.

tuition lock
: In PeopleSoft Enterprise Campus Solutions, a feature in the Tuition Calculation process that enables you to specify a point in a term after which students are charged a minimum (or *locked*) fee amount. Students are charged the locked fee amount even if they later drop classes and take less than the normal load level for that tuition charge.

unclaimed transaction
: In PeopleSoft Enterprise Incentive Management, a transaction that is not claimed by a node or participant after the allocation process has completed, usually due to missing or incomplete data. Unclaimed transactions may be manually assigned to the appropriate node or participant by a compensation administrator.

universal navigation header
: Every PeopleSoft portal includes the universal navigation header, intended to appear at the top of every page as long as the user is signed on to the portal. In addition to providing access to the standard navigation buttons (like Home, Favorites, and signoff) the universal navigation header can also display a welcome message for each user.

update access
: In PeopleSoft Enterprise Campus Solutions, a type of security access that permits the user to edit and update data.

: See also *inquiry access.*

user interaction object
: In PeopleSoft Sales Incentive Management, used to define the reporting components and reports that a participant can access in his or her context. All Sales Incentive Management user interface objects and reports are registered as user interaction objects. User interaction objects can be linked to a compensation structure node through a compensation relationship object (individually or as groups).

variable In PeopleSoft Sales Incentive Management, the intermediate results of calculations. Variables hold the calculation results and are then inputs to other calculations. Variables can be plan variables that persist beyond the run of an engine or local variables that exist only during the processing of a section.

VAT exception Abbreviation for *value-added tax exception.* A temporary or permanent exemption from paying VAT that is granted to an organization. This terms refers to both VAT exoneration and VAT suspension.

VAT exempt Abbreviation for *value-added tax exempt.* Describes goods and services that are not subject to VAT. Organizations that supply exempt goods or services are unable to recover the related input VAT. This is also referred to as exempt without recovery.

VAT exoneration Abbreviation for *value-added tax exoneration.* An organization that has been granted a permanent exemption from paying VAT due to the nature of that organization.

VAT suspension Abbreviation for *value-added tax suspension.* An organization that has been granted a temporary exemption from paying VAT.

warehouse A PeopleSoft data warehouse that consists of predefined ETL maps, data warehouse tools, and DataMart definitions.

work order In PeopleSoft Services Procurement, enables an enterprise to create resource-based and deliverable-based transactions that specify the basic terms and conditions for hiring a specific service provider. When a service provider is hired, the service provider logs time or progress against the work order.

worker A person who is part of the workforce; an employee or a contingent worker.

workset A group of people and organizations that are linked together as a set. You can use worksets to simultaneously retrieve the data for a group of people and organizations and work with the information on a single page.

worksheet A way of presenting data through a PeopleSoft Business Analysis Modeler interface that enables users to do in-depth analysis using pivoting tables, charts, notes, and history information.

worklist The automated to-do list that PeopleSoft Workflow creates. From the worklist, you can directly access the pages you need to perform the next action, and then return to the worklist for another item.

XML schema An XML definition that standardizes the representation of application messages, component interfaces, or business interlinks.

yield by operation In PeopleSoft Manufacturing, the ability to plan the loss of a manufactured item on an operation-by-operation basis.

zero-rated VAT Abbreviation for *zero-rated value-added tax.* A VAT transaction with a VAT code that has a tax percent of zero. Used to track taxable VAT activity where no actual VAT amount is charged. Organizations that supply zero-rated goods and services can still recover the related input VAT. This is also referred to as exempt with recovery.

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