
Enterprise PeopleTools 8.48 PeopleBook: PeopleSoft Mobile Agent

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Enterprise PeopleTools 8.48 PeopleBook: PeopleSoft Mobile Agent
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Contents

General Preface

- About This PeopleBookix**
- PeopleSoft Enterprise Application Prerequisites.....ix
- Application Fundamentals.....ix
- Documentation Updates and Printed Documentation.....x
 - Obtaining Documentation Updates.....x
 - Downloading and Ordering Printed Documentation.....x
- Additional Resources.....xi
- Typographical Conventions and Visual Cues.....xii
 - Typographical Conventions.....xii
 - Visual Cues.....xiii
 - Country, Region, and Industry Identifiers.....xiii
 - Currency Codes.....xiv
- Comments and Suggestions.....xiv
- Common Elements Used in PeopleBooks.....xiv

Preface

- PeopleSoft Mobile Agent Preface.....xvii**
- PeopleSoft Mobile Agent.....xvii
- About These PeopleBooks.....xvii

Chapter 1

- Getting Started with PeopleSoft Mobile Agent.....1**
- Understanding PeopleSoft Mobile Agent Technology.....1
- Implementing PeopleSoft Mobile Agent.....1
- Setting Up PeopleSoft Mobile Agent.....2
 - Locating PeopleSoft Mobile Agent Installation Programs.....2
 - Distributing PeopleSoft Mobile Agent Setup Programs.....2
 - Installing PeopleSoft Mobile Agent.....2
- Personalizing PeopleSoft Mobile Agent.....3
 - Personalizing Runtime Settings.....3
 - Using the Personalization Component Interface.....4
- Synchronizing Behind a Firewall.....5

Deploying Bootstrap Databases.....5
 Setting Debug and Trace Settings in PSMOBILE.INI.....5
 Setting Syncservergateway.xml.....7

Chapter 2

Understanding PeopleSoft Mobile Agent.....9

Disconnected Applications.....9
 PeopleSoft Mobile Agent.....9
 Mobile Page Processing.....10
 Mobile Data Storage and Synchronization.....10
 Data Synchronization.....11
 Data Synchronization.....11
 Synchronization Servers.....12
 Synchronization Gateways.....12
 Mobile Application Definition and Configuration.....12
 Mobile Applications.....13
 PeopleSoft Mobile Agent Development.....13
 Component Interface Creation.....13
 Mobile Page Creation.....14

Chapter 3

Using Synchronizable Component Interfaces.....15

Understanding Synchronizable Component Interfaces.....15
 Data Synchronization.....15
 Synchronization Conflict Resolution.....16
 Using the Synchronization ID and Datetime Stamp.....17
 Understanding the Synchronization ID and Datetime Stamp.....17
 Creating the SYNCID Field.....18
 Creating the SYNCDDTM Field.....19
 Adding SYNCID and SYNCDDTM Fields to Component Records.....19
 Initializing Synchronization IDs.....21
 Mobilizing Applications.....23
 Defining Synchronizable Component Interfaces.....23
 Creating Synchronizable Component Interfaces.....24
 Adding Component Interfaces to Permission Lists.....26
 Using Reference Properties.....27
 Understanding References.....27
 Creating Reference Properties.....27

Using Attachments.....29

Chapter 4

Creating Mobile Pages.....31

Understanding Mobile Application Elements.....31

 Navigation Menu.....31

 List Views.....32

 Detail Views.....34

Understanding Time Zones and Date Formats.....35

Building Mobile Pages.....36

 Creating Mobile Pages.....36

 Defining Mobile Page Appearance.....37

Defining Content Appearance and Characteristics.....40

 Setting Mobile Page Content Properties.....41

 Setting Mobile Page Reference Properties.....47

 Setting Mobile Page Collection Properties.....49

Displaying Prompts.....51

 Creating Prompts on Mobile Pages.....51

 Partial Prompting.....51

 Using Dynamic Enumerations.....52

Using the Time Picker and Calendar Prompts.....54

 Using the Time Picker.....54

 Creating Calendar Prompts.....54

Registering Mobile Pages.....54

 Registering Mobile Pages in Application Designer.....55

 Registering Mobile Pages in the Mobile Portal.....55

Maintaining Security.....56

 Adding Mobile Pages to Existing Permission Lists.....56

 Creating New Permission Lists for Mobile Pages.....57

 Creating Roles for Mobile Users and Associating Permission Lists to the Roles.....57

Chapter 5

Using PeopleSoft Mobile Agent.....59

Understanding Synchronization Modes.....59

 Upload Changes Mode.....59

 Update Business Data Mode.....60

 Update Applications Mode.....60

 Bootstrap Synchronization Mode.....60

Initializing Mobile Devices.....	60
Viewing and Responding to Alerts.....	61
Viewing and Responding to Synchronization Errors.....	61
Viewing Notifications.....	62
Viewing Status.....	62
Optimizing the PDA User Experience.....	62
Enabling Disconnected Operation in Microsoft Internet Explorer.....	62
Disabling the Work Offline Option.....	63
Preventing Microsoft Internet Explorer from Dialing Out for a Connection.....	63
Using the About Page.....	63
Using the Homepage.....	63
Glossary of PeopleSoft Enterprise Terms.....	65
Index	87

About This PeopleBook

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

This preface discusses:

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

PeopleSoft Enterprise 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 Enterprise applications.

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

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

Application Fundamentals

Each application PeopleBook provides implementation and processing information for your PeopleSoft Enterprise 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 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 Enterprise applications. Whether you are implementing a single application, some combination of applications within the product line, or the entire product line, you should be familiar with the contents of the appropriate application fundamentals PeopleBooks. They provide the starting points for fundamental implementation tasks.

Documentation Updates and Printed Documentation

This section discusses how to:

- Obtain documentation updates.
- Download and order printed documentation.

Obtaining Documentation Updates

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

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

See Also

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

Downloading and Ordering Printed Documentation

In addition to the complete line of documentation that is delivered on your PeopleBook CD-ROM, Oracle makes PeopleSoft Enterprise documentation available to you via Oracle's website. You can:

- Download PDF files.
- Order printed, bound volumes.

Downloading PDF Files

You can download PDF versions of PeopleSoft Enterprise documentation online via the Oracle Technology Network. Oracle makes these PDF files available online for each major release shortly after the software is shipped.

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

Ordering Printed, Bound Volumes

You can order printed, bound volumes of selected documentation via the Oracle Store.

See Oracle Store, http://oraclestore.oracle.com/OA_HTML/ibeCCtpSctDspRte.jsp?section=14021

Additional Resources

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

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

Typographical Conventions and Visual Cues

This section discusses:

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

Typographical Conventions

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

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

Typographical Convention or Visual Cue	Description
[] (square brackets)	Indicate optional items in PeopleCode syntax.
& (ampersand)	<p>When placed before a parameter in PeopleCode syntax, an ampersand indicates that the parameter is an already instantiated object.</p> <p>Ampersands also precede all PeopleCode variables.</p>

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 Enterprise 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 Oracle reference and training materials. Please send your suggestions to your product line documentation manager at Oracle Corporation, . Or email us at appsdoc@us.oracle.com.

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

Common Elements Used in PeopleBooks

As of Date	The last date for which a report or process includes data.
Business Unit	An ID that represents a high-level organization of business information. You can use a business unit to define regional or departmental units within a larger organization.
Description	Enter up to 30 characters of text.
Effective Date	The date on which a table row becomes effective; the date that an action begins. For example, to close out a ledger on June 30, the effective date for the ledger closing would be July 1. This date also determines when you can view and change the information. Pages or panels and batch processes that use the information use the current row.
Once, Always, and Don't Run	Select Once to run the request the next time the batch process runs. After the batch process runs, the process frequency is automatically set to Don't Run.

	Select Always to run the request every time the batch process runs.
	Select Don't Run to ignore the request when the batch process runs.
Process Monitor	Click to access the Process List page, where you can view the status of submitted process requests.
Report Manager	Click to access the Report List page, where you can view report content, check the status of a report, and see content detail messages (which show you a description of the report and the distribution list).
Request ID	An ID that represents a set of selection criteria for a report or process.
Run	Click to access the Process Scheduler request page, where you can specify the location where a process or job runs and the process output format.
SetID	An ID that represents a set of control table information, or TableSets. TableSets enable you to share control table information and processing options among business units. The goal is to minimize redundant data and system maintenance tasks. When you assign a setID to a record group in a business unit, you indicate that all of the tables in the record group are shared between that business unit and any other business unit that also assigns that setID to that record group. For example, you can define a group of common job codes that are shared between several business units. Each business unit that shares the job codes is assigned the same setID for that record group.
Short Description	Enter up to 15 characters of text.
User ID	An ID that represents the person who generates a transaction.

PeopleSoft Mobile Agent Preface

This preface describes the PeopleSoft Mobile Agent PeopleBook.

PeopleSoft Mobile Agent

This PeopleBook covers PeopleSoft Mobile Agent, which extends PeopleSoft Application Designer to enable the creation of applications to run in the PeopleSoft Mobile Agent runtime environment on disconnected mobile devices.

The PeopleSoft Mobile Agent is a product that is licensed separately from the PeopleSoft product, and only those customers who have a license for PeopleSoft Mobile Agent may install and use this product. Use of the Mobile Agent functionality described herein is subject to the licensing conditions for the PeopleSoft Mobile Agent product. Please refer to the applicable contract to determine restrictions regarding this product.

About These PeopleBooks

The “About These PeopleBooks” preface contains general product line information, such as related documentation, common page elements, and typographical conventions. This preface also contains a glossary with useful terms that are used in PeopleBooks.

See About These PeopleBooks

CHAPTER 1

Getting Started with PeopleSoft Mobile Agent

This chapter provides an overview of PeopleSoft Mobile Agent technology and discusses how to:

- Implement PeopleSoft Mobile Agent.
- Set up PeopleSoft Mobile Agent.
- Personalize PeopleSoft Mobile Agent.
- Synchronize behind a firewall.
- Deploy bootstrap databases.
- Debug PeopleSoft Mobile Agent.

Understanding PeopleSoft Mobile Agent Technology

Through PeopleSoft Mobile Agent, you can download information from a database server to a mobile device. Mobile sales professionals can access customer information from the PeopleSoft Customer Relationship Management Sales database and display it on a laptop or PDA.

Implementing PeopleSoft Mobile Agent

The functionality to create mobile pages for your applications is delivered as part of standard PeopleSoft PeopleTools that are provided with all PeopleSoft products.

Several activities must be completed before you begin to create mobile pages and implement them on laptops and other mobile devices.

- Install your PeopleSoft application according to the installation guide for your database type.
See the PeopleSoft installation guide for your platform and product line.
- Establish a user profile that gives you access to PeopleSoft Application Designer and any other processes that you will use.

See *Enterprise PeopleTools 8.48 PeopleBook: Security Administration*.

In the planning phase of your implementation, take advantage of all PeopleSoft sources of information, including installation guides, table-loading sequences, data models, and business process maps.

See Also

PeopleSoft CRM Mobile Applications PeopleBook, “Getting Started with PeopleSoft CRM Mobile Applications”

Setting Up PeopleSoft Mobile Agent

This section discusses how to:

- Locate PeopleSoft Mobile Agent installation programs.
- Distribute PeopleSoft Mobile Agent installation programs.
- Install PeopleSoft Mobile Agent.

Locating PeopleSoft Mobile Agent Installation Programs

PeopleSoft Mobile Agent installation programs are installed on the web server as part of PeopleSoft Internet Architecture installation.

Find PeopleSoft Mobile Agent installation programs in the mobile portal directory of your web server:

- On an OAS web server, this location is `ORACLE_HOME\j2ee\PeopleSoft\applications\PeopleSoft\PORTAL\ps\mobile`
- On a BEA WebLogic web server, this location is `PS_HOME\webserv\peoplesoft\applications\peoplesoft\PORTAL\ps\mobile`
- On an IBM WebSphere web server this location is `WEBSPPHERE_HOME\AppServer\webserv\peoplesoft\applications\peoplesoft\PORTAL\ps\mobile`

Two or more installation files are available in the mobile folder; one for laptops and one for personal digital assistants (PDAs).

An HTML file, `index.html`, is also available in the same location, to provide a web page for installation program distribution. For example, you can set up a web page with an HTTP URL such as `http://<webserver>/ps/mobile`, for end users to access the setup program.

See [Chapter 1, “Getting Started with PeopleSoft Mobile Agent,” Setting Up PeopleSoft Mobile Agent, page 2.](#)

Distributing PeopleSoft Mobile Agent Setup Programs

The installation program for PeopleSoft Mobile Agent can be delivered to users in several ways:

- From a web site using the provided HTML file.
- From a File Transfer Protocol (FTP) site.
- As an attachment to an email.
- As a link to a web or FTP site in an email.
- From the web server’s mobile portal directory.

Installing PeopleSoft Mobile Agent

To launch the PeopleSoft Mobile Agent Setup wizard:

1. Double-click the executable file.
Use setup.exe for Win32 installations.
Use setup_pspc_arm.exe for PDA installations, where *processor_type* is the type of processor in the supported PDA.
2. Select the path to the destination folder to which you will install the Mobile Agent application.
3. Select the startup method for PeopleSoft Mobile Agent: automatic or manual.
Automatic mode will start Mobile Agent every time you start your mobile device. Manual will require user intervention to start Mobile Agent.
4. Select the preferred language for the application.

Note. If you select a language that is not supported by the application server or database that you are connecting to, all data will come back in the default language.

5. Enter the URL for the synchronization server gateway that the mobile device connects to.
6. Review the settings that you have selected.
7. Click Finish to exit the setup wizard.

Personalizing PeopleSoft Mobile Agent

This section discusses how to:

- Personalize runtime settings.
- Personalize synchronization settings.
- Use the personalization component interface.

Personalizing Runtime Settings

An administrator or user personalizes the runtime operating environment with four settings, summarized in the following table.

Personalization Setting	Definition Method	Default Value
Language	At installation	English
Currency	On the My System Profile page	None
Date format	By selecting My Personalizations, International & Regional Settings	Personalization default
Local time zone	By selecting My Personalizations, International & Regional Settings	Personalization default

Set personalization separately for each database that will be synchronized to the user's device.

Setting the Language

Set the language for the mobile device at installation. The setting is stored in the psmobile.ini file. You can change the selected language only by reinstalling PeopleSoft Mobile Agent.

Note. The language preference setting on the My System Profile page does not affect the language setting for mobile devices.

Synchronization requests include the user's preferred language, as set in the psmobile.ini file. The synchronization server uses this value in selecting related-language data, including Message Catalog objects, for the mobile user. The synchronization server does not use the language setting from the user profile, which might be different.

Setting the Currency

To set the currency:

1. Sign in to PeopleSoft.
2. Select My System Profile and select a currency code in the Personalizations section of the page.
This defines the default currency code to be selected and displayed if global currencies are enabled by the installation. If not defined, there is no default currency.

To display the specified currency code as the default value for a currency control field on a mobile page, define a reference for the currency control field. PeopleSoft supplies a standard mobile page for PS_CURRENCY_CD_TBL for use as the related mobile page object.

Note. Currency market rates now have mobile synchronization IDs and can be used by mobile applications.

Setting the Date Format and Local Time Zone

To set the date format and local time zone:

1. Sign in to PeopleSoft.
2. Select PeopleTools, My Personalizations.
3. Click the Personalize Option button for regional settings.
4. Select the appropriate settings from the Date Format and Local Time Zone drop-down list boxes.

These settings define:

- The base time zone for the mobile device for all times and dates not otherwise specified.
- The preferred date format for the mobile device.

Using the Personalization Component Interface

The mobile personalization component interface, MOBILE_PREFS_CI, passes the specifications of date format, time zone, currency code, and other date and time parameters set in My Personalizations and My System Profile to the mobile device. PeopleSoft Mobile Agent does not require any mobile-specific personalizations. The mobile user sets preferences using the My Personalizations and My System Profile links in the portal menu.

The PeopleSoft PTPT1000 user permission list includes MOBILE_PREFS_CI, so no additional security is required.

Synchronizing Behind a Firewall

If a firewall protects the network between the mobile device being synchronized and the synchronization server gateway, the firewall must allow passage of the following content types in HTTP messages:

- Application/vnd.peoplesoft-mobile-xml
- Application/vnd.peoplesoft-mobile-zlib

Deploying Bootstrap Databases

Each PeopleSoft Mobile Agent database contains identifying data specific to the mobile device on which it resides. You can transfer databases between mobile devices by stripping device-specific data from the database. This facilitates distributing bootstrap databases to remote users lacking high-speed internet connections or sharing an initial database within a team.

To prepare a mobile database for distribution, run the following from a command prompt:

```
psmobile -stamp
```

psmobile.exe exits immediately after clearing the device-specific data.

The -stamp option is not documented in psmobile.exe help messages.

Setting Debug and Trace Settings in PSMOBILE.INI

You can set debug mode and trace levels by editing the psmobile.ini file. For a laptop, you can edit the psmobile.ini file on the mobile device. This file is either in the C:\\Windows or C:\\WinNT directory. For a PDA, you must copy the psmobile.ini file to the laptop or desktop using ActiveSync, edit it there, and then copy it back to the PDA.

The psmobile.ini file contains debug settings for mobile PeopleCode.

By setting the values in the psmobile.ini file, you can use the PeopleCode debugger with your mobile application.

To create a debug folder in the menu of the mobile page, set debug = 1. This will enable users to browse objects on the device database.

In addition, you can also trace some of the operations in the application. All trace information is written to a file named psmobile.log, located in the directory defined by %temp%.

Note. Be aware that tracing logs can grow to a large size. Only specify tracing when necessary, and only trace critical operations.

The following is an example of the psmobile.ini file.

```
[PSMOBILE]
Language=ENG
Port=8080
HomeDirectory=C:\Program Files\PeopleSoft\PeopleSoft Mobile Agent
MaxCachedStatements=100
MaxCachedObjects=100
debug=1
[SYNC]
SyncGateway=http://fsampson040502.corp.peoplesoft.com:80/SyncServer
SyncLogVerbose=0
[PCDEBUG]
DebugEnabled=0
DebugDatabase=Your Database Name
DebugOprid=Your OPRID
DebugIPAddress=nnn.nnn.nnn.nnn
DebugPort=9500
[Trace]
;-----
; PeopleCode Tracing Bitfield
;
; Bit      Type of tracing
; ---      -----
; 1        - Trace instructions
; 2        - List the program
; 4        - Show assignments to variables
; 8        - Show fetched values
; 16       - Show stack
; 64       - Trace start of programs
; 128      - Trace external function calls
; 256      - Trace internal function calls
; 512      - Show parameter values
; 1024     - Show function return value
; 2048     - Trace each statement in program
; Dynamic change allowed for TracePC and TracePCMask
TracePC=0
```

Language	Sets the default language set for the device.
Port	The default port is 8080 if the device port is 80 and the web server is running on port 80. This can be changed to a different port as long as the browser URL used to communicate with psmobile uses the same port.
HomeDirectory	Identifies the path to the directory where PeopleSoft Mobile Agent is installed.
MaxCachedStatements	Sets the maximum number of database commands that can be cached. Resizing this number can affect performance.
MaxCachedObjects	Sets the maximum number of objects that can be cached at one time. Resizing this number can affect performance.
Debug	Use a 0 to turn off debug mode and a 1 to turn on debug mode.

See *Enterprise PeopleTools 8.48 PeopleBook: PeopleCode Developer's Guide*, "Debugging Your Application," Understanding the PeopleCode Debugger.

DebugEnabled	Specify whether debugging is enabled or not. Use a 0 to turn off debug mode, or a 1 to turn on debug mode.
DebugDatabase	Specify the actual database (not the domain) that application server uses with the PeopleTools PeopleCode debugger (this should be the database that is used for synchronizing).
DebugOperid	Specify the user ID that you use to log on to the PeopleTools PeopleCode debugger.
DebugIPAddress	Specify the IP address of machine name of the application server.
DebugPort	Specify the port number that the application server (PSDBGSRV) has been configured to use.

Specifying Trace Settings

The following are the trace settings you can specify in the psmobile.ini file. You can specify more than one trace by adding the numbers together.

0	Turn off all tracing.
1	Trace all instructions.
2	List the program being traced.
4	Show all assignments to all variables.
8	Show all fetched values.
16	Show stack.
64	Trace the start of programs.
128	Trace external function calls.
256	Trace internal function calls.
512	Show all parameter values.
1024	Show function return value.
2048	Trace each statement in the program.

Setting Syncservergateway.xml

Navigate to the location of the file on the web server and open the file in a text editing tool.

For OAS it is %ORACLE_HOME%\j2ee\PeopleSoft\applications\PeopleSoft\PORTAL\WEB-INF\psftdocs\ps

For WebLogic it is %WEB_HOME%\peoplesoft\applications\peoplesoft\PORTAL\WEB-INF\psftdocs\ps.

```
<?xml version="1.0" ?> -
<sync-gateway-config>
```

```

<primary-domain>1</primary-domain>
<trace-level>0</trace-level>
<max-timeslice>10</max-timeslice>
- <domain-list> -
<domain id="1" version="1">
<name>Domain #1 Name Here</name>
<description>Domain #1 Description Here</description>
<connect>CRMORDERCAP3:9000</connect>
<thread-pool-size>1</thread-pool-size>
</domain> </domain-list>
</sync-gateway-config>

```

Primary-domain	This is the number of primary domain. Should always be set to 1.
Trace-level	Sets the trace flag for sync server gateway on web server. Valid values are 0 (zero) or 1. Enter 0 to disable tracing. If set to 1 and you run the web server on a console (not as a service), you will see debug messages.
Max-timeslice	Maximum time in seconds for the service to complete on the application server. This setting is affected by the number you set for thread-pool sizing.
Domain ID	The number of the domain. The default value should always be set to 1.
Name	Enter the domain name. This value appears to the user upon syncing.
Description	Enter the description of the domain. This value appears to the user upon syncing.
Connect	Enter the application server name and port number for the Jolt Service Listener on the web server.
Thread-pool size	The value you enter here enables multi-threading. For increased performance, this number should be greater than application server instance number. For example, if you have two application servers, the thread-pool size value should be 3. If this number is too high for the number of application server instances you have configured, performance will be negatively affected.

Note. The values that you enter for thread-pool size and max timeslice may need to be adjusted in relation to each other. If the value for max timeslice is too great and you do not have enough threads, performance for online users may be negatively affected.

Other Sources of Information

In addition to implementation considerations presented in this chapter, take advantage of all PeopleSoft sources of information, including the installation guides, release notes, and PeopleBooks.

See Also

[“PeopleSoft Mobile Agent Preface,” page xvii](#)

Enterprise PeopleTools 8.48 PeopleBook: Getting Started with PeopleTools

CHAPTER 2

Understanding PeopleSoft Mobile Agent

This chapter discusses:

- Disconnected applications.
- PeopleSoft Mobile Agent.
- Data synchronization.
- Mobile application definition and configuration.

Disconnected Applications

PeopleSoft Mobile Agent extends the functionality of PeopleSoft Pure Internet Architecture to disconnected mobile devices, enabling users to work with PeopleSoft applications on laptop computers or personal digital assistants (PDAs) while they are disconnected from the internet or local network. PeopleSoft Mobile Agent uses standard internet tools and protocols—web browsers, HTTP, and XML—to access a mobile database containing application definitions and data. Changes that users make while disconnected are distributed across the network when they reconnect.

Disconnected applications enable users to use applications when and where required and to download refreshed data and upload new or updated data when connected. PeopleTools extends support for these disconnected applications with an internet architecture.

The PeopleSoft Mobile Agent extensions to PeopleTools add a disconnected mobile capability to the internet technology base in PeopleSoft Internet Architecture. They leverage the server-centric runtime architecture by integrating flexible data distribution and a high-performance data synchronization capability. This integration enables the same business objects to be used for connected and disconnected applications, providing common data edits and processing logic.

PeopleSoft Mobile Agent

This section discusses:

- Mobile page processing.
- Mobile data storage and synchronization.

PeopleSoft Mobile Agent provides a mobile, device-resident runtime component for PeopleSoft applications. This small-footprint component supports metadata-driven applications that operate without requiring a live network connection.

The PeopleSoft approach of using metadata to define and drive application behavior is also used for disconnected applications. Distribution of application metadata that is applicable for the user and class of device is handled in the same way as application business data, using a common synchronization protocol and mechanism.

The device-resident PeopleSoft Mobile Agent runtime component supports a common user experience for interacting with business objects that originate from multiple PeopleSoft enterprise applications. All device-resident applications appear in a common menu.

Disconnected PeopleSoft applications are designed to:

- Provide a similar look and feel between connected and disconnected counterparts.
- Optimize the user interface for a class of mobile device (laptop or PDA).

Mobile Page Processing

PeopleTools Mobile Agent generates the mobile page HTML used by the browser and accepts user input from the mobile pages. It dynamically generates the user interface based on application metadata and the current session state. Application configuration for business process-specific requirements is completed by tailoring metadata and synchronizing changed metadata to the device.

PeopleTools Mobile Agent works with a web browser to render the mobile application's user interface for supported mobile device platforms. In this context, it acts like a lightweight, device-resident web server.

Mobile Data Storage and Synchronization

PeopleSoft Mobile Agent manages data distribution, persistence, and synchronization. It communicates with the synchronization server through the synchronization gateway, using SyncAPI-formatted (XML) messages over HTTP.

Metadata Distribution

Mobile application metadata is distributed based on personalization and security permissions. Only the metadata for mobile pages that a user is authorized to use is downloaded to the device. Mobile Agent stores metadata in a database for later use. The metadata defines object structure and relationships with the mobile application user interface.

Business Data Distribution

Mobile Agent makes requests to the synchronization server for applicable business data to display on mobile pages. The synchronization server performs relevance filtering using rules that are contained in component interface definitions. It follows references to related objects and makes subsequent requests to the synchronization server to get copies of related objects. Application developers specify data distribution rules as required for the application. For example, in the customer relationship management (CRM) sales domain, an opportunity is related to a company, and a company can be related to many locations. A relevance rule identifying the proper opportunity objects for a user also produces the related company and site objects for those opportunities.

Object Persistence

Application data is stored on the mobile device. PeopleSoft Mobile Agent maintains a queue of new, deleted, and changed data to optimize performance of synchronization operations using a small, embedded database for physical storage of device-resident data.

Data Synchronization

Mobile Agent manages synchronization of data, as well. Synchronization types include:

- Pushing new, deleted, or changed objects to the server.
- Two-way business data synchronization.
- Complete, device-side data refreshing (including business data and metadata).

A synchronization request starts the appropriate type of synchronization session. Synchronization sessions communicate using HTTPS and can accommodate wired or wireless network communications.

Data Synchronization

This section discusses:

- Data synchronization.
- Synchronization servers.
- Synchronization gateways.

Data Synchronization

Mobile users access synchronization options in the synchronization group within the applications menu. Users can post transactions to the server, initiate a two-way synchronization, request an application metadata update, view the results of the last synchronization session, or update data-distribution preferences by clicking the appropriate link from the menu. The browser displays progress and results as the synchronization session proceeds.

Data synchronization supports disconnected devices using internet-standard protocols. PeopleTools provides several important functions through its data synchronization mechanism.

Metadata Distribution

A data synchronization session distributes metadata for the appropriate mobile applications to a user device.

Business Data Distribution

Disconnected applications provide instant access to business information. For example, the value of a mobile sales force automation application is providing quick access to contact, company, opportunity, and product information. The challenge with data distribution is putting the correct subset of enterprise information on a mobile device. Too much information doesn't fit on memory-constrained devices, and too little information results in lost productivity.

Business Data Synchronization

Disconnected applications support the creation and update of business information for people in the field.

Synchronization Servers

The synchronization server is a specialized application server that is optimized for concurrent, multi-user synchronization processing. It leverages metadata defining PeopleSoft component interfaces and extends them for use on mobile devices. It provides a device-independent synchronization mechanism using the SyncAPI protocol with the device-resident Mobile Object Manager. Multiple synchronization servers providing different object types can participate in fulfilling requests during a synchronization session. Synchronization requests and messages are routed to and from the appropriate synchronization server by the synchronization gateway.

Business Object Definition with Component Interfaces

Component interfaces define objects and their properties for replication. Any PeopleSoft component interface can be distributed as part of a mobile application by exposing it through a synchronizable component interface. A synchronizable component interface must expose an immutable synchronization ID with a version indicator property.

SyncAPI Synchronization Protocol

SyncAPI specifies the application-level protocol for data that is passed between the mobile device and the application server. It uses a set of verbs to specify actions and serialized object data on which to act. SyncAPI is modeled after two emerging internet standards: SyncML and the Simple Object Access Protocol.

Data Distribution and Filtering

A good mobile application makes relevant information available without distributing the entire enterprise database to a mobile device. The most efficient forms of data distribution communicate net changed objects only. In PeopleTools, definitions and rules for determining the data subset that is specific to the user and class of device (for example, laptop or PDA) are part of the component interface definition. During a synchronization session, data for a refreshed object is communicated to the device only if it has been updated since the last synchronization.

Synchronization Gateways

The web-server-based synchronization gateway provides an internet access point for synchronization requests. Data synchronization using internet communication provides more options and adds flexibility. Mobile device-to-synchronization gateway communication is handled with XML-formatted messages over HTTP. Secure Sockets Layer can be used to protect information with encryption as it passes over the internet. In addition, messages contain security credentials to authenticate requests from mobile users. The synchronization gateway provides a routing and forwarding function. Based on object type, it forwards synchronization requests to the appropriate application-server-based synchronization server.

See Also

Enterprise PeopleTools 8.48 PeopleBook: PeopleCode API Reference, “Mobile Classes”

Enterprise PeopleTools 8.48 PeopleBook: PeopleCode API Reference, “SyncServer Class”

Mobile Application Definition and Configuration

This section discusses:

- Mobile applications.

- PeopleSoft Mobile Agent development.
- Component interface creation.
- Mobile page creation.

Mobile Applications

Mobile applications are defined using PeopleSoft Application Designer. Disconnected applications leverage the base of metadata from their connected counterparts. Developers use Component Interface Designer and Mobile Page Designer to:

- Define additional metadata that is specific to disconnected applications and mobile devices.
- Configure mobile applications for specific business process needs during implementation.
- Maintain applications.

Changes to application metadata are distributed to mobile devices when an Update Applications type of synchronization is requested.

PeopleSoft Mobile Agent Development

To create mobile pages for display on a laptop or PDA:

1. Create synchronizable component interfaces.
2. Create mobile pages based on synchronizable component interfaces.
3. Register and apply security to the mobile pages and underlying component interfaces.
4. Test and verify the mobile pages.

See Also

Enterprise PeopleTools 8.48 PeopleBook: PeopleCode API Reference, “Mobile Classes”

Component Interface Creation

A component interface is a PeopleTools definition created in PeopleSoft Application Designer that exposes a component for synchronous access from an external application. PeopleTools component interfaces support data distribution and synchronization. Use PeopleSoft Application Designer to define additional metadata for the component interface definition that is specific to disconnected applications, and to define synchronization-specific data requirements for synchronizable component interfaces.

Required Properties

Each record that is exposed on a synchronizable component interface requires an immutable identifier (synchronization ID) and version identifier (synchronization date and time stamp). An immutable synchronization ID is required for each object because changes to traditional key values might result in orphaned objects during synchronization. The version identifier is used for data validation and conflict detection.

Object Relationship Definition

Object relationships are specified in the form of component interface properties holding key values for a related object’s component interface. Explicit relationship definition supports the automatic distribution of related objects during synchronization.

Data Distribution Filters

Object instance filtering for a specific user and class of device is specified in the component interface OnSelect event. Developers specify the rules that are generally applicable for the type of object, considering the memory constraints of various devices. Developers complete the final configuration of data filtering rules during implementation.

Conflict Resolution Rules

The synchronization server supports both declarative and programmatic conflict resolution rules. Declarative rules are specified as part of the component interface definition and optional programmatic rules in PeopleCode. Declarative rules should be sufficient in most cases. Current declarative rules are server-resident object wins, device-resident object wins, or server and device object property merge. An example of conflict resolution that is implemented in PeopleCode is making a determination based on the updating user's role or position in an organizational hierarchy.

See Also

Enterprise PeopleTools 8.48 PeopleBook: PeopleSoft Component Interfaces, “Developing the Component Interface”

Mobile Page Creation

Developers define mobile application user interfaces using PeopleSoft Application Designer. Mobile application component interfaces and mobile pages are closely linked; all mobile pages are defined in terms of the component interface properties that they expose.

PeopleTools uses inheritance to simplify user-interface metadata for mobile device types. A set of default metadata values is specified that applies to all types of mobile devices. These defaults are inherited for device-type-specific metadata, unless they are overridden.

See Also

Enterprise PeopleTools 8.48 PeopleBook: PeopleCode Developer's Guide, “Understanding Mobile Pages and Classes”

CHAPTER 3

Using Synchronizable Component Interfaces

This chapter provides an overview of synchronizable component interfaces and discusses how to:

- Use the synchronization ID and synchronization datetime stamp.
- Mobilize applications.
- Define synchronizable component interfaces.
- Use reference properties.
- Use attachments.

See Also

Enterprise PeopleTools 8.48 PeopleBook: PeopleSoft Component Interfaces, “Developing the Component Interface”

Understanding Synchronizable Component Interfaces

The basis for defining a PeopleSoft mobile page is a synchronizable component interface. You can use existing component interfaces or build new ones. However, for a mobile application to access data through a component interface, the component interface must be synchronizable.

This chapter assumes that you are familiar with developing, validating, and testing component interfaces using PeopleSoft Application Designer.

This section discusses:

- Data synchronization.
- Synchronization conflict resolution.

Data Synchronization

Data synchronization initially copies selected application metadata and instance data from the server to the mobile device while the mobile device is connected to the network. This initial synchronization is also called a bootstrap synchronization. While disconnected, the data might change on the server, on the mobile device, or on another user’s mobile device that subsequently updates the server data through synchronization.

The goals of subsequent synchronization between the server and the mobile device are to:

- Determine whether data has changed on the server, the mobile device, or both the server and the mobile device.
- Determine whether there is a conflict with changed data as determined by comparison with the original property values of the object.

- Determine how to resolve a conflict based on standard conflict-resolution algorithms combined with OnConflict PeopleCode event handlers.
- Update changed data on the server and the mobile device after resolving any conflicts.

Synchronization Conflict Resolution

A mobile device can be attached to the network for update and data synchronization. If data has changed on only the server or only the mobile device, as determined by a three-way comparison of the original server values from the last synchronization, the current server values, and the device values, the synchronization server updates the unchanged value. In this case, no conflict resolution is required. However, if data has changed on both the server and the mobile device, a conflict occurs. The developer assigns a conflict resolution rule to each component interface that determines how to resolve the conflict.

For every property that has changed on the device, the original server value from the last synchronization and the current device value are transmitted to the synchronization server. Conflicts are determined by a three-way comparison of the original server value, the current server value, and the device value. A conflict exists if the property value has changed on both the server and the device, but not to the same value. If the property value is changed on both the server and the device to the same value, there is no conflict. The synchronization server does not attempt to determine which change was made first, because it is not possible to accurately determine the date and time that the update was made on the mobile device. It is considered a conflict that must be resolved.

If the server object has been deleted, it remains deleted, and the mobile device updates to the deleted object are discarded. A notification is sent to the mobile device to notify the user that this has occurred. No error or conflict arises.

Many synchronization conflicts can be handled by selecting from a short list of standard conflict resolution algorithms provided as standard components of the synchronization server. Select the standard resolutions in the Properties dialog box: Synchronization tab of the component interface. PeopleTools also provides PeopleCode events to use to invoke a custom procedure in response to a conflict.

See *Enterprise PeopleTools 8.48 PeopleBook: PeopleCode API Reference*, “SyncServer Class,” Using OnConflict.

Note. Applying the conflict resolution algorithms might result in business rule violations. The application developer must provide resolutions that are compatible with the operative business rules. Manage unresolvable conflicts using events.

The following resolution strategies are available:

- Server wins.

This setting does not cause unresolvable conflicts. The synchronization server assumes that values on the server take precedence, and the mobile device values are discarded. No PeopleCode is run, and no update takes place. Although a conflict is detected, the server values are maintained, and a message is returned to the mobile device alerting the user that the change was not accepted. The server data is sent to the device. The user can reapply changes on the device and upload the changes again.

- Device wins.

The synchronization server assumes that all values on the mobile device take precedence. Where a conflict is detected between server and device values (because the values have changed on both the server and on the device), field values from the mobile device replace the values on the server. Field values that have changed on the server but do not result in a conflict are updated to the mobile device. No PeopleCode is run.

Fields that are not exposed through properties, but have changed on the server, are retained. No message is issued to the device.

- Custom resolution.

No automatic conflict resolution is attempted. The application developer determines conflict resolution using OnConflict PeopleCode events according to the following:

- For a property conflict, the OnConflict PeopleCode attached to the property is run.
- If there is a conflict, the OnConflict PeopleCode attached to the level zero object is run after all other OnConflict PeopleCode.

Use OnConflict PeopleCode to set the ConflictAlgorithm property on the SyncServer object to either device wins or server wins. This causes the device update to be accepted or rejected. All of the OnConflict PeopleCode programs are run before the value of the ConflictAlgorithm property is checked.

If an object is deleted on the server, conflicts are not generated. The device update is accepted (if there were no other conflicts or the conflict resolution rule is device wins). The server data is sent to the device. If an object is deleted on the device and changed on the server, conflicts are not generated.

Property values changed on the device replace property values on the server. Property values changed on the server and not on the device are left equal to the server values. Objects added on the server are left in place. Objects added on the device are added on the server.

The merge algorithm runs when the conflict resolution rule is device wins or custom. When the conflict resolution rule is custom, the merge algorithm runs before the OnConflict PeopleCode is run. While it is possible for the OnConflict PeopleCode to change the outcome of the merge algorithm, it should not do so. The purpose of OnConflict PeopleCode is to decide whether the device update is accepted or rejected.

See Also

Enterprise PeopleTools 8.48 PeopleBook: PeopleCode API Reference, “SyncServer Class”

Enterprise PeopleTools 8.48 PeopleBook: PeopleSoft Component Interfaces, “Developing the Component Interface,” Understanding Synchronization

Using the Synchronization ID and Datetime Stamp

This section provides an overview of the synchronization ID and datetime stamp and discusses how to:

- Create the SYNCID field.
- Create the SYNCDTTM field.
- Add SYNCID and SYNCDTTM fields to component records.
- Initialize synchronization IDs.

Understanding the Synchronization ID and Datetime Stamp

Every row of data (record) exposed on a component interface to be synchronized must include two fields:

- A synchronization ID, commonly named SYNCID.
- A synchronization datetime stamp, commonly named SYNCDTTM.

If a derived (calculated) value is displayed on the mobile page, its originating records must include SYNCID and SYNCDDTM and must be exposed on the component interface. However, a work (derived) record should not have SYNCID and SYNCDDTM, because the value of the work record changes with changes to its originating data.

Note. PeopleSoft Application Designer allows reference and data collection properties to be marked as derived in the component interface definition. Derived references are not supported; a derived flag on a reference is ignored.

If you include the SYNCID and SYNCDDTM fields in a subrecord, define the fields in both the subrecord and the parent record.

The developer can define the actual names for the synchronization ID and synchronization datetime stamp, but use the names consistently. This document uses SYNCID for the synchronization ID and SYNCDDTM for the synchronization datetime stamp. SYNCDDTM is sometimes named SYNCDDTIMESTAMP.

The synchronization datetime stamp must be dedicated to the synchronization function. If another datetime stamp (such as LASTUPDDTM) already exists in the selected record, do not use it as the synchronization datetime stamp. Create another specifically for synchronization.

After adding SYNCID and SYNCDDTM, the Build or Alter tables process creates database triggers to:

- Assign a synchronization ID and initial synchronization datetime stamp when new rows are inserted into the table.
- Update the synchronization datetime stamp when rows are modified.

The synchronization datetime stamp cannot be updated by any method other than the database trigger. An insert trigger assigns synchronization IDs, except in the case of existing rows in an altered table. For an existing table, you must initialize the synchronization IDs using the Set Sync ID utility.

For a new table, synchronization IDs are automatically assigned as the table is populated with data, and cannot otherwise be changed or updated.

Synchronization IDs are unique to each table, except for effective-dated tables. In an effective-dated table, all instances of a specific row share the same synchronization ID. If you select only in-effect rows, you get unique synchronization IDs within that table.

Note. Each record being mobilized must include at least one key field (not SYNCID or SYNCDDTM) for the trigger to use when building or altering the table.

See Also

Enterprise PeopleTools 8.48 PeopleBook: PeopleSoft Application Designer, “Creating Field Definitions”

Enterprise PeopleTools 8.48 PeopleBook: PeopleSoft Application Designer, “Creating Record Definitions”

Enterprise PeopleTools 8.48 PeopleBook: PeopleSoft Application Designer, “Creating Page Definitions”

Enterprise PeopleTools 8.48 PeopleBook: PeopleSoft Application Designer, “Administering Data”

Enterprise PeopleTools 8.48 PeopleBook: PeopleSoft Application Designer, “Working With Projects,” Setting System IDs

Creating the SYNCID Field

To create the SYNCID field:

1. In the Field Type field, select *Number*.
2. Clear the Signed check box.
3. In the Integer Positions field, enter *10*.
4. Enter *0* in the Decimal Positions field.
5. (Optional) Select the Raw Binary Format check box.
6. Enter *SYNCID* as the label ID.
7. Enter *Synchronization ID* as the long name.
8. Enter *Sync ID* as the short name.
9. Select the Def (default) check box.

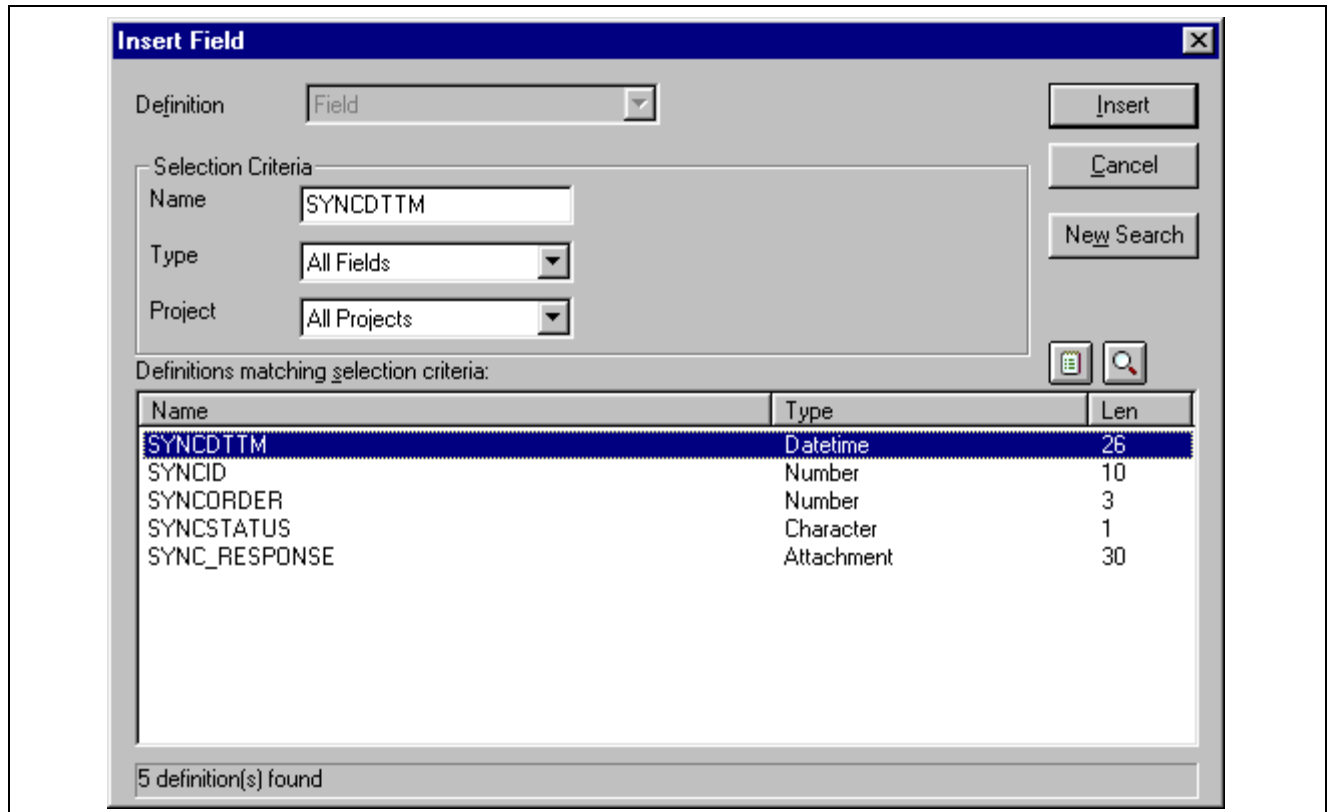
Creating the SYNCDTTM Field

To create the SYNCDTTM field:

1. Select *Datetime* for the field type.
2. Enter *SYNCDTTM* for the label ID.
3. Enter *Synchronization DateTimeStamp* as the long name.
4. Enter *SyncDateTime* as the short name.
5. Select the Def (default) check box.
6. Enter *50* in the Default Century field.
7. Select *HH:MM:SS:999999* in the Time Formatting field.

Adding SYNCID and SYNCDTTM Fields to Component Records

This section discusses how to add SYNCID and SYNCDTTM fields to component records and how to build and index the record tables before creating the synchronizable component interface.



Insert Field dialog box

To add SYNCID and SYNCDTTM to component records:

1. Open PeopleSoft Application Designer.
2. Open the selected component.
3. Insert the SYNCID and SYNCDTTM fields for each record that will be exposed in the component interface.

Add SYNCID and SYNCDTTM at the end of the list of record fields.

4. For each record:
 - a. Open the Record Properties dialog box.
 - b. On the Use tab, set the Record-level Auto-Update System ID field to *SYNCID*.

If you do not set Record-level Auto-Update System ID, you receive an error message when initializing the synchronization ID.

Note. Subrecords exist only in relation to their parent records. If you include SYNCID and SYNCDTTM fields in a subrecord, those fields automatically appear as if they belong to the parent record. However, the SetSyncID function does not set SYNCID in subrecords. Set the Record-level Auto Update field in both the parent record and subrecord to SYNCID and SYNCDTTM. SetSyncID recognizes the subrecord SYNCID field as the parent's, and sets it if necessary.

- c. Set the Timestamp field to *SYNCDTTM*.
5. If SYNCID is not a key of the record, add SYNCID to the properties index.

The new index should not be unique.

If you do not add a custom index for SYNCID, you cannot save the record.

6. Build or alter the project tables to add the new fields.
 - If you added SYNCID and SYNCDDTM to an existing component, select Build, Project, and specify Alter Tables and Create Views.
Create Trigger is selected by default.
 - If you created a new component that includes SYNCID and SYNCDDTM, select Build, Project, and specify Build Tables, Create Views, and Create Trigger.
If you do not specify Create Trigger, SYNCID and SYNCDDTM are not updated during synchronization.
 - If the record type is SQL View, open the SQL editor and manually add SYNCID and SYNCDDTM.
Because the record is only a view of a table, not a table itself, the Build or Alter process does not update the view. Note also that views may not include data altered on the device until the next synchronization.

Note. Select Create Trigger for every new component that will be associated with or referenced by a synchronizable component interface and mobile page.

You can now create a synchronizable component interface based on this component.

See Also

Enterprise PeopleTools 8.48 PeopleBook: PeopleSoft Application Designer, “Administering Data”

Initializing Synchronization IDs

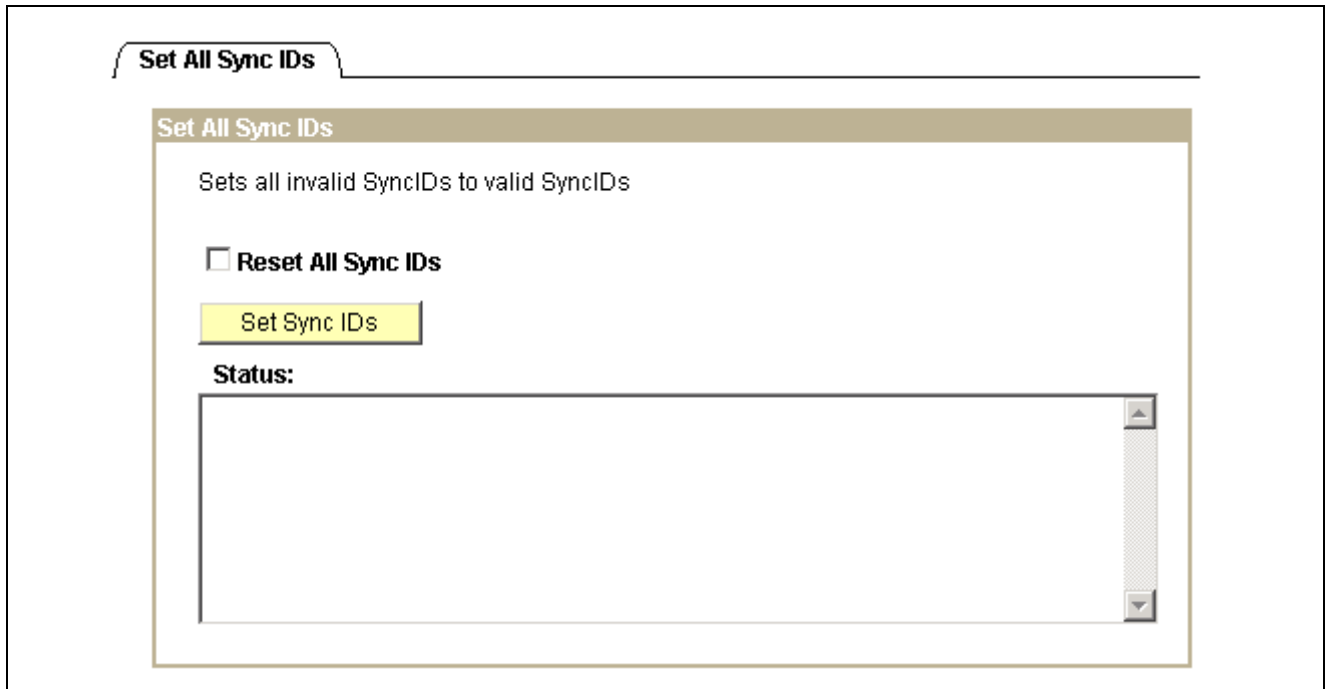
If you included a synchronization ID in a new component, any row that is added afterwards will have the synchronization ID set by the insert trigger.

If you added a synchronization ID to an existing component, the synchronization ID value is zero, and the synchronization ID therefore does not update properly. Initialize the synchronization ID to a value greater than zero with the Set Sync IDs utility.

You can set synchronization IDs in these ways:

- From the PeopleTools, Utilities, Administration page.
- Using the Application Engine program AE_SYNCIDGEN from Application Designer or from the command line.

See *Enterprise PeopleTools 8.48 PeopleBook: PeopleSoft Application Engine*, “Managing Application Engine Programs,” Using the Command Line to Invoke Application Engine Programs.



Set All Sync IDs page

To initialize all synchronization IDs:

1. Sign in to PeopleSoft.
2. Select PeopleTools, Utilities, Administration, Set Sync IDs.
3. Select Reset All Sync IDs.

If you do not select this option, only invalid synchronization IDs will be reset. An invalid synchronization ID is either null or zero. If you select this value, all synchronization IDs will be reset in the specified record or project, or in the entire database, to a value greater than zero.

4. Click Set Sync IDs.

This initializes all synchronization IDs, as specified.

Warning! If you choose to run the Set Sync IDs utility for any set of synchronization IDs, you must stop the application server, delete the application server cache, and restart the application server after running the Set Sync IDs utility.

Note. You can also set up a Process Scheduler job to set synchronization IDs on a recurring basis. Select PeopleTools, Utilities, Administration, Set Sync ID Process to set up the job.

See Also

Enterprise PeopleTools 8.48 PeopleBook: PeopleSoft Application Designer, “Working With Projects,” Setting System IDs

Mobilizing Applications

Making an application available on mobile devices is known as mobilizing an application.

Note. While synchronizable component interfaces are the requisite building block of mobile applications, the base component interface and underlying components must be thoroughly tested and working properly before defining the mobile component interface. Using a nonfunctional component as the basis for a mobile component interface results in a nonfunctional component interface and failure of the associated mobile pages.

If you are mobilizing an existing working application, begin by opening an existing component interface. Using the instructions provided in this chapter, build the synchronizable component interface by:

1. Opening a component interface.
2. Running the Validate for Consistency process to identify record definitions requiring modification.
3. Adding synchronization ID and synchronization datetime stamp fields to the required records, creating an index for each table based on the synchronization ID, and building or altering the tables (which includes building the required database triggers).

Note. Every property exposed in the component interface is synchronized with the mobile device during synchronization, even if the property is not displayed on a mobile page. Synchronizing properties that are not displayed might cause performance issues and should be avoided. When mobilizing an existing application, consider creating new component interfaces specifically for use with PeopleSoft Mobile Agent.

If you are developing a new application for use with PeopleSoft Mobile Agent, include synchronization ID and synchronization datetime stamp fields in the records of the application's components before creating the associated component interfaces.

See Also

Enterprise PeopleTools 8.48 PeopleBook: PeopleSoft Component Interfaces, “Developing the Component Interface”

Enterprise PeopleTools 8.48 PeopleBook: PeopleCode Developer's Guide, “Understanding Mobile Pages and Classes”

Defining Synchronizable Component Interfaces

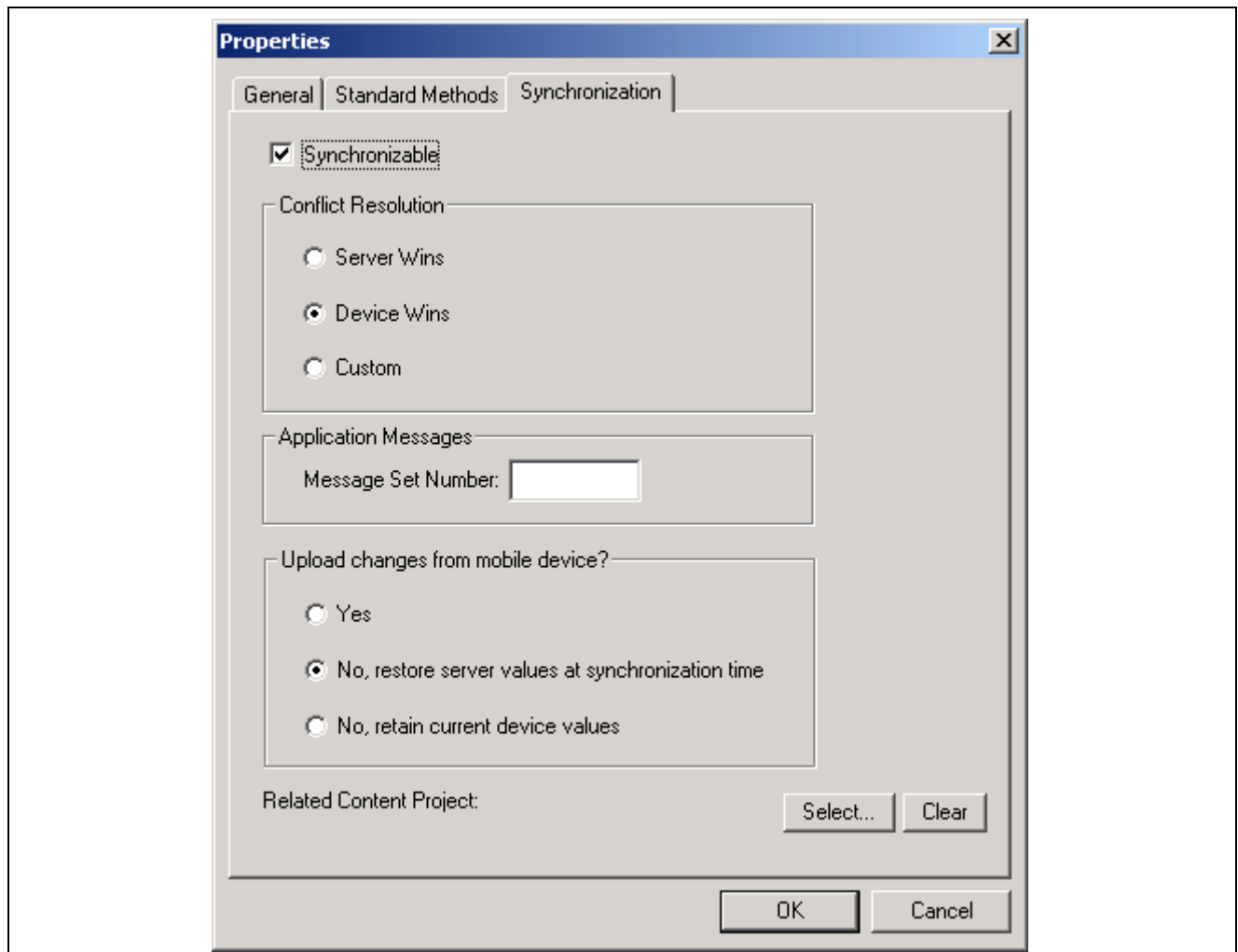
You can base your mobile page on an existing component and component interface or create a new component interface. In either case, each record to be exposed in the synchronizable component interface must include synchronization ID and datetime stamp fields.

This section discusses how to:

- Create synchronizable component interfaces.
- Add component interfaces to permission lists.

Creating Synchronizable Component Interfaces

To create a synchronizable component interface, select the Synchronization tab of the Properties dialog box in Application Designer.



Properties dialog box: Synchronization tab

Synchronizable Select to create a synchronizable component interface.

Conflict Resolution

Select one of the following options to resolve conflicts in data between the device and the server.

- Server Wins** The synchronization server assumes that values on the server take precedence, and the mobile device values are discarded.
- Device Wins** The synchronization server assumes that all values on the mobile device take precedence.
- Custom** No automatic conflict resolution is attempted. The application developer determines conflict resolution using OnConflict PeopleCode events.

See [Chapter 3, “Using Synchronizable Component Interfaces,” Synchronization Conflict Resolution, page 16.](#)

Application Messages

Application developers can write PeopleCode to issue a message to the mobile device. Specify the message set number to be synchronized on the component interface designer dialog box, Synchronization tab.

Message Set Number Enter the message set number to be synchronized.

Upload Changes from Mobile Device?

Select an option from the Upload changes from mobile device? group box to determine whether data created or modified on the mobile device is uploaded to the server. None of these options affect new data created on the server. New server data is always downloaded to the mobile device, regardless of the value of this setting.

- | | |
|--|---|
| Yes | Select to upload changed data from the mobile device to the server. |
| No, restore server values at synchronization time | Select to leave changed data from the mobile device on the server and overwrite that data with server values. |
| No, retain current device values. | Select to leave changed data from the mobile device on the server and to retain changed data on the mobile device regardless of changes to that data on the server. |

Related Content Project

Related Content Project Specify a project to be synchronized with the component interface. This project should contain all the HTML definitions, as well as all the images that you want distributed to the mobile device.

Note. Every property exposed in the component interface is synchronized with the mobile device during synchronization, even if the property is not displayed on a mobile page. Synchronizing properties that are not displayed might cause performance issues and should be avoided.

Creating Synchronizable Component IDs

To create a synchronizable component ID:

1. Create a new component interface for the selected component.
Accept the default properties from the associated component, or select properties after creating the component interface.
2. Add properties to, or delete properties from, the component interface.
Drag properties from the associated component.
3. Open the component interface Properties dialog box.
4. Select the Synchronization tab.
5. Select Synchronizable.
6. Select a conflict resolution method.
7. Select from Upload changes from mobile device? group to determine whether or not data created or modified on the mobile device will be uploaded to the server:
8. Save the component interface.

Validating and Testing the Component Interface

Select Tools, Validate for Consistency from the PeopleSoft Application Designer menu to validate the current component interface.

Validation checks for the presence of a synchronization ID and synchronization datetime stamp for each record exposed in the component interface. A list of errors and warnings appears in the Validate window. If an error indicates that a record requires a synchronization ID or datetime stamp, double-click the message to open and edit the property.

Testing for validation before the component interface is defined as synchronizable does not locate missing synchronization IDs and synchronization datetime stamps on associated records.

See *Enterprise PeopleTools 8.48 PeopleBook: PeopleSoft Component Interfaces*, “Developing the Component Interface,” Validating the Component Interface.

Select Tools, Test Component Interface from the PeopleSoft Application Designer menu to test the current component interface.

The Component Interface Tester appears, enabling you to perform search tests on the component interface and its associated records using existing data. Synchronization uses the get method, so it is important to test this method. If you receive a Not Authorized error message, you do not have permission for this component interface. You must obtain permission.

See *Enterprise PeopleTools 8.48 PeopleBook: PeopleSoft Component Interfaces*, “Developing the Component Interface,” Testing the Component Interface.

Adding Component Interfaces to Permission Lists

Include every component interface associated with a mobile page in the appropriate permission lists for mobile users.

The mobile personalization component interface, MOBILE_PREFS_CI, handles the specification of date format, time zone, currency code, and daylight savings time parameters. The user sets mobile preferences using the My Personalizations link in the Mobile Portal menu.

Add permissions to MOBILE_PREFS_CI through the PTPT1000 (PeopleSoft user) permissions list. The administrator then adds this permissions list to the role of the mobile users.

Note. Every component interface referenced by a mobile page must be included in the appropriate permission list, even if the component interface is not the basis for the mobile page. Without permission to all referenced component interfaces, data is not available during synchronization, and the synchronization fails.

Adding a Component Interface to the Permission List

To add a component interface to a permission list:

1. Sign in to PeopleSoft in your browser.
2. Select PeopleTools, Security, Permissions & Roles, Permission Lists.
3. On the Find an Existing Values page, search for and select the appropriate permission list.

If the appropriate permission list does not yet exist, select Add a New Value and create a permission list for mobile applications.

4. Scroll right to display the Component Interfaces tab.
5. Add the component interface.

6. Click Save.

See Also

Enterprise PeopleTools 8.48 PeopleBook: Security Administration, “Setting Up Permission Lists,” Managing Permission Lists

Using Reference Properties

Each component interface is unaware of the other component interfaces in the system. To access and update information from other component interfaces, references establish relationships between component interfaces.

This section provides an overview of references and discusses how to create reference properties.

Understanding References

A component interface reference property is equivalent to a database table foreign key (or multiple keys), which links one table to another. A reference property defines the relationship between two or more tables (objects), allowing a component interface to access data from another component interface.

As components represent business objects, component interfaces represent the exposed properties (fields) of those business objects. Each component interface may contain one or more foreign keys to the database tables exposed by another component interface, but that relationship is not formalized and available for use unless explicitly linked using a reference property.

Create a reference property in one component interface to access data exposed in another component interface. For example, the Customer object and the component interface exposing its properties include properties such as the customer’s name, address, and telephone numbers. Another object, Contact, includes data associated with all contacts in the system. The link between a specific customer and its associated contacts is owned by the Contact record, not the Customer record.

Therefore, to access contact data, the Customer component interface needs a reference property referring to the Contact component interface. To update contact data from the Customer component interface, the reference must include a valid reference path and reference back-pointer back to the customer ID.

Note. PeopleSoft Application Designer allows reference and data collection properties to be marked as derived in the component interface definition. Derived references are not supported; a derived flag on a reference is ignored.

Creating Reference Properties

A reference property always points to another component interface. A database relationship must exist between the current component interface and the component interface being referenced. Define the mapping of the relationship while creating a reference property.

To create a reference property:

1. Open the selected component interface.
2. Select the fields that form the foreign key to the related component.
3. Right-click a selected field, and select Create Reference.

The Create Reference dialog box appears.

Create Reference

Name:

Related Component Interface:

Comments:

Related Key Mapping:

CI Property	Related CI Property
CURRENCY_CD	

Valid Reference Path:

From Object	Using Reference
CURRENCY_CD_CI	

Reference Backpointer:

OK Cancel

Create Reference dialog box

- Name** Enter an identifying name for the reference, which becomes a property that can be used in PeopleCode. Appears in the component interface.
- Related Component Interface** Select the component interface referenced from the current component interface. Only synchronizable component interfaces appear in the list.
- Related Key Mapping** Map the property from the related component interface to the selected component interface property.
- Valid Reference Path** Specify dynamic enumeration of the objects that can be selected as the value of the reference property being defined. This effectively filters these values so that you can select only objects that support the defined reference.
- Because references use the concept of a *walkpath* to go from level zero of one component interface to level zero of another component interface, and then “walk” down to the lower levels of the component interface, only the level zero references are displayed in the Valid Reference Path drop-down list of a reference definition
- Reference Backpointer** Select a backpointer to the originating component interface.

Using Attachments

PeopleSoft Mobile Agent supports attachments, which require setting up reference properties on synchronizable component interfaces. PeopleTools supports attachments for mobile devices. The attachment consists of header information (such as size, type, and description) and the corresponding document object. The attachment events occur when the mobile user synchronizes the mobile device.

PeopleSoft Mobile Agent supports attachments from many different technologies. For example, a relational database, FTP server, or document management system are all possible sources of attachment data.

CI Property	Related CI Property
ATTACHUSERFILE	FileName
FILE_SIZE	Size
QE_MB_ATTCH_DESCR	Description
QE_MB_FILE_TYPE	ContentType

Edit Reference dialog box

To enable attachments for mobile pages:

1. Build a synchronizable component interface on a component that is set up to use attachments.
See *Enterprise PeopleTools 8.48 PeopleBook: PeopleCode Developer's Guide*, "Understanding File Attachments and PeopleCode," Using File Attachments in Applications.
2. Create a reference property in the synchronizable component interface.
3. Select the reference property, right-click, and select Edit Reference from the popup menu.
4. On the Edit Reference property page, specify the related component interface for the ATTACHMENT reference property as <Attachment>.
5. On the Edit Reference property page, associate the file name with the ATTACHUSERFILE field.

Once you have created the ATTACHMENT property, all the attachment events are displayed in the PeopleCode editor for the ATTACHMENT property.

Both binary and text document types are supported. You can define storage interaction mechanisms. For example, you can directly retrieve a Calico project file from Calico's native storage mechanism, or move content to and from a document management system such as Documentum.

Note. When enabling attachments, add filtering programs to block malicious programs from accessing the system. For example, you might not allow .exe file types, so that destructive macros or HTML scripts are not brought into the system as attachments.

See Also

Enterprise PeopleTools 8.48 PeopleBook: PeopleCode API Reference, "Mobile Classes"

CHAPTER 4

Creating Mobile Pages

This chapter provides overviews of mobile application elements and time zones and date formats and discusses how to:

- Build mobile pages.
- Define content appearance and characteristics.
- Display prompts.
- Use dynamic enumerations.
- Use the time picker and calendar prompts.
- Register mobile pages.
- Maintain security.

Understanding Mobile Application Elements

Every mobile application is made up of mobile pages, as well as the PeopleCode programs that filter the data or set synchronization rules or business rules. Mobile pages are based on synchronizable component interfaces.

This section discusses:

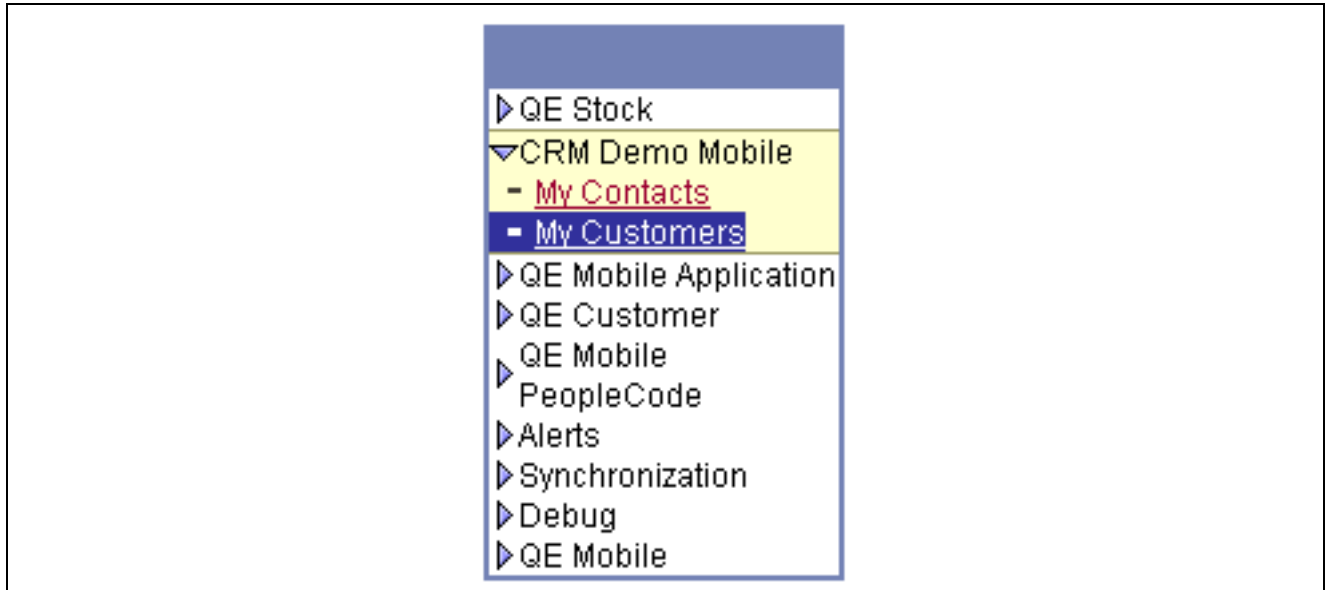
- Navigation menus.
- List views.
- Detail views.

See Also

Enterprise PeopleTools 8.48 PeopleBook: PeopleCode API Reference, “Mobile Classes”

Navigation Menu

All mobile applications that have been downloaded to a mobile device appear in a single navigation menu. In addition, some common menu items, such as Synchronization, are also listed, as shown in the following illustration:



Mobile navigation menu

You enter the application names that appear in the navigation menu when you register the mobile page (the content reference label). You also enter the pop-up window that appears when the user places the cursor over the menu item (the long description).

All items in the navigation menu are links to list view pages. From a list view page, the user can navigate to a detail view page.

List Views

List view pages are created from the top level of a component interface (level zero), or from a collection in a component interface. A list view can also be thought of as a search page.

Each instance of a component interface has a level-zero row. Each of these instances is displayed on a list view page generated from the top level of a component interface.

The following list view page has two instances of data. It is created from level zero of the component interface (the top level of the mobile page):

My Customers			
Find View All First 1-2 of 2 Last			
<u>Customer</u>	<u>*Name</u>	<u>Industry ID</u>	<u>Symbol</u>
1	<u>Acme Corporation</u>	SPORTING GOODS	ACME
2	<u>Willie's Widgets</u>	DISHWASHERS, HOUSEHOLD	WWGT

My Customers mobile list view page

The properties (fields) that make up the list view page include:

- Content properties.
- Reference properties.

You specify the layout of the list view for the mobile page in PeopleSoft Application Designer. All content properties that are specified as list box items appear in the list view.

A list view that is generated from a collection (level one, level two, and so on) in a component interface is made up of the following:

- Information from the collection.
- Instances of data in that collection.

The following is an example of a list view generated from a collection, with two instances of data:

The screenshot shows a mobile page titled "Customer Detail" with a sub-tab "Sites". Below the tabs, there are two input fields: "Customer:" with the value "1" and "Status:" with a dropdown menu showing "Active Customer". Below these fields is a list view titled "Sites". The list view has a header bar with "Find | View All |" and "First 1-2 of 2 Last". The list view contains two rows of data:

Site	Description
2	New Stock Warehouse
1	Wiley Coyote Manufacturing

Below the list view is an "Add" button.

Sites list view page created from component interface collection

You can change the instances of data that appear on a list view page created from a collection. You can also add instances of data.

All properties, as well as any keys, that are specified as read-only on the underlying synchronizable component interface are automatically set as read-only on the mobile page, and cannot be changed to read-write. In the previous example, the Customer field is the key and is not available to the user.

List View Headers

The list view header sits on top of a list view and allows the user to navigate to the next group of items in a list view, view all items, or go to the last group of items in a list view. A new option has been added to the Mobile Page Collections Property dialog box enabling developers to hide the list view header on a mobile page for usability purposes. To hide the list view header, select Suppress List Header.

Customer: 1
 Status: Active Customer

Site	Description
2	New Stock Warehouse
1	Wiley Coyote Manufacturing

Add
 Save [Return to List](#)

Sites list view page with list view header suppressed

Detail Views

Detail view pages are created from the content properties (fields) in a mobile page. Where and how a property appears on a page is determined by the content properties page for that property.

In the following detail view, the value in the customer ID is not available to the user. It is the level-zero key and cannot be changed.

Customer: 1
 Status: Active Customer

Tax ID:

*Name: Acme Corporation Short Name: Acme

Industry ID: SPORTING GOODS








Web URL: www.acme.com

Symbol: ACME

Customer Detail detail view page

A prompt button and detail button appear next to the Industry ID field. This field is defined as a *reference* property in the underlying synchronizable component interface in PeopleSoft Application Designer.

If you click the prompt button, a list view of a different component interfaces appears. The list view is generated by the level-zero data from a new component interface, as shown in the following example:

Industry Codes	
Industry ID	Description
APPLIANCES, HOUSEHOLD	 Appliances, Household Electric
ATHLETIC GOODS, CONSUMER	 Athletic Goods, Consumer General
CAMPING EQUIPMENT, CONSUMER	 Camping Equipment, Retail Consumer
COMPUTER EQUIPMENT, RETAIL	 Computer Equipment, Retail Hardware
COMPUTER PERIPHERALS, RETAIL	 Computer Peripheral Devices, Retail
COMPUTER PROGRAMMING SERVICES	 Computer Programming Services, Retail
COMPUTER SOFTWARE, RETAIL	 Computer Software, Retail Prepacked
COMPUTERS, RETAIL	 Computers, Retail Sales
COOKING APPLIANCE	 Cooking, Household Appliances
DISHWASHERS, HOUSEHOLD	 Dishwashers, Household Appliances
EXERCISE APPARATUS, CONSUMER	 Exercise Apparatus, Consumer Goods
FREEZERS, HOUSEHOLD	 Freezers, Household Appliances
REFRIGERATORS, HOUSEHOLD	 Refrigerators, Household Appliances
SPORTING GOODS	 Sporting Goods, Consumer
WASTE DISPOSALS, HOUSEHOLD	 Waste Disposals, Household Appliances

Industry Codes list view page

If you click the detail button, a different component interface, the one specified by the reference property, appears, as shown in the following example:

Industry Code Detail	
Industry ID:	<input type="text" value="APPLIANCES, HOUSEHOLD"/>
Status:	Active
Description:	<input type="text" value="Appliances, Household Electric"/>

Industry Code Detail page

Understanding Time Zones and Date Formats

From the perspective of the server, each database stores time and datetime data according to the base time of the database. When rendered on a page, the time or datetime data is either displayed in the database's base time or converted to a user time or specified time, as defined in the record definition.

PeopleSoft Mobile Agent displays time and datetime data on the device similarly, but must account for the possibility that the data on the mobile device originates from multiple databases, and those databases might have different base times. For this reason, time and datetime data is stored on the mobile device according to a base time selected for the device. Time and datetime data that is sent to the mobile device during synchronization is converted to the base time for the device. The server knows the base time for the device, so it performs the conversion for time and datetime data that is both sent to and received from the mobile device.

The exception is if the time or datetime data has a time zone attached in the record definition. In this case, the server converts from the base time of the database to the specified time zone for time and datetime data that is both sent to and received from the mobile device. With this architecture, the mobile device handles both user time or datetime data and specified time or datetime data. No time zone conversions take place on the mobile device.

For display purposes, the time appears as it is stored on the device. If it is specified time or datetime data, the time zone field should be included by the developer on the mobile page. If a time or datetime field does not include a specified time zone, the developer can control the display of the device time zone in PeopleSoft Application Designer.

The only time zone conversion that may occur on the device is for datetime fields (but not time fields) that do not have a specified time zone, and daylight savings time applies to the device time zone. All time and datetime data is stored in the device's base time. If datetime data falls within the daylight savings time date range, the value and time zone are displayed appropriately. If the field is time only, no conversion is done. If the base time zone for a device is changed, the user must perform an Update Applications synchronization.

Note. PSTIMEZONE is a component interface used to support timezone prompting on the mobile device. Synchronizable component interfaces that contain Time Zone Control Fields can have references built over the Time Zone field, using this component interface as the related component interface for the reference.

Building Mobile Pages

To build a mobile page, one or more synchronizable component interfaces must already exist. You can also build mobile pages that include other mobile pages.

This section describes how to:

- Create mobile pages.
- Define mobile page appearance.
- Build mobile pages that include other mobile pages.

Creating Mobile Pages

Use the Select source Component Interface dialog box to begin defining a mobile page.

To create a mobile page:

1. From the PeopleSoft Application Designer menu, select File, New.

The New Definition dialog box appears.

2. From the New Definition dialog box, select Mobile Page.

The Select source Component Interface dialog box appears.

Only synchronizable component interfaces appear in the list of definitions matching selection criteria. If a specific component interface does not appear in the list, the component interface might not be defined as synchronizable.

3. Specify the component interface on which you are basing the mobile page.

PeopleSoft Application Designer imports all properties of the selected component interface. Retain the default mobile page content, or delete the content that is not required. You can add content by dragging properties from the component interface. Click the View Component Interface toolbar button to open the associated component interface.

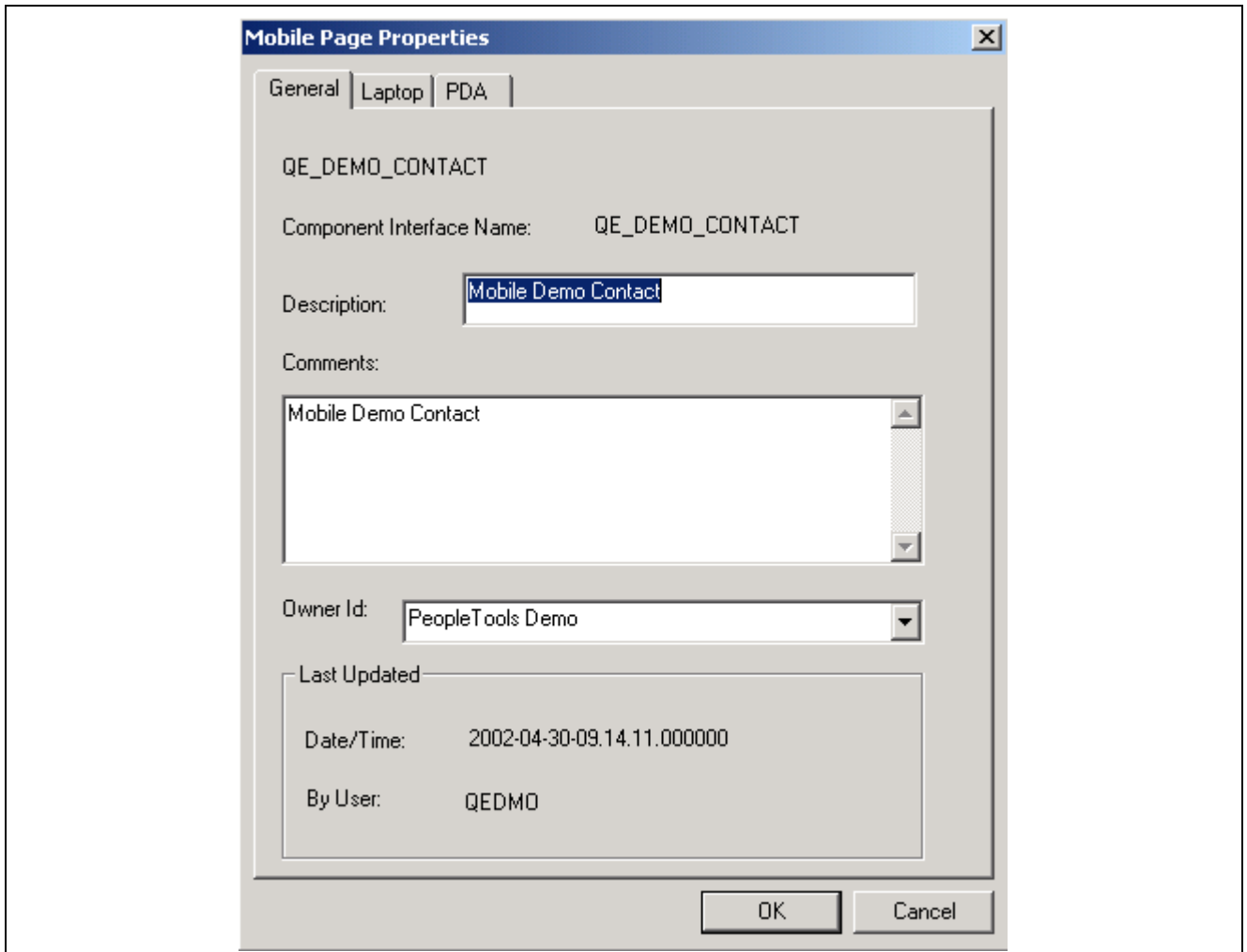
4. Save the new mobile page with a unique name.

Note. PeopleSoft Application Designer does not update a mobile page when the underlying component interface changes, but it does display a warning message when you edit the mobile page if the underlying component interface has changed. If you change the component interface underlying a mobile page by adding properties after creating the mobile page, add the properties to the mobile page by dragging from the component interface to the mobile page in PeopleSoft Application Designer.

Note. Deleting a component interface also deletes all mobile pages based on the deleted component interface.

Defining Mobile Page Appearance

Use the Mobile Page Properties dialog box to define the appearance of a selected mobile page. Access the Mobile Page Properties dialog box by opening the mobile page in PeopleSoft Application Designer and clicking the Properties button.



Mobile Page Properties dialog box: General tab

The name of the mobile page and the corresponding component interface appear on the page.

Description Describe the mobile page.

- Comments** Enter comments describing the function or purpose of the mobile page.
- Owner Id** Enter the owner ID of the person who created the page.

Laptop Tab

To specify properties for the mobile page as it appears on the laptop, select the Laptop tab.

The screenshot shows the 'Mobile Page Properties' dialog box with the 'Laptop' tab selected. The 'List View Label' is 'My Contacts' and the 'Detail View Label' is 'Contact Detail'. The 'Occurs Count (Max Number of rows in list)' is set to 12. The 'Allow Add' and 'Use This Page for Errors' checkboxes are checked, while 'Allow Delete' and 'Exclude From Go To Drop Down' are unchecked. The 'Help Message Set' and 'Help Message Number' are both set to 0. The dialog has 'OK' and 'Cancel' buttons at the bottom.

Mobile Page Properties dialog box: Laptop tab

Select the following options to define page properties.

- List View Label** List view pages are created from the top level of a component interface (the level zero), or from a collection in a component interface. A list view can also be thought of as a search page.

See [Chapter 4, “Creating Mobile Pages,” List Views, page 32.](#)

- Detail View Label** Detail view pages are created from the content properties (fields) in a mobile page. Where and how a property appears on a page is determined by the content properties page for that property (field).

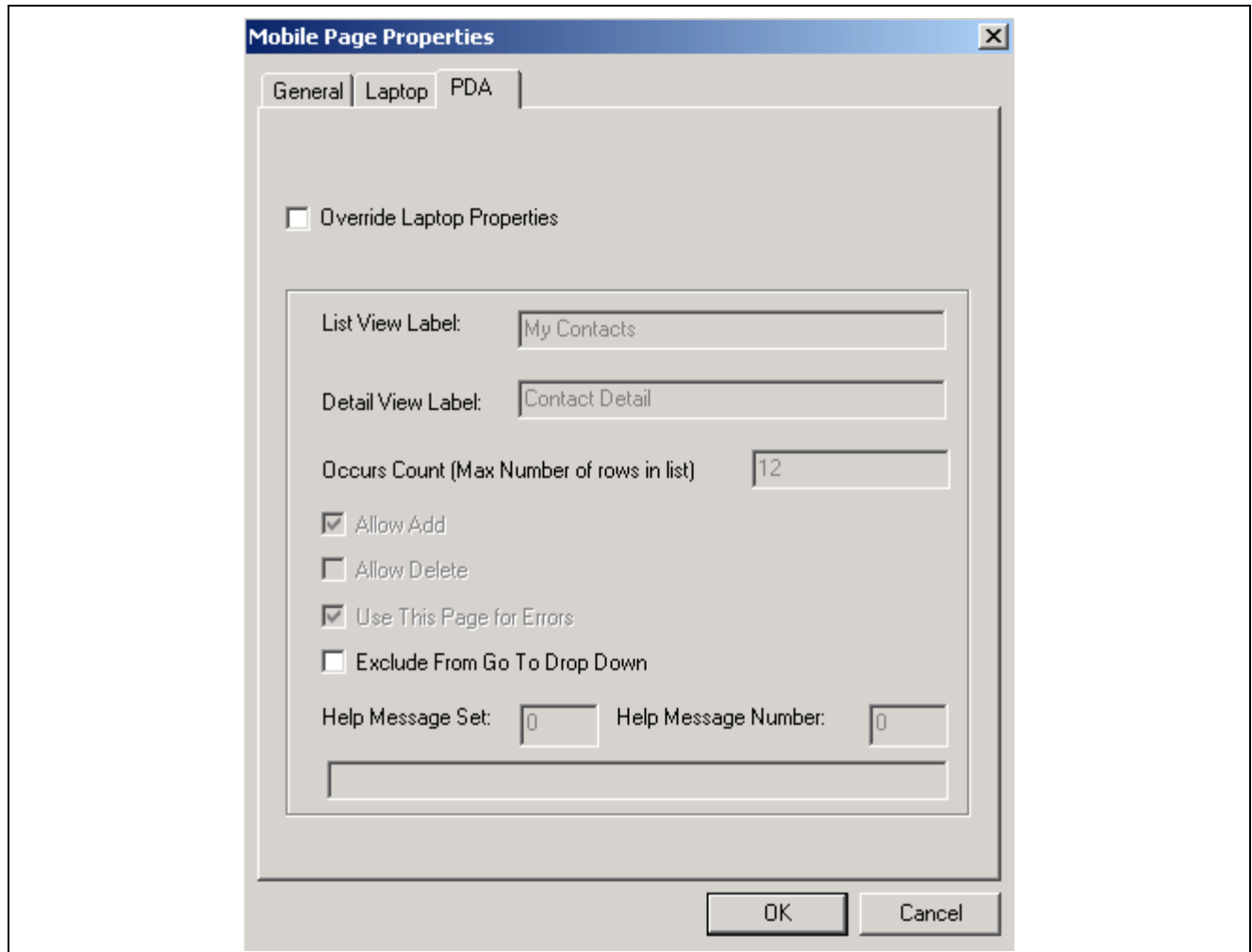
See [Chapter 4, “Creating Mobile Pages,” Detail Views, page 34.](#)

Occurs Count (Max Number of rows in list)	Enter the number of rows to display initially at runtime. Select a row greater than zero, or no information will appear.
Allow Add	Select to enable the user to add data.
Allow Delete	Select to enable the user to delete data.
Use This Page for Errors	Select to enable the user to correct errors on this page.
Exclude from Go To Drop Down	Select to exclude the page from the Go To drop-down list box. The Go To drop-down list box is for end-user navigation between components and is not present when navigating between parent and child pages within the same component. You may want to exclude a page from the navigation list box when the user has navigated to another component and the context is no longer valid to return to.
Help Message Set	Specify the help message set associated with this content for context-sensitive help. This applies only to fields, not references. The help for references comes from the mobile page to which you point.
Help Message Number	Specify the help message number associated with this content for context-sensitive help. This applies only to fields, not references. The help for references comes from the mobile page to which you point.

Note. Help on mobile devices displays the message explanation rather than the message text. This allows display of help messages up to 32K long. The browser on the laptop and the PDA wrap long help message explanations appropriately.

PDA Tab

To specify properties for the mobile page as it appears on a PDA, select the PDA tab.



Mobile Page Properties dialog box: PDA tab

You can accept the laptop properties as the properties for display on a PDA or override the laptop properties by selecting the Override Laptop Properties check box. If you override laptop properties, you can specify the same settings as for the laptop properties.

Defining Content Appearance and Characteristics

This section discusses how to:

- Set mobile page content properties.
- Set mobile page reference properties.
- Set mobile page collection properties.

Understanding Mobile Page Content

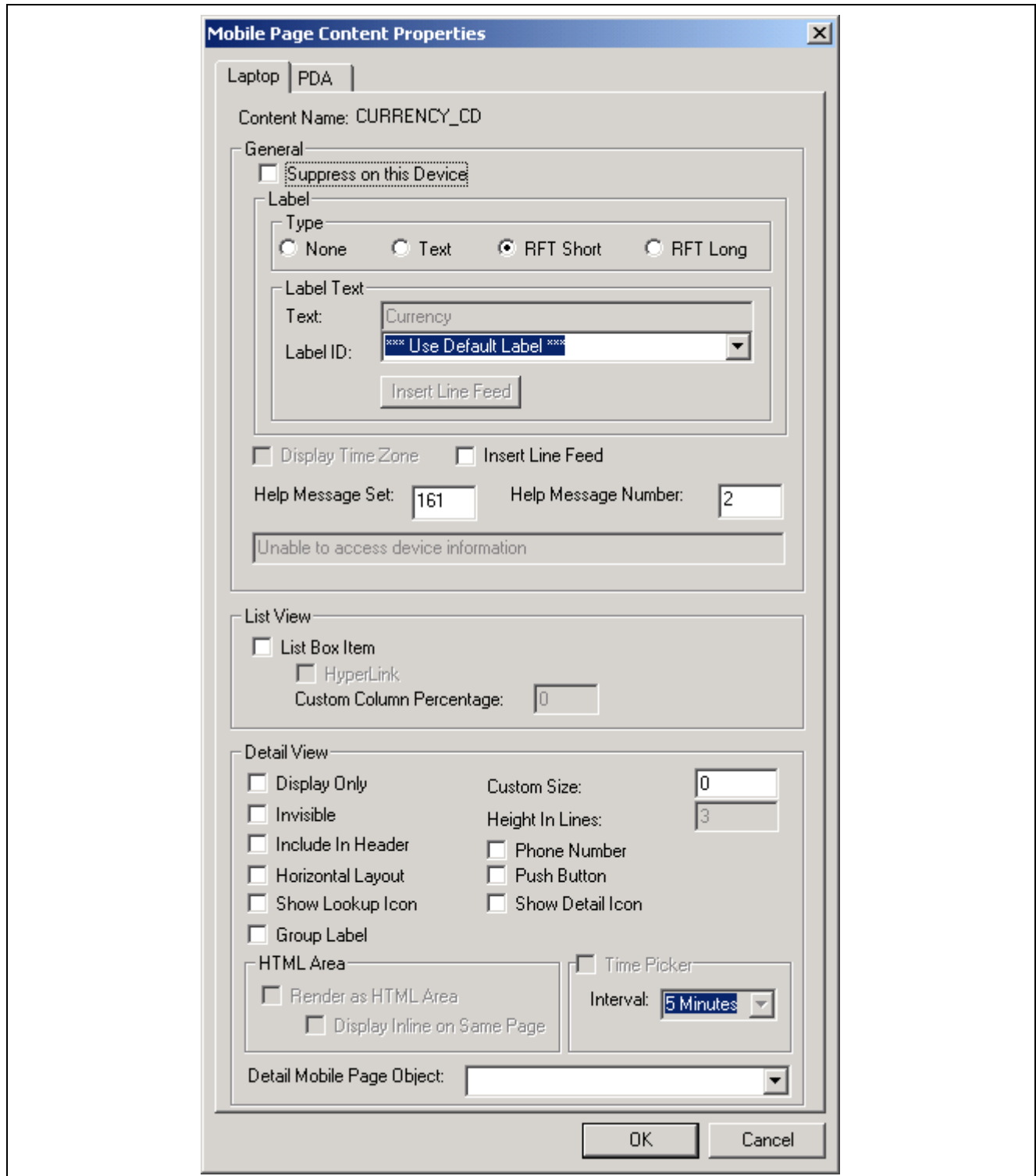
Use the Mobile Page Content Properties, Mobile Page Reference Properties, and Mobile Page Collection Properties dialog boxes to define the appearance and characteristics of content within the selected mobile page.

Content refers to the component interface properties (fields and references) that you select to display on a mobile page. If the content is a reference, special considerations apply, as described in this section.

Each dialog box includes a tab for each supported mobile device. Specify display properties for the selected content for each device. To specify display options for PDAs that are different from the display options for laptops, select Override Laptop Properties on the PDA tab.

Setting Mobile Page Content Properties

Access the Mobile Page Content Properties dialog box by right-clicking the content property and selecting Content Property.



Mobile Page Content Properties dialog box: Laptop tab

Select the options for the content of your mobile page. The content name appears as read-only text at the top of the dialog box.

Suppress on This Device Select to ensure that this content does not appear on the specified device (laptop or PDA). The remaining options become unavailable.

None	Select None to omit a label for the field.
Text	Select Text to enter the static text to appear on the label.
RFT Short	Select RFT Short (record field table short) to display the RFT short name for the field from the associated record definition. Displays the label to the left of the value in detail view and as a column header in list view.
RFT Long	Select RFT Long(record field table long) to display the RFT long name for the field from the associated record definition.
Text	If you selected the Text control, enter the static text for the label in this field.
Label ID	Select a label ID, or accept the default ID. By default, this field displays the long translate value on laptops, and the short translate value on PDAs.
Insert Line Feed	You can split a control label into multiple lines by positioning the cursor in the Text field where you want the split to occur and clicking Insert Line Feed. A thick, vertical bar character appears in the Text field at the split location, and the label is split into multiple lines. In the Mobile Page Content Properties dialog box, inserting a line feed into label text has the effect of changing the label type from RFT short or long names to text.
Display Time Zone	Select to display the time zone for time and datetime fields displayed on the page. If Time Zone is a display-only field, it cannot be changed from the mobile page.
Help Message Set	Specify the help message set associated with this content for context-sensitive help. This applies to fields only, not references. The help for references comes from the mobile page to which you are pointing.
Help Message Number	Specify the help message number associated with this content for context-sensitive help. This applies only to fields, not references. The help for references comes from the mobile page to which you point.
List Box Item	Select to make the field a list box item. It displays the content in a: <ul style="list-style-type: none"> • Top-level list view. • Collection list view. • Prompt list view. Content is linked to enable navigation from a child to a parent object.
Hyperlink	If List Box Item is selected, select Hyperlink to enable returning to the parent object from a prompt list view. If Hyperlink is not selected, the detail button does not appear in the list view.
Custom Column Percentage	Specify the percentage of the layout width that this property occupies when it appears in a list view. This field is available only if List Box Item is selected
Display Only	Select to make the content read-only. If the component interface property or reference is read-only, then the content or reference must also be read-only. If the component interface property or reference is not read-only, you can set the content appearance on the mobile page as display-only.

Custom Size	Specify the number of characters that this content occupies in a text field when it appears in a detail view. If not specified, the size is determined by the field length for a text field. You may use 40 characters for a long text field on a laptop and 20 characters for a long text field on a PDA.
Invisible	Select to exclude a property displayed in list view (other than a reference) from appearing in detail view. <ul style="list-style-type: none"> • If all fields on a tab are invisible, the tab is hidden. • To hide a tab with a reference, hide the reference. • To hide a tab with an HTML area, hide the long text field that is rendered as an HTML area. • To hide a tab where multiple collections and HTML areas are on the same tab, they must all be hidden.
Height in Lines	Enter the number of lines that appear in a long edit box before scrolling. The default value is 3.
Include in Header	Select to include this field in the header area of list and detail views. If you select Hyperlink and Include in Header, you can navigate to the parent object.
Phone Number	PeopleSoft Mobile Agent supports Pocket PC Phone Edition. To enable dialing a phone number, specify that the content of a text box is a telephone number by selecting Phone Number for the display view. A phone icon appears on the mobile device, enabling the user to dial that number.
Horizontal Layout	Select to lay out the content horizontally from the previous content.
Push Button	Select to make this field appear as a button that activates OnChange PeopleCode when clicked. If Display Only is also selected: <ul style="list-style-type: none"> • The button is disabled on a laptop. • The button is not displayed on a PDA.
Show Lookup Icon	Select to display the lookup button next to the field; also select a detail mobile page object. When the user clicks the lookup button, the specified detail mobile page object list view appears for selecting a new value.
Show Detail Icon	Select to display the detail button next to the field. When the user clicks the detail button, the specified detail view appears.
Group Label	Select to display a group divider with the property label as the group label.
Render as HTML Area	Select to specify that a long text field can contain HTML, such as an HTML tree.
Display Inline on Same Page	Select this option to display an HTML area on the same page. If not selected, the HTML area appears on a tab.
Time Picker	You can specify that a time field displayed in detail view includes a time picker. The field must be of type Time for this option to be available See Chapter 4, “Creating Mobile Pages,” Using the Time Picker, page 54.

Interval	Select a time interval to use in the drop-down for the page you are creating. For example, if you choose <i>15</i> , the times 12:00, 12:15, 12:30, and so on will appear in the drop-down.
Detail Mobile Page Object	Select the name of the mobile page to appear when a user clicks the detail button. The detail mobile page object renders the detail view displayed when the detail button is clicked and the prompt list displayed when the lookup button is clicked. If the selected reference content is display-only, the value appears as a link and the detail view is display-only.

Creating Mobile Page Content Properties for the PDA

You can accept the laptop properties as the properties for display on a PDA or override the laptop properties by selecting the Override Laptop Properties check box. If you override laptop properties, you can specify the same settings as for the laptop properties.

Defining the List View Layout

Specify horizontal space for list columns as a percentage. The developer can specify this percentage, or it can be calculated automatically. Specify percentages for list view allocation as laptop properties, which can be overridden for other devices.

If the percentage is calculated automatically, it is based on each field's size as a percentage of the total of all fields. For example, if there are four fields with widths of 128, 32, 20, and 20 characters, the total width is 200; the percentage for each field is 64, 16, 10, and 10 percent, respectively.

The percentage width definition applies across multiple devices. For example, using the preceding percentages, on a laptop page width of 500 pixels, the column widths are 320, 80, 50, and 50. On a PDA page width of 200 pixels, the column widths are 128, 32, 20, and 20 pixels.

Specify percentages for fields for which you want to control the width, and use the default value for the remaining fields. The field with a specified percentage width occupies the specified space, and the remaining field width percentages are calculated based on their percentages of the total remaining. For example, the application developer specifies a 60 percent column width for the first field, leaving 40 percent to be allocated automatically to the remaining fields. The remaining fields have widths of 32, 20, and 20, for a total of 72, representing 44, 28, and 28 percent of the balance of 40 percent of the device space. The final space allocation is 60 percent for the field defined by the developer and 18, 11, and 11 percent for the automatically calculated fields.

If the data to be displayed is larger than the allocated column width, the data wraps to the next line. The browser wraps both labels and values when possible. The browser does not break words, so if a single word exceeds the requested column width, the browser resizes the column to fit the word.

Defining the Detail View Layout

Fields on detail view pages are ordered based on the sequence in which the fields and references appear in Mobile Page Designer. Fields marked with the property Horizontal Layout are placed to the right of the preceding displayed property. A standard amount of space is displayed between the end of one field and the start of the next label or field. All labels displayed in the left-most position are left-aligned; the label column expands to the width of the longest label.

Label 1	<input type="text"/>	
Long Label 2	<input type="text"/>	<input type="text"/>
Label 3	<input type="text"/>	
Longer Label 4	<input type="text"/>	Label 5 <input type="text"/>

Sample label layout

The space allocated to each field is based on the field length, but it can be overridden by the Custom Size property. For example, a field defined with a length of 50 (but that usually only has 10–20 characters of data in it) might be defined with a custom size of 20 so that another field can be placed next to it without excess blank space in the field. The values are not truncated, but can be scrolled.

Building Mobile Pages That Include Other Mobile Pages

A mobile page displays data that is exposed on a component interface. The mobile page displays references on the same page (inline) and contained collections on the same page (inline) or on a tab. These references must be defined in the component interface on which the main mobile page is based, and their appearance must be defined on another mobile page. We sometimes refer to these as mini-pages, because of the small amount of information displayed. The mini-page defines the display appearance of each referenced element.

Each content element with Details Icon or Hyperlink selected must have a detail mobile page object defined, which formats the appearance of associated information. Create a mini-page for each such content element.

To create a referenced page:

1. Create a component interface.
2. Create a mobile page.
3. Define content properties.
4. Create another component interface.
5. Specify reference relationships.
6. Create another mobile page.
7. Specify reference properties.

Note. While developing mobile pages in PeopleSoft Application Designer, right-click on a reference property and select Open Related Mobile Page.

Using an HTML Area on Mobile Pages

You can create an HTML area on a mobile page in either list view or detail view, which can include an HTML tree. To set up an HTML area for mobile pages:

1. Add a long text field to the synchronizable component interface that the mobile page is built on.
2. Create a mobile page from the synchronizable component interface.

If you change the underlying component interface, any mobile page based on that component interface is *not* automatically changed.

3. On the Mobile Page Content Properties dialog box for the long text field, select Render as HTML Area.

4. Decide where the HTML area is to appear. HTML areas are either displayed inline on the same page or on a separate tab. To display the HTML area inline, select the Display Inline on Same Page check box for the property on the property page.
5. In the OnInit event, populate the HTML area using PeopleCode.
You can either use HTML in your PeopleCode, or you can use the GetHTMLText function to access an existing HTML definition. To use images in HTML, use the %IMAGE(Imagename) meta-HTML function.
6. Add the HTML definition to a project.
7. Specify the project that you added the HTML definition to as the project to be synchronized with the component interface.

On the Synchronization tab of the component interface properties, specify a project to be synchronized with the component interface using the Related Content Project field. This project should contain all the HTML definitions, as well as all the images to distribute to the mobile device.

Note. Include an HTML tree in an HTML area in much the same manner as for pages built for PeopleSoft Pure Internet Architecture.

Specify a project containing HTML and images for display in the HTML area on the Mobile Page Properties Related Content Project field.

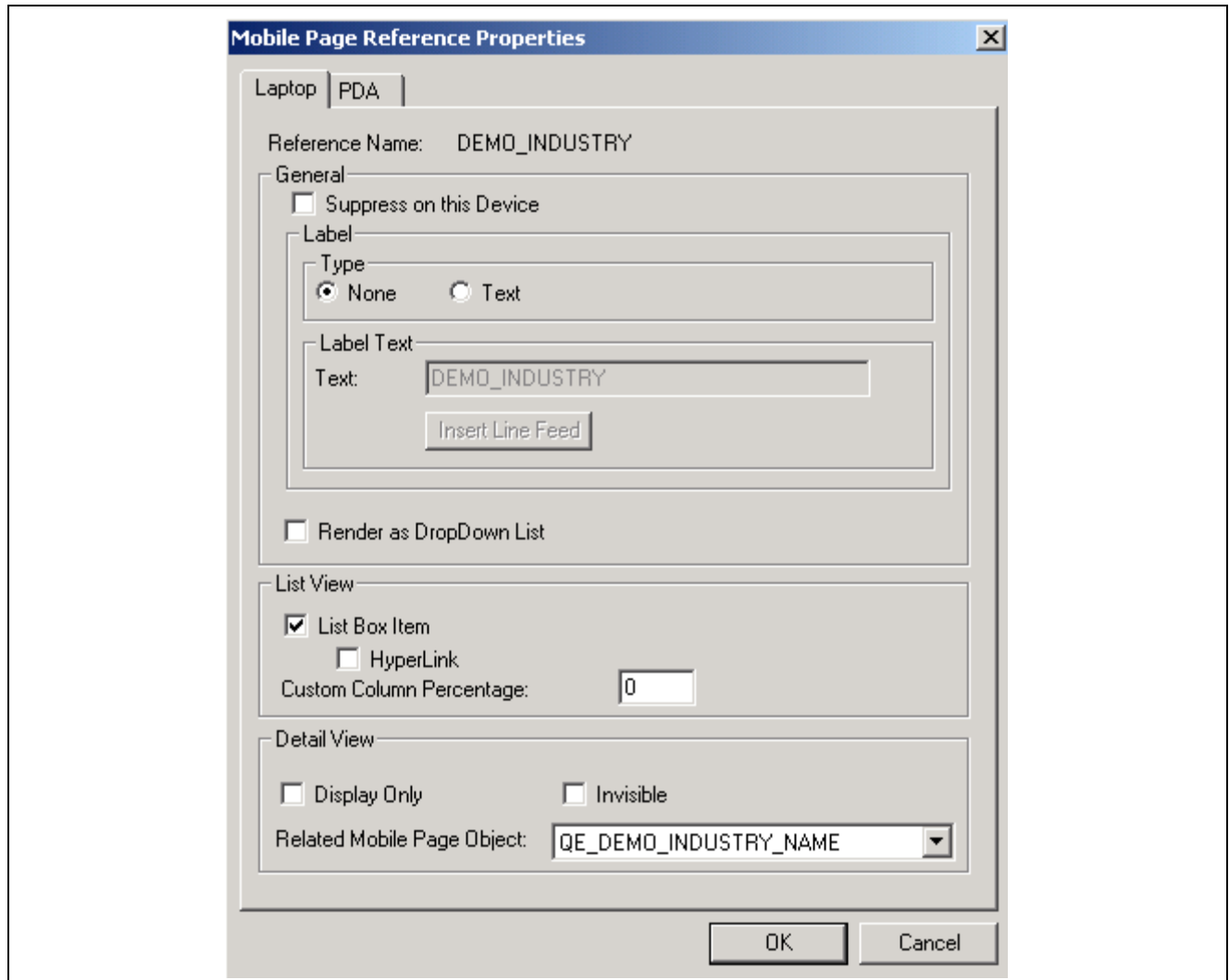
The following is an example of a test in PeopleCode:

```
/* HTML Area for Company */
%ThisMobileObject.QE_COMMENTS_LV0 = "<H1>This is HTML for Company Page,
testing Mobile HTML Area</H1><H2>This is more HTML, testing Mobile HTML Area</H2>";
```

See *Enterprise PeopleTools 8.48 PeopleBook: PeopleCode Language Reference*, “Meta-HTML,” %Image.

Setting Mobile Page Reference Properties

Access the Mobile Page Reference Properties dialog box by selecting a reference, right-clicking it, and selecting Content Properties.



Mobile Page Reference Properties dialog box: Laptop tab

The name of the reference appears as read-only text at the top of the dialog box.

- Suppress on this Device** Select to ensure that this content does not appear on the specified device (laptop or PDA). The remaining options become unavailable.
- None** Select None to omit a label for the field.
- Text** Select Text to enter the static text to appear on the label.
- Insert Line Feed** You can split a control label into multiple lines by positioning the cursor in the Text field where you want the split to occur and clicking Insert Line Feed. A thick, vertical bar character appears in the Text field at the split location, and the label is split into multiple lines.
- Render as DropDown List** Select to create a drop-down list box instead of the standard prompt list.
- List Box Item** Select to make the field a list box item. It displays the content in a:
- Top-level list view.
 - Collection list view.

	<ul style="list-style-type: none"> • Prompt list view. <p>Content is linked to enable navigation from a child to a parent object.</p>
Hyperlink	If List Box Item is selected, select Hyperlink to enable returning to the parent object from a prompt list view. If Hyperlink is not selected, the detail button does not appear in the list view.
Custom Column Percentage	Specify the percentage of the layout width that this property occupies when it appears in a list view. This field is available only if List Box Item is selected
Display Only	<p>Select to make the content read-only. If the component interface property or reference is read-only, then the content or reference must also be read-only. If the component interface property or reference is not read-only, you can set the content appearance on the mobile page as display-only.</p> <p>In the Mobile Page Reference Properties dialog box, if the selected content is specified as display-only, the detail view is also display-only.</p>
Invisible	<p>Select to exclude a property displayed in list view (other than a reference) from displaying in detail view.</p> <ul style="list-style-type: none"> • If all fields on a tab are invisible, the tab is hidden. • To hide a tab with a reference, hide the reference. • To hide a tab with an HTML area, hide the long text field that is rendered as an HTML area. • To hide a tab where multiple collections and HTML areas are on the same tab, they must all be hidden.
Related Mobile Page Object	Specify the name of the mobile page that formats the appearance of the related information. The specified mobile page must already exist. The reference component interface determines which pages are available for selection.

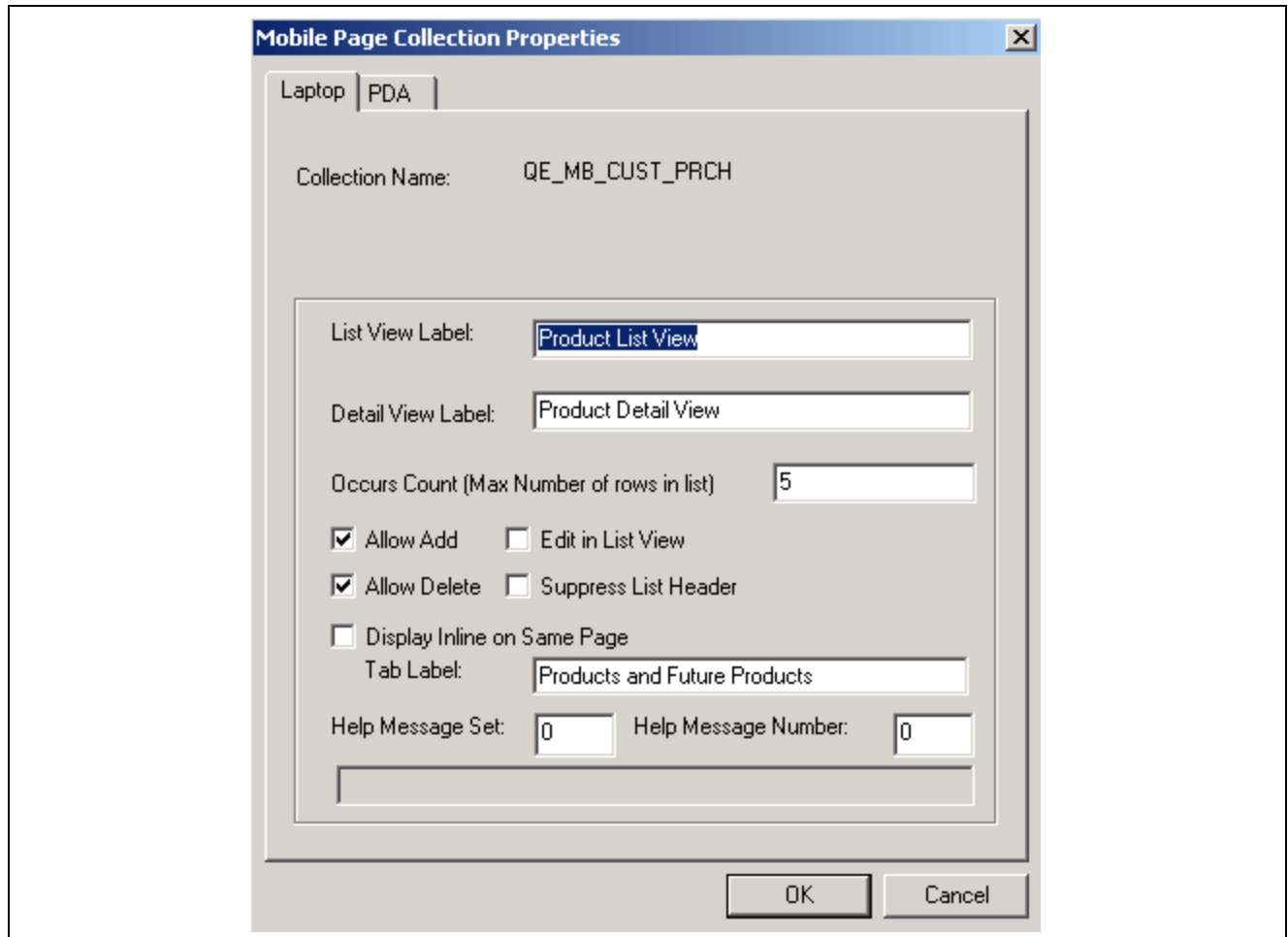
Note. Multiple collections can be on any tab. Collections are rendered in the order they are defined. If a collection is specified to be on a tab, then any collections that follow immediately and are specified to be inline on the same page are rendered on the same tab.

Creating Mobile Page Reference Properties for the PDA

You can accept the laptop properties as the properties for display on a PDA or override the laptop properties by selecting the Override Laptop Properties check box. If you override laptop properties, you can specify the same settings as for the laptop properties.

Setting Mobile Page Collection Properties

Access the Mobile Page Collection Properties dialog box by right clicking the collection, and selecting Content Properties from the pop-up menu.



Mobile Page Collection Properties dialog box: Laptop tab

A mobile page collection includes all of the detail rows displayed for a specified content element. Appearance is controlled similarly to mobile pages. The name of the collection appears at the top of the page as read-only text.

List View Label

List view pages are created from the top level of a component interface (the level zero), or from a collection in a component interface. A list view can also be thought of as a search page.

See [Chapter 4, “Creating Mobile Pages,” List Views, page 32](#).

Detail View Label

Detail view pages are created from the content properties (fields) in a mobile page. Where and how a property appears on a page is determined by the content properties page for that property (field).

See [Chapter 4, “Creating Mobile Pages,” Detail Views, page 34](#).

Occurs Count (Max Number of rows in list)

Enter the number of rows to display initially at runtime. Select a row greater than zero, or no information will appear.

Allow Add

Select to enable the user to add data.

Edit in List View

Select to enable users to add the row and create edits directly edit in table.

Allow Delete

Select to enable the user to delete data.

Suppress List Header	Select to hide the list view header on the page.
Display Inline on Same Page	Select to display an HTML area on the same page. If not selected, the HTML area appears on a detail page. If not selected, the HTML area appears on a tab.
Tab Label	If the properties appear on a separate page (Display Inline on Same Page is not selected), you can specify a tab label different from the list view label.
Help Message Set	Specify the help message set associated with this content for context-sensitive help. This applies only to fields, not references. The help for references comes from the mobile page to which you point.
Help Message Number	Specify the help message number associated with this content for context-sensitive help. This applies only to fields, not references. The help for references comes from the mobile page to which you point.

Creating Mobile Page Collection Properties for the PDA

You can accept the laptop properties as the properties for display on a PDA or override the laptop properties by selecting the Override Laptop Properties check box. If you override laptop properties, you can specify the same settings as for the laptop properties.

Displaying Prompts

This section discusses:

- Creating prompts on mobile pages
- Partial prompting

Creating Prompts on Mobile Pages

You can display a prompt to enable the user to select from a list.

To create a prompt on a mobile page follow these general steps:

1. Create a component interface.
2. Create two mobile pages.
3. Specify content appearance properties.
4. Create a reference.
5. Specify reference relationships.
6. Specify reference appearance properties.

Partial Prompting

In PeopleSoft Pure Internet Architecture, if a default value appears in the edit box, clicking the prompt button returns all rows. Or, you can enter a partial value in a prompt edit box, and the list view returns:

- Only rows containing the entered value, if there is a partial but not an exact match.
- Only the row matching the entered value, if there is an exact match.

In disconnected applications running under PeopleSoft Mobile Agent, if a default value appears in the edit box, clicking the prompt button returns all rows. However, if you enter a partial value in a prompt edit box, the list view returns:

- Only rows containing the entered value, if there is a partial but not an exact match.
- All rows, if the entered value exactly matches a listed value.

PeopleSoft Mobile Agent does not support partial prompts on fields using dynamic enumeration.

Using Dynamic Enumerations

The following sections discuss using dynamic enumerations in Mobile pages.

Understanding Dynamic Enumerations

PeopleSoft Mobile Agent dynamic enumerations enable the value displayed in one field to be dependent on the value in a related (referenced) field. This is the mobile version of display control/related field for pages created for PeopleSoft Pure Internet Architecture.

As shown in the following example, you can make the valid prompts for a State field dependent on the value in the referenced Country field, such that only valid U.S. states appear if *USA* is selected in the country field, or only valid Mexican states if *MX* is selected in the Country field.

Company Detail View

Company:

Country: Country Descrip: United States

State: State Descripti: California

Company detail view example

The following sections illustrates the steps required to create a dynamic enumeration of valid state values based on the value in the Country field.

Create the Records

Create three records:

1. Country, with a search key on the country field and an alternate search key on the description field.
2. A child record for the state, with search keys on the Country and State fields.
3. A grandchild record for a company, with search keys on the Country, State, and Company fields.

See *Enterprise PeopleTools 8.48 PeopleBook: PeopleSoft Application Designer*, “Creating Record Definitions”.

Create the Pages

Build one page for each of the records:

1. On the Country page, place Country and Description fields in level zero and Country and State fields in level one; these fields provide the basis for the subsequent mobile page references.

2. On the State page, place the Country, State, and State Description fields in level zero.
3. On the Company page, place the Company, Country, Country Description, State, and State Description fields in level zero.

Note. Dynamic enumerations process in the order of the fields (properties) on the page. Properties used in a dynamic enumeration must come before the property with the dynamic enumeration.

See *Enterprise PeopleTools 8.48 PeopleBook: PeopleSoft Application Designer*, “Designing Pages for Optimal Performance and Accessibility”.

Create the Components, Component Interfaces, and References

Create a component for each page.

Create a component interface for each component.

1. Keep the State component interface simple, with all properties on level zero.
2. Include properties for the Country component interface on both level zero and level one:
 - a. Drag the Country property from the component’s level one into the component interface’s State collection. Since it is now a duplicate property, you must rename this property.
 - b. Create a reference in the State collection of the Country component interface, relating the reference to the State component interface. Map the level one Country property to the Country property in the State component interface, and the level one State property to the State property in the State component interface.

The valid reference path should be in the form *current_ci.referenced_ci*, which identifies the originating component interface.

Note. To include both properties in the related key mapping, select both properties in the component interface workspace, then right-click and select Create Reference.

3. Keep all properties for the Company component interface at level zero, and include two references.
 - a. Create a singular reference on the Country property, relating it to the Country property in the Country component interface.
 - b. Create another reference on both the Country and State properties, relating them to their counterparts in the State component interface. The valid reference path should “walk” from the Country reference on the Company component interface to the State reference on the Country component interface, then to the Country reference in the State collection of the Country component interface, then to the State component interface.

Create the Mobile Pages

To create mobile pages:

1. On the Country mobile page, include the Country, Country Description, and the Country reference to the State property.
2. On the State mobile page, include only the State and State Description records.
3. On the Company mobile page, display the Company name, and Country and State fields with prompt buttons using the references.

The Country reference points to the Country mobile page, and the State reference points to the State mobile page.

Note. When you create the Company mobile page, you can delete Country and State properties imported from the component interface, because the references replace them.

Using the Time Picker and Calendar Prompts

This section discusses how to:

- Use the time picker.
- Create calendar prompts.

Using the Time Picker

You can specify that a time field displayed in detail view includes a time picker. The field must be of type Time for this option to be available.

On the Mobile Page Content Properties dialog box, select Time Picker, and select an interval from the drop-down box.

The time format displayed depends on the format specified in the user's personalizations.

On the mobile device, the time picker appears as a drop-down list. If the time field is not display-only and time picker is not enabled, then the field appears as a text edit box.

Time can be entered in either 12-hour or 24-hour format, regardless of the user's time format personalization. After a time value is entered, PeopleSoft Mobile Agent reformats the entry to the user's time format (12-hour or 24-hour format). If the time field is display-only, then the time appears as a non-editable text field.

Creating Calendar Prompts

PeopleSoft Mobile Agent supports a calendar prompt on fields of type Date. Calendar prompts can be included on search pages, on detail pages, and on editable list views.

To display the calendar prompt on detail mobile pages, the field must be of type Date and not display-only. To place a calendar prompt on the page, you must associate the date field with an edit box control and select Show Prompt Button in the Display Options of the record properties of the edit box.

See Also

Enterprise PeopleTools 8.48 PeopleBook: PeopleSoft Application Designer, "Creating Page Definitions," Prompt Fields

Registering Mobile Pages

You must register mobile pages, just as you must register pages built for PeopleSoft Pure Internet Architecture.

This section discusses how to:

- Register mobile pages in PeopleSoft Application Designer.
- Register mobile pages in the mobile portal.

Understanding Mobile Page Registration

Group mobile pages together as content references in folders in the mobile portal to provide a navigational scheme for the application's mobile pages. Create as many folders as necessary to provide access to mobile pages in a logical scheme.

The synchronization server searches for mobile pages requiring synchronization based on the folders registered in the Mobile folder in the mobile portal. Even if a mobile page is otherwise synchronizable, if it is not registered in the Mobile folder in the mobile portal, the mobile page is not synchronized.

Registration of mobile pages is like registration of any other content reference, with these requirements and exceptions:

- The Mobile folder is made up of only one level of folders.
These folders generally group mobile applications, but also include synchronization and alerts.
- Register mobile pages in a child folder to the Mobile folder.
Do not register mobile pages directly in the Mobile folder.
- Register only mobile pages in the Mobile folder's child folders.
No other objects are valid.
- If you delete a mobile page in PeopleSoft Application Designer, also delete the mobile page from its folder in the mobile portal.

Note. To be viewed and synchronized from a mobile device, a mobile page must be registered in a child folder of the Mobile folder in the mobile portal.

Registering Mobile Pages in Application Designer

In Mobile Page Designer, right-click on any property and select Register Mobile Page; or click the Register Mobile Page button. The Registration Wizard appears for you to enter the information that pertains to the mobile page.

See Also

Enterprise PeopleTools 8.48 PeopleBook: PeopleSoft Application Designer, “Using the Registration Wizard”

Registering Mobile Pages in the Mobile Portal

PeopleSoft delivers a mobile portal to enable registration of mobile pages. You can administer mobile pages from the mobile portal.

To register a mobile page in the mobile portal:

1. Sign in to the mobile portal.
You can change the default portal selection to mobile portal, or edit the following URL to reference the mobile portal:
`http://localhost/ps/ps/MOBILE/QE_LOCAL/c/UTILITIES.PORTAL_DEFINITIONS.GBL`
2. Select PeopleTools, Portal, Structure & Content.
The Root Structure and Content page appears.
3. On the Root Structure & Content page, select the Mobile folder.

The Mobile Structure and Content page appears.

4. Either select an existing folder for an application, or add a new folder for an application.
5. Add or edit content references.

On the content reference page, use the Mobile Device drop-down list to specify the mobile devices on which a mobile page is available.

You cannot add a folder at this level.

6. Click Save.

See Also

Enterprise PeopleTools 8.48 PeopleBook: Internet Technology, “Administering Portals,” Changing Default Portals

Maintaining Security

Administer security for PeopleSoft mobile pages the same way that you administer security for any other page created for PeopleSoft Pure Internet Architecture: through the Security function. Define security for each mobile page, rather than for the folder.

Note. Maintain security for both component interfaces and mobile pages. If the user does not have permission to an underlying component interface, the associated mobile page fails.

This section discusses how to:

- Add mobile pages to existing permission lists.
- Create new permission lists for mobile pages.
- Create roles for mobile users and associate permission lists to the roles.

See Also

Enterprise PeopleTools 8.48 PeopleBook: Security Administration, “Understanding PeopleSoft Security”

Adding Mobile Pages to Existing Permission Lists

To add a mobile page to a permission list:

1. Select PeopleTools, Security, Permissions & Roles, Permission Lists.
2. On the Find an Existing Values page, search for and select the appropriate permission list.
3. On the Pages page, click the Mobile Page Permissions link.
4. Specify the mobile page or pages, or click the Lookup Mobile Page Name link to look up a mobile page or range of pages.
5. Click OK.
6. Click Save.

Creating New Permission Lists for Mobile Pages

You can create a new permission list specifically for mobile pages and associate the permission list with appropriate roles.

To create a mobile page permission list:

1. Select PeopleTools, Security, Permissions & Roles, Permission Lists.
2. On the Add a New Value page, specify the name for a new permission list.
3. On the Pages page, click the Mobile Page Permissions link.
4. Specify the mobile page or pages, or click the Lookup Mobile Page Name link to look up a mobile page or range of pages.
5. Click OK.
6. Click Save.

Creating Roles for Mobile Users and Associating Permission Lists to the Roles

You can create one or more roles specifically for mobile users and associate permission lists that contain mobile pages to the roles.

To create a new mobile user role:

1. Select PeopleTools, Security, Permissions & Roles, Roles.
2. On the Add a New Value page, enter the new name and click Add.
3. On the General page, specify the description of the new role.
4. On the Permission Lists page, specify the permission list or lists to associate with this role.
5. Specify other attributes of this role as required.
6. Click Save.
7. Assign this mobile user role to a user profile.

See Also

Enterprise PeopleTools 8.48 PeopleBook: Security Administration, “Setting Up Permission Lists”

Enterprise PeopleTools 8.48 PeopleBook: Security Administration, “Setting Up Roles”

CHAPTER 5

Using PeopleSoft Mobile Agent

This section provides an overview of synchronization modes and discusses how to:

- Initialize mobile devices.
- View and respond to alerts.
- Optimize the personal digital assistant (PDA) user experience.
- Enable disconnected operation in Microsoft Internet Explorer.
- Use the About page.
- Use homepages.

Note. This chapter includes information about using PeopleSoft Mobile Agent that is not specific to an application.

Understanding Synchronization Modes

The synchronization mode determines the data that is transmitted during synchronization: application metadata, business data, or both.

Four synchronization modes are available.

This section discusses:

- Upload Changes mode.
- Update Business Data mode.
- Update Applications mode.
- Bootstrap Synchronization mode.

Upload Changes Mode

The Upload Changes mode enables a quick update of changes from the mobile device to the server. Data received from the server is limited to error responses to update requests and server-side changes to objects that you updated. To receive updates to all data, use Update Business Data mode.

Update Business Data Mode

The Update Business Data mode enables a complete reconciliation of the business data on the mobile device with the data on the server. All updates are uploaded to the server for processing, and errors are returned to the mobile device. All existing metadata on the mobile device is validated against the server. If any metadata is found to be missing or out of date on the server, the process is stopped, and an error message appears that explains how to correct the problem. Then, modified or new data on the server is downloaded to the mobile device. If data that you modified on the mobile device generates an error, and the same data was modified on the server, the new data is not retrieved until you reconcile the errors. To send only your changes to the server, use Upload Changes mode.

Update Applications Mode

The Update Applications mode uploads all changes from the mobile device. If errors occur during this upload, the upload terminates. Resolve all errors before performing Update Applications again. If the upload is successful, Update Applications retrieves the current version of the business applications. If the applications load successfully, Update Business Data is performed to load business data onto the mobile device. Update Applications is irreversible.

Bootstrap Synchronization Mode

Bootstrap Synchronization mode starts automatically when you sign in to an uninitialized mobile device. Bootstrap synchronization loads business applications if the mobile device has never been initialized. If the applications successfully load, an Update Business Data synchronization is performed to load business data onto the mobile device.

Note. Some applications allow your input into the business data downloaded to your mobile device. In this case, specify your inputs and then perform an Update Business Data synchronization.

Initializing Mobile Devices

Initializing a mobile device first requires a bootstrap synchronization. To run bootstrap synchronization:

1. Verify that the PSMOBILE.INI file in your WINNT folder identifies the server you will use to transfer PeopleSoft Mobile Sales data between the server and the remote device when you launch the application.

This URL should be identified in the SyncGateway parameter. (For example, SyncGateway=http://psuser110200/SyncServer).
2. Launch the PeopleSoft Mobile Agent by selecting Start, Programs, PeopleSoft Mobile Agent, Start PeopleSoft Mobile Agent.

If PeopleSoft Mobile Agent is already running on the local machine, you can stop the application by selecting Start, Programs, PeopleSoft Mobile Agent, Stop PS Mobile Agent.
3. From the Start menu of your computer, select Start, Programs, PeopleSoft Mobile Agent, PS Mobile Application. If the device has not previously been initialized, the PeopleSoft Mobile Device Bootstrap page appears.
4. Sign in to the application with your user ID and password.

The userID, such as the delivered userID/password, FLDSLSREP/FLDSLSREP, identifies the appropriate application metadata (application definitions) and instance data (business data) to be downloaded to the device. When the sign on information has been entered, the synchronization begins, and the user must wait for this process to complete before launching the application. Subsequent synchronizations do not require a complete synchronization of both metadata and instance data, but only upload changes from the device to the server and reconcile changes between the device and server.

5. Click Synchronize.

The PeopleSoft Mobile Synchronization Results page appears, showing the progress of your bootstrap synchronization. When complete, check for alerts or notifications.

Viewing and Responding to Alerts

This section discusses how to:

- View and respond to synchronization errors.
- View notifications.
- View status.

Viewing and Responding to Synchronization Errors

Click the Status link to access the Mobile Device Status page.

The synchronization server writes synchronization errors, such as unresolvable conflicts, to an error log, which the user or administrator can read. A summary of synchronization results, alerts, and completed updates appears on the Mobile Device Status page. Use the information in the error log to correct errors or to roll back changes so that synchronization can complete successfully. Each synchronization deletes the previous error list and creates a new error list.

From the application menu, select Alerts, Error List to view synchronization errors. Both system and application errors appear in the Synchronization Errors list.

- System errors display an ID number and an object type of *Non specific error*.

Click the error ID link to view details about the error.

Click Delete Error to remove the error from the error list.

- Application errors display an ID number, an object type of the business object on which the error occurred, and key information listing the object keys involved.

Click the error ID link to view details about the error. The business object generating the error appears below the error message, enabling the user to reenter data or note the update requiring attention.

Objects generating application errors can be rolled back to the pre-synchronization state by clicking the link that is appropriate to the change requested:

- Cancel Update
- Undo Delete
- Cancel Add

Reapplying Changes Rejected Due to Conflict

When a mobile device update is rejected, the server data is sent to the device and the device data is stored temporarily. When you view the error detail, you can reapply changes. The detail view initially displays the server data. You can accept that data by doing nothing, or reapply your changes. Reapplied changes are synchronized to the server the next time that you synchronize. Because your changes are applied to the current server data, the device update is accepted on synchronization, unless other changes are made to the same data on the server.

Re-Apply My Changes

Click to apply your changes. The server data merged with your changes is then displayed in the detail view. You can validate that the merged data is correct and make any additional changes required.

Save

Click to save the reapplied data. You can click the Return to list button to return to the error list and delete the error by clicking the Delete Error link. However, each subsequent synchronization deletes prior error lists and creates a new error list.

Viewing Notifications

Select Alerts, Notifications from the application menu to access the Notifications page.

During synchronization, the synchronization server delivers any user notifications to the mobile device. This page lists notifications received, including a time stamp, the message, and a link to view the complete notification and related object. When done viewing the notification, you can delete the notification, then save.

Viewing Status

Click Status to view a status report for the mobile device.

You can remove all metadata and business data from the device and prepare it to receive a new bootstrap synchronization by clicking the Reset the mobile device link.

Optimizing the PDA User Experience

To minimize the need for horizontal scrolling on a Pocket PC PDA, set Microsoft Pocket Internet Explorer to the smallest legible text size. From the Microsoft Pocket Internet Explorer toolbar, select View, Text Size. Then, select either Smaller or Smallest.

Enabling Disconnected Operation in Microsoft Internet Explorer

Disconnected use of PeopleSoft Mobile Agent requires the browser to connect to <http://localhost:8080>, also known as IP address 127.0.0.1. Microsoft Internet Explorer might not recognize this connection unless the user disables the Work Offline option and prevents Microsoft Internet Explorer from dialing out for a connection.

This section discusses how to:

- Disable the Work Offline option.

- Prevent Microsoft Internet Explorer from dialing out for a connection.

Disabling the Work Offline Option

To disable Work Offline, from the Microsoft Internet Explorer File menu, cancel the Work Offline selection.

Preventing Microsoft Internet Explorer from Dialing Out for a Connection

To prevent Microsoft Internet Explorer from dialing out for a connection:

1. Select Tools, Internet Options.
2. On the Connections tab, select Never dial a connection.
3. Click OK.

Using the About Page

The About page displays information about the PeopleTools release, platform, browser, synchronization gateway and port, and the version of PeopleSoft Mobile Agent, which can be useful when troubleshooting.

Access the About page on a laptop by pressing CTRL + J (the same combination as in PeopleSoft Pure Internet Architecture).

Access the About page on a PDA by clicking the About link on any Help page.

Using the Homepage

You can select a mobile homepage that appears after signing on to your mobile device.

Specify a default mobile page in Personalizations on the My System Profile page.

Personalizations

Your current language preference is: English

My preferred language for reports and email is: English

Currency Code: USD

Default Mobile Page: MY_HOME_MP

My System Profile page, Personalizations region

The homepage appears on your device after your next synchronization.

Glossary of PeopleSoft Enterprise 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 Enterprise Human Resources, PeopleSoft Enterprise Benefits

	Administration, PeopleSoft Enterprise Stock Administration, and the COBRA Administration feature of the Base Benefits business process.
action template	In PeopleSoft Enterprise 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	<p>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.</p> <p>In PeopleSoft Enterprise Performance Management, the work of an organization and the aggregation of actions that are used for activity-based costing.</p> <p>In PeopleSoft Enterprise Project Costing, the unit of work that provides a further breakdown of projects—usually into specific tasks.</p> <p>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.</p>
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 Enterprise 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 Enterprise 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.

Application Messaging	PeopleSoft Application Messaging enables applications within the PeopleSoft Enterprise product family to communicate synchronously or asynchronously with other PeopleSoft Enterprise and third-party applications. An application message defines the records and fields to be published or subscribed to.
AR specialist	Abbreviation for <i>receivables specialist</i> . In PeopleSoft Enterprise 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 Enterprise 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 Enterprise 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 Enterprise Business Planning, the lowest level time period in a calendar.
benchmark job	In PeopleSoft Enterprise Workforce Analytics Solution, 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 Enterprise 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 activity	The name of a subset of a detailed business process. This might be a specific transaction, task, or action that you perform in a business process.
business event	In PeopleSoft Enterprise Receivables, defines the processing characteristics for the Receivable Update process for a draft activity. In PeopleSoft Enterprise 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 process	A standard set of 17 business processes are defined and maintained by the PeopleSoft Enterprise product families and are supported by the Business Process Engineering group. An example of a business process is Order Fulfillment, which is a business process that manages sales orders and contracts, inventory, billing, and so forth. See also <i>detailed business process</i> .
business task	The name of the specific function depicted in one of the business processes.
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 Enterprise 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 Enterprise Catalog Management, translates values from the catalog source data to the format of the company's catalog.
catalog partner	In PeopleSoft Enterprise 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 Enterprise 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 Enterprise 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 <i>course</i> .
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 <i>sub-classification</i> .
clearance	In PeopleSoft Enterprise Campus Solutions, the period of time during which a constituent in PeopleSoft Enterprise 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 <i>copy</i> 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 <i>population</i> and <i>division</i> .
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, PeopleTools maintains a set of collections (one per language code) for each search index object.
collection rule	In PeopleSoft Enterprise 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 <i>communication key</i> .
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 <i>comm keys</i> or <i>speed keys</i>) 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.
component interface	A component interface is a set of application programming interfaces (APIs) that you can use to access and modify PeopleSoft Enterprise database information using a program instead of the PeopleSoft client.
condition	In PeopleSoft Enterprise 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 Enterprise. 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-plus contract line	A rate-based contract line associated with a fee component of Award, Fixed, Incentive, or Other. Rate-based contract lines associated with a fee type of None are not considered cost-plus contract lines.
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 cube	In PeopleSoft Analytic Calculation Engine, a data cube is a container for one kind of data (such as Sales data) and works with in tandem with one or more dimensions. Dimensions and data cubes in PeopleSoft Analytic Calculation Engine are unrelated to dimensions and online analytical processing (OLAP) cubes in PeopleSoft Cube Manager.
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 Enterprise Supply Chain Management, identifies the method by which goods are shipped to their destinations (such as truck, air, and rail). 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.
detailed business process	A subset of the business process. For example, the detailed business process named Determine Cash Position is a subset of the business process called Cash Management.
dimension	In PeopleSoft Analytic Calculation Engine, a dimension contains a list of one kind of data that can span various contexts, and it is a basic component of an analytic model. Within the analytic model, a dimension is attached to one or more data cubes. In PeopleSoft Cube Manager, a dimension is the most basic component of an OLAP cube and specifies the PeopleSoft metadata to be used to create the dimension's rollup structure. Dimensions and data cubes in PeopleSoft Analytic Calculation Engine are unrelated to dimensions and OLAP cubes in PeopleSoft Cube Manager.
directory information tree	In PeopleSoft Enterprise 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 <i>population</i> and <i>cohort</i> .
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 Enterprise 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 Enterprise 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 <i>Enterprise Incentive Management ledger</i> . 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 Enterprise General Ledger, a related group of intercompany accounts that is processed during consolidations.
entry event	In PeopleSoft Enterprise 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 Enterprise 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 Enterprise Human Resources, also refers to an incident that affects benefits eligibility.
event propagation process	In PeopleSoft Enterprise 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. PeopleSoft Enterprise Enterprise Sales Incentive Management uses this mechanism to implement splits, roll-ups, and so on. Event propagation determines who receives the credit.
exception	In PeopleSoft Enterprise Receivables, an item that either is a deduction or is in dispute.

exclusive pricing	In PeopleSoft Enterprise 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 Enterprise 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 Enterprise 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 <i>donor pyramid</i> describing the number and size of gifts that you expect will be needed to successfully complete the campaign in PeopleSoft Enterprise 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 <i>general ledger business unit</i> . A unit in an organization that is an independent entity for accounting purposes. It maintains its own set of accounting books. See also <i>business unit</i> .
GL entry template	Abbreviation for <i>general ledger entry template</i> . 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 <i>General Ledger Interface process</i> . 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 Enterprise Billing and Receivables, a posting entity that comprises one or more transactions (items, deposits, payments, transfers, matches, or write-offs). In PeopleSoft Enterprise 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 Enterprise 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, and user interaction objects.
incentive rule	In PeopleSoft Enterprise 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 Enterprise 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 <i>update access</i> .
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.
integration	A relationship between two compatible integration points that enables communication to take place between systems. Integrations enable PeopleSoft Enterprise applications to work seamlessly with other PeopleSoft Enterprise applications or with third-party systems or software.
integration point	An interface that a system uses to communicate with another PeopleSoft Enterprise application or an external application.
integration set	A logical grouping of integrations that applications use for the same business purpose. For example, the integration set <code>ADVANCED_SHIPPING_ORDER</code> contains all of the integrations that notify a customer that an order has shipped.
item	In PeopleSoft Enterprise Inventory, a tangible commodity that is stored in a business unit (shipped from a warehouse). In PeopleSoft Enterprise 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 Enterprise 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 Enterprise 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 <i>key performance indicator</i> . 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 <i>Lightweight Directory Access Protocol (LDAP) Data Interchange Format file</i> . Contains discrepancies between PeopleSoft Enterprise 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 <i>rates</i>) 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 <i>learning management system</i> . In PeopleSoft Enterprise Campus Solutions, LMS is a PeopleSoft Enterprise 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 Enterprise Inventory, identifies a group of goods that are shipped together. Load management is a feature of PeopleSoft Enterprise Inventory that is used to track the weight, the volume, and the destination of a shipment.
local functionality	In PeopleSoft Enterprise 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 <i>1</i> —is the address you use most often and may be different from the main address.
logistical task	In PeopleSoft Enterprise 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 <i>3C engine</i> .
match group	In PeopleSoft Enterprise 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 <i>PeopleSoft MultiChannel Framework server</i> . Comprises the universal queue server and the MCF log server. Both processes are started when <i>MCF Servers</i> is selected in an application server domain configuration.
merchandising activity	In PeopleSoft Enterprise 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 SQL substrings. They are used in functions that pass SQL strings, such as in SQL objects, the <i>SQLExec</i> 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 Enterprise 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 Enterprise 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 <i>need analysis</i> .
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 Enterprise and non-PeopleSoft Enterprise 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 <i>compensation object</i> .
partner	A company that supplies products or services that are resold or purchased by the enterprise.
pay cycle	In PeopleSoft Enterprise 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 Enterprise 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 Enterprise component processor. PeopleCode generates results based on existing data or user actions. By using various tools provided with PeopleTools, external services are available to all PeopleSoft Enterprise applications wherever PeopleCode can be executed.
PeopleCode event	See <i>event</i> .
PeopleSoft Pure 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 Enterprise 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 Enterprise 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 <i>division</i> and <i>cohort</i> .
portal registry	In PeopleSoft Enterprise 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 Enterprise 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	A PeopleSoft Enterprise or third-party product. PeopleSoft organizes its software products into product families and product lines. Interactive Services Repository contains information about every release of every product that PeopleSoft sells, as well as products from certified third-party companies. These products appear with the product name and release number.
product category	In PeopleSoft Enterprise Incentive Management, indicates an application in the PeopleSoft Enterprise Incentive Management suite of products. Each transaction in the PeopleSoft Enterprise Incentive Management system is associated with a product category.
product family	A group of products that are related by common functionality. The family names that can be searched using Interactive Service Repository are Oracle's PeopleSoft Enterprise, PeopleSoft EnterpriseOne, PeopleSoft World, and third-party, certified partners.
product line	The name of a PeopleSoft Enterprise product line or the company name of a third-party certified partner. Integration Services Repository enables you to search for integration points by product line.
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 Enterprise 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 Enterprise Project Costing, an individual transaction line that represents a cost, time, budget, or other transaction row.
promotion	In PeopleSoft Enterprise 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 <i>record input value-added tax flag</i> . Within PeopleSoft Enterprise 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 Enterprise Order Management, Billing, or Receivables, where it is assumed that you are always recording only output VAT, or in PeopleSoft Enterprise Expenses, where it is assumed that you are always recording only input VAT.
record output VAT flag	Abbreviation for <i>record output value-added tax flag</i> . See <i>record input VAT flag</i> .
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 Enterprise Sales Incentive Management, system objects that represent the sales organization, such as territories, participants, products, customers, and channels.
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 Enterprise 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 <i>real-time event notification server</i> in PeopleSoft MultiChannel Framework.
requester	In PeopleSoft Enterprise 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.
SCP SCBM XML message	Abbreviation for <i>Supply Chain Planning Supply Chain Business Modeler Extensible Markup Language message</i> . Supply Chain Business Modeler uses XML as the format for all data that it imports and exports.
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 Enterprise Manufacturing, the ability to track the composition of a specific, serial-controlled item.
serial in production	In PeopleSoft Enterprise 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	<p>In PeopleSoft Enterprise Campus Solutions, time elements that subdivide a term into multiple time periods during which classes are offered. In PeopleSoft Enterprise 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.</p> <p>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.</p>
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 Enterprise 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 Enterprise application server, access a second PeopleSoft Enterprise 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 Enterprise 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 <i>communication key</i> .
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 Enterprise, this is equivalent to the Alternate Account (ALTACCT) ChartField.
step	In PeopleSoft Enterprise Sales Incentive Management, a collection of sections in a plan. Each step corresponds to a step in the job run.
storage level	In PeopleSoft Enterprise 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 Enterprise 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 <i>basis</i> 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 Enterprise Receivables, an activity that defines how the system generates accounting entries for the general ledger.
system source	<p>The system source identifies the source of a transaction row in the database. For example, a transaction that originates in PeopleSoft Enterprise Expenses contains a system source code of BEX (Expenses Batch).</p> <p>When PeopleSoft Enterprise Project Costing prices the source transaction row for billing, the system creates a new row with a system source code of PRP (Project Costing pricing), which represents the system source of the new row. System source codes can identify sources that are internal or external to the PeopleSoft Enterprise system. For example, processes that import data from Microsoft Project into PeopleSoft Enterprise applications create transaction rows with a source code of MSP (Microsoft Project).</p>
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 Enterprise, you use templates to build a page by combining HTML from a number of sources. For a PeopleSoft Enterprise portal, all templates must be registered in the portal registry, and each content reference must be assigned a template.
territory	In PeopleSoft Enterprise Sales Incentive Management, hierarchical relationships of business objects, including regions, products, customers, industries, and participants.
third party	A company or vendor that has extensive PeopleSoft Enterprise product knowledge and whose products and integrations have been certified and are compatible with PeopleSoft Enterprise applications.
3C engine	Abbreviation for <i>Communications, Checklists, and Comments engine</i> . 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 <i>Communications, Checklists, and Comments group</i> . 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 Enterprise 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 Enterprise Projects.

trace usage	In PeopleSoft Enterprise 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 Enterprise 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 <i>locked</i>) 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 Enterprise 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 <i>inquiry access</i> .
user interaction object	In PeopleSoft Enterprise Sales Incentive Management, used to define the reporting components and reports that a participant can access in his or her context. All PeopleSoft Enterprise 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 Enterprise 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 <i>value-added tax exception</i> . 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 <i>value-added tax exempt</i> . 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 <i>value-added tax exoneration</i> . An organization that has been granted a permanent exemption from paying VAT due to the nature of that organization.
VAT suspension	Abbreviation for <i>value-added tax suspension</i> . An organization that has been granted a temporary exemption from paying VAT.
warehouse	A PeopleSoft Enterprise data warehouse that consists of predefined ETL maps, data warehouse tools, and DataMart definitions.
work order	In PeopleSoft Enterprise 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 Enterprise 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 link	The XML Linking language enables you to insert elements into XML documents to create a links between resources.
XML schema	An XML definition that standardizes the representation of application messages, component interfaces, or business interlinks.
XPI	Abbreviation for <i>eXtended Process Integrator</i> . PeopleSoft XPI is the integration infrastructure that enables both real-time and batch communication with JD Edwards EnterpriseOne applications.
yield by operation	In PeopleSoft Enterprise Manufacturing, the ability to plan the loss of a manufactured item on an operation-by-operation basis.
zero-rated VAT	Abbreviation for <i>zero-rated value-added tax</i> . 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.

Index

A

- About page 63
- additional documentation x
- AE_SYNCIDGEN 21
- alerts
 - application errors 61
 - notifications 62
 - re-applying changes 62
 - system errors 61
- Allow Add field 39
- Allow Delete field 39
- appearance of pages 41
- Application Designer, *See* PeopleSoft Application Designer
- application error alerts 61
- application fundamentals ix
- application messages 25
- application servers, *See* synchronization server
- Application/vnd.peoplesoft-mobile-xml 5
- Application/vnd.peoplesoft-mobile-zlib 5
- applications, disconnected, *See* disconnected applications
- ATTACHMENT reference property 29
- attachments
 - binary 30
 - security 30
 - setting up 29
 - text 30
- ATTACHUSERFILE 29
- automatic startup 3

B

- BEA WebLogic 2
- binary attachments 30
- bootstrap databases 5
- bootstrap synchronization 15, 60, 62
- browser limitations 39
- business data
 - distributing 10, 11
 - synchronizing 11
 - two-way synchronization 11
 - update mode 60
- business objects definition 12

C

- calendar prompts 54
- collections 33, 49
- column percentages 43, 45, 49
- comments, submitting xiv
- common elements xiv
- component IDs 25
- Component Interface Tester 26
- component interfaces
 - adding to permission lists 26
 - bootstrap synchronization 15
 - conflict resolution 16
 - creating 13
 - creating mobile pages 14
 - creating synchronizable 24
 - data distribution filters 14
 - defining business objects 12
 - defining object relationships 13
 - defining synchronizable 23
 - derived properties 18
 - MOBILE_PREFS_CI 4
 - personalization 4
 - related component interface field 28
 - related key mapping 28
 - required properties 13
 - resolving conflicts 14
 - synchronizable 15, 29
 - testing 26
 - using references 27
 - valid reference paths 28
- conflict resolution
 - custom method 24
 - custom resolution rules 17
 - declarative rules 14
 - device wins 16, 24
 - managing unresolvable conflicts 16
 - reapplying changes 62
 - server wins 16, 24
 - synchronization resolutions 16
- ConflictAlgorithm 17
- connect ID 8
- contact information xiv
- content
 - defining 41
 - detail views 34

- display-only 43
 - properties 32, 41
 - related projects 25
- content reference label 32
- correcting errors 39
- Create Reference dialog box 28
- creating triggers 21
- cross-references xiii
- currency setup 3, 4
- custom sizing 44
- Customer Connection website x

D

- data
 - distributing 12
 - distributing business data 10, 11
 - distributing metadata 10, 11
 - filtering 12, 14
 - synchronizing 11
 - See Also* data synchronization
- data synchronization
 - AE_SYNCIDGEN 21
 - application messages 25
 - business data 11
 - conflict resolution 16
 - device-side refresh 11
 - HTTPS 11
 - initializing synchronization IDs 21
 - metadata distribution 11
 - overview 11, 15
 - pushing new data 11
 - synchronizable component
 - interfaces 15
 - two-way 11
- database triggers 18
- date formats 3, 4, 35
- Debug field 6
- DebugDatabase 7
- DebugEnabled 7
- debugging 5
- DebugIPAddress 7
- DebugOperid 7
- DebugPort 7
- declarative conflict rules 14
- derived records 18
- derived references 27
- Detail button 45
- detail icons 44
- detail views
 - example 34

- labels 38, 50
 - overview 34
- device wins conflict rule 16
- device-side data refresh 11
- disconnected applications 9
- display inline on same page 44
- display only 49
- display-only content 43
- distributing Mobile Agent, *See* installing Mobile Agent
- documentation
 - printed x
 - related x
 - updates x
- domain ID 8
- domain name 8
- downloading data 25
- drop-down lists 48
- dynamic enumerations 28, 52

E

- Edit Reference dialog box 29
- effective-dated tables 18
- encryption in synchronization gateway 12
- enumerations, dynamic 52
- error messages 61
- errors
 - application 61
 - correcting 39
 - deleting 62
 - during uploads 60
 - non-specific 61
 - synchronization 61
- Exclude from Go To Drop Down 39

F

- fields
 - display order 45
 - length restrictions 44
 - widths 45
- filtering attachments 30
- filtering data 12, 14
- firewalls 5
- foreign keys 27

G

- gateway 3
- glossary 65
- group label 44

H

- height in lines 44
- help messages 39, 43, 51
- home directory 6
- Home page 63
- horizontal layouts 44
- HTML areas
 - creating for mobile pages 46
 - displaying on same page 44
 - hiding tabs 44
 - including HTML trees 47
 - long text fields 44
- HTTP messages 5
- hyperlinks 43, 49

I

- IBM WebSphere 2
- icons
 - detail 44
 - lookup 44
- immutable synchronization ID 13
- implementing Mobile Agent, *See* installing Mobile Agent
- include in header 44
- indexes 20
- initialization
 - synchronization IDs 21
- initializing 60
 - bootstrap synchronization 60
 - record-level auto-update system ID 20
- Insert Field dialog box 19, 20
- insert line feed 43
- Insert Line Feed field 43
- installing Mobile Agent
 - BEA WebLogic 2
 - distributing installation program 2
 - distribution methods 2
 - IBM WebSphere 2
 - installation web page 2
 - installing PeopleSoft applications 1
 - laptop setup file 3
 - locating install program 2
 - mobile portal 2
 - OAS web server 2
 - PDA setup file 3
 - user profiles 1
 - using setup wizard 2
- instances
 - collections 33

- data 15
- list view pages 32
- multiple 33
- synchronization IDs 18
- international settings 3
- intervals of time 45
- Invisible field 44, 49

L

- labels
 - content reference 32
 - detail view 38
 - group 44
 - label IDs 43
 - record field table (RFT) 43
 - splitting 43
 - tab labels 51
 - wrapping 45
- language settings 3, 4, 6
- laptop setup file 3
- laptops 40
- laptops and mobile pages 13
- LASTUPDTM 18
- layouts
 - column percentages 49
 - column widths 43
 - detail views 45
 - horizontal 44
 - list view 45
 - sample label 46
- List Box Item field 43
- list box items 48
- list boxes 43
- list view header 33
- list views
 - collections 33
 - defining 45
 - example 32
 - labels 38
 - lables 50
 - layouts 45
 - maximum number of rows 39
 - overview 32
 - suppressing headers 34
- local time zone settings 3, 4
- lookup icons 44

M

- manual startup 3

- market rates 4
 - max-timeslice 8
 - MaxCachedObjects 6
 - MaxCachedStatements 6
 - merge algorithms 17
 - message catalog objects 4
 - message set number 25
 - messages
 - alerts 61
 - See Also* notifications
 - application 25
 - help messages 39
 - HTTP 5
 - issuing with PeopleCode 25
 - synchronizing 25
 - metadata
 - business data 60
 - distribution 10, 11
 - removing 62
 - Microsoft Internet Explorer
 - browser connections 62
 - disabling work offline option 63
 - stopping dial out connections 63
 - Microsoft Pocket Internet Explorer 62
 - mini-pages, *See* references
 - Mobile Agent
 - About page 63
 - administering 1
 - application elements 31
 - detail views 34
 - homepage 63
 - installing 2
 - list views 32
 - navigation menu 31
 - overview 59
 - personalizing 3, 63
 - stopping Mobile Agent 60
 - synchronizing 59
 - mobile applications
 - defining 13
 - defining user interfaces 14
 - mobilizing 23
 - mobile classes 12
 - mobile database distribution 5
 - Mobile navigation menu 32
 - Mobile Object Manager 10
 - Mobile Page Collection Properties dialog box
 - Laptop tab 50
 - PDA tab 51
 - Mobile Page Content Properties dialog box
 - Laptop tab 42
 - PDA tab 45
 - Mobile page processing 10
 - Mobile Page Properties dialog box
 - General tab 37
 - Laptop tab 38
 - PDA tab 40
 - Mobile Page Reference Properties dialog box
 - Laptop tab 48
 - PDA tab 49
 - mobile pages
 - building 36
 - building mobile pages that include references 46
 - creating 13, 14, 36
 - creating HTML areas 46
 - defining appearance 37
 - defining content 40
 - displaying a prompt 51
 - registration 54
 - registration exceptions 55
 - setting collection properties 49
 - setting reference properties 47
 - mobile portal
 - installation program 2
 - page registration 55
 - synchronizing pages 55
 - MOBILE_PREFS_CI 4, 26
 - My Personalizations page 26
 - My System Profile page 63
- N**
- navigation
 - between child and parent objects 43
 - excluding pages from drop down 39
 - menu 31
 - notes xiii
 - notifications 61, 62
- O**
- OAS web server 2
 - object persistence 10
 - object relationships 13
 - occurs count 39
 - OnConflict 16
 - OnConflict PeopleCode 16, 17
 - OnSelect events 14

optimizing mobile pages 62
 overriding laptop properties 40

P

page width 45
 pages, mobile, *See* mobile pages
 parameters
 date and time 5, 26
 SyncGateway 60
 partial prompts 51
 PDA
 creating pages 13
 PDA tab 39
 setup file 3
 PeopleBooks
 ordering x
 PeopleCode
 ATTACHUSERFILE 29
 HTML area test example 47
 issuing messages 25
 OnConflict 16, 17
 OnSelect 14
 SetSyncID 20
 PeopleCode conflict resolution 17
 PeopleCode events 16
 PeopleCode, typographical
 conventions xii
 PeopleSoft Application Designer
 Component Interface Tester 26
 creating HTML areas on mobile
 pages 46
 creating mobile pages 36
 defining mobile applications 13
 defining mobile page appearance 37
 defining mobile page content 40
 Insert Field dialog box 20
 Mobile Page 14
 registering mobile pages 55
 setting mobile page collection
 properties 49
 setting mobile page reference
 properties 47
 PeopleSoft Application Engine 21
 PeopleSoft Mobile Device Bootstrap
 page 60
 PeopleSoft Mobile Synchronization Results
 page 61
 permission lists
 adding component interfaces 26
 adding to existing lists 56

 associating with roles 57
 creating new lists 57
 for mobile users 26
 security 56
 personal digital assistants (PDAs), *See*
 PDAs
 personalization component interface 4
 personalization settings
 component interfaces 4
 runtime 3
 personalizations 63
 phone numbers 44
 picker, time 54
 pixels 45
 port 6
 preferred language 3
 prerequisites ix
 primary-domain 8
 printed documentation x
 Process Scheduler jobs 22
 prompts
 calendar 54
 displaying 51
 partial 51
 properties
 invisible 44, 49
 Properties dialog box: Synchronization
 tab 24
 PS_CURRENCY_CD_TBL 4
 psmobile -stamp 5
 Psmobile.exe 5
 psmobile.ini 4, 5, 60
 PTPT1000 5
 push buttons 44

R

record field table (RFT) labels 43
 record-level auto-update system ID 20
 records
 adding SYNCID/SYNCDDTTM to
 component 19
 including SYNCID/SYNCDDTTM in
 subrecords 20
 required properties 13
 SYNCID and SYNCDDTTM 17
 reference backpointer 28
 reference properties 34
 references
 creating properties 27
 mini-pages 46

- setting reference properties for mobile
 - pages 47
 - understanding 27
 - using attachments 29
- regional settings 3
- registration
 - using Application Designer 55
 - using Mobile Portal 55
- registration pages 54
- related component interfaces 28
- related content projects 25
- related documentation x
- related key mapping 28
- related mobile pages 49
- Render as HTML Area field 44
- resetting mobile devices 62
- restoring server values 25
- retaining device values 25
- roles 57
- row, maximum number 39
- runtime personalizations
 - overview 3
 - setting currency 4
 - setting date format 4
 - setting language 4
 - setting local time zone 4

S

- search pages 38
- Secure Sockets Layer 12
- security
 - attachments 30
 - component interfaces 26
 - mobile pages 56
 - permission lists 26
 - SSL 12
 - synchronization gateway 12
- server wins conflict rule 16
- Set All Sync IDs page 22
- Set Sync ID utility 18
- SetSyncID 20
- setting up 29
- setup programs, *See* installing Mobile Agent
- setup wizard 2
- Simple Object Access Protocol 12
- SOAP, *See* Simple Object Access Protocol
- SQL views 21
- SSL, *See* Secure Sockets Layer
- startup methods 3

- status reports 62
- subrecords 18, 20
- suggestions, submitting xiv
- Suppress on This Device field 42
- suppressing list headers 33
- suppressing list view headers 33
- Sync DateTimeStamp 13
- Sync Gateway, *See* synchronization gateway
- sync ID 13
- SyncAPI synchronization protocol 12
- SYNCDTTM 18
 - adding to component records 19
 - creating 19
 - in subrecords 20
 - understanding 17
- SyncGateway parameters 60
- synchronizable component IDs 25
- synchronizable component interfaces, *See* component interfaces
- synchronization
 - alerts 61
 - behind firewalls 5
 - component IDs 25
 - data 11
 - See Also* data synchronization
 - DateTime stamp 17
 - See Also* SYNCDTTM
 - defining synchronizable component interfaces 23
 - derived records 18
 - error messages 61
 - gateway 12
 - ID 17
 - See Also* SYNCID
 - notifications 61
 - recurring jobs 22
 - Update Business Data 60
- synchronization IDs
 - currency rates 4
- synchronization server 3
 - conflict resolution rules 14
 - overview 12
 - running Set Sync IDs 22
 - solving synchronization conflicts 16
 - SyncAPI 12
- synchronization types 11
- SYNCID 18
 - adding to component records 19
 - creating 18

- in subrecords 20
- indexes 20
- initializing 21
- SyncML 12
- SyncServer class 12
- SyncServer object 17
- syncservergateway.xml 7
- SYNCTIMESTAMP, *See* SYNCDTTM
- system error alerts 61

T

- terms 65
- testing component interfaces 26
- text attachments 30
- text size 62
- text wrapping 45
- thread-pool size 8
- time intervals 45
- time picker 44, 54
- time zones 4, 35
 - displaying 43
- trace settings 5, 7
- trace-level 8
- triggers 18, 21
- two-way synchronization 11
- typographical conventions xii

U

- unresolvable conflicts 16
- Update Applications mode 60
- Update Business Data mode 59, 60
- Update Business Data synchronization 60
- Upload Changes mode 59
- uploading changes 25
- uploading data
 - bootstrap synchronization 60
 - updating applications 60
 - updating business data 60
- user ID 61
- user profiles 1

V

- valid reference path 28
- validating component interfaces 26
- visual cues xiii

W

- walkpath 28
- warnings xiii

- web server 2
 - synchronization gateway 12
- WebLog, *See* BEA WebLogic
- WebSphere, *See* IBM WebSphere
- wrapping 45

