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PeopleSoft Enterprise CRM 9.1 PeopleBook: Enterprise Components

October 2009

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PeopleSoft Enterprise CRM 9.1 PeopleBook: Enterprise Components
SKU crm91pbr0

Contents

Enterprise Components Preface

This preface provides an overview of Oracle's PeopleSoft Enterprise Components Common Application Objects documentation included in this PeopleBook.

Overview of Enterprise Components

This PeopleBook describes features generally available as common objects or components to all product lines, including using datasets, formatting addresses, using the Find Object Navigation utility, and working with currencies and market rates.

Note. Some of the page elements and colors that your product uses may differ from the screen shots presented in this PeopleBook. This book uses a generic style sheet for the purposes of illustration only.

PeopleBooks and the Online PeopleSoft Library

A companion PeopleBook called PeopleBooks and the Online PeopleSoft Library contains general information, including:

- Understanding the PeopleSoft online library and related documentation.

- How to send PeopleSoft documentation comments and suggestions to Oracle.

- How to access hosted PeopleBooks, downloadable HTML PeopleBooks, and downloadable PDF PeopleBooks as well as documentation updates.

- Understanding PeopleBook structure.

- Typographical conventions and visual cues used in PeopleBooks.

- ISO country codes and currency codes.

- PeopleBooks that are common across multiple applications.

- Common elements used in PeopleBooks.

- Navigating the PeopleBooks interface and searching the PeopleSoft online library.

- Displaying and printing screen shots and graphics in PeopleBooks.

- How to manage the PeopleSoft online library including full-text searching and configuring a reverse proxy server.

- Understanding documentation integration and how to integrate customized documentation into the library.

- Glossary of useful PeopleSoft terms that are used in PeopleBooks.

You can find this companion PeopleBook in your PeopleSoft online library.

Chapter 1

Using Datasets

This chapter provides an overview of using datasets with PeopleSoft Enterprise applications and discusses how to:

- Define dataset rules.

- Define dataset roles.

Understanding Datasets

Datasets enable role-based filtering and distribution of data. You can limit the range and quantity of data displayed for a user by associating dataset rules with a user's dataset roles. The resulting dataset rules are a set of data appropriate to the user's dataset roles.

You can also limit the range and quantity of data passed to a mobile device by defining data distribution rules based on datasets. Data distribution rules define the selection of data downloaded to a mobile device. The dataset may differ depending on the mobile device.

Note. If you are using PeopleCode to control data distribution, consider using datasets instead.

Defining Dataset Rules

This section provides an overview of dataset rules and discusses how to create dataset rules.

Understanding Dataset Rules

Dataset rules define datasets for use in conjunction with each dataset role's security rules. Defining dataset rules creates Structured Query Language (SQL) statements that select the dataset displayed for each rule.

To use dataset rules and roles:

1. Define dataset rules, which are based on a synchronized record.

    You define a dataset rule to return a subset of rows from the selected synchronized record based on the dataset role to which you will link the rule.

    These dataset rules are based on views that can join to any record in your PeopleSoft system.

    For each rule condition, the user specifies a field that comes from the search record name defined in the dataset rule. When the specified field has neither a prompt or translate table edit, the following system variables, which are delivered as system data to all applications, can be used to filter the condition:

    - %Blank

    - %Date

    - %EmployeeID

    - %PersonID

    - %Time

    - %UserID

2. Assign the dataset rules to dataset roles, according to role security and data requirements.

    Each dataset role can have multiple dataset rules. You can use existing dataset roles, or create new dataset roles by selecting from existing PeopleTools security-based user roles.

    See *Enterprise PeopleTools 8.50 PeopleBook: Security Administration,* "Setting Up Roles"

3. Ensure that the original user roles on which dataset roles were based are associated with appropriate user IDs.

    Each user ID can have multiple user roles.

    See *Enterprise PeopleTools 8.50 PeopleBook: Security Administration,* "Administering User Profiles," Setting Roles

Creating Dataset Rules

Access the Dataset Rules page (Enterprise Components, Component Configurations, Datasets, Dataset Rules).

Use the Dataset Rules (EOEC_DATASET) page to define the rules that make up a dataset.

Dataset Rules page

The number of rule conditions in a dataset rule is limited only by your performance requirements. You can set a series of rule conditions that can navigate through as many records as necessary.

Dataset Rules

Search Record Name	Select the name of the search record for this rule. You can create a view specifically for use in the rule.
Status	Select *Active* or *Inactive.*

Rule Conditions

…((and))…	If the AND or OR field is left blank, specify the nesting level for this condition. Be sure to match opening and closing parentheses.
Field Name	Select the field name on which this rule operates.
Operator	Specify the operation with which to compare the specified field value. Select from standard conditional operators.
Field Value	Specify the value of the specified field against which to compare.

AND or OR	For second and subsequent rule conditions, specify *AND* or *OR,* or leave blank if the rule statements are nested.
Test SQL	Click to test the validity of the rule conditions. The result is returned below the button.
Show SQL	Click to view the SQL statement generated by the rule.

Defining Dataset Roles

Set up user roles by associating dataset rules with user roles.

Defining Dataset Roles

Access the Dataset Roles page (Enterprise Components, Component Configurations, Datasets, Dataset Roles).

Use the Dataset Roles (EOEC_MP_ROLE) page to define dataset roles that associate existing PeopleTools user roles with dataset rules.

Dataset Roles page

Select an existing dataset role for editing, or create a new dataset role by selecting from existing PeopleTools security-based user roles.

See *Enterprise PeopleTools 8.50 PeopleBook: Security Administration,* "Setting Up Roles"

Dataset Name	Select the dataset with which the component rule is associated.
Rule	Select the component rule.
Laptop and **PDA**	Select to display the resulting data on a laptop computer or PDA.
	Note. If you do not select Laptop or PDA, no data from this rule is displayed.

Defining Mobile Data Distribution

Use datasets to define the data distributed to mobile devices running the PeopleTools Mobile Agent.

Important! PeopleSoft Mobile Agent is a deprecated product. The information in this section exists for backward compatibility only.

This section provides an overview of mobile data distribution and discusses how to:

- Define mobile data distribution rules.

- Use mobile user rules.

Understanding Mobile Data Distribution

Mobile devices can have limited processing power, storage capacity, and display space. You can limit the range and quantity of data passed to the mobile device by associating dataset rules with synchronizable component interfaces. Mobile data distribution rules define the selection of data from network servers for download to a mobile device. The result of data distribution rules is a set of data appropriate to the user's roles. The set of data may differ depending on the mobile device.

Data distribution for mobile applications implements security and filters the data downloaded to the mobile device. You define data distribution for mobile devices based on datasets by selecting dataset rules assigned to the mobile device user's dataset roles.

Implementing Mobile Data Distribution

To filter data defined by dataset rules to mobile devices, developers must include the function DistributeDataByRules() in the synchronizable component interface's OnSelect PeopleCode method.

For example:

```
Declare Function DistributeDataByRules PeopleCode
FUNCLIB_ECMOBIL.EOEC_ONSELECT FieldFormula;
DistributeDataByRules();
```

Enterprise PeopleTools 8.49 PeopleBook: Mobile Agent

Enterprise PeopleTools 8.50 PeopleBook: PeopleCode Language Reference

Pages Used to Define Mobile Data Distribution

Page Name	Definition Name	Navigation	Usage
Mobile Data Distribution	EOEC_MP_RULE	Enterprise Components, Component Configurations, Mobile, Mobile Data Distribution	Define data distribution rules for mobile devices based on datasets.
Mobile User Rules	EOEC_MP_USRRULE	Enterprise Components, Component Configurations, Mobile, Mobile User Rules	Preview the effect of mobile data distribution.

Defining Mobile Data Distribution Rules

Access the Mobile Data Distribution page (Enterprise Components, Component Configurations, Mobile, Mobile Data Distribution).

Use the Mobile Data Distribution (EOEC_MP_RULE) page to define data distribution rules for mobile devices based on datasets.

Mobile Data Distribution page

Note. Component interfaces selected for mobile data distribution must be synchronizable; only synchronizable component interfaces are available from the prompt.

Laptop Limit	Select the limiting factor for data instances to be downloaded to a laptop computer during synchronization. Select from:
	All Data: Select to download all data matching the rule's conditions.
	Limit By Count: Select to download only data matching the rule's conditions up to the specified count. The count is based on the number of rows returned. Referenced data is also included.
	Referenced Data Only: Select to download only data only if it is referenced by another component. You would be more likely to select this option for setup data than for transaction data.
	For example, if you have 50,000 products, but the leads you download are related to only 2,000 of the products, select *Referenced Data Only* so that you only download the 2,000 products, instead of the entire set.
	If *Reference Data Only* is selected for products, downloads do not include products unless other objects such as leads and opportunities that reference products are downloaded.
PDA Limit	Select the limiting factor for data instances to be downloaded to a PDA during synchronization. Select from:
	All Data: All data matching the rule's conditions is downloaded.
	Limit By Count: Only data matching the rule's conditions up to the specified count is downloaded. Referenced data is also included.
	Referenced Data Only: Only data referenced by the component interface is downloaded.
Laptop Count and **PDA Count**	If you select *Limit By Count* in the Laptop Limit field or the PDA Limit field, specify the maximum number of data instances to be downloaded.
Dataset Name	Select the dataset to apply to this mobile data distribution rule.
Dataset Details	Click to access the Dataset Rules page, where you can view and modify the selected dataset definition.
	See Chapter 1, "Using Datasets," Creating Dataset Rules, page 2.

The Dataset Rules grid lists rules for the specified dataset.

Using Mobile User Rules

Access the Mobile User Rules page (Enterprise Components, Component Configurations, Mobile, Mobile User Rules).

Use the Mobile User Rules (EOEC_MP_USRRULE) page to preview the effect of mobile data distribution.

Mobile User Rules

User ID:	VP1
Component Interface Name:	TE_COUNTRY
Dataset Name:	TE_COUNTRY

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Show Rule Count	Rule	Description	Laptop	PDA
Show Rule Count	TE_NORTH_AMERICA	North American Countries	☑	☑

Show Laptop Count   Show PDA Count

Preview Laptop Results   Preview PDA Results

Mobile User Rules page

A mobile user can specify whether a selected data distribution rule returns data to a selected mobile device. The user must be signed in with a user ID, not as an administrator, to define mobile user rules.

Show Rule Count	Click to view the number of results the mobile data distribution rule returns.
Show Laptop Count and **Show PDA Count**	Click to view the number of results the mobile data distribution rule returns to a laptop computer or PDA based on any limits set for the mobile device on the Mobile Data Distribution page.
Laptop and **PDA**	Select to display the results of this mobile data distribution rule on a laptop computer or on a PDA, or both.
	Note. If neither Laptop nor PDA is selected, no data from this mobile data distribution rule is displayed.
Preview Laptop Results and **Preview PDA Results**	Click to preview the data that will be downloaded to a laptop or PDA as a result of this mobile data distribution rule and any limits set for the mobile device on the Mobile Data Distribution page.

Chapter 2

Formatting Addresses

This chapter provides an overview of using address formats with PeopleSoft Enterprise applications and discusses how to specify address formats.

Understanding Address Formats

You can use addresses throughout PeopleSoft applications for customer, vendor, and student locations. The address format pages are used to specify the details and defaults for the way address fields display and how they prompt users.

You can format addresses for any country in the world. You can create country and state descriptions and street, suite, building, and postal zone formats to meet the needs of any country format. For example, the state description can be changed to county, province, district, or other geopolitical designation in use by the country in question. In addition, PeopleSoft applications contain fully populated country code and state code tables that Oracle updates for each major release, according to current changes in national boundaries and designations.

Specifying Address Formats

This section discusses how to:

*   Describe countries.

*   Format addresses.

*   Validate addresses.

*   Specify state information.

Note. This task, Specifying Address Formats, does not apply to the PeopleSoft Enterprise Customer Relationship Management application nor the PeopleSoft Enterprise Financials/Supply Change Management application, because these applications do not use the common address objects.

See *PeopleSoft Enterprise Customer Relationship Management 9.1 PeopleBook*

See *PeopleSoft Enterprise Financials/Supply Chain Management 9.1 PeopleBook*

Pages Used to Specify Address Formats

Page Name	Definition Name	Navigation	Usage
Country Description	COUNTRY_DEFN	• Set Up <Product Line>, Install, Country Table. • Enterprise Components, Component Configurations, Address - Hidden, Country - Hidden.	Define countries to be used throughout the system. Used mainly for currencies and addresses.
Address Format	ADDR_FORMAT_TABLE	• Set Up <Product Line>, Install, Country Table, Address Format. • Enterprise Components, Component Configurations, Address - Hidden, Country - Hidden.	Customize fields and field descriptions, so addresses conform to the customary address format of the specified country. Once set, the format appears everywhere the system uses the address subrecord.
Valid Address	EO_ADDR_VALIDAT	• Set Up <Product Line>, Install, Country Table, Valid Address. • Enterprise Components, Component Configurations, Address - Hidden, Country - Hidden.	Add valid combinations of address fields.
State or Province Table	STATE_DEFN	• Set Up <Product Line>, Install, State/Province. • Enterprise Components, Component Configurations, Address - Hidden, State - Hidden.	Add or review a state, province, county, or other geopolitical region within a country.

Describing Countries

Access the Country Description page (Set Up <Product Line>, Install, Country Table).

Use the Country Description (COUNTRY_DEFN) page to set up the appropriate prompts and fields to display throughout the system. This information is mainly used for currency information and addresses.

Country Description page defines the prompts and fields that display throughout the system

2-Char Country Code
(two-character country
code)

Enter the Value Added Tax (VAT) registration ID for the country.

EU Member State
(European Union member
state)

Select if the country is a member of the European Union. Select to include the
country in prompts for intrastate reporting.

Formatting Addresses

Access the Address Format page (Set Up <Product Line>, Install, Country Table, Address Format).

Use the Address Format (ADDR_FORMAT_TABLE) page to customize fields and field descriptions to
conform to the customary address format of the specified country.

Address Format page

Use the Address Format page to set up the three main aspects of the address: editing, displaying, and printing.

Address Edit Page   Displays the secondary page used for editing the address. You can create a new secondary page using Application Designer. On the new address secondary page you create, use page fields from the DERIVED_ADDRESS record definition. You then need to add a secondary page control to ADDRESS_SBP pointing to your new secondary page. Once you complete these steps, the secondary page is accessible in this field.

Enable Address Search   Select to enable users to search for a valid value. Selecting this check box enables the Used in Search column and the Valid Address page.

                               The system default is to leave this check box clear.

Enable Address Validation Available only when Enable Address Search is selected. Select to ensure validation of all values selected. When selected, users must select a value from the search list. If this check box is clear, users can select from the search list or enter a new value.

                               The system default is to leave this check box clear.

Search Limit   Enter a numeric value to limit the number of search results.

                               This option enables you to limit the search results retrieved during Address Search.

Field Name   Displays the field options available for the address page.

Edit Label Override   (Optional) Enter an alternative label for the field. The new label is used when prompting for the field. You can customize address formats so that they conform to the address requirements of each location. For instance, for a U.S. address, you would change the Postal field to read ZIP Code.

Keep in mind the distinctions between county and state:

- *County:* The tertiary geopolitical region within a state; the level after country and state. (In the UK, the level of state is called a county; you would enter such counties in the State field.)

- *State:* The secondary geopolitical region within a country; a state in the U.S., a province in Canada, a county in the UK, and a department in France.

Used in Search   Available only when you select the Enable Address Search check box. Select the fields you want users to be able to search on.

Include in Display?   Select to have the PeopleSoft system include this field when an address appears in read-only mode. Clear this check box for specific fields if your organization wants to display addresses in a format that is different than the appearance of the address during data entry.

Include in Print   Select to print the field when printing.

Line Number and **Position Number**   Enter the physical location of the fields for displaying and printing. The line number and position number control the field order in the Address Edit page.

The Line Number field specifies the line in which the address field should appear on the page. If there are more than two fields on the same line, then the Position Number field is used to resolve the conflict.

Use Description   Select to display the description for the field value. For example, for addresses in Japan, select this option to display the description of the state rather than the state code, since the code is numeric.

Pre Separator and **Post Separator**   Enter characters to be used surrounding the address field. For example, in the United States, a comma generally follows the city name, such as in *San Francisco, CA*. In India, there are parentheses around the postal code, for example *(123)*.

Validating Addresses

Access the Valid Address page (Set Up <Product Line>, Install, Country Table, Valid Address).

Use the Valid Address (EO_ADDR_VALIDAT) page to add valid combinations of address fields.
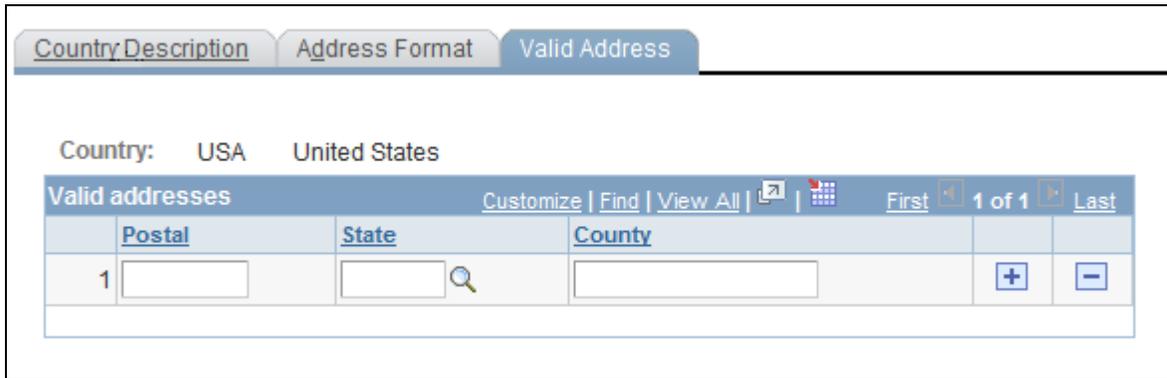
Valid Address page

To enable this page, select the Enable Address Search check box on the Address Format page. This enables the Used in Search column. The fields that you select to be used in the search appear on the Valid Address page as columns. Enter the valid postal code and state combinations that the user can search for and select.

Specifying State Information

Access the State or Province Table page (Set Up <Product Line>, Install, State or Province).

Use the State or Province Table (STATE_DEFN) page to add or review a state, province, county or other geopolitical region within a country.
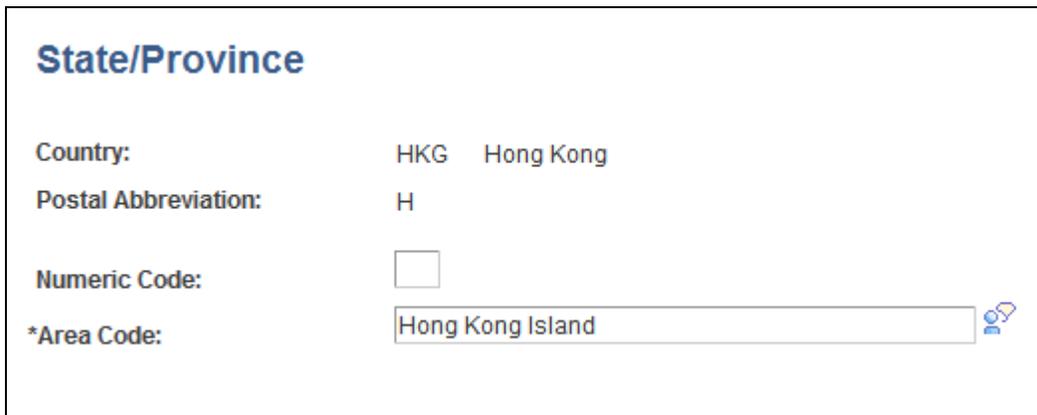
State or Province Table page to define a state, province, or other geopolitical region within a country

This table provides states, provinces, and equivalent geopolitical entities for all supported countries, such as Dutch communities and French departments. The codes are based on standard postal codes.

Numeric Code   Enter a two digit numeric code for statistical and reporting purposes.

Province   The second enterable field, Province in the preceding example, changes depending on the country.

This field has a maximum limitation of 30 characters. Other examples for this field include:

- State—if the country is USA, the field label appears as State.

- Department—if the country is France, the field label appears as Department.

- Community—if the country is Holland, the field label appears as Community.

Chapter 3

Using the Find Object Navigation Utility

This chapter provides an overview of the Find Object Navigation utility and discusses how to specify navigation path search criteria.

Understanding the Find Object Navigation Utility

You can use this utility with any PeopleSoft Pure Internet Architecture page to locate the navigation path for a component, page, content reference, or portal. Select your search criteria and click the Find Navigation button. The resulting navigation paths appear with links that enable you to navigate directly to the page that you specified in your search. Frequently, several ways are available to access a page. Reviewing all of the navigation paths may help you find the page in a more intuitive way.

For example, an administrator wants to apply security to all references to Monitor Approvals. This component resides in Enterprise Components, Approvals, Approvals. Some applications can choose to create static reference or links to a page. With this utility, the administrator can find both references and confirm that the appropriate security is applied.

Additionally, when used as an internal tool, this utility can be very helpful during PeopleTools and application upgrades.

Specifying Navigation Path Search Criteria

This section provides an overview of the navigation path search criteria and discusses how to:

- Specify search criteria by component name.

- Specify search criteria by page name.

- Specify search criteria by secondary page name.

- Specify search criteria by content reference (CREF) name and portal name.

Understanding Navigation Path Search Criteria

This utility uses the object ID and portal tables to locate the target objects, allowing you to enter a component name, page name, or content reference (CREF) name and portal name to locate all of the navigation paths. Select your search criteria to populate and display a grid with the navigation for your search parameters. The full navigation path is given along with URL links that take you to a new browser for the navigation that you specified.

Specifying Search Criteria by Component Name

Depending on the PeopleSoft application that you are using, you can access the Find Object Navigation (EOEC_FIND_NAV) page in the following ways:

- Select Setup <Product Line>, System Administration, Utilities, Find Object Navigation.

- Select Enterprise Components, Find Object Navigation.

A component is a set of pages that are grouped for a business purpose. Component Interfaces expose components for synchronous access from another application, such as PeopleCode, Java, C/C++, or Component Object Model (COM).

Find Object Navigation page showing search criteria of component name

Component Name	Select to search by component name.
	The system default is *Component Name.*
*Component Name	This is a required field. Enter the name of the component for the search, or click the prompt to display available component names.
Find Navigation	Click to display a grid that is populated with all of the corresponding navigation paths for your search parameters.

Find Object Navigation

Select Navigation By

- ◉ Component Name
- ○ Page Name
- ○ Secondary Page Name
- ○ Content Reference Name

*Component Name: `ALGORITHM_CHAIN` 🔍   Encryption Algorithm Chain

Page Name:

Secondary Page:

Portal Name:

Content Reference:

[Search]

Results   Customize | Find | 🔲 | 🔲 First ◀ 1-6 of 6 ▶ Last

	Portal Name	Component Name	Market	Navigation	Hidden	URL
1	CUSTOMER	ALGORITHM_CHAIN	GBL	Root > Algorithm Chain	☐	Algorithm Chain
2	EMPLOYEE	ALGORITHM_CHAIN	GBL	Root > PeopleTools > Security > Encryption > Algorithm Chain	☐	Algorithm Chain
3	MOBILE	ALGORITHM_CHAIN	GBL	Root > Algorithm Chain	☐	Algorithm Chain
4	PARTNER	ALGORITHM_CHAIN	GBL	Root > Algorithm Chain	☐	Algorithm Chain
5	PORTAL	ALGORITHM_CHAIN	GBL	Root > Algorithm Chain	☐	Algorithm Chain
6	PS_SITETEMPLATE	ALGORITHM_CHAIN	GBL	Root > Algorithm Chain	☐	Algorithm Chain

Find Object Navigation page with navigation grid displaying the path and URL for search parameters of component name

Click the URL link to open a browser window that directly accesses the navigation that you select in the grid.

Specifying Search Criteria by Page Name

Depending on the PeopleSoft application that you are using, you can access the Find Object Navigation (EOEC_FIND_NAV) page in the following ways:

- Select Setup <Product Line>, System Administration, Utilities, Find Object Navigation.

- Select Enterprise Components, Find Object Navigation.

Find Object Navigation page showing search criteria of page name

Page Name	Select to search by page name.
*Page Name	This is a required field. Enter the name of the page for the search, or click the prompt to display available page names.
Find Navigation	Click to display a grid that is populated with all of the corresponding navigation paths for your search parameters.

Find Object Navigation

Select Navigation By

○ Component Name
◉ Page Name
○ Secondary Page Name
○ Content Reference Name

Component Name: [   ]

*Page Name: [ALGORITHM_CHAIN   ] 🔍

Secondary Page: [   ]

Portal Name: [   ]

Content Reference: [   ]

[Search]

Results   Customize | Find | 🔲 | 📖   First ◄ 1-6 of 6 ► Last

	Portal Name	Component Name	Market	Navigation	Hidden	URL
1	CUSTOMER	ALGORITHM_CHAIN	GBL	Root > Algorithm Chain	☐	Algorithm Chain
2	EMPLOYEE	ALGORITHM_CHAIN	GBL	Root > PeopleTools > Security > Encryption > Algorithm Chain	☐	Algorithm Chain
3	MOBILE	ALGORITHM_CHAIN	GBL	Root > Algorithm Chain	☐	Algorithm Chain
4	PARTNER	ALGORITHM_CHAIN	GBL	Root > Algorithm Chain	☐	Algorithm Chain
5	PORTAL	ALGORITHM_CHAIN	GBL	Root > Algorithm Chain	☐	Algorithm Chain
6	PS_SITETEMPLATE	ALGORITHM_CHAIN	GBL	Root > Algorithm Chain	☐	Algorithm Chain

Find Object Navigation page with navigation grid displaying path and URL for search parameters of page name

Click the URL link to open a browser window that directly accesses the navigation that you select in the grid.

Specifying Search Criteria by Secondary Page Name

Depending on the PeopleSoft application that you are using, you can access the Find Object Navigation (EOEC_FIND_NAV) page in the following ways:

•   Select Setup <Product Line>, System Administration, Utilities, Find Object Navigation .

•   Select Enterprise Components, Find Object Navigation.

Find Object Navigation Path page showing search criteria of secondary page name

Secondary Page Name   Select to search by secondary page name.

*Secondary Page Name   This is a required field. Enter the name of the secondary page for the search, or click the prompt to display available secondary page names.

Find Navigation   Click to display a grid that is populated with all of the corresponding navigation paths for your search parameters.

Find Object Navigation page with navigation grid displaying path and URL for search parameters of secondary page name

Click the URL link to open a browser window that directly accesses the navigation that you select in the grid.

Specifying Search Criteria by CREF Name and Portal Name

Depending on the PeopleSoft application that you are using, you can access the Find Object Navigation (EOEC_FIND_NAV) page in the following ways:

- Select Setup <Product>, System Administration, Utilities, Find Object Navigation .

- Select Enterprise Components, Find Object Navigation.

CREFs are pointers to content that is registered in the portal registry. These are typically URLs or iScripts. CREFs fall into three categories: target content, templates, and template pagelets.

Find Object Navigation Path page showing search criteria of CREF name and portal name

Content Reference Name	Select to search by CREF name for the portal that you specify.
	When you select Content Reference Name, the Portal Name field becomes available to search for CREF names within a specific portal.
*Portal Name	This is a required field. Enter the name of the portal for the search, or click the prompt to display available portal names.
	The default for this field is *Employee.*
*Content Reference	This is a required field. Enter the name of the CREF for the search, or click the prompt to display available CREF names.
Find Navigation	Click to display a grid that is populated with all of the corresponding navigation paths for your search parameters.

Find Object Navigation page with navigation grid displaying path and URL for search parameters of CREF name and portal name

Click the URL link to open a browser window that directly accesses the navigation that you select in the grid.

Chapter 4

Working With Currencies and Market Rates

This chapter provides an overview of using currencies and market rates with PeopleSoft Enterprise applications and discusses how to:

- Define currencies.

- Define currency quotation methods.

- Define market rates.

- Calculate cross and reciprocal rates.

- Use the Currency Exchange Calculator.

Understanding Currencies and Market Rates

PeopleSoft applications offer a core set of objects (fields, tables, work records, pages, and PeopleCode functions), as well as a recommended set of standard techniques and formulas to support a common approach to converting currency throughout PeopleSoft applications and to define and store market rates. Market rate is a generic term for a currency exchange rate, an interest rate, or a future rate.

This section provides overviews of:

- Currency and market rate tables.

- Triangulation.

- Conversion factor fields and the visual rate.

- Application-specific requirements for currency conversion.

Understanding Currency and Market Rate Tables

The following tables store currency and market rate data:

- CURRENCY_CD_TBL

    Stores currency code data.

- CURR_QUOTE_PNL

  Stores currency quotation method data.

- RT_INDEX_TBL

  Stores market rate index data.

- RT_TYPE_TBL

  Stores rate type data.

- RT_RATE_TBL

  Stores market rate data.

Understanding Triangulation

Triangulation is the process by which a conversion between two currencies takes place by way of a third reference currency. This process may be used in hyperinflationary environments, where all conversions to the local currency are done by way of a stronger, more stable currency. This process may also be used when a country is undergoing a currency revaluation.

To support triangulation, the PeopleSoft system provides a means to define that you want a currency pair to triangulate through a fixed reference currency. The actual conversion process is done in a two-step procedure in which the from-currency amount is first converted to the reference currency and then to the destination currency, using the appropriate exchange rates. Supporting triangulation also affects the user interface, as there are now two or possibly three exchange rates that are relevant to the conversion. When viewing a triangulated conversion at a detailed level, users access three visual rates:

- A rate for converting the from-currency to the reference currency.

- A rate for converting the reference currency to the to-currency.

- A cross rate indicating the rate that would be required to convert the from-currency directly into the to-currency.

The cross rate in a triangulated conversion is not typically maintained directly. The system enables you to maintain those non-triangulated rates that are components of the triangulated rate, then run a process to generate the triangulated exchange rate. However, you can override the cross rate, which causes one of the other exchange rate values to be recalculated to synchronize it with the overridden cross rate.

For example, suppose an implementation was using triangulation to convert from USD to FRF. You would directly maintain the visual rate from the USD to euros (1.25 in the example table) and rate from euros to FRF (6.8 in the example table). You could then run the EOP_RATECALC application engine process to derive the triangulated rate for converting from USD to FRF. The results are shown in the following table:

Currency Pair	Quote Method	Quote Units	Primary Visual Rate	RATE_MULT	RATE_DIV
USD to Euro	Indirect	1	1.25	1	1.25
Euro to FRF	Direct	1	6.8	6.8	1

Currency Pair	Quote Method	Quote Units	Primary Visual Rate	RATE_MULT	RATE_DIV
USD to FRF	Direct/Triangulate/Euro	1	5.44	6.8	1.25

When performing the actual conversion, applications interpret the visual rates into RATE_MULT and RATE_DIV values based on the quotation method for the exchange, then use the RATE_MULT and RATE_DIV values stored in the Market Rates Data table in the currency conversion formula, either by accessing the values directly or by calling the ConvertCurrency PeopleCode function.

Note. For information on how a specific application supports maintenance of triangulated exchange rates, see the documentation for that application.

See Also

Understanding Conversion Factor Fields and the Visual Rate

Support for both direct and indirect currency quotations creates a potential for complex currency conversion formulas in applications. To avoid excess conditional logic in the conversion formula, the PeopleSoft system provides two fields to store the conversion factor, RATE_MULT and RATE_DIV. The rate that you enter is called the *visual rate.* This visual rate is generally stored in either RATE_MULT or RATE_DIV, based on the quote method. The quote units are stored in whichever field does not contain the visual rate. As a result, the formula for currency conversion remains consistent:

(from-currency / RATE_DIV) $\times$ RATE_MULT = to-currency

This formula is also used for currency conversion in PeopleCode programs for online processing, as well as in SQR and COBOL processes.

The following table shows a few basic examples of how visual rates are transformed into RATE_MULT and RATE_DIV, according to the quote method and quote units for the currency pair:

Currency Pair	Quote Method	Quote Units	Primary Visual Rate	RATE_MULT	RATE_DIV
USD to GBP	Indirect	1	1.6	1	1.6
GBP to USD	Direct	1	1.6	1.6	1
DEM to CHF	Indirect	100	119.335	100	119.335
CHF to DEM	Direct	100	119.335	119.335	100

Currency Pair	Quote Method	Quote Units	Primary Visual Rate	RATE_MULT	RATE_DIV
USD to Euro	Indirect	1	1.25	1	1.25
Euro to FRF	Direct	1	6.8	6.8	1
USD to FRF	Direct/Triangulate/Euro	1	5.44	6.8	1.25
FRF to Euro	Indirect	1	6.8	1	6.8
Euro to USD	Direct	1	1.25	1.25	1
FRF to USD	Indirect/Triangulate/Euro	1	5.44	1.25	6.8

In all cases, the visual rate for a currency pair remains the same, regardless of the direction. This is consistent with business standards. For a direct quoted rate, you multiply by the visual rate; therefore the visual rate goes into RATE_MULT and 1 (or the quote units) goes into RATE_DIV. For an indirect quoted rate, you divide by the visual rate; therefore the visual rate goes into RATE_DIV and 1 (or the quote units) goes into RATE_MULT.

The following examples show indirect quotation, direct quotation with quote units, and triangulation:

100 USD to GBP (indirect) = (100 USD / 1.6) $\times$ 1 = 62.50 GBP

1000 CHF to DEM (direct with units) = (1000 CHF / 100) $\times$ 119.335 = 1193.35 DEM

100 USD to FRF (triangulate) = (100 USD / 1.25) $\times$ 6.8 = 544 FRF

See Also

Understanding Application-Specific Requirements for Currency Conversion

Each application that shows a visual rate on a page must have an application-specific work record to hold the visual rate and the associated PeopleCode; this can be an existing work record. The suggested name for the field is VISUAL_RATE. The work record should also have a field to store the original rate for purposes of tolerance checking.

The application also typically provides an application-specific table to store RATE_MULT and RATE_DIV values that are stored on the database.

Application-specific PeopleCode needs to format work record fields and call the common functions in various circumstances, such as RowInit or FieldChange on the currency or visual rate.

See Also

Enterprise PeopleTools 8.50 PeopleBook: Global Technology

Enterprise PeopleTools 8.50 PeopleBook: PeopleCode Developer's Guide

Defining Currencies

This section discusses how to define currencies.

Defining Currency Codes

Depending on the PeopleSoft application that you are using, you can access the Currency Code (CURRENCY_CD_TABLE) page in the following ways:

- Select Set Up <Product Line>, Common Definitions, Currency, Currency Code.

- Select Set Up <Product Line>, Currency and Market Rates, Currency Code.

- Select Portal Objects, Navigation Collections, General Ledger Center, Definition and Administration, Currency.

Note. PeopleTools provides the system data in the currency table, CURRENCY_CD_TBL, and Oracle updates this data during major releases. You are also expected to update or adjust the system data in the currency table for your own needs. Enterprise Components maintains the system data in the country table and defines a default currency for each country definition. The currency table has a default country code, but that does not apply in the case of a multi-country currency like the Euro.

Use the Currency Code page to add and maintain currency codes. These currency codes are used to designate currencies throughout your PeopleSoft system.

Currency Code

Currency Code: CAD

Definition   Find | View All First ◀ 1 of 1 ▶ Last

*Effective Date: 01/01/1900 📅   *Status: Active ▼   ➕ ➖

*Description: Canadian Dollar

Short Description: Dollar

Currency Symbol: $

Country: CAN 🔍   Canada

Decimal Positions: 2

Scale Positions:

Currency Code page

Status	Indicate whether the currency code is active or inactive. If you inactivate a currency code that is in use, existing transactions are unaffected. However, the currency code is unavailable for future selections.
	Some PeopleSoft applications do not allow you to inactivate a currency code that is in use.
Currency Symbol	PeopleSoft applications deliver many currencies with a currency symbol such as $ for Australian dollar (AUD) or £ for British pound (GBP). You can enter new symbols for delivered currencies or for currencies that you might add.
Country	Select the code for the country from which the currency originates.
	Note. PeopleSoft applications deliver fully populated country, state, and province code tables and update these tables as national boundaries and designations change.
Decimal Positions	Enter the number of decimal positions that should appear in the notation for the currency. For example, there are two decimal positions for Australian dollars (500.00 AUD), but no decimal positions for Japanese yen (500 JPY).
Scale Positions	Enter the scale positions you want to round for this currency. This controls how many numbers appear to the left of the decimal when displayed. The data is actually stored with full precision in the database itself.
	For example, if you want all million-dollar amounts displayed as the number of millions without the zeros, enter 6 as your scale position. In this case, 24,000,000 is displayed as 24, but is stored in the database as 24,000,000.

Defining Currency Quotation Methods

This section discusses how to define currency quotation methods.

Defining Currency Quotation Methods

Access the Currency Quotation Method page (Set Up <Product Line>, Foundation Tables, Currency and Market Rates, Currency Quotation Method).

Use the Currency Quotation Method (CURR_QUOTE_PNL) page to set up and maintain a currency quotation method for each from-currency and to-currency pair.

Currency Quotation Method page to set up and maintain currency quotation methods for each from-currency and to-currency pair

A currency quotation method, defined for an exchange rate, stores data that determines how the application interprets a visual rate entered by a user (or multiple visual rates, in the case of triangulated exchange rates) into the RATE_MULT and RATE_DIV values stored on the Market Rate Data table. Conversely, a currency quotation method also determines how the stored RATE_MULT and RATE_DIV values are interpreted into the visual rate displayed to the user.

The quotation method can be direct or indirect, and it can be non-triangulated or a triangulated conversion using a third reference currency. The currency quotation method also determines the quotation units of the from-currency.

See Chapter 4, "Working With Currencies and Market Rates," Understanding Conversion Factor Fields and the Visual Rate, page 29.

It is not necessary to define a currency quotation method for every exchange rate. If, during maintenance of market rates, no quotation method is found for an exchange rate, the page logic assumes the following defaults:

• The exchange rate is direct.

• The quotation units are equal to 1.

• The exchange rate is not triangulated.

Note. This use of default values supports backward compatibility with previous exchange rate data, including calculated reciprocal rates, if your implementation requires them.

See Chapter 4, "Working With Currencies and Market Rates," Understanding Conversion Factor Fields and the Visual Rate, page 29.

Access the Currency Quotation Method page (Set Up <Product Line>, Foundation Tables, Currency and Market Rates, Currency Quotation Method). Click the Exchange Rate Detail button beside the Rate field on the Market Rate page to access the Exchange Rate Details page.

Note. The Market Rate (RT_RATE_PNL) page provides the details about the exchange rate between two currencies. The Exchange Rate Detail page is a secondary page of the Market Rate (RT_RATE_PNL) page. After you access the Market Rate page, you must click the Exchange Rate Detail icon beside the Rate field on the Market Rate page to access the Exchange Rate Details page.

Use the Currency Quotation Method (CURR_QUOTE_PNL) page to set up and maintain a currency quotation method for each from-currency and to-currency pair.

Note. You can view the currency quotation method for an exchange rate on the Exchange Rate Detail page while working on the Market Rate page.

See Chapter 4, "Working With Currencies and Market Rates," Defining Market Rates, page 36.

| **Direct** and **Indirect** | In the Rate Quotation Basis section, indicate whether the rates for this currency pair are quoted directly or indirectly. For example, when defining a currency quotation method for USD and FRF: |

- Select *Direct* if you want one USD to equal x.xxxx FRF.

- Select *Indirect* if you want x.xxxx USD to equal one FRF.

Even currency quotation methods for currency pairs that triangulate must be classified as either direct or indirect. In this case, the value is used to display the calculated cross rate.

Support for indirect and direct quotation methods allows applications to eliminate use of calculated reciprocal rates by using a single rate by which you either divide or multiply, depending on whether the conversion method is direct or indirect.

Quote Units

Enter a quote unit for the exchange rate, as is common business practice for some currencies. This field can have any value, but is usually a power of 10.

Sometimes called scaling factors, quote units are often used to preserve more decimal precision. For example, the exchange rate between Swiss francs (CHF) and Deutsche marks (DEM) may be stated as 100 CHF = 119.335 DEM instead of 1 CHF = 1.19335 DEM.

Auto Reciprocate

Select to automatically create or update the rate for the reciprocal currency pair on the Market Rates page whenever an exchange rate is added or updated.

For example, if you create a currency quotation method for USD to EUR. The reciprocal currency quotation method for EUR to USD is automatically created, regardless of this setting.

When you create a rate for USD to EUR on the Market Rates page, the EUR to USD reciprocal rate is automatically created if this Auto Reciprocate option is selected for the currency pair.

If the either rate for the currency pair is updated on the Market Rates page, the reciprocal rate is updated as long as the Auto Reciprocate option is selected for one of the currencies in the pair.

Triangulate

Select to triangulate conversions between this currency pair using a reference currency.

Reference Currency

Enter the reference currency for a triangulated conversion.

Primary Visual Rate

With triangulated currency pairs, there are three exchange rates to consider:

- The rate between the from-currency and the reference currency.

- The rate between the reference currency and the to-currency.

- The calculated cross rate between the from-currency and the to-currency.

Select which of these three rates you want as the primary visual rate. This is the rate that displays on the primary pages and reports. For online applications, other components of the rate can be viewed and modified on the Exchange Rate Detail page.

Allow Override   For triangulated currency pairs, select to enable users to override the cross rates
                            on the Market Rates page and Exchange Rate Detail page.

Recalculate   If the Allow Override option is selected, select to indicate which of the two other
                            rates should be recalculated to bring the triangle back into balance. Because the
                            triangulated rate is initially a calculated rate, if you allow it to be overridden, the
                            rates that are used to initially calculate this rate must be recalculated.

Defining Market Rates

This section discusses how to:

*   Define market rate indexes.

*   Define market rate types.

*   Create market rate definition.

*   Define market rates.

*   Access rate definition details.

*   Access exchange rate details.

Pages Used to Define Market Rates

Page Name	Definition Name	Navigation	Usage
Market Rate Index	RT_INDEX_TBL	Setup <Product Line>, Foundation Tables, Currency and Market Rates, Market Rate Index.	Create market rate indexes, which provide a means of organizing market rates in the PeopleSoft system.
Currency Exchange Rate Type	RT_TYPE_TBL	Setup <Product Line>, Foundation Tables, Currency and Market Rates, Currency Exchange Rate Type.	Define rate types that further categorize market rates. Examples of rate types include current, commercial, floating, average, and historical.
Market Rate Definition - Rate Definition	RT_RATE_DEF_TBL	Setup <Product Line>, Foundation Tables, Currency and Market Rates, Market Rate Definition.	Define tolerance limits for rates and determine what action occurs if a new rate falls outside the tolerance limit. The Market Rate Definition (RT_RATE_DEF_TBL) page shows all of the rate definitions for a rate index.

Page Name	Definition Name	Navigation	Usage
Market Rates	RT_RATE_PNL	Setup <Product Line>, Foundation Tables, Currency and Market Rates, Market Rates, and then click the Rate Definition link.	Maintain and view market rates. The fields available on the page vary depending on the rate category. This page shows the rate definition for any two currencies.
Rate Definition	RT_RATE_DEF_SEC	Setup <Product Line>, Foundation Tables, Currency and Market Rates, Market Rates, and then click the Rate Definition link.	View market rate definition details, including the maximum variance and error handling definitions specified for the currency pair on the Rate Definition page.
Exchange Rate Detail	EXCH_RT_DTL	Click the Exchange Rate Detail icon on the Market Rates page.	Access exchange rate detail information.
Currency Exchange Calculator	CURRENCY_EXCHNG_PN	Setup <Product Line>, Foundation Tables, Currency and Market Rates, Currency Exchange Calculator	Use the Currency Exchange Calculator (CURRENCY_EXCHNG_PN) page to calculate currency exchange between currencies. This tool enables you to select a rate type other than the base currency, but does not enable you to override the exchange rate.

Defining Market Rate Indexes

Access the Market Rate Index page (Set Up <Product Line>, Currency and Market Rates, Market Rate Index).

Use the Market Rate Index (RT_INDEX_TBL) page to create market rate indexes that provide a means of organizing market rates in the PeopleSoft system.

Market Rate Index page to create market rate indexes for organization within the PeopleSoft system

Market rate indexes are stored in the RT_INDEX_TBL table.

Index	Displays the key term for the highest level of organization for market rates in the application.
Rate Category	Select a general category for the market rate index, such as *Exchange Rate, Commodity Price,* or *Interest Rate.*
Default Exchange Rate Index	Select to indicate that the selected market rate index is the default exchange rate index. This field is available only if:

- The Rate Category field is set to *Exchange Rate.*

- No other index is currently defined as the default exchange rate index.

The Market Rates Index page does not ensure that a default market rate index has been defined. However, if no default has been defined, the Market Rate Default view does not return any data.

The Market Rate Definition Default view (RT_DEF_DFLT_VW) selects rows from the Market Rate Definition table that have a term of zero and an index defined as the default exchange rate index.

Rate Type	Enter or select the rate type.
	Defines the category of market rates for currency conversion. Some examples of rate types are commercial, average, floating and historical.
Term	Enter or select the terms.
From Currency Code	Enter or select the currency that you are converting from.
To Currency Code	Enter or select the currency that you are converting to.
Effective Date	Enter the date that you are initiating the currency exchange.
*Rate	Displays the rate amount.
	Click the Exchange Rate Detail icon to the right of the Rate field to access the Exchange Rate Detail page and corresponding information.
Rate Definition link	Click to view market rate definition details, including the maximum variance and error handling definitions specified for the currency pair on the Rate Definition page.
	The Rate Definition link on the Market Rates (RT_RATE_PNL) page takes you to the Rate Definition page and shows the rate definition for any two currencies.

Defining Rate Types

Depending on the PeopleSoft application that you are using, you can access the Rate Type (RT_TYPE_TBL) page in the following ways:

• Select Set Up <Product Line>, Currency and Market Rates, Currency Exchange Rate Type.

• Select Set Up <Product Line>, Common Definitions, Market Rates, Market Rate Type.

Use the Rate Type (RT_TYPE_TBL) page to define rate types that further categorize market rates. Examples of rate types include current, commercial, floating, average, and historical.

Rate Type page to define rate types for organization within the PeopleSoft system

Rate types are stored in the RT_TYPE_TBL edit table. Rate types serve as categories within a market rate index. For example, some common types of exchange rates are official rate, spot rate, and free market rate.

Enter a description and short description to define each market rate type that you use.

Creating Market Rate Definitions

Depending on the PeopleSoft application that you are using, you can access the Market Rate Definition - Rate Definition (RT_RATE_DEF_TBL) page in the following ways:

• Select Set Up <Product Line>, Common Definitions, Market Rates, Market Rate Definition.

• Select Set Up <Product Line>, Currency and Market Rates, Market Rate Definition.

Use the Market Rate Definition - Rate Definition (RT_RATE_DEF_TBL) page to define tolerance limits for rates and determine what action occurs if a new rate falls outside of the tolerance limit.

The Market Rate Definition (RT_RATE_DEF_TBL) page shows all of the rate definitions for a rate index.

Market Rate Definition - Rate Definition page to define tolerance limits for rates and determine action if rate falls outside limit

Market rate definitions specify the valid term, currency, and other appropriate field combinations for market rates. For example, if you have a market rate definition for an exchange rate with a term of 30, a from-currency of CHF, and a to-currency of USD, you can enter a rate using this combination on the Market Rates page.

If you have not created a market rate definition on this page when you create the a market rate on the Market Rates page, the system automatically creates one for you using the default values of 2.5 percent maximum variance and warning message processing.

It is common for applications to support tolerance checking (against user-specified tolerances) in all places where exchange rates can be entered or overridden. With the introduction of indirect quotation methods and quote units, tolerance checking is even more critical to ensure data entry accuracy.

Note. The information you see on this page depends on the selected market rate index. For example, if you select an index associated with a rate category of *Interest Rate,* fields on this page display interest-related data.

From Currency Code	Enter the from-currency code with which you want to populate all From Currency fields on the page.
Refresh	Click to populate the From Currency field with the currency you selected in the From Currency Code field.

Term	Enter the desired term expressed in days. A zero term indicates that the spot rate = zero term. Only PeopleSoft Treasury uses non-zero terms; all other applications must use a zero term for spot rate.
From Currency	In addition to using the From Currency Code field to populate all From Currency field on this page, you can also manually enter the appropriate from-currency. This value is used with its associated To Currency field value as part of an exchange rate pair. When you use triangulation, include a definition row for each of the currency pairs involved in the triangulation.
To Currency	Enter the appropriate to-currency. This value is used with its associated From Currency field value as part of an exchange rate pair.
Currency	This field displays when you are working with a rate definition with a rate category set to *Interest Rate.*
	Select the currency for which you are creating an interest rate definition.
	The From Currency and To Currency fields do not display.
Day Count Basis	This field displays when you are working with an interest rate definition.
	Select an interest basis:
	30/360
	30E/360
	Actual/360
	Actual/365
	Actual/Actual
Maximum Variance	Enter the percentage of variance that is allowed when a user maintains or overrides a market rate. If the change exceeds the tolerance, an error results. The default value is 2.50 (2.5%).
Error Type	Select the type of error that results when the defined maximum variance is exceeded during data entry.
	None: No error processing occurs and the new rate is used, even if it exceeds the maximum variance.
	Stop: Processing halts and the system prevents you from saving the new rate.
	Warning: This is the default value. A warning appears that you can ignore and proceed to save the new rate.

Defining Market Rates

Depending on the PeopleSoft application that you are using, you can access the Market Rates (RT_RATE_PNL) page in the following ways:

- Select Set Up <Product Line>, Common Definitions, Market Rates, Market Rates.

- Select Set Up <Product Line>, Currency and Market Rates, Market Rates.

Use the Market Rates (RT_RATE_PNL) page to maintain and view market rate definition details, including the maximum variance and error handling definitions specified for the currency pair on the Rate Definition (secondary) page.

Market Rates page to maintain and view market rate definition details

The data you enter on this page is stored in the RT_RATE_TBL table that is the common repository for all types of market rates including exchange rates and interest rates.

You cannot edit this page if all of the following are true:

• The rate is triangulated.

• The primary visual rate is the cross rate.

• The Allow Override option is clear for the exchange rate's quotation method on the Currency Quotation Method page.

Note. When working with interest rates, the From Currency Code and To Currency Code fields may contain the same field value.

Rate

Rate	Displays the visual rate. If you are working with a triangulated exchange rate, this field displays the primary visual rate, which is typically the cross rate, but can also be one of the other component rates of the triangle.
	During online maintenance of market rates, you don't view or change RATE_MULT and RATE_DIV values directly, but instead access this visual rate, which is calculated by page logic based on RATE_MULT, RATE_DIV, and the currency quotation method defined for the currency pair on the Currency Quotation Method page. The visual rate is stored temporarily on a page work record.
	Click the Exchange Rate Detail icon to the right of the Rate field to access the Exchange Rate Detail (EXCH_RT_DTL) page, where you can view all three visual rates of a triangulated exchange rate.

If a quotation method has been defined for the currency pair and the Auto Reciprocate option for the currency quotation method is selected, then creating or maintaining a rate for a currency pair on this page automatically creates or updates the rate for the reciprocal currency pair. For example, if you change the USD-to-GBP rate, the GBP-to-USD rate is automatically updated. You can only auto-reciprocate currency pairs for which currency quotation methods have been defined on the Currency Quotation Method page.

See Chapter 4, "Working With Currencies and Market Rates," Defining Currency Quotation Methods, page 33.

Note. The results of updating the rate definition do not take effect until you save, close, and reopen the Market Rates page.

Rate Definition link	Click to view market rate definition details, including the maximum variance and error handling definitions specified for the currency pair on the Rate Definition page.

Rate Definition page to view market rate definition details to include maximum variance and error handling

Accessing Exchange Rate Details

Access the Exchange Rate Detail (EXCH_RATE_DTL) page (Set Up, <Product Line>, Foundation Tables, Currency and Market Rates, Market Rates). Click the Exchange Rate Detail icon beside the Rate field on the Market Rates page.

Depending on the PeopleSoft application that you are using, you can access the Exchange Rate Detail (EXCH_RATE_DTL) page from the Market Rates (RT_RATE_PNL) page in the following ways:

- Select Set Up <Product Line>, Foundation Tables, Currency and Market Rates, Market Rates, and then click the Exchange Rate Detail icon beside the Rate field to access the Exchange Rate Details (secondary) page.

- Select Set Up <Product Line>, Foundation Tables, Currency and Market Rates, Market Rates, and then click the Exchange Rate Detail icon beside the Rate field to access the Exchange Rate Details (secondary) page.

Use the Exchange Rate Detail (EXCH_RATE_DTL) page to access exchange rate detail information from the Market Rates (RT_RATE_PNL) page.

Exchange Rate Detail page to access exchange rate detail information

The primary record for this page is the Exchange Rate work record. For triangulated rates, you can update rate values for all three components of the triangulated rate.

Rate Quotation Basis   Displays the quotation basis for the exchange rate as defined in the Currency Quotation Method page.

Quote Units   Displays the quote units for the exchange rate as defined in the Currency
                             Quotation Method page.

Triangulate   Displays the triangulation setting for the exchange rate as defined in the Currency
                             Quotation Method page.

Reference Currency   For triangulated exchange rates, displays the reference currency used in the
                             triangulated exchange.

Current Quote   Displays the current exchange rate used to convert the from-currency to the to-
                             currency.

                             For a direct, non-triangulated rate, this field displays quote units (or 1) to the left
                             side of the equal sign and the visual rate on the right. For example:

                             1 USD = 1.40000000 CAD

                             For an indirect, non-triangulated rate, this field displays the visual rate to the left
                             of the equal sign and quote units (or 1) on the right. For example:

                             1.400000000 CAD = 1 USD

                             For a triangulated rate, this field displays the two component rates of the triangle:
                             the rate for converting the from-currency to the reference currency (USD to
                             EUR) and the rate for converting the reference currency to the to-currency (FRF
                             to EUR). For example:

                             1.25 USD = 1 EUR = 6.8 FRF

Historic Quote   If page logic determines that the exchange rate, as stored in the database, is
                             inconsistent with the current quotation method, this field displays a quote based
                             on the current quotation method, instead of the quotation method active on the
                             rate effective date.

                             Data provided in the historic quote field allows you to see how the exchange rate
                             has changed over time, using a consistent quotation method, even if the quotation
                             method has actually changed.

                             For example, if you are viewing a historical rate where FRF was converted to
                             USD directly using a calculated reciprocal rate of 1 FRF = 0.1470588 USD and
                             the current quotation method for this currency pair is indirect, the conversion
                             function recalculates the visual rate based on indirect quotation, that is 6.8000001
                             FRF = 1 USD.

                             This field also displays a quote if the historic quote method was non-triangulated
                             and the current quote method is triangulated.

                             A historic quote is also displayed if you override a cross rate and bypass
                             triangulation, because the exchange rate being used is inconsistent with the
                             current quotation method.

                             If the system determines that the exchange rate is consistent with the current
                             quotation method, the field displays *Not Applicable.*

Exchange Rate   Displays a single visual rate for non-triangulated exchange rates, or all three
                           component visual rates for triangulated exchange rates. You can edit the cross
                           rate for triangulated exchange rates only if the Allow Override option box is
                           selected for the exchange rate on the Currency Quotation Method page.

Calculating Cross, Triangulated, and Reciprocal Rates

This section discusses how to run the EOP_RATECALC Application Engine process to calculate cross,
triangulated, and reciprocal rates.

Understanding the EOP_RATECALC Process

Run the EOP_RATECALC process to calculate rates and update the market rates table.

The process performs three functions:

*   Generates cross rates for non-triangulated currency pairs.

    For example, an organization subscribes to a rate service that provides all rates respective to USD.
    Starting with a USD to Canadian dollar rate and a USD to Mexican peso rate, the system can calculate a
    new Canadian dollar to Mexican peso cross rate.

*   Generates triangulated rates for triangulated currency pairs.

    For example, the EUR to an EPC (euro participating currency) fixed rate has been established on the
    market rate table and a new EUR to USD rate has just been entered. Using this information, the process
    can create a new USD to EPC triangulated rate. The difference between triangulated rates and cross rates
    affects how the data is stored in the database. When calculating a cross rate, you actually create a new
    rate. When calculating a triangulated rate, the individual components of the source rates are stored on the
    target.

*   Generates reciprocal rates for those currency pairs that are not automatically reciprocated.

    For example, using a USD to CAD rate as the source, the process calculates the CAD to USD reciprocal.
    If currency quote methods are in place, the visual rate remains the same and there is a difference in how
    the data is stored in the database (RATE_MULT and RATE_DIV are inverse). If currency quote methods
    are not used, the process actually calculates an inverse rate, meaning that the visual rates will differ.

Running the EOP_RATECALC Process

Access the Calculate Cross/Reciprocal Rate - Parameters page (Setup <Product Line>, Foundation Tables,
Currency and Market Rates, Calculate Cross/Reciprocal Rate). Click the Add a New Value tab and add a new
run control ID.

Use the Calculate Cross/Reciprocal Rate Rate - Parameters (RUN_EO9030) page to set run control
parameters and run the EOP_RATECALC Application Engine process that sets up cross, triangulated, and
reciprocal rates.

Cross/Reciprocal Rate - Parameters page to set run control parameters to set up cross, triangulated and reciprocal rates

Market Rate Index	Select a market rate index. Applications other than PeopleSoft Treasury should use the default index that you select for the exchange rate.
Term	This value defaults from the value entered on the Market Rate Definition page.
From Common Currency	Select a currency code to calculate a reciprocal rate.
Exchange Rate Type	Select the exchange rate type to use for this calculation
As of Date	Select the effective date of the newly created exchange rates, which are the output of the process. The as of date also determines the rates used as the basis for the calculations, which are the input of the process.
	The report uses the most current currency quotation method for the currency pair as the input to the process. If the as of date is the current effective rate on the specified date, it can affect triangulation. For example, a USD to EPC (euro participating currency) triangulated rate effective April 1, 2004 might be comprised of the EUR to USD rate also effective April 1, 2004 and the fixed EUR to an EPC rate effective on the date the newly participating EPC officially becomes a euro participating currency.
Generate Report	Select to generate a report that displays the cross, triangulated, and reciprocal rate calculations performed by the process.
Override Existing Rates	Select to have the calculated rates override rates for the exchange rate type, regardless of the as of date.

Generate Reciprocal Rate	Select to calculates reciprocal rates for currency pairs that do not have the Auto Reciprocate option select on the Currency Quotation Method page.
	You can select this option alone, or in combination with the Generate Cross Rates and Rate Triangulate options.
	This process does not directly manipulate the exchange rates. The system uses numerator and denominator values instead, such that the following is true:
	(from-currency / RATE_DIV) × RATE_MULT = to-currency
	Fro example, suppose you want a reciprocal rate between USD and CHF and assume a two-to-one ratio. If the exchange rate for USD to CHF is quoted directly (either using a direct quote method that you selected or using the system default), this rate is stored as RATE_MULT = 2 and RATE_DIV = 1. The rate is represented as 1 USD = 2 CHF, with a visual rate of 2.
	In turn, the CHF to USD rate must be indirect. The reciprocal is a simple exchange, storing the rate as RATE_MULT = 1 and RATE_DIV = 2. The visual rate remains 2.
	If quote methods are not being used, the CHF to USD rate must be quoted directly (the default), so the reciprocal rate is actually a calculated inverse. This rate is stored as RATE_MULT = 0.5 and RATE_DIV = 1, with a visual rate of 0.5.
	In this example between USD and CHF, using a quote method and using a calculated inverse produced the same end result, 1/2 equals 0.5. But in actual practice, the manipulation of exchange rates is a major task and is one of the reasons for establishing the currency quote method.
Generate Cross Rates	Select to automatically generate cross rates. For example, to generate cross currency rates for USD, CAD, and MXP, you enter USD to CAD = 1.473 and USD to MXP = 9.8793. The system automatically generates CAD to MXP = 9.8793/1.473 = 6.7069246.
	If you choose to generate cross rates, the From Cur (from-currency) and To Cur (to-currency) fields display and you must select a from-currency and a to-currency. You can enter a wild card of *%* in either or both fields to indicate from all or to all currencies.
Rate Triangulate	Select to convert two currencies through a third currency.
	Select to convert two currencies through a third currency. If you select Rate Triangulate, the From Cur (from-currency) and To Cur (to-currency) fields display and you must select a from-currency and a to-currency. You can enter a wild card of *%* in either or both fields to indicate from all or to all currencies.
Quote Method Required	Select to indicate that you want the process to perform selected calculations only if the currency pairs have an existing currency quotation method definition.

Using the Currency Exchange Calculator

This section discusses how to convert amounts using the Currency Exchange Calculator.

Converting Amounts Using the Currency Exchange Calculator

Depending on the PeopleSoft application that you are using, you can access the Currency Exchange Calculator (CURRENCY_EXCHNG_PN) page in the following ways:

- Select Set Up <Product Line>, Common Definitions, Currency, Currency Exchange Calculator.

- Select Set Up <Product Line>, Common Definitions, Foundation Tables, Currency and Market Rates, Currency Exchange Calculator.

- Select Enterprise Components, Component Configuration, Currency Exchange Calculator.

Use the Currency Exchange Calculator (CURRENCY_EXCHNG_PN) page to calculate currency exchange between currencies. This tool enables you to select a rate type other than the base currency, but does not enable you to override the exchange rate.

Currency Exchange Calculator page to calculate currency exchange between currencies

From Amount	The currency exchange is based on the from amount that you enter and the current exchange rate set up on the Market Rates page.
	See Chapter 4, "Working With Currencies and Market Rates," Defining Market Rates, page 36.
From Currency Code	Select the currency code from which to calculate the exchange amount.
To Currency Code	Select the currency code to which to calculate the exchange amount.
Exchange Rate Type	Select the type of exchange rate to use for this calculation.
Converted Amount	Click Save to calculate the amount and display it in this field.

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