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PeopleSoft Risk Management 9.1 PeopleBook

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PeopleSoft Risk Management 9.1 PeopleBook
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PeopleSoft Risk Management Preface

This chapter discusses:

- PeopleSoft application fundamentals.
- Deferred processing.
- Common elements used in this PeopleBook.

Note. This PeopleBook documents only page elements that require additional explanation. If a page element is not documented with the process or task in which it is used, then it either requires no additional explanation or is documented with the common elements for the section, chapter, or PeopleBook.

Oracle's PeopleSoft Products

This PeopleBook refers to these products:

- PeopleSoft Cash Management.
- PeopleSoft Deal Management.
- PeopleSoft Risk Management.
- PeopleSoft General Ledger.
- JD Edwards General Accounting.

PeopleSoft Application Fundamentals

The*PeopleSoft Risk Management PeopleBook* provides you with implementation and processing information for your PeopleSoft Risk Management system. However, additional, essential information describing the setup and design of your system resides in companion documentation. The companion documentation consists of important topics that apply to many or all PeopleSoft applications across the Financials, Enterprise Service Automation, and Supply Chain Management product lines. You should be familiar with the contents of these PeopleBooks.

The following companion PeopleBooks apply specifically to Risk Management.

- *PeopleSoft Applications Fundamentals PeopleBook*
- *PeopleSoft Global Options and Reports PeopleBook*
- *PeopleSoft Banks Setup and Processing PeopleBook*

Deferred Processing

Several pages in Risk Management operate in deferred processing mode. Most fields on these pages are not updated or validated until you save the page or refresh it by clicking a button, link, or tab. This delayed processing has various implications for the field values on the page—for example, if a field contains a default value, any value you enter before the system updates the page overrides the default. Another implication is that the system updates quantity balances or totals only when you save or otherwise refresh the page.

See Also

PeopleTools PeopleBook: PeopleSoft Application Designer Developer's Guide, "Designing Pages for Optimal Performance" ,

PeopleBooks and the PeopleSoft Online Library

A companion PeopleBook called *PeopleBooks and the PeopleSoft Online 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 locally installed PeopleSoft online library, including web site folders.
- Understanding documentation integration and how to integrate customized documentation into the library.
- Application abbreviations found in application fields.

You can find *PeopleBooks and the PeopleSoft Online Library* in the online PeopleBooks Library for your PeopleTools release.

Common Elements Used in This PeopleBook

Account	ChartField that identifies the nature of a transaction for corporate accounts.
Affiliate	ChartField used to map transactions between business units when using a single interunit account.
Alt Acct (alternate account)	ChartField that identifies the nature of a transaction for statutory accounts. This field appears only if you enabled the Alternate Account option for your organization and for the general ledger business unit.
Attachment	Click this link to add, delete, and view attachments. When adding large attachments, you should save the transaction before adding the attachment.
Class	ChartField that identifies a particular appropriation when you combine it with a Fund, DeptID, Program Code, and Budget Reference.
Currency	Code that identifies the type of currency for an amount, such as USD or FRF.
Dept (department)	ChartField that indicates who is responsible for or affected by the transaction.
Description	Free-form text up to 256 characters.
Effective Date	Date on which a table row becomes effective; the date that an action begins. For example, if you want 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.
Fund	ChartField that represents structural units for education and government accounting. Can also represent a divisional breakdown in your organization.
Fund Affiliate	ChartField used to correlate transactions between funds when using a single intraunit account.
Language	The language in which you want the field labels and report headings of your reports to print. The field values appear as you enter them.
Oper Unit (operating unit)	ChartField used to identify a location, such as a distribution warehouse or sales center.

Process Frequency	Select from: *Once:* Runs the request the next time the batch process runs. After the batch process runs, the process frequency is automatically set to *Don't Run.* *Always:* Runs the request every time the batch process runs. *Don't Run:* Ignores the request when the batch process runs.
Process Monitor	This link takes you to the Process List page, where you can view the status of submitted process requests.
Product	ChartField that captures additional information useful for profitability and cash flow analysis by product sold or manufactured.
Program	ChartField that identifies groups of related activities, cost centers, revenue centers, responsibility centers, and academic programs. Tracks revenue and expenditures for programs.
Project	ChartField that captures information for project/grants accounting.
Report ID	The report identifier.
Report Manager	This link takes you to 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).
Run	This button takes you to the Process Scheduler request page, where you can specify the location where a process or job runs and the process output format.
Run Control ID	An identification code that identifies the run parameters for a report or process.
SetID	An identification code that represents a set of control table information or TableSets. A TableSet is a group of tables (records) necessary to define your company's structure and processing options.
Short Description	Free-form text up to 15 characters.
Status	Indicates whether a row in a table is *Active* or *Inactive.* You cannot display inactive rows on transaction pages or use them for running batch processes. Inactivate rather than delete data you no longer use to maintain an audit trail.
Unit	Business unit for an item.

Chapter 1

Getting Started With PeopleSoft Risk Management

This chapter discusses:

- Risk Management business processes.
- Risk Management integrations.
- Risk Management implementation.

Risk Management Business Processes

Risk Management provides these business processes:

- Risk analysis and hedge determination.
- Position limit notification.
- Hedge transaction compliance using FAS 133 or IAS 39 Accounting standards.
- Hedge and hedge group creation and maintenance.

This PeopleBook covers these business processes in the business process chapters.

Risk Management Integrations

Risk Management integrates with these PeopleSoft applications:

- Cash Management
- Deal Management
- General Ledger

We cover integration considerations in the implementation chapters of this PeopleBook.

Supplemental information about third-party application integrations is located on Orlacle's My Oracle Support website.

Risk Management Implementation

PeopleSoft Setup Manager enables you to generate a list of setup tasks for your organization based on the features that you are implementing. The setup tasks include the components that you must set up, listed in the order in which you must enter data into the component tables, and links to the corresponding PeopleBook documentation.

Before running Setup Manager to generate a list of PeopleSoft setup tasks, you need to set up PeopleSoft banks functionality, Cash Management, and Deal Management.

Other Sources of Information

In the planning phase of your implementation, take advantage of all PeopleSoft sources of information, including the installation guides, table-loading sequences, data models, and business process maps. A complete list of these resources is in the preface of *PeopleTools PeopleBook: PeopleBooks and the PeopleSoft Online Library*, with information on where to find the most up-to-date version of each.

See Also

PeopleSoft Banks Setup and Processing 9.1 PeopleBook, "Getting Started with PeopleSoft Banks Setup and Processing"

PeopleSoft Cash Management 9.1 PeopleBook, "Getting Started with PeopleSoft Cash Management"

PeopleSoft Deal Management 9.1 PeopleBook, "Getting Started with PeopleSoft 9.1 Deal Management"

PeopleTools PeopleBook: PeopleSoft Setup Manager

PeopleTools PeopleBook: PeopleSoft Component Interfaces, "Using the Excel to Component Interface Utility"

Chapter 2

Defining Risk Management Processing Options

This chapter provides an overview of risk analytics setup and discusses how to:

- Set up hedges.
- Define hedge groups.
- Set up risk analytics.
- Define deal instrument analytical functions.
- Define market risk scenario sets.

Understanding Risk Analytics Setup

This section lists prerequisites and discusses the risk analytics setup process.

Prerequisites

Before using Risk Management, you must:

- Set up banks and counterparties.
- Set up the Cash Management and Deal Management products.
- Set up third-party analytics.

See Also

PeopleSoft Banks Setup and Processing 9.1 PeopleBook, "Setting Up Banks"

PeopleSoft Banks Setup and Processing 9.1 PeopleBook, "Setting Up External, Internal, and Netting Accounts"

PeopleSoft Banks Setup and Processing 9.1 PeopleBook, "Setting Up Additional Banking Information"

PeopleSoft Cash Management 9.1 PeopleBook, "Defining Cash Management Processing Options"

PeopleSoft Deal Management 9.1 PeopleBook, "Defining Deal Management Processing Options"

Risk Analytics Setup Process

Risk Management is a data-driven application for evaluating risk. You define how the application works with risk data and models it through capture mechanisms. Risk Management can accommodate the models you derive to address the dynamic nature of the market and the varying effects of the types of risk.

This is an overview of the risk analytics setup process:

- Define hedge sources and hedge items.
- Set up risk analytics.

  You can access and communicate with third-party analytics through three methods:

  - Microsoft Excel.
  - Component Object Model (COM) automation.
  - Flat File Export.

Pages Used to Navigate Setup in Treasury Management

This table provides a listing of custom navigation folders in the Treasury Definitions Center that contain pages that are used to setup Risk Management:

Folder Name	***Navigation***	***Usage***	***Setup Information***
Treasury Definitions Center	Treasury Management Center	Access primary Risk Management setup pages from a central location. For easier retrieval, you can save this page in the My Favorites folder on the portal navigation menu.	
Analytics	Click Analytics.	Access pages to define analytic calculations, functions, and vendor information used in risk analysis.	See Chapter 2, "Defining Risk Management Processing Options," Setting Up Risk Analytics, page 9.
Hedges	Click Hedges.	Access pages to set up hedge groups, item sources, and strategies.	See Chapter 2, "Defining Risk Management Processing Options," Setting Up Risk Analytics, page 9.

Setting Up Hedges

To define hedge information, use the following components:

- Hedge Strategies component (HDG_STRATGY_PNG_GBL).
- Hedge Item Sources component (HDG_SRC_PNG).

This section discusses how to:

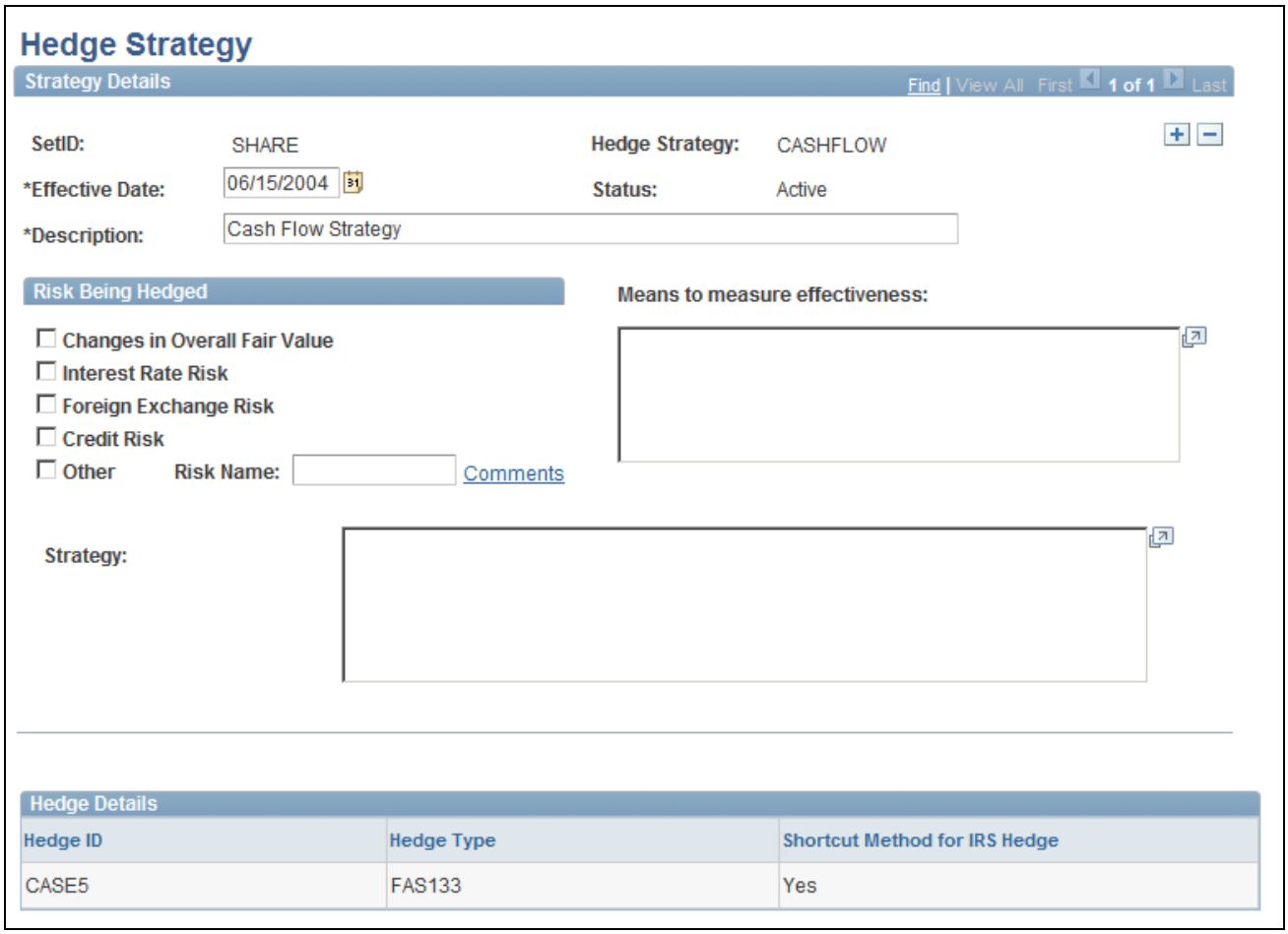
- (Optional) Define hedge strategies.
- Define hedge item sources.

Pages Used to Set Up Hedges

Page Name	*Definition Name*	*Navigation*	*Usage*
Hedge Strategy	HDG_STRATEGY_PNL	Risk Management, Administer Risk, Hedge Strategies, Hedge Strategies	Record any relevant information that a third-party needs to understand the course of action as purposeful and meriting of IAS 39 or FAS 133 special accounting considerations. You can document qualitative concerns and link them to the quantitative dimensions of the hedging activities.
Hedged Item Source	HDG_SRC_PNL	Risk Management, Administer Risk, Hedged Item Sources, Hedged Item Sources	Set up the risk evaluation and accounting of the hedged item.

Defining Hedge Strategies (Optional)

Access the Hedge Strategy page (Risk Management, Administer Risk, Hedge Strategies, Hedge Strategy).



Hedge Strategy page

Description and **Strategy** Summarize the reasons for your choices. Use the Strategy field to detail those reasons.

Note. Paragraph 44 of FAS 133 states: "Qualitative disclosures about an entity's objectives and strategies for using derivative instruments may be more meaningful if such objectives and strategies are described in the context of an entity's overall risk management profile. If appropriate, an entity is encouraged, but not required, to provide such additional qualitative disclosures [44]."

Risks You Can Hedge

According to ¶ 21(a-f), you can hedge only these four risks:

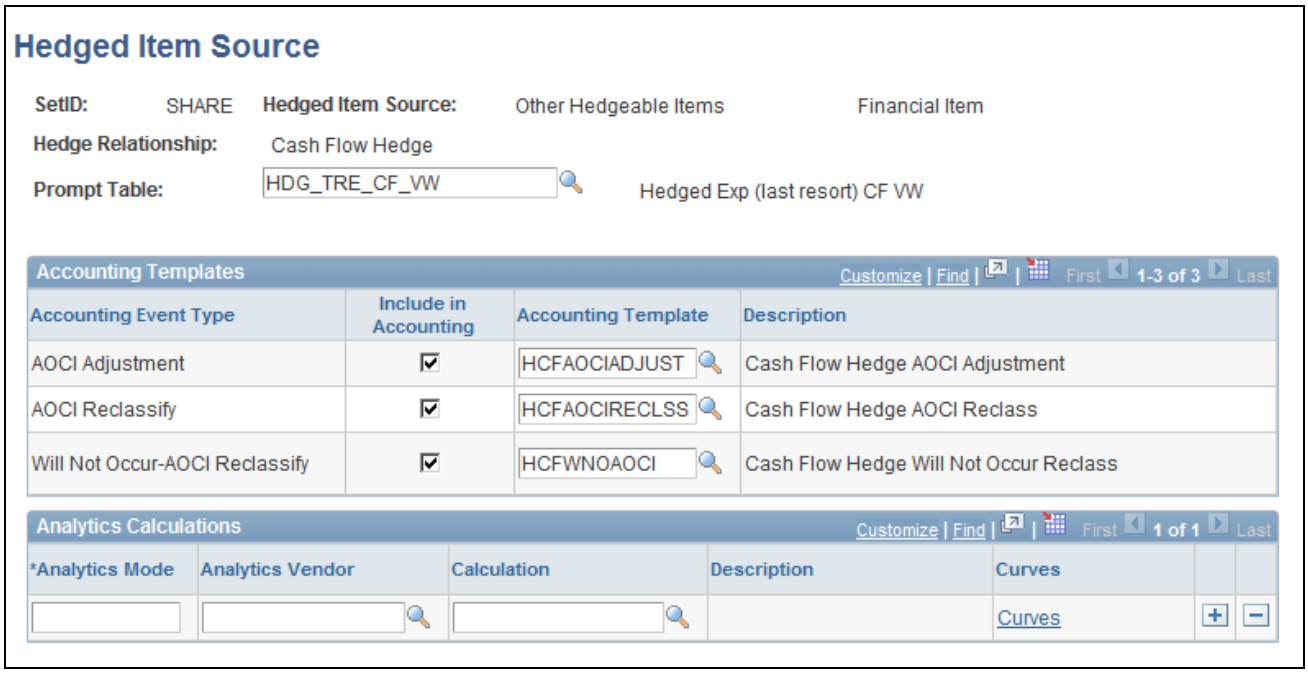
Changes in Overall Fair Value Select to hedge nonfinancial risks, such as commodities. Selecting this check box automatically clears any other hedged risk options that are selected.

Interest Rate Risk Select to hedge risk of instability in interest rates.

Foreign Currency Exchange Risk	Select to hedge risk of fluctuation of foreign currency exchange rates.
Credit Risk	Select to hedge risk of credit variability.
Other and **Risk Name**	Enter a name in the Other field to designate another type of risk investment to be hedged.
Comments	Click to access the Details page to record details of the hedged risk entered in the Risk Name field.

Defining Hedge Item Sources

Access the Hedged Item Source page (Risk Management, Administer Risk, Hedged Item Sources, Hedged Item Source).



Hedged Item Source page

Note. The fields available on this page depend on the FAS 133 Hedge Type that you select.

This table shows the association between the selected hedge type and a prompt table:

FAS 133 Hedge Type	*Prompt Table*
Cash Flow Hedges *FX (foreign exchange) Cash Flow Hedges*	Select a record.

FAS 133 Hedge Type	*Prompt Table*
Fair Value Hedge *FX F V (foreign exchange fair value) Available-for-Sale* *FX F V (foreign exchange fair value of Firm Commitment)*	Select a record, and then define both the Hedged Item Type and the Fair Value Adjustment Type. Hedged Item Type: Select *Recognized Asset or Liability*, *Forecasted Transaction* or *Unrecognized Firm Commitment.* Fair Value Adjustment Type: Select *Per Period Fair Value*, *Cumulative Amortized Cost* or *Cumulative Fair Value.*

Accounting Templates

Do Accounting Select the checkbox next to the appropriate Accounting Event Type,and then select an Accounting Template. Available accounting event types depend on the hedge type that you selected.

Hedge Type and Associated Accounting Event Types

This table shows the association between the selected hedge type and an accounting event type:

FAS 133 Hedge Type	*Accounting Event Type*
Cash Flow Hedges *FX Cash Flow Hedges*	*AOCI Adjustment* *AOCI Reclassification* *Will Not Occur- AOCI Reclassify.*
FX F V of Available-for-Sale	*Fair Value Hedged Item G/L* *Amortize Adj of Carrying*
FX F V of Firm Commitment *Fair Value Hedge*	*Fair Value Hedged Item G/L* *Firm Commitment to Carrying* *Amortize Adj of Carrying* *Derecognize Firm Commitment.*

Analytic Calculations

Analytics Mode Enter a mode definition.

Analytics Vendor Associate an installed third-party analytics vendor and select an associated calculation in the Calculation field.

Setting Up Risk Analytics

To define risk analytics, use the following components:

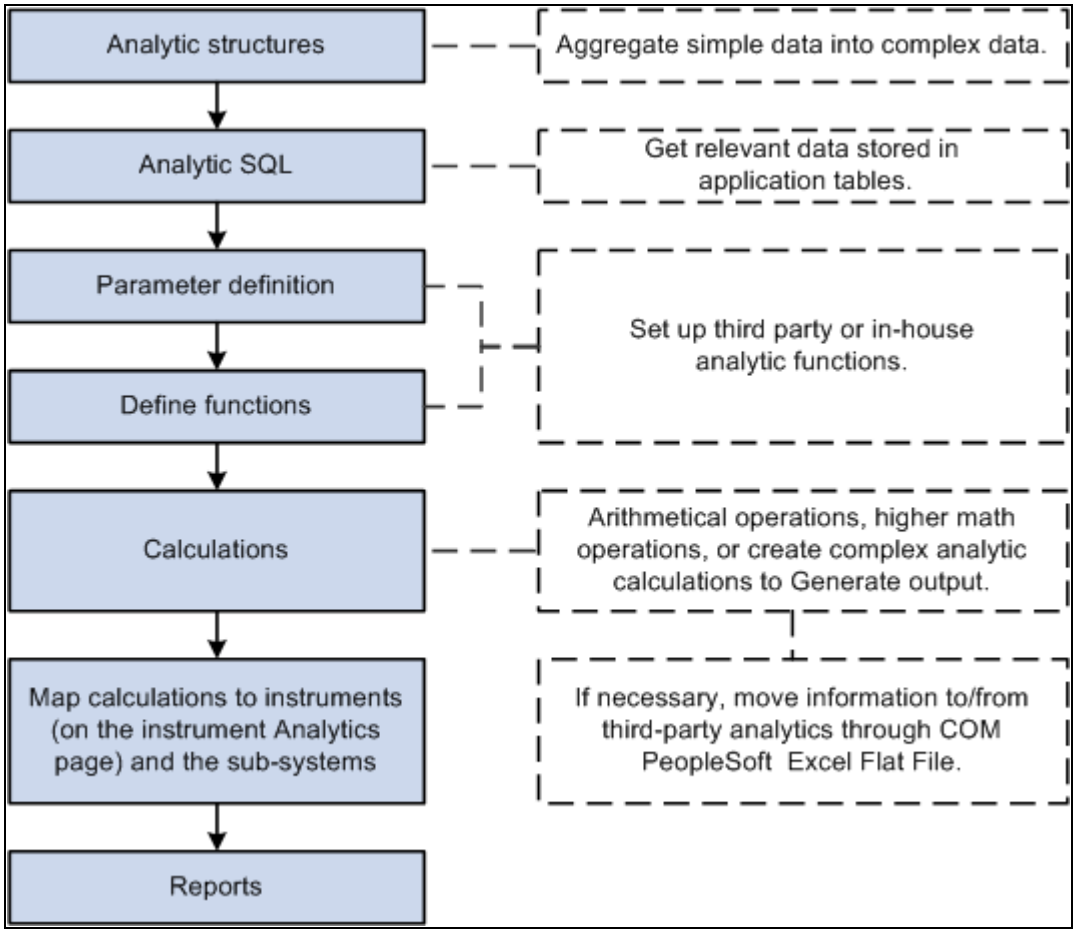
- Instrument Analytics (INSTR_MTMDEFN_PNL_GBL).
- Analytic Calculations (MTM_PROGRAM_DEFN_GBL).
- Analytic Functions (COM) (MTM_FUNC_HDR_COM_GBL).
- Analytic Functions (Excel) (MTM_FUNC_HDR_EXL_GBL).
- Analytic Functions (File Exp) (MTM_FUNC_HDR_FLE_GBL).
- Analytic SQL (MTM_SQLCNTRL_PNL_GBL).
- Analytic Structures (MTM_STRUCTDEFN_PNL_GBL).
- Vendor Information (MTM_PRODNM_PNL_GBL).
- Vendor Parameters (MTM_PARMNM_PNL_GBL).

This section provides an overview of analytic parameters, analytic structures, and interface methods; lists common elements; and discusses how to:

- Define analytic structures.
- Assign analytic Structured Query Language (SQL) statements.
- Enter vendor information.
- Map vendor function parameters.
- Set up analytics using the Microsoft Excel interface method.
- Assign Microsoft Excel parameters.
- Set up analytics for using the COM interface method.
- Assign COM parameters.
- Set up analytics for using the File Export interface method.
- Assign file export parameters.
- Define analytic calculations.
- Map calculations to programs.
- Set parameter details.
- Define deal analytic functions.

Understanding Analytic Parameters, Analytic Structures, and Interface Methods

This flowchart illustrates the setup process for enterprise risk management:



Setting up enterprise risk management

The first step to running analytics is establishing the analytic structures' definitions.

By the time you are ready to perform this step, you may have chosen your analytic solution vendor and gone through vendor-specific functional data requirements. Most analytic functions use structured parameters as inputs.

Analytic Parameters

Analytic parameters can range from generic yield curves with a maturity date and corresponding rate as component fields to complex cash flow sets and vendor-specific structures that have more than three fields as components. For example, a yield curve parameter that is being passed to a function could look like this:

Date	*Rate*
March 10, 2004	5.60000%
March 11, 2004	5.60043%
April 11, 2004	5.60210%
July 11, 2004	5.60800%
March 10, 2005	5.61000%
March 10, 2006	5.80000%
March 10, 2007	6.30000%

Analytic Structures

To enable the use of such a parameter, we define it as a structure. Structures enable the definition of complex parameters required by the analytic solution functions in a specific format. PeopleSoft tables store the application and market data as normal fields and not as structures. This step enables you to combine the simple data types stored in the PeopleSoft rate tables and to build the complex data structures required by the analytic vendor that you specify.

In a later step, you can use SQL statements to retrieve complex data parameters from the application tables and incorporate these parameters into their respective functions.

Interface Methods

Set up parameters for communicating with third-party analytics using one of three methods:

- Microsoft Excel.
- Component Object Model (COM).
- Flat File Export.

Common Elements Used in This Section

Sequence Displays the numerical order in which a process runs.

Character Enter an alphanumeric character.

Structure Enter a predefined analytic structure.

Data Type Select from *Character*, *Date*, or *Number*.The data type corresponds to the value of the characters in the data tables.

MTM Func Comments (mark-to-market function comments) Enter comments about parameters, any limitations or exceptions to these parameters, and general comments about functions.

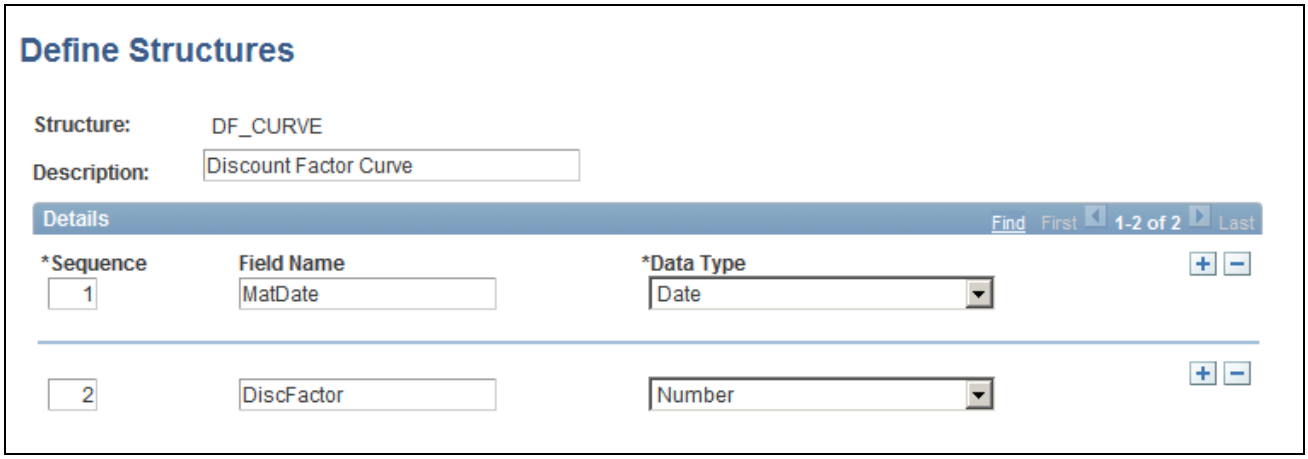
Pages Used to Set Up Analytics

Page Name	*Definition Name*	*Navigation*	*Usage*
Define Structures	MTM_STRUCTDEFN_PNL	Risk Management, Structure Analytics, Analytic Structures	Define the analytic structures that your organization uses when assigning valuation parameters.
Analytic SQL	MTM_SQLCNTRL_PNL	Risk Management, Structure Analytics, Analytic SQL, Analytic SQL	Assign SQL statements to retrieve the discrete deal and market rate information. PeopleSoft tables store this data.
Vendor Information	MTM_PRODNM_PNL	Risk Management, Structure Analytics, Vendor Information, Vendor Information	Enter general information about third-party analytics vendors.
Vendor Parameters	MTM_PARMNM_PNL	Risk Management, Structure Analytics, Vendor Parameters, Vendor Parameters	Establish parameters used by functions associated with a specific vendor.
Analytic Functions (Excel)	MTM_FUNC_HDR_EXL_P	Risk Management, Structure Analytics, Analytic Functions (Excel)	Map your analytics to Microsoft Excel formatting.
Analytic Functions (Excel) - Parameters	MTM_FUNC_DFN_EXL_P	Select the Parameters tab on the Analytic Functions (Excel) page.	Assign parameters to the Microsoft Excel-based analytics.
Analytic Functions (COM)	MTM_FUNC_HDR_COM_P	Risk Management, Structure Analytics, Analytic Functions (COM)	Set up analytics using the Component Object Model (COM) format.
Analytic Functions (COM) - Parameters	MTM_FUNC_DFN_COM_P	Select the Parameters tab on the Analytics Using COM page.	Assign parameters to COM-based analytics.

Page Name	*Definition Name*	*Navigation*	*Usage*
Analytic Functions (File Exp)	MTM_FUNC_HDR_FSI_P	Risk Management, Structure Analytics, Analytic Functions (File Exp)	Set up analytics using file export. This method uses analytic functions provided by third-party tools. If you specified an interface method of File Export for either vendor, you can add extra functions to apply to the same or different parameters, thereby increasing the complexity of analysis.
Analytic Functions (File Exp) - Parameters	MTM_FUNC_DFN_FSI_P	Select the Parameters tab on the Analytics Using File Export page.	Assign parameters to the analytic functions using file export. See Chapter 2, "Defining Risk Management Processing Options," Assigning Microsoft Excel Parameters, page 19.
Analytic Calculations - Program	MTM_PROGRAM_DEFN	Risk Management, Structure Analytics, Analytic Calculations	Create arithmetical functions to identify and measure risk as well as conduct macroeconomic analyses. For example, you can create what-if cases for which interest rate changes cause variations in demand.
Analytic Calculations - Steps	MTM_PROG_STEPS	Select the Steps tab on the Analytic Calculations - Programs page.	Establish instrument to analytic program mapping.
Program Function Details	MTM_PROG_FUNC_DETL	Click the Function Details/Parameters link on the Analytic Calculations - Steps page.	Establish evaluation type values for functions.
Instrument Analytics	INSTR_MTMDEFN_PNL	Risk Management, Structure Analytics, Instrument Analytics, Instrument Analytics	Map analytic functions to specific instrument types.
Deal Analytics	MTM_DEALVAL_PNL	Risk Management, Reevaluate Deals, Deal Analytics, Deal Analytics	Set up analytics for the deal.

Defining Analytic Structures

Access the Define Structures page (Risk Management, Structure Analytics, Analytic Structures, Define Structures).



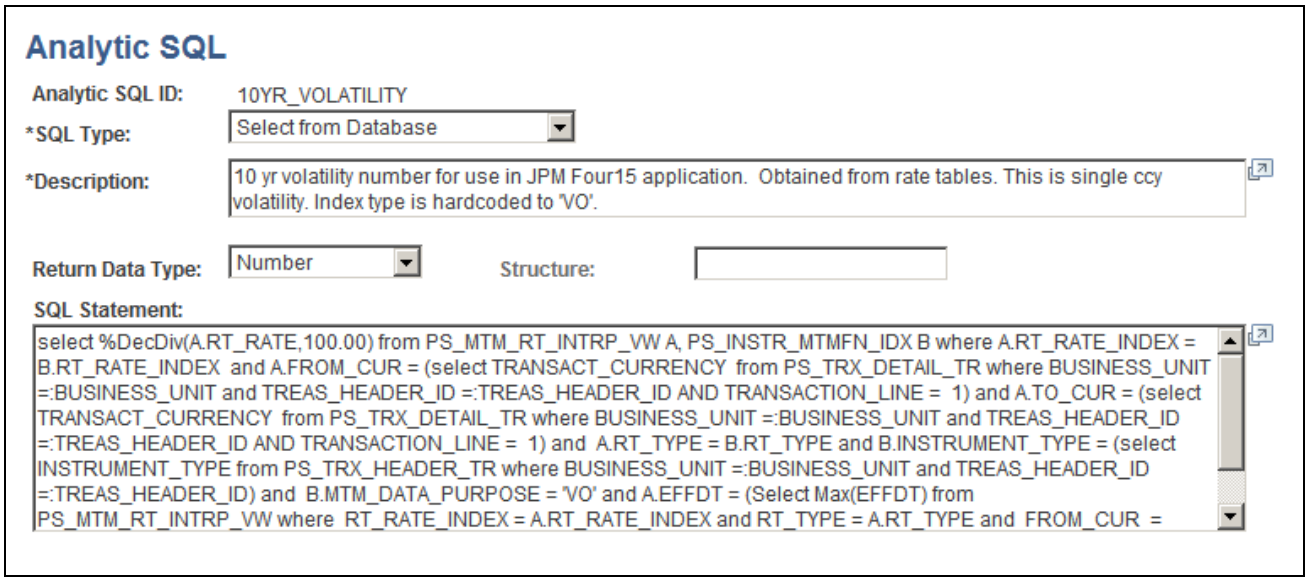
Define Structures page

Field Name Displays the name associated with the data field extracted from the market rate or deal data tables.

Data Type Corresponds to the value of the characters in the data tables.

Assigning Analytic SQL Statements

Access the Analytic SQL page (Risk Management, Structure Analytics, Analytic SQL, Analytic SQL).



Analytic SQL page

You need to retrieve specific parameters from the deal and forward these parameters to the analytic function to use the analytic functions. Risk Management delivers a standard set of parameter SQL statements that retrieve the discrete deal and market rate information and store the data in PeopleSoft tables. You can use the SQL statements provided or devise and implement new parameter data, depending on your business requirements.

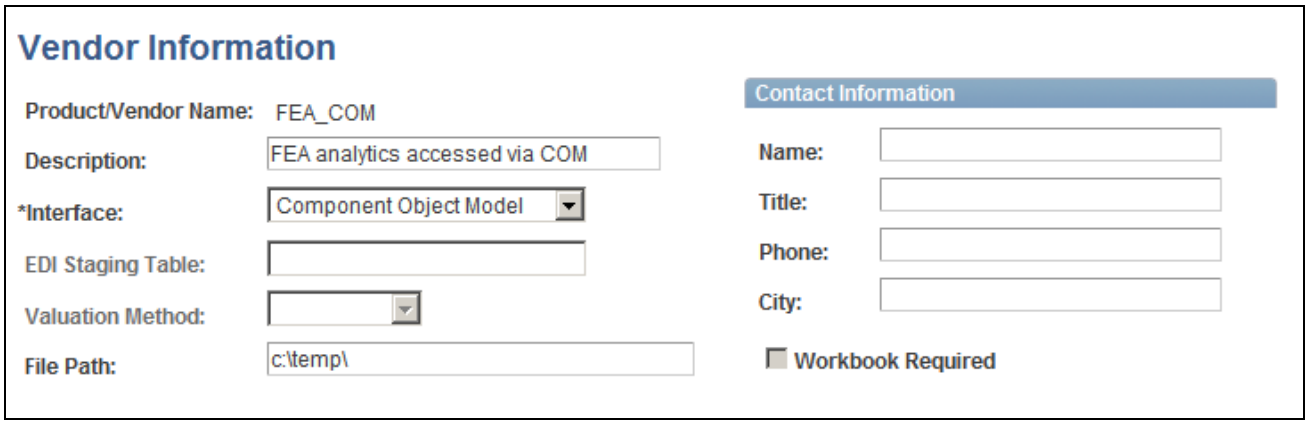
SQL Type Select *Select from Database* if you wish to retrieve data from the database, or select *Save to Database* if you are saving data using an Update or Insert statement.

Return Data Type This field is available only if you are creating a Select from Database SQL statement. Select a *Number*, *Date*, *Structure*, or *Char* (character). If you select *Structure*, the Structure field becomes available. Enter a structure that you defined on the Analytic Structures page.

SQL Statement Displays discrete deal and market rate information. You can view and edit this SQL statement, as necessary.

Entering Vendor Information

Access the Vendor Information page (Risk Management, Structure Analytics, Vendor Information, Vendor Information).



Vendor Information page

This table describes the Interface methods:

Interface Method	***Description***	***Conditions***
COM (Component Object Model)	Creates objects that can be accessed and used by another COM-compliant application. Uses analytic functions provided by third-party tools.	Selecting this option disables the Valuation Method, Workbook Required, and EDI Staging Table fields.
Excel Add-In	Calculates analytics for the deal using third-party Microsoft Excel calculations.	Selecting this option enables the Valuation Method and Workbook Required fields and disables the EDI Staging Table field. Select a valuation method of either *Function* or *Macro*, and select the Workbook Required check box, if applicable. The options you set depend upon the third-party vendor that you are using.
File Format	Provides a staging table location for deal attributes. Risk Management stores the attributes in a staging table and exports them in a flat file. Uses analytic functions provided by third-party tools.	Selecting this option disables Valuation Method and Workbook Required fields and enables the EDI Staging Table field. Identify the location of the EDI staging table where you plan to store the deal data for export.

EDI Staging Table Used when the File Format Interface method is selected. This is the staging table used to store deal attributes that are to be used to create the file to be exported.

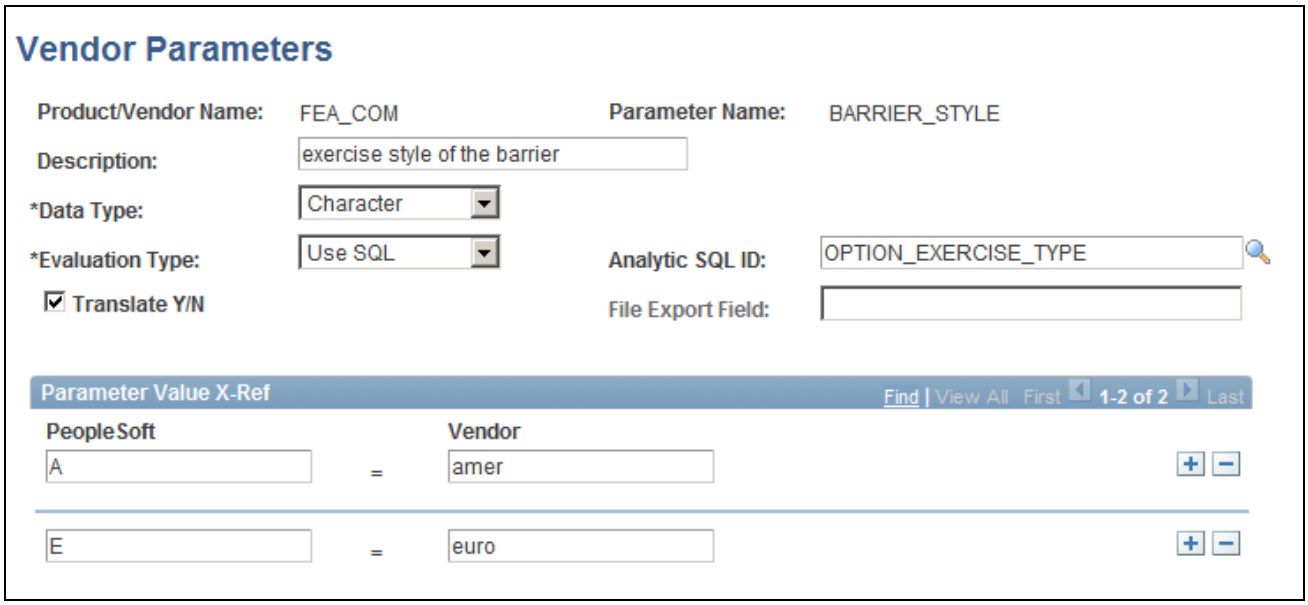
Valuation Method Used when the Excel Add-In Interface method is selected. Directs the system to either call a specified Macro or built-in Excel function.

File Path The directory where an exported file will be placed.

Fields in the Contact Information group box are optional.

Mapping Vendor Function Parameters

Access the Vendor Parameters page (Risk Management, Structure Analytics, Vendor Parameters, Vendor Parameters).



Vendor Parameters page

The field attributes for this page vary depending on the values you select in the Data Type and Evaluation Type fields. Use this table as a guide:

Data Type	*Evaluation Type*	*Available Fields*
Character	Use Constant.	Constant
(blank)	Use SQL.	Analytic SQL ID, Translate Y/N
Date	Use Constant.	Constant
(blank)	Use SQL.	Analytic SQL ID

Data Type	*Evaluation Type*	*Available Fields*
Number	Use Constant.	Constant
(blank)	Use SQL.	Analytic SQL ID, Translate Y/N
Structure	If you select *Structure* as the data type, you cannot select an evaluation type.	Structure, Analytic SQL ID

Use SQL Select SQL statements in the Analytic SQL ID field from those provided by Risk Management or additional statements that you created.

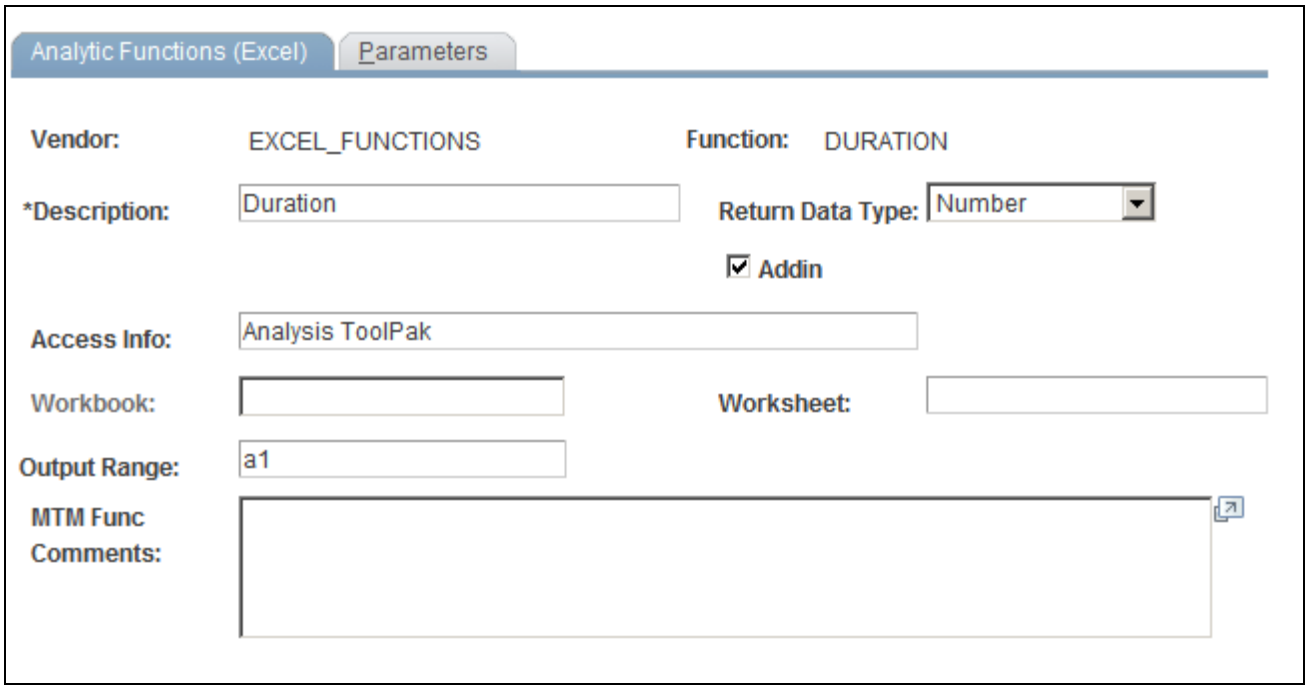
Use Constant Select a value in the Constant field. You can use a constant value not associated with PeopleSoft tables, or use the same value for all deals regardless of the instrument type or any other conditions.

Translate Y/N (translate yes/no) Select to enable the Parameter Value X-Ref group box, which provides a field for PeopleSoft- and Vendor-specific entries. Enter information specific to Risk Management in the PeopleSoft field and information provided from the third-party vendor in the Vendor field. For example, PeopleSoft tables store an option Buy or Sell as a Purchase (P) or Write (W) XLAT value. Vendor "X" wants to see and use the values as a Buy (B) or Sell (S). The PeopleSoft system translates the stored values (P) or (W) to Vendor "X" accepted values of (B) or (S).

File Export Field Enter the mapping sequence used to map the parameter to a specific field in the staging table for file exports. This field is available only if you select a vendor with *File Format* as the interface method on the Vendor Information page.

Setting Up Analytics for Using the Microsoft Excel Interface Method

Access the Analytic Functions (Excel) page (Risk Management, Structure Analytics, Analytic Functions (Excel), Analytic Functions (Excel)).



Analytic Functions (Excel) page

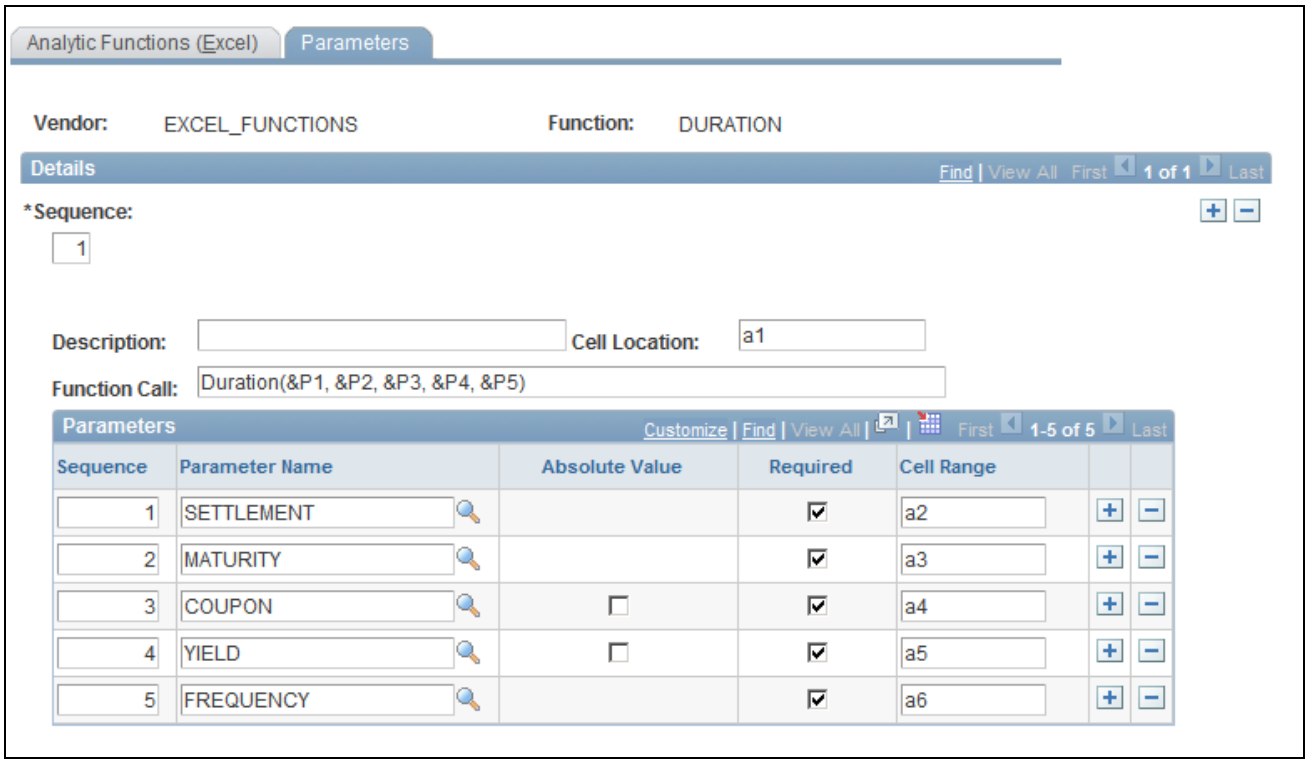
If you specified an interface method of *Excel Add-In* for a vendor, you can add extra functions to apply to the same or different parameters, thereby increasing the complexity of analysis.

Return Data Type Select *Number*,*Date*,*Structure*, or *Char* (character). If you select *Structure*, the Structure field becomes available. Enter a structure that you defined on the Analytic Structures page.

Addin Select to incorporate an add-in to the Microsoft Excel third-party analytics. If you selected *Macro* on the Vendor Information page, complete the Workbook and Worksheet fields. Enter the value of the Cell Location field (on the Analytic Functions (Excel) - Parameters page) in the Output Range field.

Assigning Microsoft Excel Parameters

Access the Analytic Functions (Excel) - Parameters page (Risk Management, Structure Analytics, Analytic Functions (Excel), Parameters).



Analytic Functions (Excel) - Parameters page

Each third-party analytic function requires parameters to calculate an analytic value for a deal. Vendors provide functions, and the PeopleSoft system uses the deal attributes stored in tables as parameters.

Specifying Function Calls

Function Call

If a vendor uses functions, you must concatenate &P with the sequential parameter number by separating each parameter with a comma in the Function Call field. The function call expands into a Microsoft Excel-compatible function call when you save. For example, if the function call is *Func (&P1, &P2, &P3)*, the values in the Cell Range field for these parameters are *C1*,*C2*, and *C3*. Internally, this cell range converts into *Func (R1C3:R1C3, R2C3:R2C3, R3C3:R3C3)*. This field is hidden, and Microsoft Excel uses it. The length of the field is equivalent to the maximum permissible character limit allowed for a Microsoft Excel cell (254 characters).

Cell Location

Displays the output sheet name. Enter this value in the Output Range field on the Analytic Functions (Excel) page.

Mapping Parameters

Parameter Name

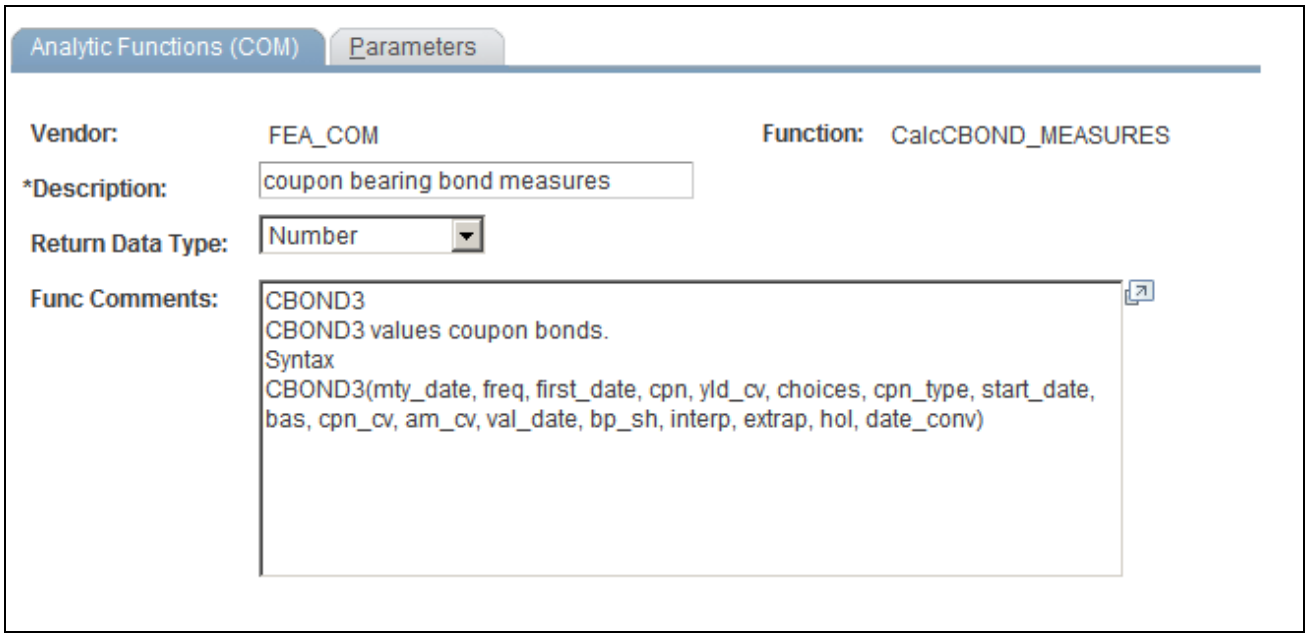
Select a parameter name value associated with the specified function.

Required Indicates those function parameters that are required. Certain third-party vendor applications fail if you do not export specific required function parameters to their application.

Absolute Select to convert a signed numeric value to an absolute numeric value.

Setting Up Analytics for Using the COM Interface Method

Access the Analytic Functions (COM) page (Risk Management, Structure Analytics, Analytic Functions (COM), Analytic Functions (COM)).



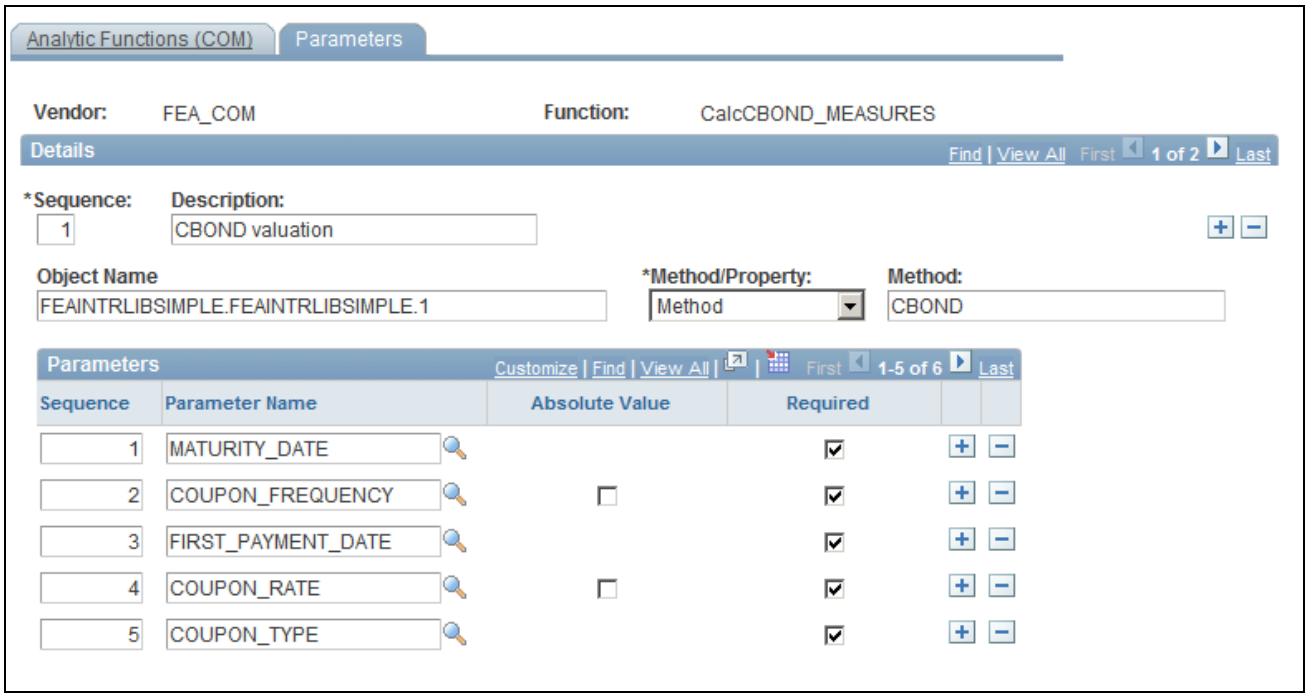
Analytic Functions (COM) page

This method uses analytic functions provided by third-party tools. If you specified a COM interface method, you can add extra functions to apply to the same or different parameters, thereby increasing the complexity of analysis.

Return Data Type Select *Number*, *Date*,*Structure*, or *Char* (character). If you select *Structure*, the Structure field becomes available. Enter a structure that you defined on the Analytic Structures page.

Assigning COM Parameters

Access the Analytic Functions (COM) - Parameters page (Risk Management, Structure Analytics, Analytic Functions (COM), Parameters).



Analytic Functions (COM) - Parameters page

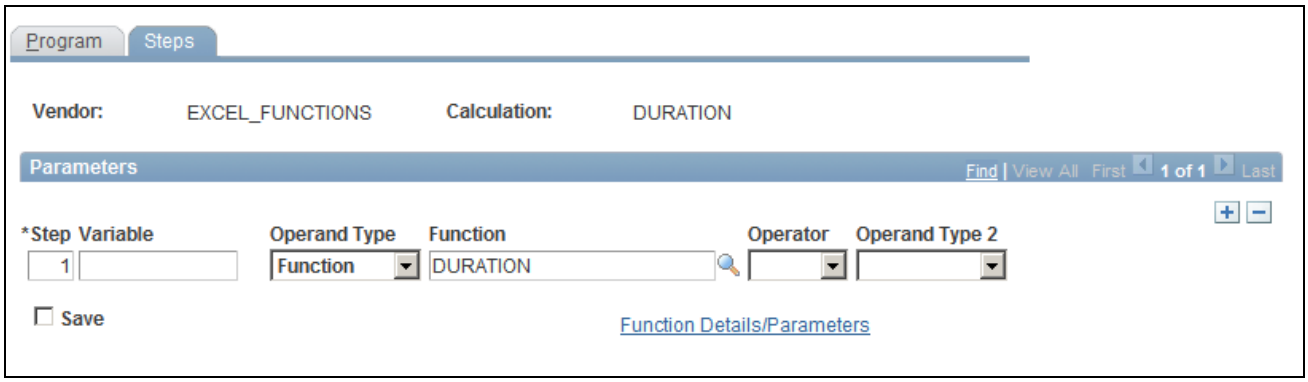
Object Name	Enter the component object model name.
Method/Property	Specify whether to call a method, set or get a property. If you select *Get Property* or *Set Property*, enter the Property name. If you select *Method*, enter the Method name.

See Also

Chapter 2, "Defining Risk Management Processing Options," Assigning Microsoft Excel Parameters, page 19

Mapping Calculations to Programs

Access the Analytic Calculations - Steps page (Risk Management, Structure Analytics, Analytic Calculations, Steps).



Analytic Calculations - Steps page

This page enables you to further define analytic rules for a specific vendor using existing predefined calculations. You can create relationships between mathematical operands using mathematical operators. To do this:

1. Define the step number.
2. Define the variable.

   Variables symbolically refer to figures, which must be generated through calculations. Use of variables improves system performance when rendering complex mathematical operations. The available mathematical operations that you can symbolize through variables are determined by the operands that you select.

3. Select an operand type.

   Operands are the components of mathematical operations. There are four types of operands:

   - *Constant:* Brings a particular figure into the formulations.
   - *Function:* Runs provided functions, such as executing valuation models or setting up yield curves.

     The Function operand can be used only as the first operand, the primary mathematical process, which is then adjusted by given quantities. Selecting *Function* as an operand activates the Parameter link, which enables you to edit a provided function according to your business needs.

   - *SQL:* Uses SQL.
   - *Variable:* Uses a specified variable.

4. Define an operator.

   Operators refer to the symbols of mathematical relationships linking operands. In addition to the four standard math operators (+ = Add, - = Subtract, x = Multiply, / = Divide),five additional operators are provided:

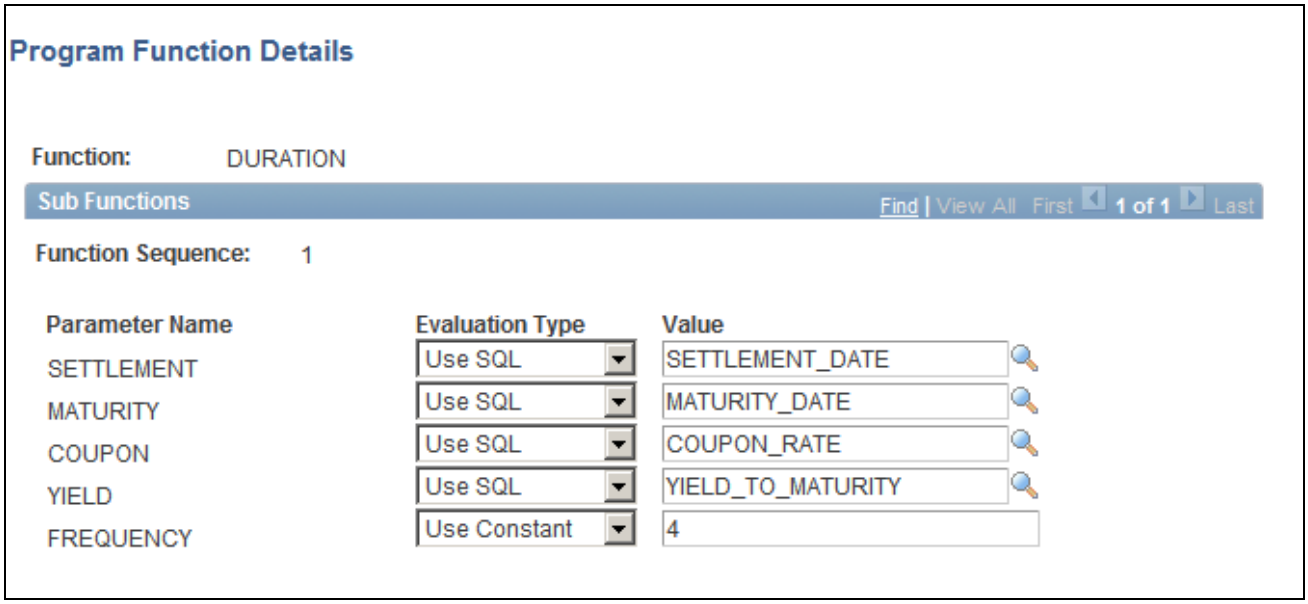
   - *Log:* Any base logs.
   - *Exp:* Enables you to calculate discount rates.
   - *Min:* Lowest operand.
   - *Max:* Creates operand.
   - *Return:* Enables you to make the result of that step to return to the underlying calculation (PeopleCode) for further use.

5. Define an operand value.

6. Select the Save check box to store that step's data as temporary data in a table.

Setting Parameter Details

Access the Program Function Details page (click the Function Details/Parameters link on the Analytic Calculations - Steps page).



Program Function Details page

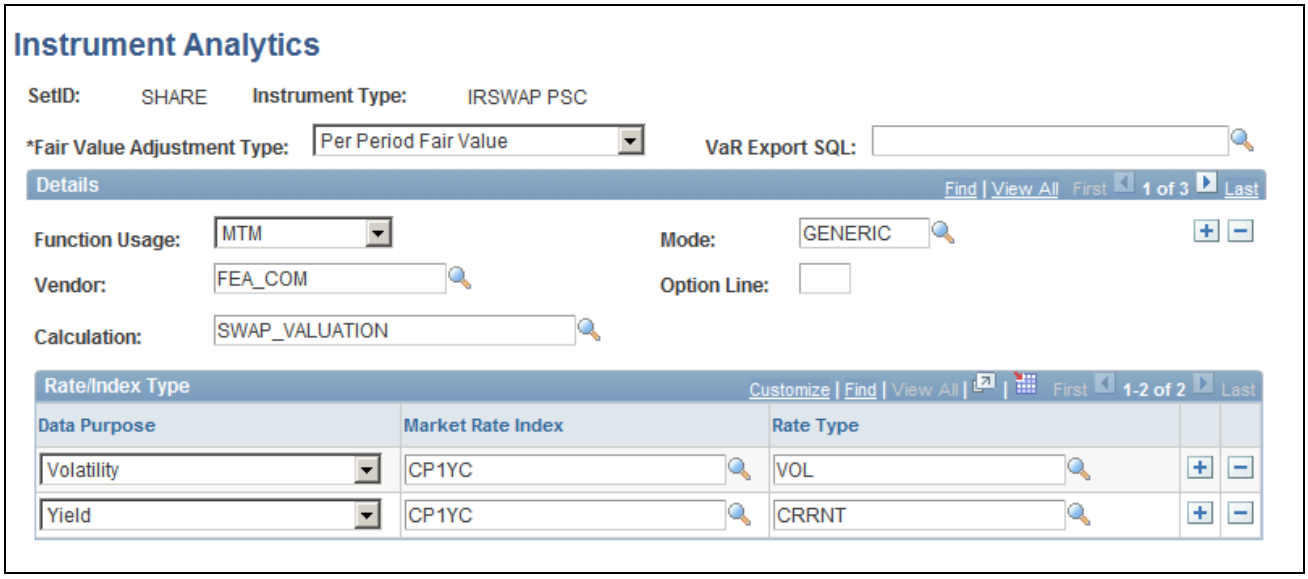
Evaluation Type

You can edit the evaluation type of a function's sub-function parameters, according to your business needs.

- *Use Constant:* Select to specify a constant value.
- *Use SQL:* Select to specify a constant value.
- *Use Variable:* Select to specify a variable.

Defining Instrument Analytic Functions

Access the Instrument Analytics page (Risk Management, Structure Analytics, Instrument Analytics, Instrument Analytics).



Instrument Analytics page

Fair Value Adjustment Type

Select *Per Period Fair Value*, *Cumulative Amortized Cost*, or *Cumulative Fair Value.*

VaR Export SQL

This is the SQL used to generate the VaR export file. The results of the SQL will be used to create a comma delimited file to be used by the VaR process to calculate VaR.

Details

Function Usage

Select the function usage for this instrument. If you have more than one function sequence, the sequences must be from the same vendor. Select from the following:

Convexity: Represents the amount that an instrument's price sensitivity differs from that implied by the instrument's duration.

Mathematically, it is the second derivative of price with respect to yield. For a bond, it measures the curvature of the price/yield relationship of a bond's cash flows.

Credit Risk: Describes the credit risk associated with an instrument.

Delta: Describes an option premium's sensitivity to changes in the price of the underlying asset.

It is the amount of the underlying necessary to hedge small changes in the option price for small movements.

Duration: Represents the average life of the present values of future cash flows from an instrument.

Mathematically, it is the first derivative of price with respect to yield.

File Export: Processes deal attributes into a flat file for use by third-party applications.

If you select *File Export*, the fields in the Rate/Index Type group box are unavailable.

MTM (mark-to-market): Calculates the value of the financial instrument based on the current market price of the underlying asset.

MTM-A (mark-to-market accounting): Calculates the clean value of the financial instrument based on the current market price of the underlying asset for accounting purposes.

This value does not contain any accrued interest.

Pricing: Values an instrument to observe and analyzes its worth.

This may or may not involve using current market prices.

Market Risk: Analyzes the impact of changes in market conditions on the firm.

Operational Risk: Measures the risk arising out of operational conditions and human interaction.

Other: Indicates any other type of risk; for example, legal, political, and so on.

Calculation

Specify an analytic calculation.

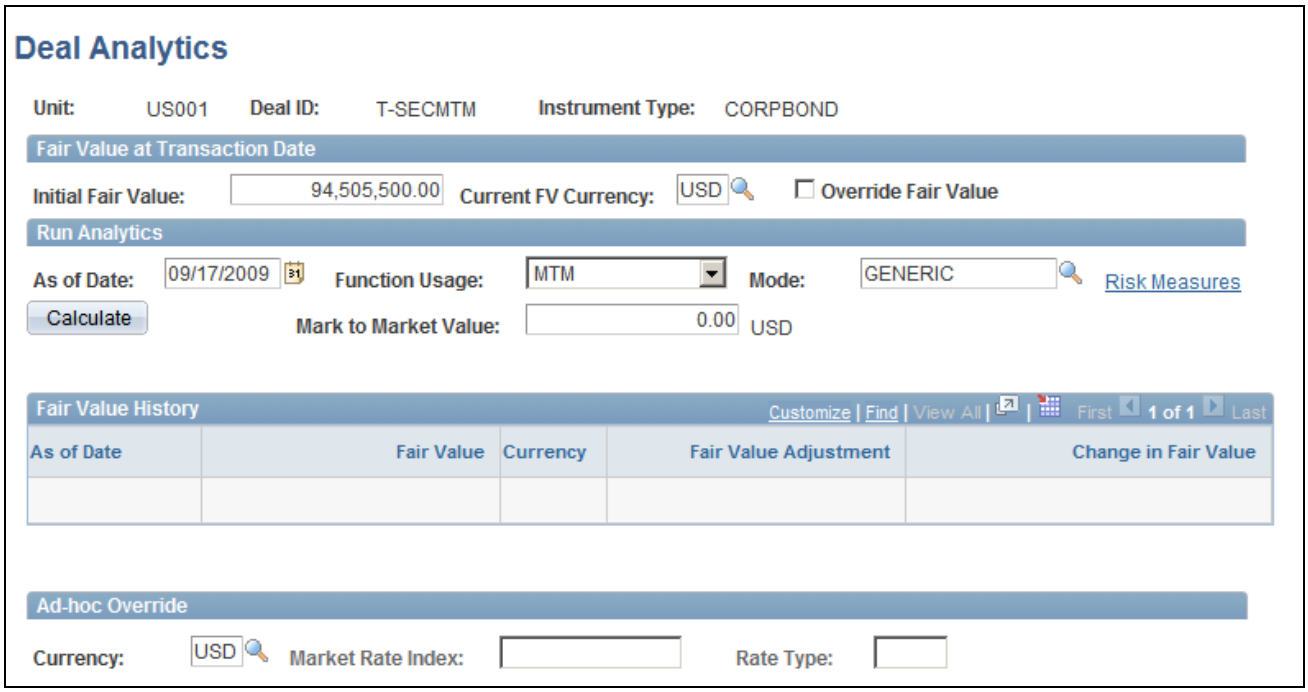
Rate/Index Type

Data Purpose Select *Cmdty* (commodity), *Credit*, *FX* (foreign exchange), *Other*, *Price*, *VO* (volatility), or *Yield*.

Market Rate Index and Rate Type Specify options for these fields to dictate the mapping of market rates to the instrument types.

Defining Deal Analytic Functions

Access the Deal Analytics page (Risk Management, Reevaluate Deals, Deal Analytics, Deal Analytics).



Deal Analytics page

Analytic functions based on the instrument type can also be set on a specific deal to track the effects of various types of market risk against the deal's fair value.

Override Fair Value Select to override the initial fair value amount.

Risk Measures Click to access the Deal Risk Measures page to view risk measurements for the deal.

Calculate Specify analytic parameters in the Run Analytics region, and then click the Calculate button to view the recalculated fair value history.

Chapter 3

Understanding Hedge Analytics and Accounting

This chapter provides an overview of hedge accounting and analytic, and discusses:

- FAS 133 Hedge Accounting.
- Hedge types.
- Embedded derivatives.
- Accounting Treatments for complying with IAS 39.

Understanding Hedge Analytics and Hedge Accounting

Every enterprise's assets and liabilities are exposed to fluctuations in interest rates, exchange rates, or commodity prices. An enterprise will always have natural hedges, but in most cases it is necessary to manage risk proactively by taking a position in a derivatives contract, insurance, and so on. Not entering into such contracts actually increases overall risk.

Derivatives, such as foreign exchange forward and future contracts, options, or currency swaps can reduce deviations from expected earnings, but the enterprise needs to implement risk management systems and procedures to manage those transactions.

Risk Management provides the IAS 39 and FAS 133 Hedge Accounting features to address your organization's economic realities and the regulatory requirements associated with derivative instruments.

FAS 133 provides accounting standards for working with hedge transactions and requires certain compliance elements that provide stakeholders with windows into the workings and financial progress of the enterprise's risk management. Under FAS 133, you use special accounting for hedged transactions, decreasing the income statement volatility otherwise introduced by mark-to-market accounting.

Since PeopleSoft 8.0, Treasury provided a hedge accounting solution based on FAS 133 guidelines, which focuses on accounting for derivatives and hedging activities. IAS 39 takes a broader view on accounting for financial instruments in general, and extends the areas addressed in FAS 133. There are, however, some differences that have a significant impact on reported performance.

IAS 39 imposes strict regulations on the use of hedge accounting, even for hedges that are economically effective. IAS 39 also imposes requirements for a wide range of instruments, including all derivatives, an enterprise's investments in debt and equity securities, financial assets and liabilities held for trading, and a company's own debt. It also covers short-term instruments such as trade receivables and payables.

Whether an organization complies with FAS 133 or IAS 39 regulations, PeopleSoft provides the ability to review investment and hedging strategies, and implement accounting systems to meet the processes and documentation requirements.

See Also

Chapter 4, "Analyzing Risk," page 43

Chapter 5, "Creating and Maintaining Hedges," page 49

FAS 133 documentation, www.FAS133.com

IAS 39 documentation, www.iasc.org.uk

Risk Management and Hedge Accounting

This section discusses:

- FAS 133 Documentation requirements.
- Periodic effectiveness assessment for FAS 133.
- Hedge de-designation.

FAS 133 Documentation Requirements

Risk Management enables you to systemically meet and capture most hedge accounting requirements around documentation for FAS 133 and IAS 39. .

There are, however, certain documentation issues in the FAS 133/IAS 39 standard that fall outside of the scope of database features, and these may or may not apply to your organization and its risk management strategy. PeopleSoft discloses and documents these context-sensitive areas during the course of this PeopleBook.

Periodic Effectiveness Assessment for FAS 133

Effectiveness tests provide a means for an organization, its stakeholders, and external auditors to evaluate whether risk management strategies are on track. The tests also evaluate whether hedges are working or are likely to work as planned, and thus remain within bounds for special accounting.

Note. The paragraphs below are purely from FAS 133 documentation provided at the time of issue. The Financial Accounting Standards Board (FASB), however, regularly updates and appends some of the content through amendments or through feedback from Derivatives Implementation Group (DIG) commentaries. PeopleSoft does not take responsibility for such changes and modifications and expects the users to be familiar with the changes recommended by FASB in regards to FAS 133/138 accounting standards.

Examining the value of derivative instruments at given points in time, per paragraph 20(b), 28(b), determines whether they have experienced gains and losses on a derivative. When you set up a transaction, its correspondent hedged deal, and the link between the two and document it for FAS 133, you must also define and document tests or methodologies to assess hedge effectiveness.

Effectiveness Assessment at Inception

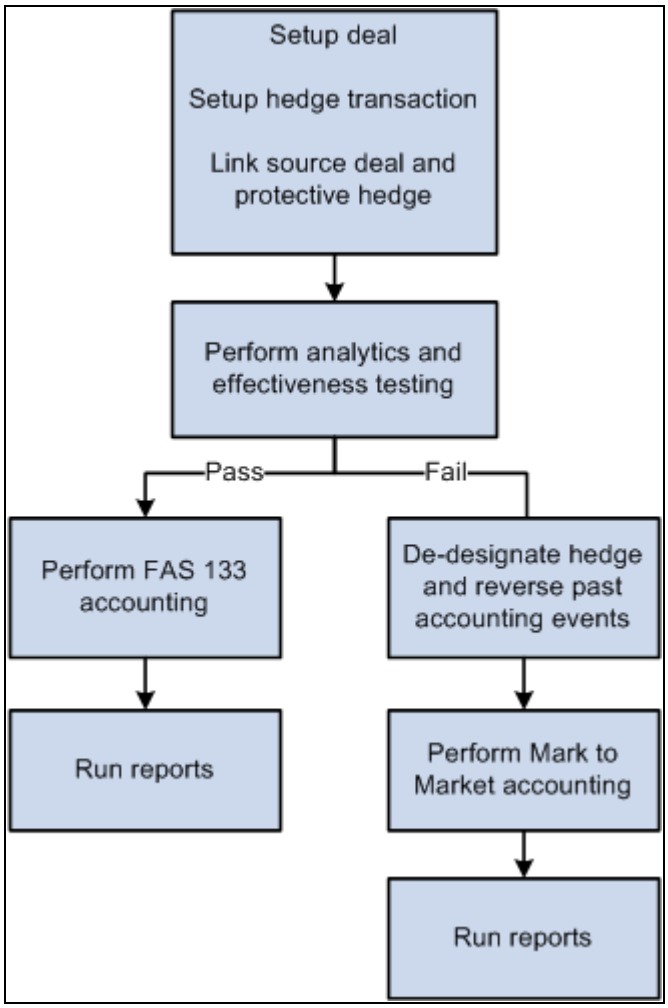
FAS 133 requires that you define tests of effectiveness assessment at the inception of the hedge, not retroactively or during the hedge's life span. Identifying and recording a derivative's value at predetermined points in time creates an audit trail.

Note. Regarding fair value hedges, ¶ 20(b) states: Both at inception of the hedge and on an ongoing basis, the hedging relationship is expected to be highly effective in achieving offsetting changes in fair value attributable to the hedged risk during the period that the hedge is designated. An assessment of effectiveness is required whenever financial statements or earnings are reported and at least every three months [¶ 20(b)]. Regarding cash flow hedges, ¶ 28(b) states: Both at inception of the hedge and on an ongoing basis, the hedging relationship is expected to be highly effective in achieving offsetting cash flows attributable to the hedged risk during the term of the hedge, except as indicated in paragraph 28(d) below. An assessment of effectiveness is required whenever financial statements or earnings are reported, and at least every three months [¶ 28(b)].

Hedge De-Designation

When your hedge transaction criteria are not met, including failed effectiveness assessment tests, you must de-designate the hedges, unwind their components, and apply mark-to-market accounting back to the last recorded date that the hedge passed effectiveness assessment. If a fundamental change in nature has occurred to the criteria you are hedging, FAS 133 accounting ends. For example, if you sell the recognized asset/liability, it expires, or the once firm commitment is terminated, FAS 133 accounting no longer holds.

Whenever deals meet documentation and effectiveness assessment testing requirements, you can use FAS 133's special accounting and benefit from decreased income statement volatility. This flowchart provides an overview of FAS 133 hedge accounting:



FAS 133 Hedge Accounting overview

Ineligible and Eligible Hedge Scenarios

These types of hedge scenarios are ineligible under FAS 133:

- Liquidity
- Theft
- Weather
- Competition
- Seasonality
- Political
- Operational

These types of hedge changes are eligible under FAS 133:

- Fair value of entire financial instrument.

- Percentage of entire fair value of the financial instrument.
- Fair value attributable to changes in interest (including prepayment as a separate component of interest rate risk).
- Fair value attributable to changes in foreign currency exchange rates.
- Fair value attributable to changes in the obligator's creditworthiness.

Understanding Hedge Types

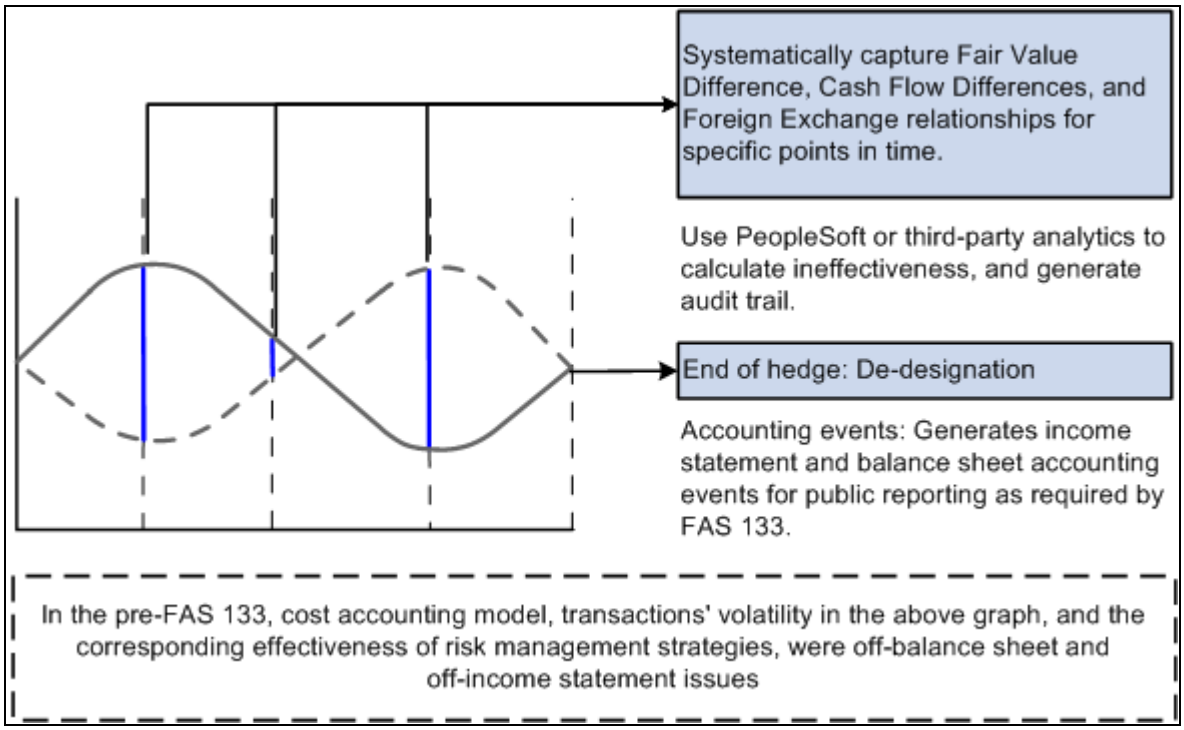
FAS 133 standardizes accounting for derivative instruments. It requires you to recognize derivative instruments as assets and liabilities in their statements of financial position and then to measure them at fair value. If certain conditions are met, your organization can designate a derivative instrument as a fair value hedge, cash flow hedge, or foreign currency hedge.

This section discusses:

- Risk Management and hedges.
- Fair value hedges.
- Cash flow hedges.
- Foreign currency hedges.

Risk Management and Hedges

This diagram shows how Risk Management handles hedges:



Handling hedges in Risk Management

This table shows the types of hedges that are available with particular kinds of instruments:

Instrument	*Interest Rate*	*F/X*	*Fair Value*	*Cash Flow*	*Other*
Swap	XXX		XXX	XXX	
Forward		XXX	XXX		XXX
Option		XXX		XXX	

Fair Value Hedges

Fair value hedges are hedges against exposure to changes (that are attributable to a particular risk) in the fair value of either of the following:

- Recognized assets or liabilities on your balance sheet.
- Unrecognized firm commitment and specific business commitments having significant financial relevance to your organization, but whose quantitative value does not go to your general ledger.

Firm Commitments

You hedge firm commitments in fair value hedges and in foreign currency cash flow hedges.

See "Fair Value Hedges: Firm Commitments—Statutory Remedies for Default Constituting a Disincentive for Nonperformance" published by Rutgers University.

Note. 540 defines a Firm Commitment as the following: "An agreement with an unrelated party, binding on both parties and usually legally enforceable, with the following characteristics: (a) The agreement specifies all significant terms, including the quantity to be exchanged, the fixed price, and the timing of the transaction. The fixed price may be expressed as a specified amount of an entity's functional currency or of a foreign currency. It may also be expressed as a specified interest rate or specified effective yield. (b) The agreement includes a disincentive for nonperformance that is sufficiently large to make performance probable."

Under FAS 133, gains and losses on qualifying fair value hedges should follow these accounting guidelines:

- They must recognize the hedging instrument's gain or loss in current earnings.
- The gain or loss (that is, the change in fair value) on the hedged item attributable to the hedged risk must adjust the carrying amount of the hedged item and be recognized in current earnings.

Note. From ¶ 19 of FAS 133: "The change in fair value of an entire financial asset or liability for a period refers to the difference between its fair value at the beginning of the period (or acquisition date) and the end of the period, adjusted to exclude (a) changes in fair value due to the passage of time and changes in fair value related to any payments received or made, such as in partially recovering the asset or partially settling the liability."

Here is an example of how this works:

With regression testing of a fair value hedge, the hedge is considered effective if its period ratio is between 80 and 125 basis points (0.8 to 1.25).

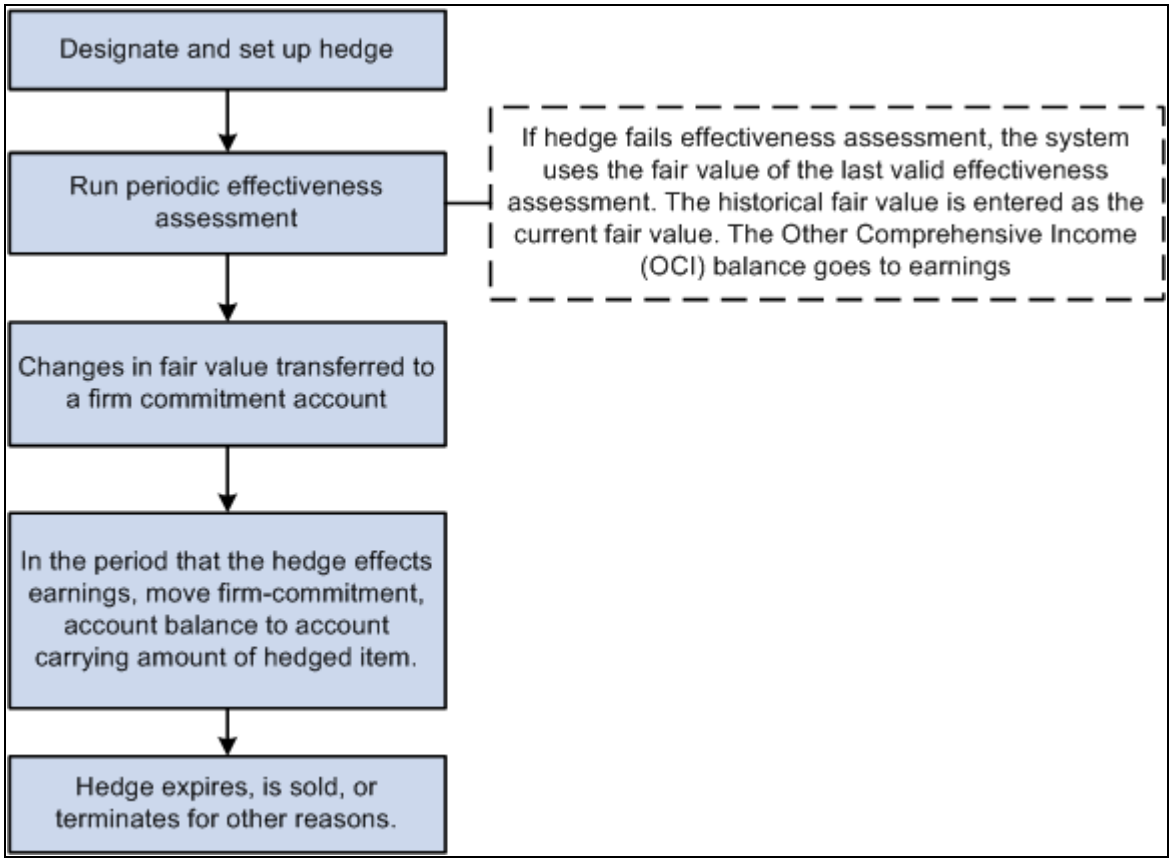
Period ratio equals the difference between the fair value change of hedging instrument (change in swap value) and the fair value change of hedged item (change in debt value).

	Period 1	***Period 2***	***Net Difference***
Change in swap value (hedging instrument)	10	-7	17
Change in debt value (hedged item)	-9	5	14
Difference in fair value	1	-2	3
Period ratio	-1.11 passes regression test ratio is within 0.8 to 1.25	-1.4 fails regression test terminate hedge	

Note. *DIG's Fair Value Hedges:* Basing the Expectation of Highly Effective Offset on a Shorter Period Than the Life of the Derivative states: "In documenting its risk management strategy for a fair value hedge, an entity may specify an intent to consider the possible changes (that is, not limited to the likely or expected changes) in value of the hedging derivative and the hedged item only over a shorter period than the derivative's remaining life in formulating its expectation that the hedging relationship will be highly effective in achieving offsetting changes in fair value for the risk being hedged. The entity does not need to contemplate the offsetting effect for the entire term of the hedging instrument."

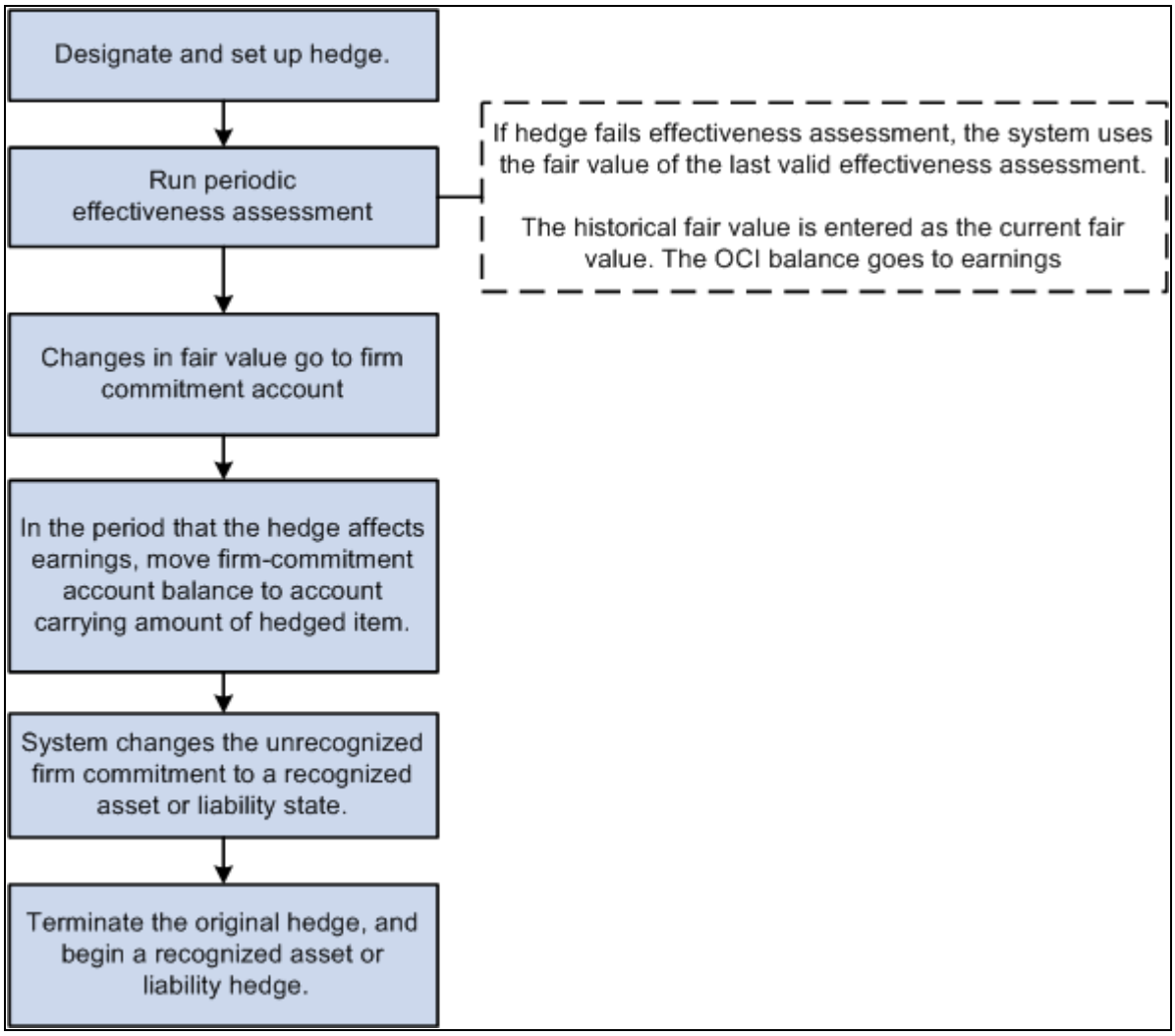
The functionality of Risk Management is not intended for formulating the prospective consideration that a hedge will be effective.

This illustration shows the fair value hedge in time:



Fair value hedges in time

This next illustration shows the life of an unrecognized firm commitment set up as a fair value hedge:



Fair value hedges in time of unrecognized firm commitments

Cash Flow Hedges

Cash flow hedges are hedges against exposure to volatility (that are attributable to particular risks) in the cash flows of either:

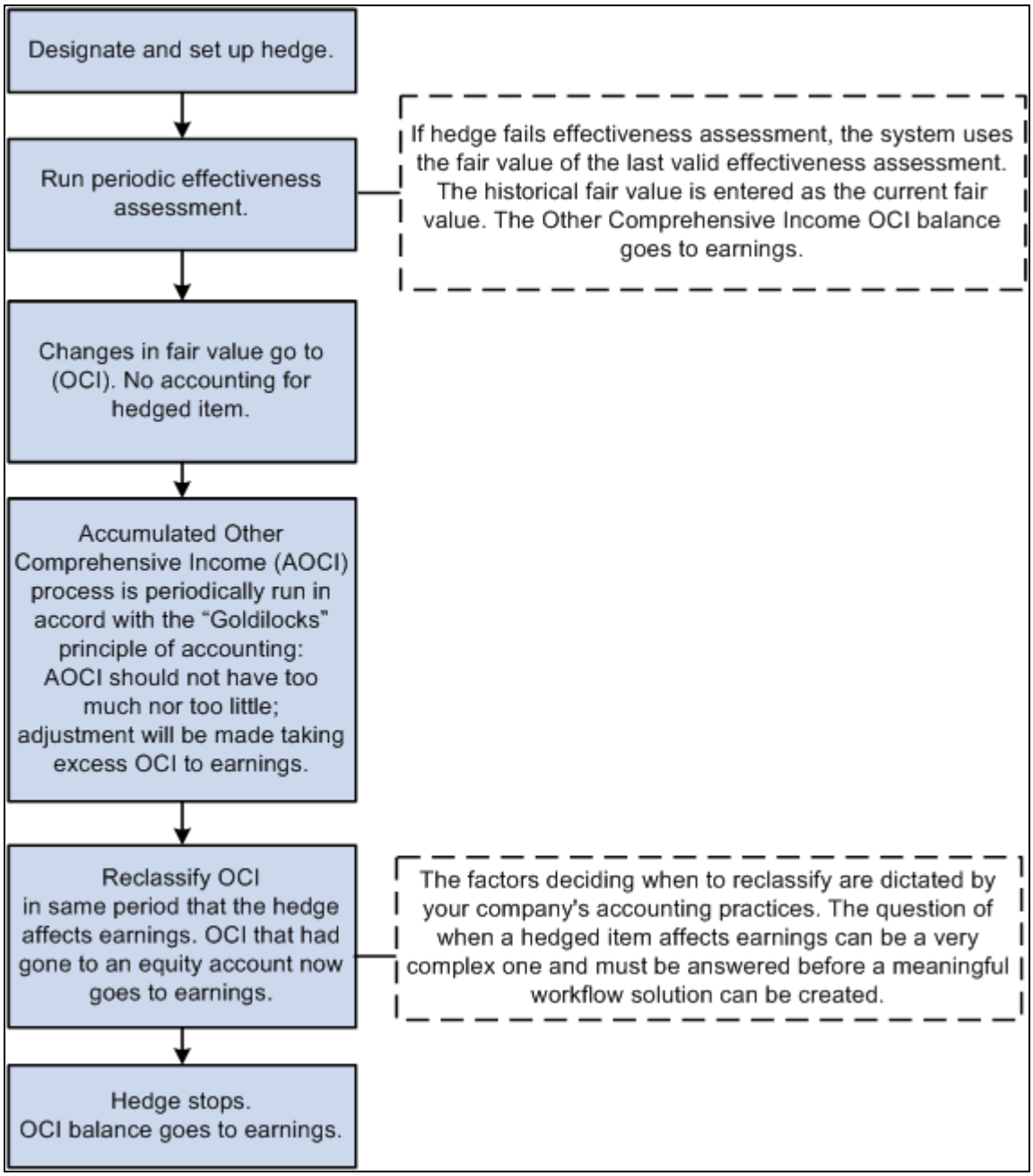
- Recognized assets or liabilities.
- Forecasted transactions.

The main purpose of a cash flow hedge is to link a hedging instrument and a hedged item in situations where you expect changes in cash flows to offset one another. Under FAS 133, to achieve this offsetting of cash flows, changes in the fair value of a derivative instrument that is designated and effective as a cash flow hedge must be:

- Initially reported as a component of Other Comprehensive Income (OCI) outside earnings.
- Later reclassified as earnings in the same periods during which the hedged transaction affects earnings (for example, when a forecasted sale actually happens).

Capture changes in the derivative instrument's fair value using effectiveness testing, which creates OCI accounting events. These events, in turn, generate an audit trail and become available for public reporting. Report OCI in the equity section of the balance sheet.

This flowchart shows the cash flow hedge occurring in time:



Cash flow hedges in time

Derivatives Implementation Group Issues

When calculating the amount of ineffectiveness of a cash flow hedge according to ¶ 30(b), the guidance in Derivatives Implementation Group (DIG) Issue G7 applies.

See *G7 - Cash Flow Hedges: Measuring the Ineffectiveness of a Cash Flow Hedge of Interest Rate Risk, When the Shortcut Method Is Not Applied*, published by Rutgers University.

The issue lists three methods. Risk Management supports only the calculations of Methods 2 and 3.

Method 1: The Change in Variable Cash Flows method involves the following amounts that need to be calculated using an analytic:

- Cumulative change in fair value of the swap.
- Present value of the cumulative change in the cash flow on the floating leg of the swap.
- Present value of the cumulative change in the expected future interest cash flows on the floating rate debt.

Method 2: The Hypothetical Derivative method involves the following amounts that must be calculated using an analytic:

- Cumulative change in fair value of the actual swap.
- Cumulative change in fair value "hypothetical" swap that mirrors the floating rate debt.

  The change in the fair value of the "perfect" hypothetical swap can be regarded as a proxy for the present value of the cumulative change in expected future cash flows on the hedged transaction, as described in ¶ 30(b)(2).

  With the analytic used to value the forecasted transaction, you calculate the second amount in the previous list: the cumulative change in fair value "hypothetical" swap that mirrors the floating rate debt.

Method 3: Change in Fair Value method involves the following amounts that must be calculated using an analytic:

- Cumulative change in fair value of the actual swap.
- Present value of the cumulative change in the expected future interest cash flows on the floating rate debt.

Foreign Currency Hedges

Foreign currency hedges are hedges against foreign currency exposure to any of the following:

- Unrecognized firm commitments (fair value).
- Available-for-sale securities (fair value).
- Forecasted transactions (cash flow).
- Net investments in a foreign operation.

Unrecognized Firm Commitments

See Firm Commitments.

Available-for-Sale Securities

You can hedge the change in fair value of an available-for-sale debt security (or a specific portion) from changes in foreign currency exchange rates.

You can also hedge available-for-sale equity securities if changes in fair value come from changes in foreign currency under certain conditions. First, the security cannot be traded on an exchange (or another established marketplace) where trades are denominated in your functional currency. Second, dividends, or other cash flows, to the security's holders' must be denominated in the same foreign currency that you expect to receive when the security is sold.

Forecasted Transactions/Recognized Firm Commitments

You can hedge foreign currency exposure to variability in the functional-currency-equivalent cash flows from foreign-currency-denominated forecasted transactions and foreign-currency-denominated intercompany transactions.

Net Investment in a Foreign Operation

The complexity of a foreign operation extends beyond the scope of cash flow and fair value hedges, which address the risks of specific financial components. Net investment in foreign operation hedges are not supported in Risk Management.

Understanding Embedded Derivatives

The FAS 133 Hedge Accounting feature in Risk Management enables you to record and account for embedded derivatives in the following two ways:

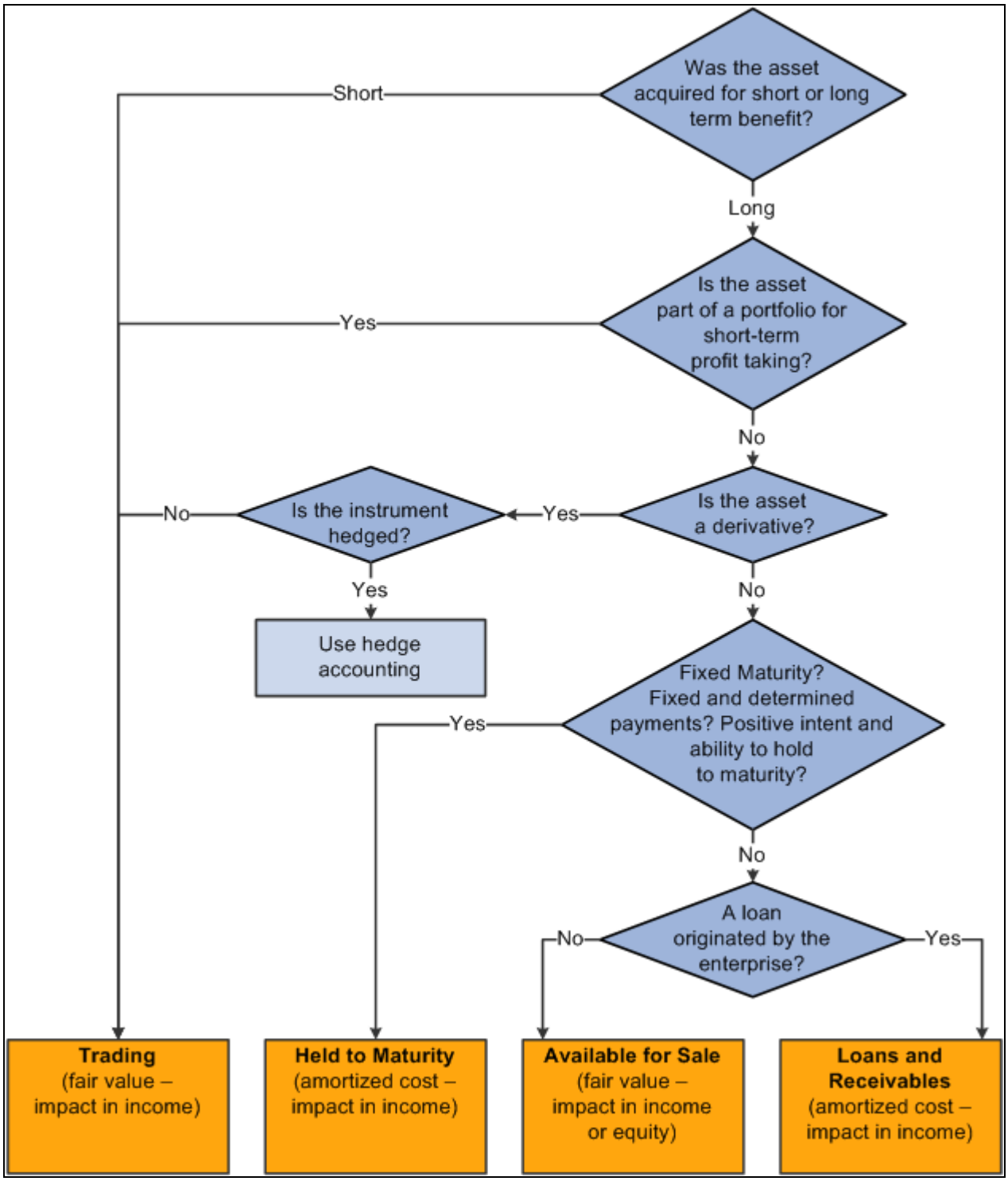
- You enter two separate Risk Management deals: one for the host contract and one for the embedded derivative.
- You enter the hybrid deal as a single deal using multiple detail lines/instrument base types if needed, and select the *Embedded* option on the Instrument Information component.

Note. The latter method is allowable only when the hybrid deal is not remeasured at fair value with changes in fair value reported in any account (such as earnings or OCI or any other account). If the hybrid deal is remeasured at fair value with changes in fair value reported in earnings as they occur, then the embedded derivative is not separated from the host contract (according to the guidance in ¶ 12(b). If the hybrid deal is remeasured at fair value with changes in fair value reported in any other account, then method (1) (separate deals) must be used to enter the hybrid instrument. This is because the system does not allow separate calculations to be made for the fair value of the host contract and the fair value of the embedded derivative.

You must examine specific contracts and ask if they contain an embedded derivative, determine how to split the embedded derivative from the host contract, and determine how best to use the Instrument Base Type architecture in PeopleSoft to split the hybrid contract into a host contract and a separated derivative.

Accounting Treatments for Complying with IAS 39

Use this diagram as an aid to determining the accounting treatment for complying with IAS 39 standards. Once determined, the accounting treatment is entered on the Instrument Detail page.



Decision tree for determining accounting treatment for IAS 39 compliance

Chapter 4

Analyzing Risk

This chapter provides an overview of the risk analysis process and discusses how to:

- Run and maintain VaR analysis.
- Export market risk files.

Understanding the Risk Analysis Process

This section discusses:

- Prerequisites.
- Common elements used in this chapter.
- Provided valuation functions.

Prerequisites

You must first define risk analytics on the Instrument Analytics page.

See Also

Chapter 2, "Defining Risk Management Processing Options," Defining Instrument Analytic Functions, page 25

Common Elements Used in This Chapter

Calculation or Analytic Calculation	Select a calculation to generate the risk analysis. The selected vendor or vendor product name determines the available values.
Function Usage	Select the type of analysis to perform.
Mode or Analytics Mode	Available values depend on the function usage type.
Vendor or Vendor Product Name	Select from the available vendor names, for example,*Excel Functions.* You define vendor names and their analytic calculations at installation.

Calculate	Click to run a risk analysis calculation.

Provided Valuation Functions

Analytics calculation includes all of the different functions needed to perform a comprehensive risk analysis and management. For example, due to the complexity of analysis and companies, you can create your own customized analytics. Customized analytics include:

- Analytics calculation.
- Treasury deal valuations.
- Cash forecasting.
- Sales forecast.
- Manufacturing optimization.
- Brand and channel valuation.
- Macro level analysis
- Hedging effectiveness.
- Value at Risk (VaR).

Use combinations of different exposure objects to evaluate the impact of business and financial risks on the enterprise. Currently, exposure objects (treasury and non-treasury) are defined stored.

- Graphs and reports.

  The system stores analysis and analytic activity output. You can generate reports (system delivered or customized) for both managerial and compliance needs, which consist of online analytical processing (OLAP) and generic data.

  Here's how to determine hedges:

- Process and analyze a current cash position worksheet.
- Process and analyze VaR risk calculations.
- Determine what deals must be hedged from analysis results.

See Also

Chapter 5, "Creating and Maintaining Hedges," page 49

Analyzing VaR

This section provides an overview of VaR analysis and discusses how to run VaR analysis.

Understanding VaR Analysis

VaR is a methodology for measuring financial risk exposure. VaR is a number that represents estimated portfolio losses due to market movements for a particular time period and a given confidence level. With VaR, you can identify sources of risk and either bear them to support long-term strategies, transfer the risks at a reasonable price, or decide on alternatives to shed the risk.

Defining potential loss depends on two parameters:

- Time horizon considerations.
- Degree of confidence.

Time Horizon Considerations

Choosing a horizon for VaR calculation depends on your company's objectives and the portfolio's characteristics. Typical considerations include:

- Unwind period: how long, on average, does it take to reverse a market position or individual trade?
- Attention period: how often, on average, do you reexamine your portfolio and its mark-to-market or hedging trades?
- Accounting period: how long until the next financial reporting must be done?

Degree of Confidence (Probability of Occurrence)

The degree of confidence is a measure of the degree of certainty of the VaR estimate. The most commonly used degree of confidence is 95 percent, which means that 95 percent of the time the losses will be lower than the VaR number, while 5 percent of the time the portfolio will experience greater losses.

For example, an enterprise's Relative Earnings at Risk (EaR) are 10.00 MM USD, the time period is set to three months, and the confidence level is 95 percent. Over the next three months, there is a five percent chance that earnings will fall 10.00 MM USD or more below the target earnings for the period (6.00 MM USD).

Note. VaR concentrates on financial price risk, not on operational, legal, and other risks that the enterprise faces.

Calculating VaR

You can calculate VaR from three complementary methodologies and use these different measurements to simultaneously provide an overall view of your portfolio's risks.

Variance-covariance (analytic VaR)	The most commonly used of the three VaR methods, variance-covariance analyzes volatility and correlation between different risk exposures of an enterprise's portfolio.

Monte Carlo simulation Generates random scenarios of prices and uses them to reevaluate a portfolio. Looking at hypothetical profits and losses under each price scenario, you can construct a histogram of expected profit and losses from which VaR is calculated. It does not assume that portfolio returns are distributed normally, but you need a correlation and volatility matrix to generate the random scenarios.

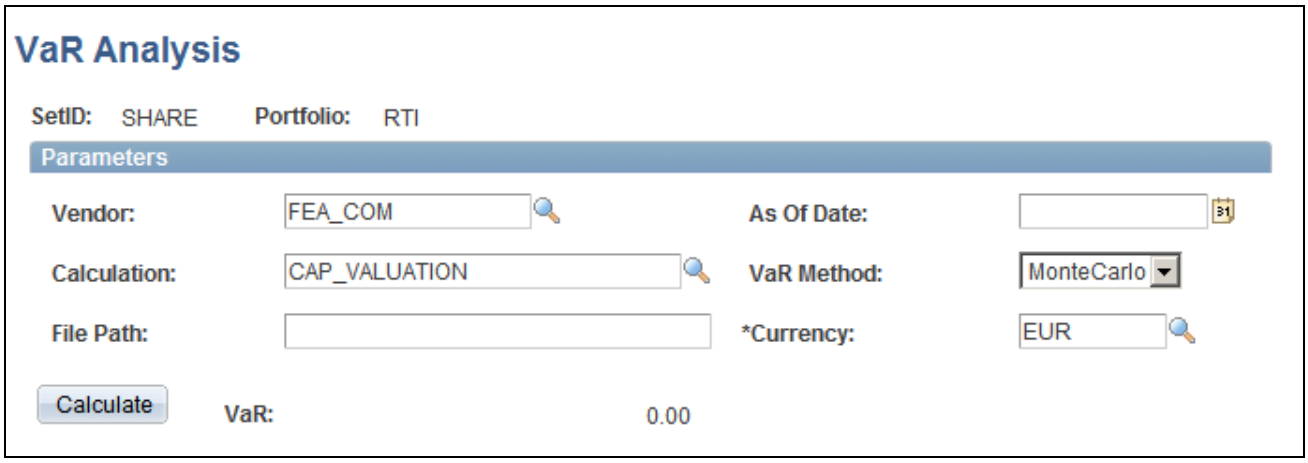
Historical simulation Revalues a portfolio for several hundred historical scenarios, building a "hypothetical" distribution of profit and losses based on how the portfolio behaved in the past. It does not use estimated variances and covariances and does not make any assumptions about the distribution of the portfolio returns. Results can be skewed by anomalous events of a previous period. A few major events in the past may dominate the simulation exercise, so your analysis is then based on fewer data points.

Page Used to Run VaR Analysis

Page Name	*Definition Name*	*Navigation*	*Usage*
VaR Analysis	RSK_VAR_RUN_PNL	Risk Management, Analyze Risk, VaR Analysis, VaR Analysis	Enter analytical parameters and calculate VaR on your portfolios.

Running VaR Analysis

Access the VaR Analysis page (Risk Management, Analyze Risk, VaR Analysis, VaR Analysis).



VaR Analysis page

Vendor Select a third-party vendor that will perform the VaR calculation based on the input values selected on this page. The vendor selected here determines the values available in the Calculation field.

Calculation Select the type of VaR calculation to be performed. The calculation value selected here determines which functions from the MTM_DATAMAP_WRK.FUNLIB_02 function library are used to call the vendor to perform the calculation

File Path Specify the output location of the log file for this vendor.

VaR Method Select from the following options:

- *Analytic:* Estimation of the volatility of asset returns and of the correlations between these asset price movements.
- *Historical:* Consists looking back over a specific period of time and applying current weights to a time-series of historical asset returns. This return does not represent an actual portfolio but rather reconstructs the history of a hypothetical portfolio using the current position.
- *Monte Carlo:* The Monte Carlo method is a two-step process:
  1. The risk manager specifies a stochastic process for financial variables, as well as process parameters; the choice of distributions and parameters such as risk and correlations can be derived from historical data.
  2. Fictitious price paths are simulated for all variables of interest. At each horizon considered, which can go from one day to many months ahead, the portfolio is marked-to-market using full valuation. Each of these scenarios are then used to compile a distribution of returns, from which a VaR figure can be measured.

Calculate Click to run the VaR calculation.

VaR Displays the results of the specified VaR calculation.

Exporting Market Risk Files

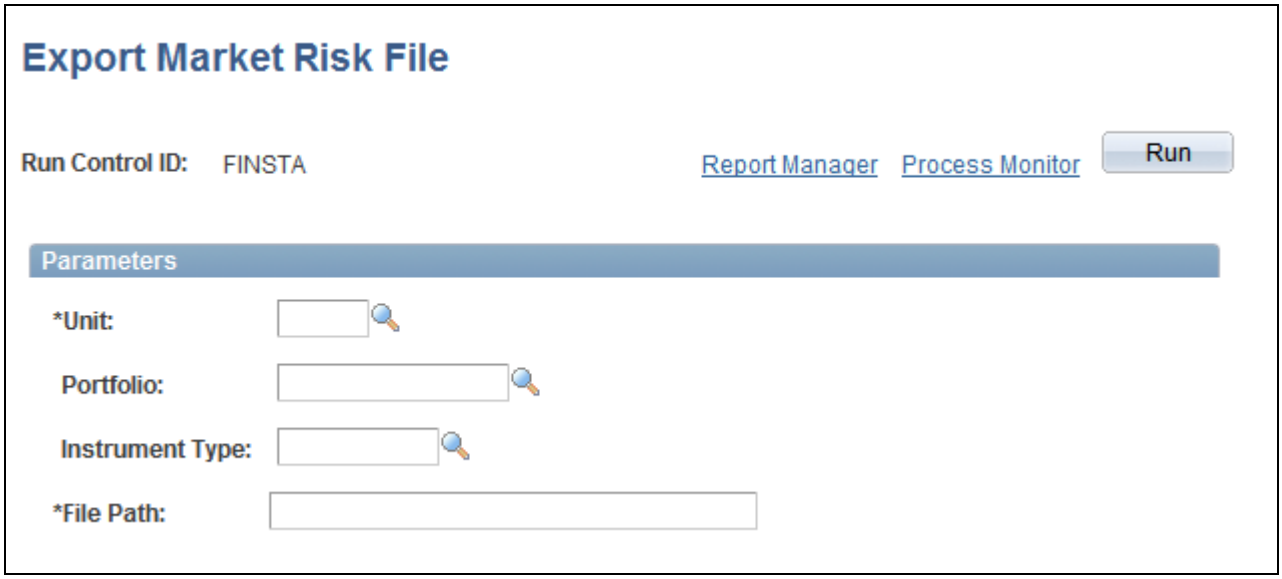
Using the Risk File Export process (RSK_FILEXP), you can export risk analysis data for a specified business unit and portfolio to a third party.

Page Used to Export Market Risk Files

Page Name	*Definition Name*	*Navigation*	*Usage*
Export Market Risk File	TR_FOUR15_FILE_EXP	Risk Management, Analyze Risk, Export Market Risk File, Export Market Risk File	Run the Risk File Export Application Engine process to export risk analysis files to a third-party application.

Exporting Market Risk Files

Access the Export Market Risk File page (Risk Management, Analyze Risk, Export Market Risk File, Export Market Risk File).



Export Market Risk File page

Unit	Select a business unit. The business unit selected determines the prompt values for the portfolio and instrument type fields.
Portfolio	Select a portfolio to determine which deals will be included in the file.
Instrument Type	Selecting an instrument type will limit the inclusion of file data to only deals of a particular instrument type. This field can be left blank.
File Path	Enter the path and directory to which the newly created file will be exported.

Chapter 5

Creating and Maintaining Hedges

This chapter provides an overview of hedge creation and maintenance and discusses how to:

- Create hedges.
- Maintain hedges.
- Set up hedge groups.
- Manage hedge groups.

Understanding Hedge Creation and Maintenance

This section discusses:

- Prerequisites.
- Common elements.
- The hedge life cycle.

See Also

Chapter 3, "Understanding Hedge Analytics and Accounting," page 29

Prerequisites

Before you create and maintain hedges, you must:

1. Analyze cash position and settlements using Cash Management.
2. From cash position and settlements information, identify investing or borrowing instruments using Deal Management.
3. Calculate and analyze your risk based on the cash and deal information and decide if you must create a hedge.

See Also

Chapter 2, "Defining Risk Management Processing Options," page 3

PeopleSoft Cash Management 9.1 PeopleBook, "Defining Cash Positions," Managing Position Worksheets

PeopleSoft Deal Management 9.1 PeopleBook, "Capturing Deals and Trade Tickets"

Common Elements in This Chapter

Initial Fair Value Attributable to Hedged Risk and Fair Value	Displays the fair value (mark to market) of a treasury deal, or the fair value or cash flows of a hedged item.
Initial Fair Value Adjustment and Fair Value Adjustment	Displays the (cumulative) adjustment amount excluded from the calculation of the change in fair value of a deal or hedged item. This amount corresponds to amortized cost for investments and to ¶ 19 adjustments for a hedged item.
Use Zero	Select this check box to use zero value for calculation, instead of initial fair value amount.
Use Values	Select this check box to use entered values for calculation, instead of initial fair value amount.
New Value	Click to calculate the new value of the hedge per specified parameters.

The Hedge Life Cycle

Here's an overview of the entire hedge life cycle:

- Create hedges, either importing information or creating hedges manually.
- Adjust and remove hedges using the Hedge Maintenance page.
- Process hedge Accumulated Other Comprehensive Income (AOCI) using the Process AOCI page.
- Create hedge groups and maintain hedge items and hedge groups.

See Also

Chapter 3, "Understanding Hedge Analytics and Accounting," Risk Management and Hedge Accounting, page 30

Creating Hedges

This section discuss how to:

- Automatically import hedge information.
- Enter hedge designation information.
- Enter hedging deal information.
- Enter deal accounting information.
- Enter hedged item information.
- Enter hedge transaction details.
- Enter item accounting information.

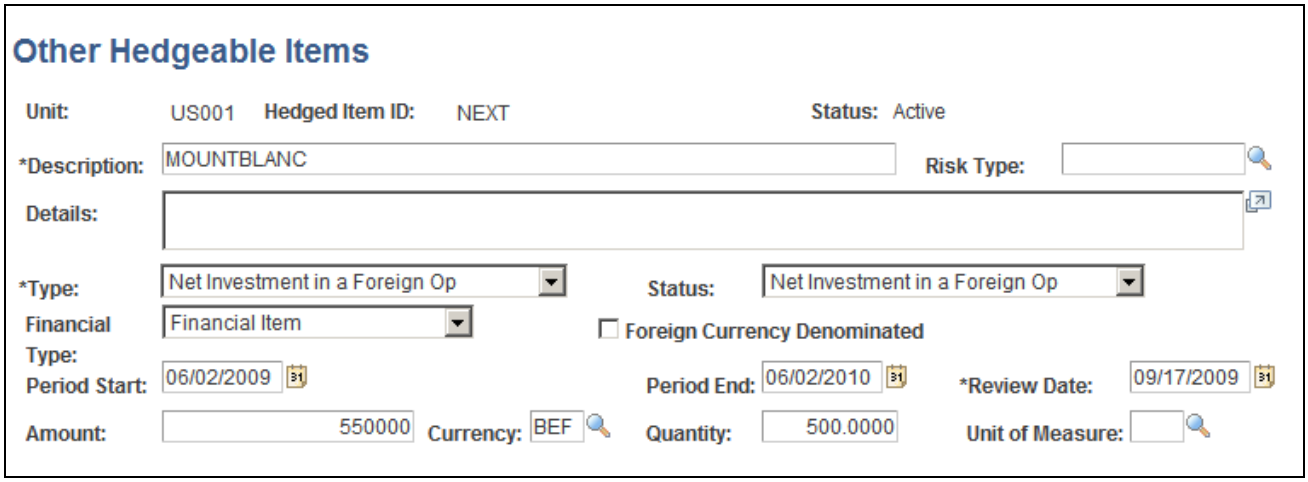
Pages Used to Create Hedges

Page Name	*Definition Name*	*Navigation*	*Usage*
Other Hedgeable Items	HDG_EXPOSURE_PNL	Risk Management, Analyze Hedge, Other Hedgeable Items, Other Hedgeable Items	You can import a database record from another PeopleSoft application or third-party system.
Hedge Designation	HDG_HEDGE	Risk Management, Analyze Hedge, Hedges, Hedge Designation	Capture descriptive information about your hedging purposes and strategies to meet disclosure requirements.
Hedging Instrument	HDG_HEDGE_DEAL	Risk Management, Analyze Hedge, Hedges, Hedging Instrument	Capture information about the deal you will use to protect the hedged exposure.
Deal Accounting	HDG_HEDGE_DEAL_AC	Risk Management, Analyze Hedge, Hedges, Deal Accounting	View the accounting associated with your hedging relationship.
Hedged Item	HDG_HEDGED_ITEM	Risk Management, Analyze Hedge, Hedges, Hedged Item	Set up the exposure that you will hedge.
Hedge Transaction Details	HDG_ITEM_FVRAL_DTL	Click the Details link on the Hedged Item page.	Capture higher resolution data about your hedge.

Page Name	Definition Name	Navigation	Usage
Item Accounting	HDG_HEDGED_ITEM_AC	Risk Management, Analyze Hedge, Hedges, Item Accounting	Set up accounting and effectiveness testing of your hedge

Automatically Importing Hedge Information

Access the Other Hedgeable Items page (Risk Management, Analyze Hedge, Other Hedgeable Items, Other Hedgeable Items).



Other Hedgeable Items page

Select the type of item whose risk exposure you want to minimize, and select the status:

Type	Status	Conditions
Forecasted Transaction	*Firm Commitment or Asset / Liab (asset / liability)* *Forecasted Transaction* *No Longer Probable* *Probably Will Not Occur*	If the type is a *Forecasted Transaction*, enter earnings information in the available grid.
Net Investment in a Foreign Op (net investment in a foreign operation)	*Cancelled* *Net Investment in a Foreign Op*	
Recognized Asset or Liability	*Recognized Asset or Liability* *Sold or Bought or Written Off*	

Type	*Status*	*Conditions*
Unrecognized Firm Commitment	*Cancelled* *Recognized Asset or Liability* *Unrecognized Firm Commitment*	

Note. Fields and available status values change depending on the value you select in the Type field.

Risk Type Select a type of risk for the hedged item.

Financial Type Select *Financial Item* or *Non-financial Item.* If the risk to be hedged is financial, enter its Amount and its currency (in the field next to the Amount field). If the risk is non-financial, enter its Quantity, and select the appropriate Unit of Measure.

Foreign Currency Denominated Select if the hedge is in a foreign currency, and select the appropriate value in the CurrencyCurrency field.

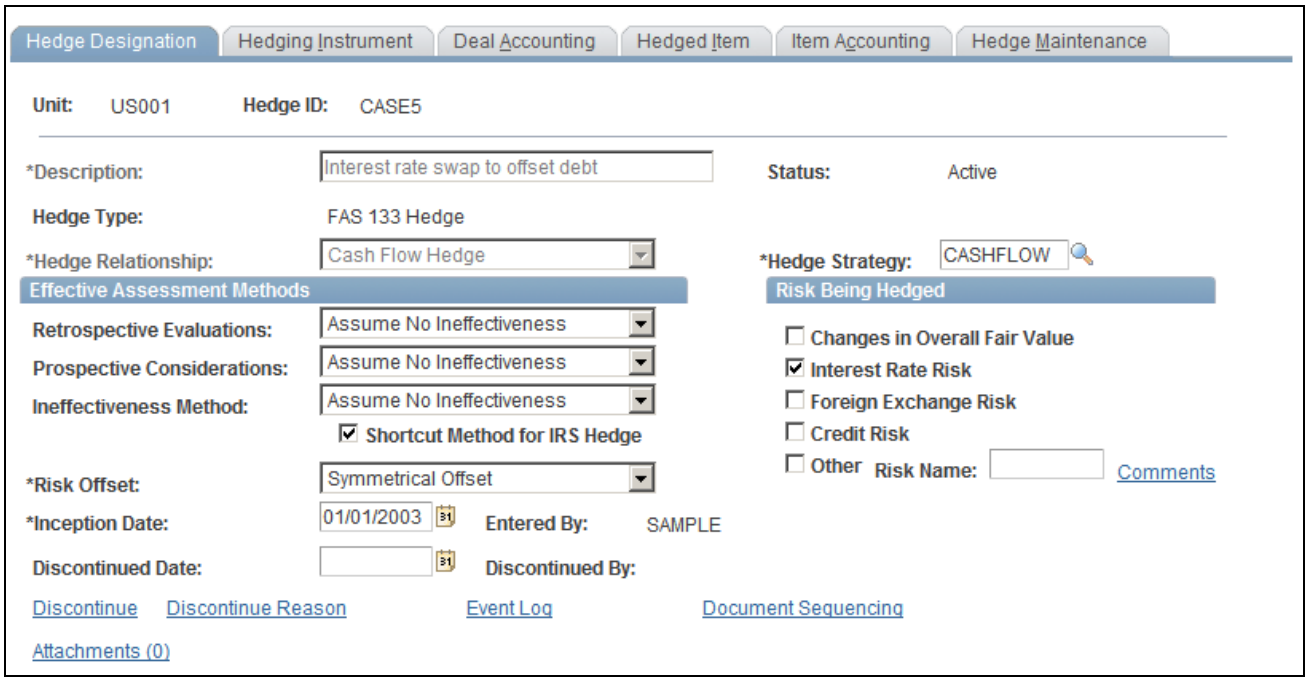
Period Start and **Period End** Select the active period start and end dates for the hedge.

Review Date Select the final review date for the hedge.

Final Earnings Effect Select to include the effect of the specified amount and percentage on hedge final earnings.

Entering Hedge Designation Information

Access the Hedge Designation page (Risk Management, Analyze Hedge, Hedges, Hedge Designation).



Hedge Designation page

Note. The page display changes depending on the Hedge Type.

Hedge Type

This field is a read-only. The hedge type is selected at the business unit level on the Treasury Options page.

Designates a hedge as either an *IAS 39 Hedge,Economic/Other Hedge,* a *FAS 133 Hedge,* or a *FAS 52 Hedge.* From the drop-down list box next to the right-hand Hedge Type field, you can further define your hedge using any of the following:

Cash Flow Hedge: Hedge of exposure to cash flow variability from a particular risk (¶ 18(c)).

Fair Value: Hedge of exposure to changes in the fair value of an asset, liability, unrecognized firm commitment, or identified portion thereof from a particular risk (¶ 18(b)).

FX Cash Flow: Hedge of exposure to cash flow variability from changes in foreign currency exchange rates (¶ 18(d)(3)).

FX FV of Available for Sale Security: Hedge of the change in the fair value of an available-for-sale debt security (or a specific portion) from changes in foreign currency exchange rates.

You can hedge available-for-sale equity securities if changes in fair value come from changes in foreign currency under the following conditions. You have not traded the security on an exchange (or another established marketplace) where trades are denominated in your functional currency. Dividends, or other cash flows, to the security's holders are denominated in the same foreign currency that you expect to receive when you sell the security (¶ 18(d)(3).

FX FV of Firm Commitment: Hedge of a foreign currency exposure to variability in the functional-currency-equivalent cash flows from foreign-currency-denominated forecasted transactions and foreign-currency-denominated intercompany transactions (¶ 18(d)(2).

FX Hedge of Net Investment: Hedge of foreign currency exposure to your net investment in a foreign operation, which is viewed for accounting purposes, as a single asset versus several single individual assets and liabilities that make up a subsidiary's balance sheet (¶ 18(d)(4).

Hedge Relationship

Select descriptors of your various risk management strategies and practices (¶ 44). It is up to you to determine a reasonable, shorthand description that parties outside your organization can correlate to your actual complex activities. It is a good idea to obtain validation from your company's auditors. To complete the disclosure requirements in ¶ 44, Risk Management provides a 1,000-character, free-form field so that you can capture context-sensitive issues underlying your hedging activities.

Hedge Strategy

Select a hedge strategy based on the type of risk being hedged. Doing so enables the default parameters that were entered on the Hedge Strategy page for the specified hedge strategy.

Effective Assessment Methods

Retrospective Evaluations, Prospective Considerations, and **Ineffectiveness Method**

Effectiveness tests are means for an organization, its stakeholders, and external auditors to evaluate whether risk management strategies are on track, whether hedges are working or are likely to work as planned, and thus are within bounds for special accounting.

When you set up a transaction and its correspondent hedged deal, link the two and document them for FAS 133. You must also define and document tests of methodologies to assess hedge effectiveness. (¶ 62.)

Effectiveness assessment methods are dictated by ¶s 65 and 68-70. They are Retrospective Evaluations, Prospective Considerations, and Ineffectiveness Method. Select one of the following values for each of the fields:

Assume No Ineffectiveness: Select this value (¶s 65, 68-70) if you are using the Shortcut Method for IRS Hedge. FAS 133's ¶ 68 permits the Shortcut Method for an IRS Hedge. You can use this method of effectiveness assessment only on interest rate swaps.

If you selected *Assume No Ineffectiveness* in the Ineffectiveness Assessment field, and the hedge is an interest-bearing financial instrument with an interest rate swap (¶s 68-70,114,132), then you can select the Shortcut Method for IRS Hedge check box to compute ¶ 22(b) or ¶ 30(b) amounts.

Correlation − Regression: This is a statistical correlation test between some attribute of the hedging deals compared to that attribute of the hedged items.

Cumulative Offset: Compares the cumulative changes in fair value of the hedging deal with the cumulative changes in fair value of the hedged item. In each period in which this comparison is made, the two amounts must match within a tolerance of 80 percent to 125 percent.

Note. In addition, when you perform the periodic assessment of effectiveness, you must do more than just run the Assessment reports or process (such as the Hedge Effectiveness report and the Regression test). You should also reassess your expectation that the hedge will continue to be highly effective. This would involve reexamining all appropriate factors, including those described in DIG issue G10.

Your accounting procedures must meet extensive criteria to qualify for the Shortcut Method, which is also known as Assuming No Ineffectiveness with an Interest Rate Swap. Refer directly to ¶ 68 of FAS 133 to ensure that your scenario qualifies for this accounting treatment of hedging.

Assume No Effectiveness does not imply that there will be no periodic assessment of effectiveness. According to DIG G9 - Cash Flow Hedges: Assuming No Ineffectiveness When Critical Terms of Hedging Instruments and Hedged Transaction Match in a Cash Flow Hedge, www.rutgers.edu/Accounting/raw/fasb/derivatives/issueg9.html, "An entity is still required to perform and document an assessment of hedge effectiveness at the inception of the hedging relationship and on an ongoing basis throughout the hedge period."

Risk Offset	Select *One-sided Offset Against Gains, Onesided Offset Against Losses*, or *Symmetrical Offset.* ¶ 20(b) and ¶ 28(b) discuss how to assess effectiveness when the hedging instrument provides only a one-sided offset against changes of the hedged item (such as when an option is used).
Inception Date	Displays the current date until you save the page. You record the entity that is creating the hedged relationship—at the data entry level—using the logon user ID. PeopleSoft Workflow can also address your organization's management authorization process, providing further audit trails.
Discontinued Date	Use to record the actual date that a hedged relationship terminates (¶s 25 and 32). The system completes this field as you undesignate the hedge later in the hedging process. If you terminate a hedged relationship and you have sufficient reason to resume the same course with the exact variables, you must create a new hedge relationship. That is, you must create a hedge for accounting purposes that is different from the one that began and ended earlier. This requirement to create a new hedge can also apply to the maturity of a derivative contract.

Note. Once a hedged relationship terminates, it cannot be revived.

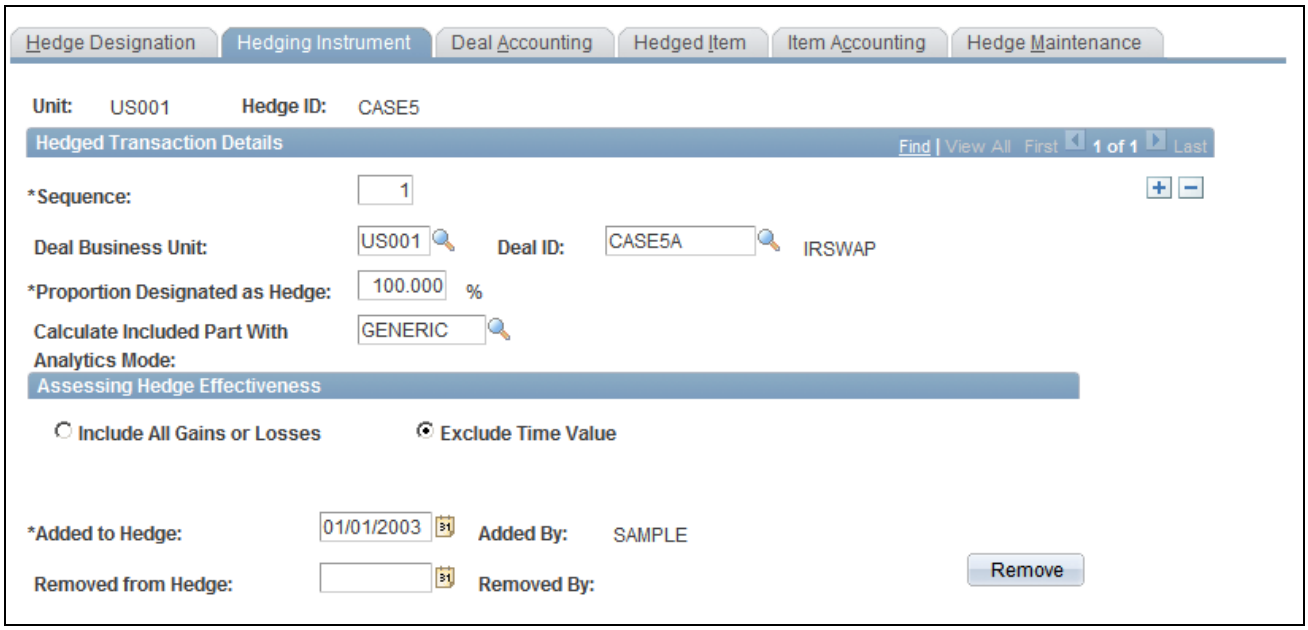
Risk Being Hedged

Per ¶ 21(a-f), you can hedge only the four risks listed:

Changes in Overall Fair Value	Select to hedge non-financial risks, such as commodities. Selecting this check box automatically clears any other hedged risk options selected.
Interest Rate Risk	Select to hedge risk of instability in interest rates.
Foreign Currency Exchange Risk	Select to hedge risk of fluctuation of foreign currency exchange rates.
Credit Risk	Select to hedge risk of credit variability.
Other and **Risk Name**	Select the Other field and enter a name to designate another type of risk investment to be hedged.
Comments	Click to access the Details page to record details of the hedged risk entered in the Risk Name field.

Entering Hedging Instrument Information

Access the Hedging Instrument page (Risk Management, Analyze Hedge, Hedges, Hedging Instrument).



Hedging Instrument page

Sequence Displays the default sequence number of *I*.Per ¶ 18, you can have multiple deals designated as the hedging instrument. Enter the Deal Business Unit and Deal ID, which create the link to the protected deal.

Proportion Designated as Hedge Given the difference in financial values that deals can have, use this field to define that only a certain percentage of the hedging deal actually be used for hedge purposes.

Note. FAS 133's ¶ 18 requires that you document that you will use only a portion or percentage of a deal for hedging purposes. It states that either all or a proportion of a derivative may be designated as the hedging instrument. The proportion must be expressed as a percentage of the entire derivative so that the profile of risk exposures in the hedging portion of the derivative is the same as that in the entire derivative. (Thus, an entity is prohibited from separating a compound derivative into any such component as the hedging instrument, except as permitted at the date of initial application by the transition provisions in ¶ 49.)

Assessing Hedge Effectiveness

Define aspects of how the hedge will be evaluated.

Include All Gains or Losses Select to assess the effectiveness of all fair value changes (¶ 63).

Exclude Time Value Select to calculate changes in fair value where effectiveness is evaluated on a cumulative basis.

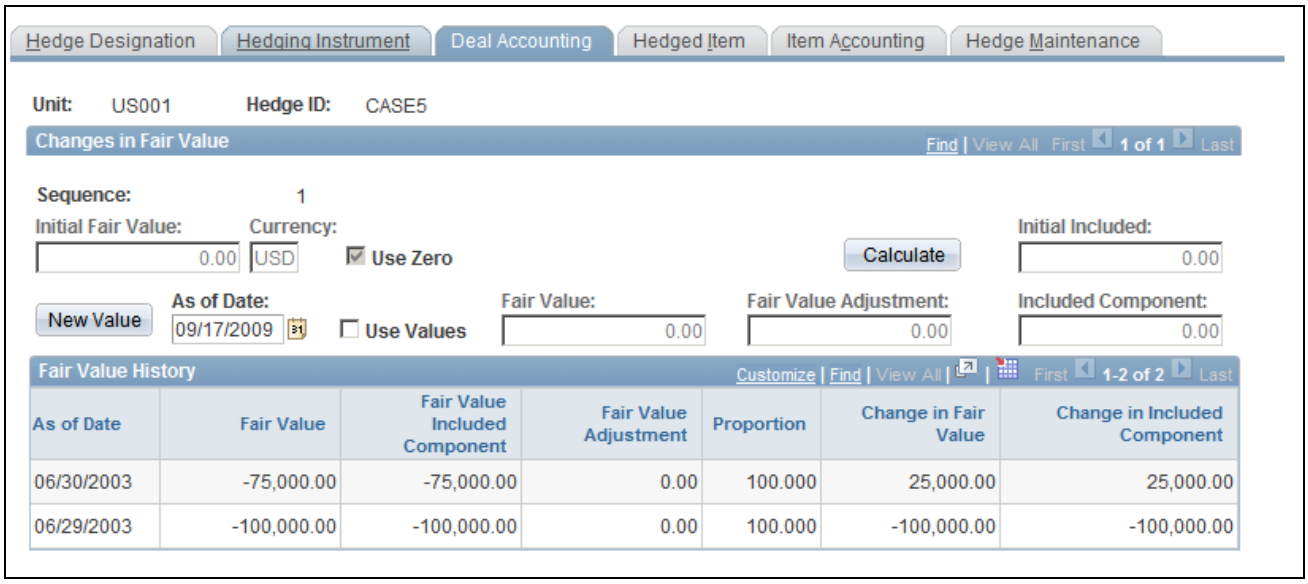
Analytics Mode Select third-party analytics to calculate the part of your hedge used to assess hedge effectiveness.

Added to Hedge Displays the current date as the default, which becomes part of the audit trail when the page is saved. The operator's login user ID appears alongside the Added to Hedge field in the view-only By field.

Removed from Hedge Enter the date the hedging relationship terminates, or the system will automatically enter the maturation date of the hedged deal as that date passes in time. (See ¶s 25 and 32.)

Entering Deal Accounting Information

Access the Deal Accounting page (Risk Management, Analyze Hedge, Hedges, Deal Accounting).



Deal Accounting page

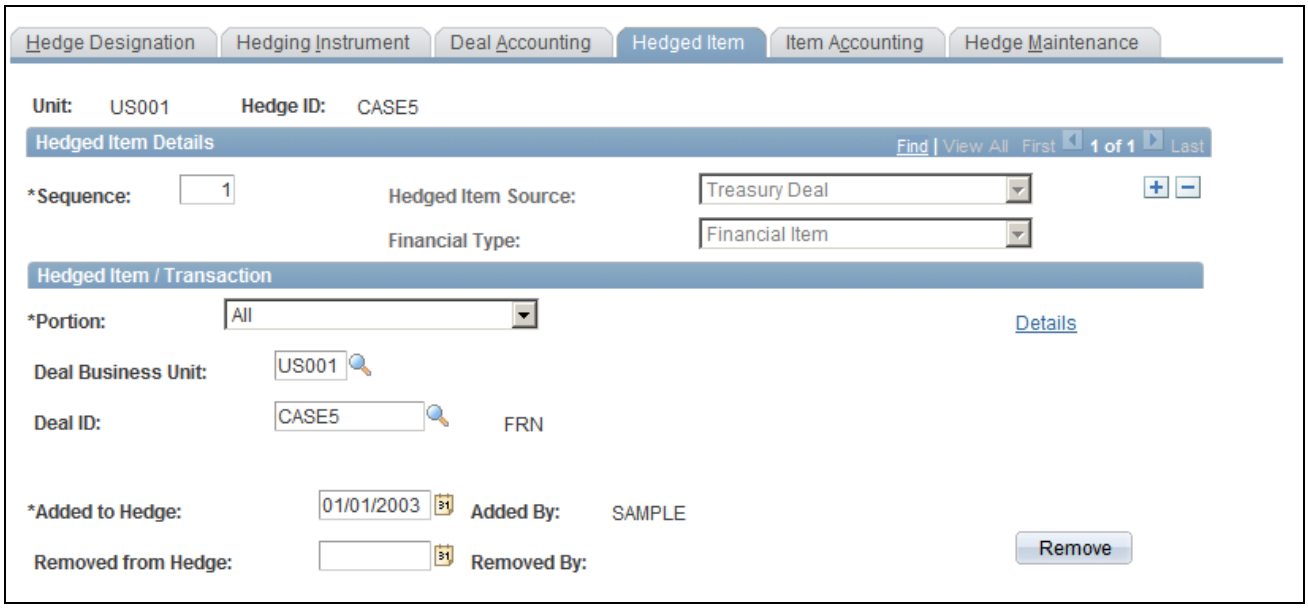
Initial Fair Value Enter the initial market to market value amount of the deal, which can be a positive or negative number.

Calculate Click to recalculate a new fair value and add a new line to the Fair Value History grid. The Calculate button appears only if the Exclude Time Value checkbox is selected on the Hedging Instrument page.

Use Values Select this check box to use specified values in the Fair Value and Fair Value Adjustment fields for calculation, instead of calculated values from Risk Analytics.

Entering Hedged Item Information

Access the Hedged Item page (Risk Management, Analyze Hedge, Hedges, Hedged Item).



Hedged Item page

Hedged Item Source Select *Treasury Deal* (a deal resident in the PeopleSoft system) or *Other Hedgeable Item* to indicate what you are hedging.

Financial Type You can set up the hedged deal as a *Financial Item* or a *Nonfinancial Item.*

Note. The page changes depending on the financial type that you selected.

Hedged Item/Transaction

Portion Select what portion or percentage of your hedged item or transaction will be used in the hedging relationship:

All: Use the entire hedged item or transaction.

Embedded Option/Cap/Floor: Enables you to handle embedded derivatives that do not require separate accounting, for example if the deal can pass a portability test (¶s 21(a) to 22(c)).

Percentage: Select to enable thePercentage field so that you can specify the exact percentage that you will use.

Residual Value in Lease: Available only for fair value hedges.

Selected Cash Flows: Available only for cash flow hedges.

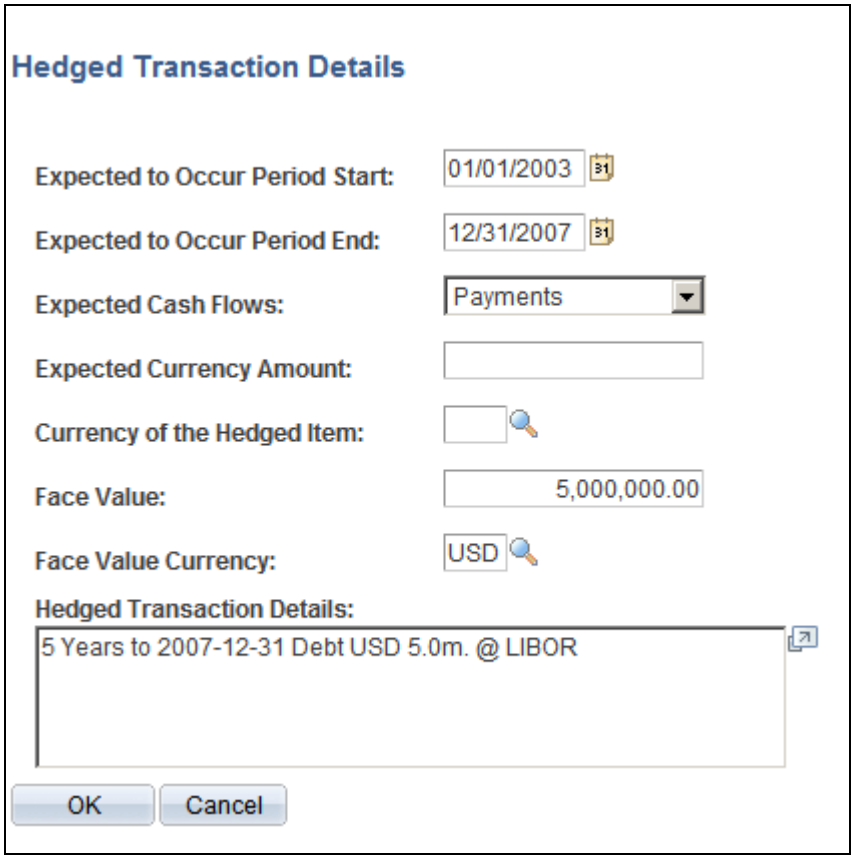
Exposure Business Unit Select the business unit for the exposure.

Added to Hedge or **Removed from Hedge** Enter the effective date for the fields.

Remove Click if you are removing the item from the hedge.

Entering Hedged Transaction Details

Access the Hedged Transaction Details page (click the Details link on the Hedged Item page).



Hedged Transaction Details page

You can capture hedge information and add the level of detail necessary for your internal monitoring of deals. For example, if you hedge commodities, you will have commodity values available from a PeopleSoft table, such as Crude Oil. The Hedged Transaction Details page enables you to record grades of crude oil, the regions they are from, or other distinguishing traits.

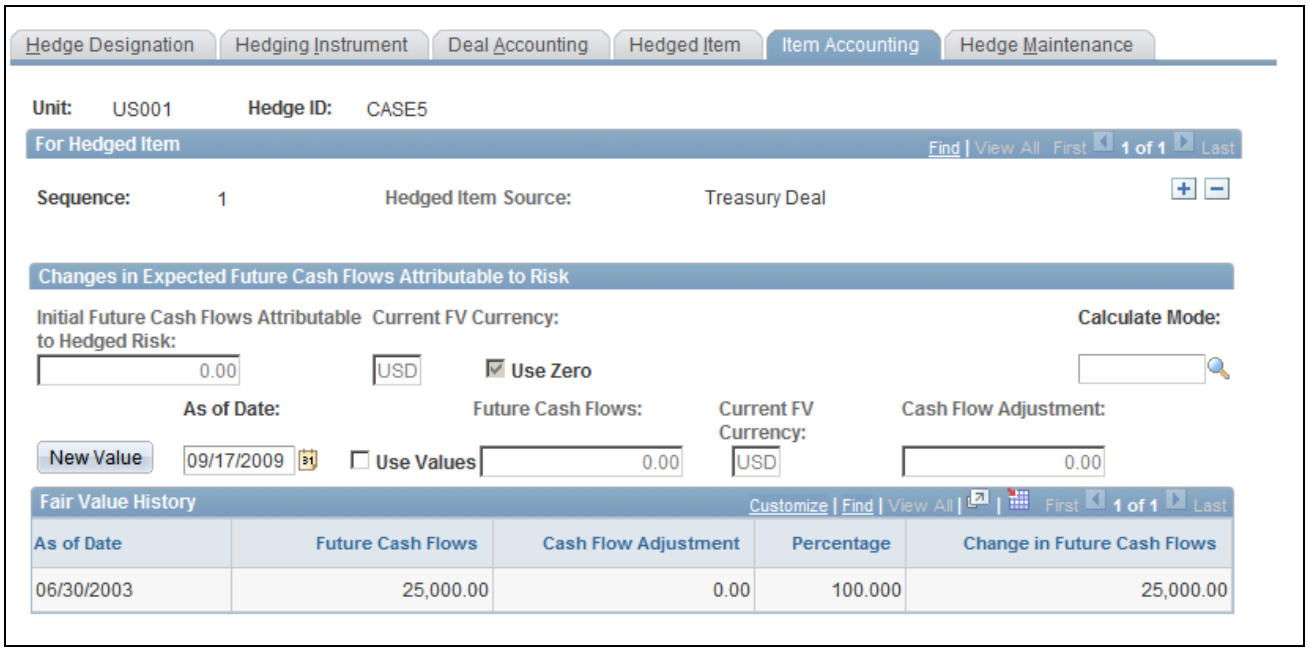
Available fields depend on the hedge type that you specify.

Hedge Type	***Available Page Fields***
Cash Flow	Expected to Occur Period Start, Expected to Occur Period End, Expected Cash Flows,Expected Currency Amount, and Quantity
Foreign Exchange	Exchange Period Start, Exchange Period End,Purchase, Sale,Fixed Price, or Face Value
Fair Value	Hedged Item End Date,AssetLiability, or Face Value

Note. In the context of FAS 133's language, the free-form text field enables you to explain your hedging with "sufficient specificity." This can include references to the Purchase Order numbers that you hedge or other details that your risk managers and auditors consider relevant for meeting the intent of FAS 133.

Entering Item Accounting Information

Access the Item Accounting page (Risk Management, Analyze Hedge, Hedges, Item Accounting).



Item Accounting page

Note. Available fields depend on the hedge type selected at the business unit level.

Hedge Type	*Page Fields*	*Description*
Cash Flow Hedges	Initial Future Cash Flow Attributable to Hedged Risk	The fair value (mark to market) of a treasury deal, or the fair value or cash flows of a hedged item.
Cash Flow Hedges	Fair Value Adjustment	The (cumulative) adjustment amount excluded from the calculation of the change in fair value of a deal or hedged item. Corresponds to amortized cost for investments and to ¶ 19 adjustments for a hedged item.

Hedge Type	*Page Fields*	*Description*
Fair Value	Amortize Carrying Amount Adjustment	Select this check box if the adjustments of the carrying amount of the hedged item should be amortized to earnings (¶ 24).
Fair Value	Amortization Period Begin/End	Define date parameters for the amortization period calculation.

As of Date The fair value calculation is based on this date.

Fair Value The value of the deal on the As of Date.

Maintaining Hedges

This section discuss how to:

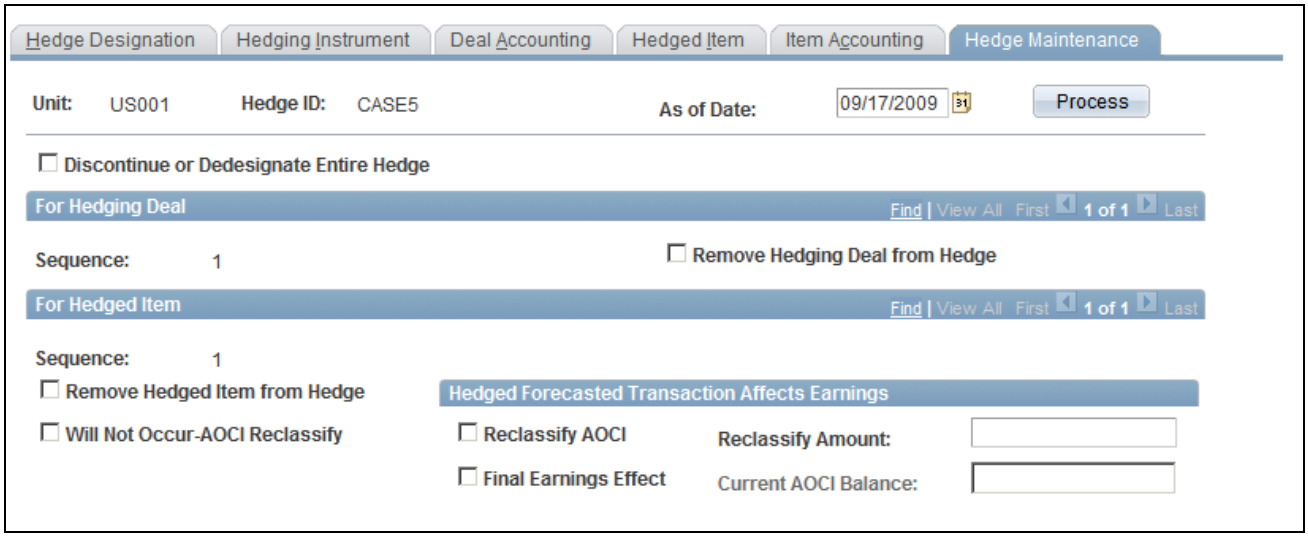
- Remove and adjust hedges.
- Process hedge AOCI.

Pages Used to Maintain Hedges

Page Name	*Definition Name*	*Navigation*	*Usage*
Hedge Maintenance	HDG_WRKFLW	Risk Management, Analyze Hedge, Hedges, Hedge Maintenance	Dedesignate the hedge relationship or remove the hedged deal from the hedge, or adjust AOCI.
Hedge AOCI Adjustment	HDG_AOCI_RUN_CNTL	Risk Management, Analyze Hedge, Hedge AOCI Adjustment, Hedge AOCI Adjustment	Run the Adjust Hedge AOCI Application Engine process (HDG_AOCI_ADJ) to perform AOCI adjustments on your hedges.
Hedge Effectiveness	HDG_CUM_OFST_INQRY	Risk Management, Analyze Hedge, Hedge Effectiveness, Hedge Effectiveness	Search and review cumulative offset information for specified hedges.
Hedge Summary	HDG_SUMMARY	Risk Management, Analyze Hedge, Hedge Summary, Hedge Summary	View online report of summarized hedge information a specific hedge.

Removing and Adjusting Hedges

Access the Hedge Maintenance page (Risk Management, Analyze Hedge, Hedges, Hedge Maintenance).



Hedge Maintenance page

AOCI is an account balance associated with the hedged transaction. It represents derivative (hedge deal) gains or losses that have been set aside from earnings and parked in the AOCI account instead. In essence, ¶ 30(b) says, "Set aside derivative gains or losses, but don't set aside too much." ¶ 30(b) addresses recognizing that you have set aside too much and puts the excess into an earnings account.

For Hedged Item

The fields available change, depending on the FAS 133 Hedge Type that you selected on the Hedge Designation page.

Hedge Type	***Page Fields***	***Description***
All hedge types.	Remove Hedged Item from Hedge	Remove hedged item from the hedge. By itself, making this selection does not terminate the hedge. **Note.** This check box appears for all hedge types.
Cash Flow Hedge *FX Cash Flow Hedge*	Reclassify AOCI	Select the Reclassify AOCI check box when reclassifying the adjusted other comprehensive income from cash flow hedges, and enter the Reclassify Amount. Or select the Will Not Occur AOCI Reclassify check box.

Hedge Type	*Page Fields*	*Description*
Cash Flow Hedge *FX Cash Flow Hedge*	Final Earnings Effect	Select to include the effect of the specified Amount and Percentage on hedge final earnings.
Cash Flow Hedge *FX Cash Flow Hedge*	Current AOCI Balance	Displays the current AOCI balance for the hedge.
FX FV of Available-for-Sale *FX FV of Firm Commitment* *Fair Value Hedge*	Amortize Carrying Amount Adj (amortize carrying amount adjustment)	Select this check box if the adjustments of the carrying amount of the hedged item should be amortized to earnings. (¶ 24) Also enter the Amortization Period Begin Date and End Date.

Setting Up Hedge Groups

To define hedge groups, use the Hedge Group Definition component (HDG_COLLECTION_HDG_GBL).

This section discuss how to:

- Define hedge groups.
- Add to a hedge group definition.

Pages Used to Set Up Hedge Groups

Page Name	*Definition Name*	*Navigation*	*Usage*
Define Hedge Groups	HDG_COLLCTN_HDG	Risk Management, Administer Risk, Define Hedge Groups, Define Hedge Groups	Set up hedge group definition.
Add to Hedge Group	HDG_COLL_FAV_A	Click the Add to Hedge Group button on the Define Hedge Groups page.	Search and add individual hedge items to a hedge group.

Defining Hedge Groups

Access the Define Hedge Groups page (Risk Management, Administer Risk, Define Hedge Groups, Define Hedge Groups).

Add to Hedge Group Click to search and add individual hedge items to this hedge group. Your selected hedge items, added to the hedge group definition, appear in the Hedge Details group box.

Adding to a Hedge Group Definition

Access the Add to Hedge Group page (click the Add to Hedge Group button on the Define Hedge Groups page).

Use the upper portion of the page to search for hedge items. All matching results appear in the lower portion of the page. Select a hedge item check box and click the Update button to add the hedge item to the hedge group.

Managing Hedge Groups

After creating hedge items and setting up hedge group definitions, you can aggregate them into collections and maintain them from a central location.

This section lists common elements and discuss how to:

- Manage your hedge groups.
- Update your hedge groups.
- Manage items in a hedge group.

Common Elements in This Section

Inception Date Displays the active date of the hedge item.

Retrospective Evaluations Displays the retrospective evaluation value for the hedge item.

Pages Used to Define and Manage Hedge Groups

Page Name	*Definition Name*	*Navigation*	*Usage*
My Hedge Groups	HDG_COLLECTION_FAV	Risk Management, Administer Risk, My Hedge Groups, My Hedge Groups	Aggregate and maintain your hedge groups from a central location.
My Hedge Groups	HDG_COLLCTN_FAV_A	Click the Update My Hedge Groups link on the My Hedge Groups page.	Add or clear hedge groups from the My Hedge Groups page.

Page Name	*Definition Name*	*Navigation*	*Usage*
Hedge Group Manager	HDG_COLLCTION_DTL	Risk Management, Analyze Hedge, Hedge Group Manager, Hedge Group Manager	Review and maintain hedge items for a selected hedge group.

Managing Your Hedge Groups

Access the My Hedge Groups page (Risk Management, Administer Risk, My Hedge Groups, My Hedge Groups).

Update My Hedge Groups Use to add existing hedge groups (assigned to you) to this page.

Create a New Group Add a new hedge group on the Hedge Group Definition page.

Search for a Hedge Group Search for a hedge group using the Hedge Manager.

Updating Your Hedge Groups

Access the My Hedge Groups - Update page (click the Update My Hedge Groups link on the My Hedge Groups page).

Update Select the check box of a hedge group and then click the Update button. The selected hedge group appears on the My Hedge Groups page. To clear a hedge group from the My Hedge Groups page, deselect the respective check box and click Update.

Managing Items in a Hedge Group

Access the Hedge Group Manager page (Risk Management, Analyze Hedge, Hedge Group Manager, Hedge Group Manager).

Hedge Group Access the Define Hedge Groups page for the specified hedge group.

Hedge IDs Navigate to data about a particular hedge item.

Add a Hedge Click this link to add another hedge item to this group.

Chapter 6

Managing Position Limits

This chapter provides an overview of position limits and exposure positions and discusses how to:

- Check position limits.
- Process limit notifications.
- Set respondents for limit notifications.
- Define limit notification exclusions.

Understanding Position Limits and Exposure Positions

This section discusses:

- Prerequisites.
- Positions limits and exposure positions.

Prerequisites

Before you can track and monitor your positions, you must define limit checking controls to manage your exposures on the Tree Manager - Position Limits page.

See Also

PeopleSoft Cash Management 9.1 PeopleBook, "Defining Cash Positions," Defining Position Limits

Position Limits and Exposure Positions

Risk Management works with your organization to manage the positions on the books and exposures related to them. PeopleSoft enables internal control procedures for checking position limits while providing you with a tool to define each person's area of accountability regarding limit violation reviews. You can monitor your exposures, check your limits, and notify the appropriate person of limit violations.

In Risk Management, an exposure is the amount of risk associated to a position from variables such as interest rates or currency exchange rates. Fluctuations in these rate types or in foreign markets can increase or decrease the amount of risk/exposure for a position. You can determine exposures from across the enterprise, and by establishing limits, you can link operational controls and risk management policies and procedures with day to day treasury operations.

PeopleSoft is flexible enough to manage any kind of exposure, including:

- Currency exposure.
- Interest rate exposure.
- Counterparty risk.
- Country risk.
- Individual dealer positions.
- Specific instrument limits.
- Specific business unit limits.

Checking Position Limits

You can check position limits for specified trees and tree nodes on an ad hoc basis.

Page Used to Check Position Limits

Page Name	*Definition Name*	*Navigation*	*Usage*
Ad-hoc Limit Check	POS_ADHOC_LIMITS	Risk Management, Position Limits, Check Position Limits, Check Position Limits Click the Check Limit button on the Check Position Limits page.	Verify limits on an ad hoc basis.

Checking Position Limits

Access the Ad-hoc Limit Check page (click the Check Limit button on the Check Position Limits page).

Check Limit Select the setID, tree name, and (optionally) the tree node for which you want to process a limit check. Then click the Check Limit button. If you do not select a tree node, the entire tree is selected.

Tree Name Displays the tree name specified in the Tree Name edit box.

Tree Node Displays the tree node, if specified in the Tree Node edit box.

Utilization Displays the amount of the position limit used.

Limit Min(limit minimum) Displays the minimum amount for this position limit.

Limit Max (limit maximum) Displays the maximum amount for this position limit.

Internal/External Displays the internal or external genesis of the position limit. Management or the board of directors typically define internal limits and the counterparty designates external limits.

Processing Limit Notifications

You run the Limit Notification (TR_POS_NOTFY) to check if deals have exceed established limits. If so, the system sends emails and worklist messages to defined users.

See Also

PeopleSoft Cash Management 9.1 PeopleBook, "Defining Cash Positions," Defining Position Limits

PeopleSoft Deal Management 9.1 PeopleBook, "Delivered Workflows for Deal Management"

Page Used to Process Limit Notifications

Page Name	*Definition Name*	*Navigation*	*Usage*
Limit Notification	TR_AE_RUNCNTL	Risk Management, Position Limits, Limit Notification, Limit Notification	Run the Limit Notification process to run position limit check processing requests.

Processing Limit Notifications

Access the Limit Notification page (Risk Management, Position Limits, Limit Notification, Limit Notification).

State Record Bind Variable Name or Value are not necessary for the POS_NOTFY_AET state record. The Limit Notification process includes this information.

Setting Respondents for Limit Notifications

Indicate users who have responded to notifications regarding position limits.

Page Used to Set Respondents for Limit Notifications

Page Name	*Definition Name*	*Navigation*	*Usage*
Review Limit Notification	POS_NOTIFY	Risk Management, Position Limits, Review Limit Notification, Review Limit Notification	Specify users who have responded to limit notifications.

Setting Respondents for Limit Notifications

Access the Review Limit Notification page (Risk Management, Position Limits, Review Limit Notification, Review Limit Notification).

Responded Select who has responded to limit notifications.

Defining Limit Notification Exclusions

You can exclude certain user IDs from receiving position limit notification.

Page Used to Define Limit Notification Exclusions

Page Name	*Definition Name*	*Navigation*	*Usage*
Exclude from Limit Notification	POS_LMT_NFY_NOT	Risk Management, Position Limits, Exclude frm Limit Notification, Exclude frm Limit Notification	For a specific tree and tree node, define who should not be notified regarding limits.

Defining Limit Notification Exclusions

Access the Exclude from Limit Notify page (Risk Management, Position Limits, Exclude frm Limit Notification, Exclude frm Limit Notification).

Select Do Not Notify for each role name that you do not want notified of issues with limits. Automatic Workflow notifications to that role name are then disabled.

See Also

PeopleSoft Cash Management 9.1 PeopleBook, "Defining Cash Management Processing Options," Defining Treasury Business Unit Options

Chapter 7

Reevaluating Deals

This chapter provides an overview of reevaluating deals, provides the prerequisite tasks, and discusses how to:

- Process portfolio reevaluation.
- Process security mark-to-market.

Understanding Reevaluating Deals

Market factors create exposures for your PeopleSoft deal transactions. To evaluate the risks associated with these exposures requires the use of complex analytical models to value these deals and obtain analytic sensitivities used to analyze the deals. Risk Management enables you to revalue positions periodically; ensuring you base the portfolio's value on current market rates or the price of the underlying.

Prerequisites

You must define analytic structures and analytic parameters, set up your third party vendor information, define function parameters, and specify file export parameters before you can start revaluing your positions.

Before you reevaluate deals, perform the following tasks:

1. Create deals.
2. Analyze and calculate risk.
3. Group deals and hedges into portfolios.

See Also

PeopleSoft Deal Management 9.1 PeopleBook, "Capturing Deals and Trade Tickets"

Chapter 4, "Analyzing Risk," page 43

Chapter 5, "Creating and Maintaining Hedges," page 49

Common Elements in This Chapter

Function Usage Select from the following:

Delta: Describes an option premium's sensitivity to changes in the price of the underlying. It is the amount of the underlying necessary to hedge small changes in the option price for small movements in the underlying.

MTM (mark-to-market): Calculates the value of the financial instrument based on the current market price of the underlying.

MTM-A (mark-to-market accounting): Calculates the clean value of the financial instrument based on the current market price of the underlying for accounting purposes. This value does not contain any accrued interest.

Analytics Mode Limit the analysis by specifying an analytics mode from the available values. Available values are limited by your implementation configuration.

Portfolio Select the portfolio to process.

Reevaluating Deals Analytics

This section describes how to define the parameters for deal analysis.

Page Used to Define Deal Analytics

Page Name	*Definition Name*	*Navigation*	*Usage*
Deal Analytics	MTM_DEALVAL_PNL	Risk Management, Reevaluate Deals, Deal Analytics, Deal Analytics	Override the analysis results by manually entering values. View a history of values that were created during the lifetime of the deal. See Chapter 2, "Defining Risk Management Processing Options," Defining Deal Analytic Functions, page 27.
Deal Risk Measures	MTM_DEAL_RSK_SEC	Click the Risk Measures link on the Deal Analytics page.	View the various types risk metrics for the deal.

Processing Portfolio Revaluation

Run the Mark-to-Market Batch Application Engine process (TR_PORT_MTM) on your portfolios to revalue and automatically update their current market value.

Pages Used to Process Portfolio Revaluation

Page Name	*Definition Name*	*Navigation*	*Usage*
Portfolio Revaluation	MTM_RUN_CNTL_PNL	Risk Management, Reevaluate Deals, Portfolio Revaluation, Portfolio Revaluation	Run the Portfolio Revaluation batch process to run analytic calculations on your portfolios and revalue their current market value.

Appendix A

Risk Management - Configuring Batch Processes

This appendix discusses how to configure temporary tables for batch processing.

Configuring Temporary Tables for Batch Processing

When you run batch processes in parallel, you risk data contention and deadlocks on temporary tables. To avoid this, PeopleTools enables you to dedicate specific instances of temporary tables for each process. When PeopleSoft application engine manages a dedicated temporary table instance, it controls the locking of the table before use and the unlocking of the table after use.

When you decide how many temporary table instances to dedicate for a process, consider the number of temporary tables that the process uses. More instances result in more copies of the temporary tables on the system. For example, if a process uses 25 temporary tables and you have 10 instances for a process, you will have 250 temporary tables on the system.

If you run processes in parallel and all of the dedicated temporary table instances are in use, the performance of the process decreases. You need to find a balance that works for your organization.

Note. When you specify the number of instances, PeopleSoft Application Designer displays a list of the temporary tables for the process. Use the list to determine how many temporary tables each process uses.

Specify how many temporary table instances to dedicate for the following batch process that can run in parallel in Risk Management: Adjust Hedge AOCI {Accumulated Other Comprehensive Income (HDG_AOCI_ADJ)}.

The PeopleTools documentation discusses the usage of temporary tables in detail and describes how to specify the number of instances.

If you run any of the General Ledger COBOL processes, also configure the temporary tables for those processes. The *PeopleSoft General Ledger 9.1 PeopleBook* discusses how to do this in detail.

See Also

PeopleSoft General Ledger 9.1 PeopleBook, "Optimizing General Ledger Performance"

PeopleTools PeopleBook: PeopleSoft Application Engine

Appendix B

Risk Management Reports

This appendix provides an overview of Risk Management reports and enables you to view a summary table of all reports.

Note. For samples of these reports, see the Portable Document Format (PDF) files that are published with your online documentation.

See Also

PeopleTools PeopleBook: PeopleSoft Process Scheduler

Risk Management Reports: A to Z

This table lists the Risk Management reports, sorted alphanumerically by report ID. The reports listed are Crystal and BI Publisher for PeopleSoft reports. If you need more information about a report, click the link to navigate to information about the process where the report is used.

Report ID and Report Name	*Description*	*Navigation*	*Run Control Page*
TRC3015 Fx - Mark to Market (Crystal)	Lists mark-to-market information for transactions for a specified business unit and all defined currencies of the business unit for a specific date range.	Risk Management, Reports, Mark to Market	RUN_TRC3015
TRX3015 Fx - Mark to Market (BI Publisher)	Lists mark-to-market information for transactions for a specified business unit and all defined currencies of the business unit for a specific date range.	Risk Management, Reports, Mark to Market	RUN_TRC3015
TRC4030 Stale Hedge (Crystal)	Generate a report listing all stale hedges.	Risk Management, Reports, Stale Hedges, Stale Hedges	RUN_TRC4030
TRX4030 Stale Hedge (BI Publisher)	Generate a report listing all stale hedges.	Risk Management, Reports, Stale Hedges, Stale Hedges	RUN_TRC4030

Report ID and Report Name	***Description***	***Navigation***	***Run Control Page***
TRC4031 Hedges (Crystal)	Provides a listing of all hedge activities for a specified business unit. Report can be filtered by hedge status, type, and relationship.	Risk Management, Reports, Hedges, Hedges	RUN_TRC4031
TRX4031 Hedges (BI Publisher)	Provides a listing of all hedge activities for a specified business unit. Report can be filtered by hedge status, type, and relationship.	Risk Management, Reports, Hedges, Hedges	RUN_TRC4031
TRC4032 Hedge Assessment Tickler (Crystal)	Generate a report of hedges that need an assessment.	Risk Management, Reports, Hedge Assessment Tickler, Hedge Assessment Tickler	RUN_TRC4032
TRX4032 Hedge Assessment Tickler (BI Publisher)	Generate a report of hedges that need an assessment.	Risk Management, Reports, Hedge Assessment Tickler, Hedge Assessment Tickler	RUN_TRC4032
TRC4110R Hedge Summary (Crystal)	Provides a summary of all hedged risk for single hedge or all hedges of a specified business unit.	Risk Management, Reports, Hedge Summary, Hedge Summary	RUN_TRC4110R
TRX4110R Hedge Summary (BI Publisher)	Provides a summary of all hedged risk for single hedge or all hedges of a specified business unit.	Risk Management, Reports, Hedge Summary, Hedge Summary	RUN_TRC4110R

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