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# PeopleSoft FSCM 9.2: Risk Management

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July 2013

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# Preface

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## Understanding the PeopleSoft Online Help and PeopleBooks

The PeopleSoft Online Help is a website that enables you to view all help content for PeopleSoft Applications and PeopleTools. The help provides standard navigation and full-text searching, as well as context-sensitive online help for PeopleSoft users.

## PeopleSoft Hosted Documentation

You access the PeopleSoft Online Help on Oracle's PeopleSoft Hosted Documentation website, which enables you to access the full help website and context-sensitive help directly from an Oracle hosted server. The hosted documentation is updated on a regular schedule, ensuring that you have access to the most current documentation. This reduces the need to view separate documentation posts for application maintenance on My Oracle Support, because that documentation is now incorporated into the hosted website content. The Hosted Documentation website is available in English only.

## Locally Installed Help

If your organization has firewall restrictions that prevent you from using the Hosted Documentation website, you can install the PeopleSoft Online Help locally. If you install the help locally, you have more control over which documents users can access and you can include links to your organization's custom documentation on help pages.

In addition, if you locally install the PeopleSoft Online Help, you can use any search engine for full-text searching. Your installation documentation includes instructions about how to set up Oracle Secure Enterprise Search for full-text searching.

See *PeopleTools 8.53 Installation* for your database platform, "Installing PeopleSoft Online Help." If you do not use Secure Enterprise Search, see the documentation for your chosen search engine.

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**Note:** Before users can access the search engine on a locally installed help website, you must enable the Search portlet and link. Click the Help link on any page in the PeopleSoft Online Help for instructions.

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## Downloadable PeopleBook PDF Files

You can access downloadable PDF versions of the help content in the traditional PeopleBook format. The content in the PeopleBook PDFs is the same as the content in the PeopleSoft Online Help, but it has a different structure and it does not include the interactive navigation features that are available in the online help.

## Common Help Documentation

Common help documentation contains information that applies to multiple applications. The two main types of common help are:

- Application Fundamentals

- Using PeopleSoft Applications

Most product lines provide a set of application fundamentals help topics that discuss essential information about the setup and design of your system. This information applies to many or all applications in the PeopleSoft product line. Whether you are implementing a single application, some combination of applications within the product line, or the entire product line, you should be familiar with the contents of the appropriate application fundamentals help. They provide the starting points for fundamental implementation tasks.

In addition, the *PeopleTools: PeopleSoft Applications User's Guide* introduces you to the various elements of the PeopleSoft Pure Internet Architecture. It also explains how to use the navigational hierarchy, components, and pages to perform basic functions as you navigate through the system. While your application or implementation may differ, the topics in this user's guide provide general information about using PeopleSoft Applications.

## Field and Control Definitions

PeopleSoft documentation includes definitions for most fields and controls that appear on application pages. These definitions describe how to use a field or control, where populated values come from, the effects of selecting certain values, and so on. If a field or control is not defined, then it either requires no additional explanation or is documented in a common elements section earlier in the documentation. For example, the Date field rarely requires additional explanation and may not be defined in the documentation for some pages.

## Typographical Conventions

The following table describes the typographical conventions that are used in the online help.

<i>Typographical Convention</i>	<i>Description</i>
<b>Bold</b>	Highlights PeopleCode function names, business function names, event names, system function names, method names, language constructs, and PeopleCode reserved words that must be included literally in the function call.
<i>Italics</i>	Highlights field values, emphasis, and PeopleSoft or other book-length publication titles. In PeopleCode syntax, italic items are placeholders for arguments that your program must supply.  Italics also highlight references to words or letters, as in the following example: Enter the letter <i>O</i> .
Key+Key	Indicates a key combination action. For example, a plus sign (+) between keys means that you must hold down the first key while you press the second key. For Alt+W, hold down the Alt key while you press the W key.
Monospace font	Highlights a PeopleCode program or other code example.
... (ellipses)	Indicate that the preceding item or series can be repeated any number of times in PeopleCode syntax.

<b>Typographical Convention</b>	<b>Description</b>
{ } (curly braces)	Indicate a choice between two options in PeopleCode syntax. Options are separated by a pipe (   ).
[ ] (square brackets)	Indicate optional items in PeopleCode syntax.
& (ampersand)	When placed before a parameter in PeopleCode syntax, an ampersand indicates that the parameter is an already instantiated object.  Ampersands also precede all PeopleCode variables.
=>	This continuation character has been inserted at the end of a line of code that has been wrapped at the page margin. The code should be viewed or entered as a single, continuous line of code without the continuation character.

## ISO Country and Currency Codes

PeopleSoft Online Help topics use International Organization for Standardization (ISO) country and currency codes to identify country-specific information and monetary amounts.

ISO country codes may appear as country identifiers, and ISO currency codes may appear as currency identifiers in your PeopleSoft documentation. Reference to an ISO country code in your documentation does not imply that your application includes every ISO country code. The following example is a country-specific heading: "(FRA) Hiring an Employee."

The PeopleSoft Currency Code table (CURRENCY\_CD\_TBL) contains sample currency code data. The Currency Code table is based on ISO Standard 4217, "Codes for the representation of currencies," and also relies on ISO country codes in the Country table (COUNTRY\_TBL). The navigation to the pages where you maintain currency code and country information depends on which PeopleSoft applications you are using. To access the pages for maintaining the Currency Code and Country tables, consult the online help for your applications for more information.

## Region and Industry Identifiers

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

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

### Region Identifiers

Regions are identified by the region name. The following region identifiers may appear in the PeopleSoft Online Help:

- Asia Pacific
- Europe
- Latin America

- North America

## Industry Identifiers

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

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

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Oracle customers have access to electronic support through My Oracle Support. For information, visit <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info> or visit <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs> if you are hearing impaired.

## Documentation Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=docacc>.

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## Using and Managing the PeopleSoft Online Help

Click the Help link in the universal navigation header of any page in the PeopleSoft Online Help to see information on the following topics:

- What's new in the PeopleSoft Online Help.
- PeopleSoft Online Help accessibility.
- Accessing, navigating, and searching the PeopleSoft Online Help.
- Managing a locally installed PeopleSoft Online Help website.

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## PeopleSoft FSCM Related Links

Financial and Supply Chain Management information for Secure Enterprise Search (SES) can be found in PeopleSoft Application Fundamentals documentation. For application specific information, see the "Understanding Search Pages within Components (*PeopleSoft FSCM 9.2: Application Fundamentals*)" topic.

[My Oracle Support](#)

[PeopleSoft Information Portal on Oracle.com](#)

[PeopleSoft Training from Oracle University](#)

[PeopleSoft Video Feature Overviews on YouTube](#)

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## Contact Us

Send us your suggestions Please include release numbers for the PeopleTools and applications that you are using.

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## Chapter 1

# Getting Started with PeopleSoft Risk Management

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## 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 documentation covers these business processes in the business process topics.

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## Risk Management Integrations

Risk Management integrates with these PeopleSoft applications:

- Cash Management
- Deal Management
- General Ledger

We cover integration considerations in the implementation topics of this documentation.

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

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## 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 the product documentation for *PeopleTools: PeopleSoft Setup Manager* and *PeopleTools: PeopleSoft Component Interfaces*.

## Related Links

"Banks Setup and Processing Overview (*PeopleSoft FSCM 9.2: Banks Setup and Processing*)"

"Cash Management Implementation (*PeopleSoft FSCM 9.2: Cash Management*)"

"Deal Management Implementation (*PeopleSoft FSCM 9.2: Deal Management*)"

## Chapter 2

# Defining Risk Management Processing Options

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## 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.

### Related Links

"Understanding Bank Setup (*PeopleSoft FSCM 9.2: Banks Setup and Processing*)"

"Understanding External, Internal, and Netting Accounts (*PeopleSoft FSCM 9.2: Banks Setup and Processing*)"

"Understanding Additional Bank Functionality (*PeopleSoft FSCM 9.2: Banks Setup and Processing*)"

"Understanding Deal Processing (*PeopleSoft FSCM 9.2: Deal Management*)"

"Establishing Cash Management Options (*PeopleSoft FSCM 9.2: Cash Management*)"

## 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 using three methods:

- Microsoft Excel.
- Component Object Model (COM) automation.

- Flat File Export.

## Navigating to Risk Management Setup Pages in Treasury Management

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

<b>Folder Name</b>	<b>Navigation</b>	<b>Usage</b>	<b>Setup Information</b>
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 supplier information used in risk analysis.	See <a href="#">Setting Up Risk Analytics</a> .
Hedges	Click Hedges.	Access pages to set up hedge groups, item sources, and strategies.	See <a href="#">Setting Up Risk Analytics</a> .

---

## 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

<i>Page Name</i>	<i>Definition Name</i>	<i>Navigation</i>	<i>Usage</i>
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.

### Hedge Strategy Page

Use the Hedge Strategy page (HDG\_STRATEGY\_PNL) to 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.

## Navigation

Risk Management, Administer Risk, Hedge Strategies, Hedge Strategies

### Image: Hedge Strategy page

This example illustrates the fields and controls on the Hedge Strategy page. You can find definitions for the fields and controls later on this page.

### Hedge Strategy

Strategy Details
Find | View All | First 1 of 1 Last

SetID:	SHARE	Hedge Strategy:	CASHFLOW <span style="float: right;">+ -</span>
*Effective Date:	06/15/2004 <span style="font-size: small;">[x]</span>	Status:	Active
*Description:	Cash Flow Strategy		

Risk Being Hedged
Means to measure effectiveness:

<input type="checkbox"/> Changes in Overall Fair Value <input type="checkbox"/> Interest Rate Risk <input type="checkbox"/> Foreign Exchange Risk <input type="checkbox"/> Credit Risk <input type="checkbox"/> Other    Risk Name: <input style="width: 50px;" type="text"/> <a href="#">Comments</a>	<div style="border: 1px solid #ccc; height: 40px; margin-top: 5px;"></div>
--	--

Strategy:

---

Hedge Details

Hedge ID	Hedge Type	Shortcut Method for IRS Hedge
CASE5	FAS133	Yes

### 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]."

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## 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.

## Hedged Item Source Page

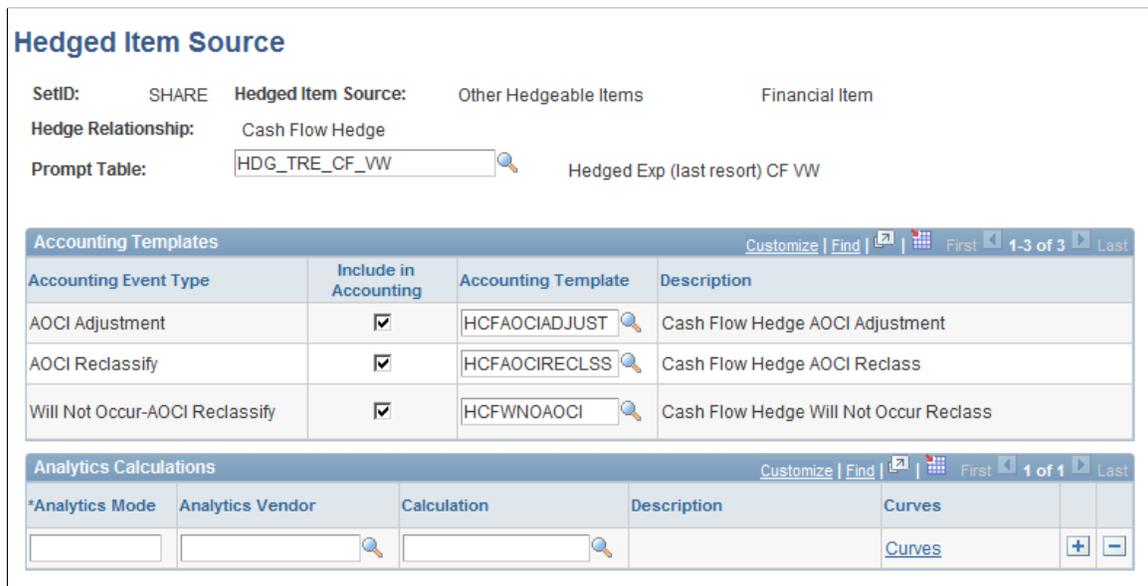
Use the Hedged Item Source page (HDG\_SRC\_PNL) to set up the risk evaluation and accounting of the hedged item.

### Navigation

Risk Management, Administer Risk, Hedged Item Sources, Hedged Item Sources

### Image: Hedged Item Source page

This example illustrates the fields and controls on the Hedged Item Source page. You can find definitions for the fields and controls later on this 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	Select a record.
FX (foreign exchange) Cash Flow Hedges	

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

## 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 types:

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

## Analytic Calculations

### Analytics Mode

Enter a mode definition.

### Analytics Supplier

Associate an installed third-party analytics supplier 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).
- Supplier Information (MTM\_PRODNM\_PNL\_GBL).
- Supplier 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 supplier information.
- Map supplier 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.

## Pages Used to Set Up Analytics

<b>Page Name</b>	<b>Definition Name</b>	<b>Navigation</b>	<b>Usage</b>
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.
Supplier Information	MTM_PRODNM_PNL	Risk Management, Structure Analytics, Supplier Information, Supplier Information	Enter general information about third-party analytics suppliers.
Supplier Parameters	MTM_PARMNM_PNL	Risk Management, Structure Analytics, Supplier Parameters, Supplier Parameters	Establish parameters used by functions associated with a specific supplier.
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.
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 supplier, 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.

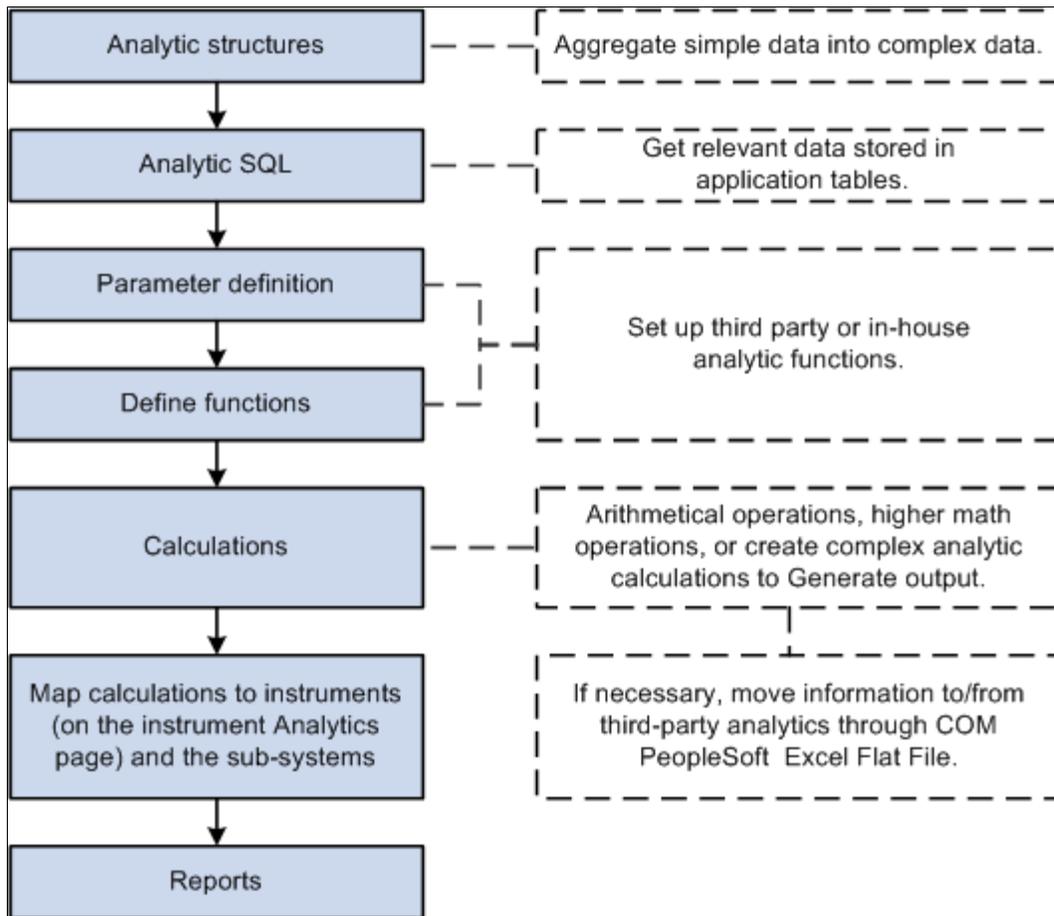
<b>Page Name</b>	<b>Definition Name</b>	<b>Navigation</b>	<b>Usage</b>
Analytic Calculations - Program	MTM_PROGRAM_DEFN	Risk Management, Structure Analytics, Analytic Calculations	Create arithmetical functions to identify and measure risk as well as conduct macroeconomic analyses. For example, you can 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.

## Understanding Analytic Parameters, Analytic Structures, and Interface Methods

This flowchart illustrates the setup process for enterprise risk management:

### Image: Setting up enterprise risk management

Setup Process for 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 supplier-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 supplier-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:

<i>Date</i>	<i>Rate</i>
March 10, 2004	5.60000%

<b>Date</b>	<b>Rate</b>
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 supplier 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 Analytics

<b>Sequence</b>	Displays the numerical order in which a process runs.
<b>Character</b>	Enter an alphanumeric character.
<b>Structure</b>	Enter a predefined analytic structure.
<b>Data Type</b>	Select from <i>Character</i> , <i>Date</i> , or <i>Number</i> . The data type corresponds to the value of the characters in the data tables.
<b>MTM Func Comments (mark-to-market function comments)</b>	Enter comments about parameters, any limitations or exceptions to these parameters, and general comments about functions.

## Define Structures Page

Use the Define Structures page (MTM\_STRUCTUREDEFN\_PNL) to define the analytic structures that your organization uses when assigning valuation parameters.

### Navigation

Risk Management, Structure Analytics, Analytic Structures, Define Structures

### Image: Define Structures page

This example illustrates the fields and controls on the Define Structures page. You can find definitions for the fields and controls later on this page.

The screenshot shows the 'Define Structures' page. At the top, there is a form with 'Structure: DF\_CURVE' and 'Description: Discount Factor Curve'. Below this is a 'Details' section with a table. The table has three columns: '\*Sequence', 'Field Name', and '\*Data Type'. There are two rows of data. The first row has sequence '1', field name 'MatDate', and data type 'Date'. The second row has sequence '2', field name 'DiscFactor', and data type 'Number'. Each row has '+' and '-' buttons to its right. The table also includes navigation controls like 'Find', 'First', '1-2 of 2', and 'Last'.

*Sequence	Field Name	*Data Type
1	MatDate	Date
2	DiscFactor	Number

**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.

## Analytic SQL Page

Use the Analytic SQL page (MTM\_SQLCNTRL\_PNL) to assign SQL statements to retrieve the discrete deal and market rate information.

PeopleSoft tables store these data.

## Navigation

Risk Management, Structure Analytics, Analytic SQL, Analytic SQL

### Image: Analytic SQL page

This example illustrates the fields and controls on the Analytic SQL page. You can find definitions for the fields and controls later on this 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.

## Supplier Information Page

Use the Supplier Information page (MTM\_PRODNM\_PNL) to enter general information about third-party analytics suppliers.

**Navigation**

Risk Management, Structure Analytics, Supplier Information, Supplier Information

**Image: Supplier Information page**

This example illustrates the fields and controls on the Supplier Information page. You can find definitions for the fields and controls later on this page.

The screenshot shows a form titled "Supplier Information". On the left side, there are several input fields: "Product/Supplier Name" with the value "EXCEL\_FUNCTIONS", "Description" with "Excel", "\*Interface" with a dropdown menu showing "Excel Add-In", "EDI Staging Table" (empty), "Valuation Method" with a dropdown menu showing "Function", and "File Path" (empty). Below these is a checkbox labeled "Workbook Required" which is unchecked. On the right side, there is a section titled "Contact Information" with a light blue header, containing four input fields: "Name", "Title", "Phone", and "City", all of which are currently empty.

This table describes the Interface methods:

<b>Interface Method</b>	<b>Description</b>	<b>Conditions</b>
<i>COM</i> (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.
<i>Excel Add-In</i>	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 <i>Function</i> or <i>Macro</i> , and select the Workbook Required check box, if applicable. The options you set depend upon the third-party vendor that you are using.
<i>File Format</i>	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.

## Supplier Parameters Page

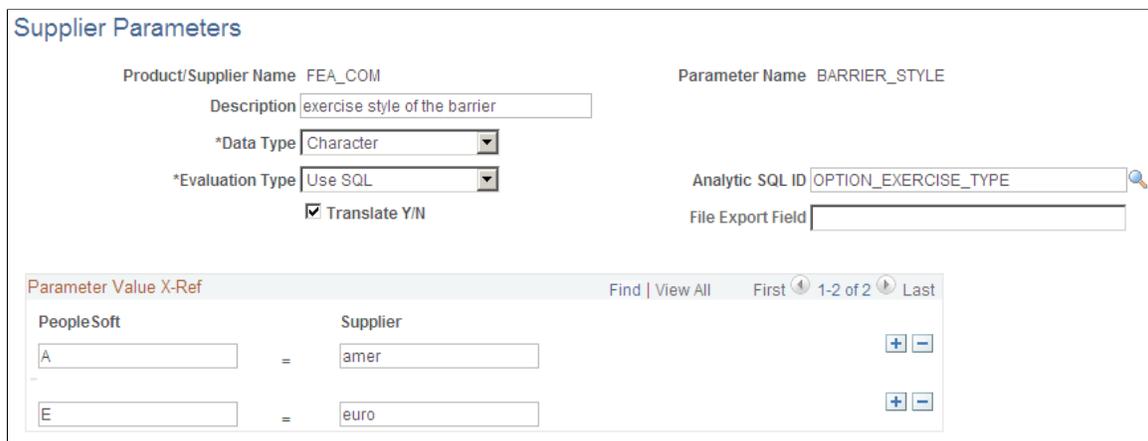
Use the Supplier Parameters page (MTM\_PARMNM\_PNL) to establish parameters used by functions associated with a specific supplier.

### Navigation

Risk Management, Structure Analytics, Supplier Parameters, Supplier Parameters

### Image: Supplier Parameters page

This example illustrates the fields and controls on the Supplier Parameters page. You can find definitions for the fields and controls later on this 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:

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

<b>Use SQL</b>	Select SQL statements in the Analytic SQL ID field from those provided by Risk Management or additional statements that you created.
<b>Use Constant</b>	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.
<b>Translate Y/N (translate yes/no)</b>	Select to enable the Parameter Value X-Ref group box, which provides a field for PeopleSoft- and Supplier-specific entries. Enter information specific to Risk Management in the PeopleSoft field and information provided from the third-party supplier in the Supplier field. For example, PeopleSoft tables store an option Buy or Sell as a Purchase (P) or Write (W) XLAT value. Supplier "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 Supplier "X" accepted values of (B) or (S).
<b>File Export Field</b>	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 supplier with <i>File Format</i> as the interface method on the Supplier Information page.

## Analytic Functions (Excel) Page

Use the Analytic Functions (Excel) page (MTM\_FUNC\_HDR\_EXL\_P) to map your analytics to Microsoft Excel formatting.

## Navigation

Risk Management, Structure Analytics, Analytic Functions (Excel)

### Image: Analytic Functions (Excel) page

This example illustrates the fields and controls on the Analytic Functions (Excel) page. You can find definitions for the fields and controls later on this 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.

## Analytic Functions (Excel) - Parameters Page

Use the Analytic Functions (Excel) - Parameters page (MTM\_FUNC\_DFN\_EXL\_P) to assign parameters to the Microsoft Excel-based analytics.

## Navigation

Select the Parameters tab on the Analytic Functions (Excel) page.

### Image: Analytic Functions (Excel) - Parameters page

This example illustrates the fields and controls on the Analytic Functions (Excel) - Parameters page. You can find definitions for the fields and controls later on this page.

Sequence	Parameter Name	Absolute Value	Required	Cell Range
1	SETTLEMENT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	a2
2	MATURITY	<input type="checkbox"/>	<input checked="" type="checkbox"/>	a3
3	COUPON	<input type="checkbox"/>	<input checked="" type="checkbox"/>	a4
4	YIELD	<input type="checkbox"/>	<input checked="" type="checkbox"/>	a5
5	FREQUENCY	<input type="checkbox"/>	<input checked="" type="checkbox"/>	a6

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

## Specifying Function Calls

### Function Call

If a supplier 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

<b>Parameter Name</b>	Select a parameter name value associated with the specified function.
<b>Required</b>	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.
<b>Absolute</b>	Select to convert a signed numeric value to an absolute numeric value.

## Analytic Functions (COM) Page

Use the Analytic Functions (COM) page (MTM\_FUNC\_HDR\_COM\_P) to set up analytics using the Component Object Model (COM) format.

### Navigation

Risk Management, Structure Analytics, Analytic Functions (COM)

### Image: Analytic Functions (COM) page

This example illustrates the fields and controls on the Analytic Functions (COM) page. You can find definitions for the fields and controls later on this page.

The screenshot shows the 'Analytic Functions (COM)' page with the 'Parameters' tab selected. The fields are as follows:

- Vendor:** FEA\_COM
- Function:** CalcCBOND\_MEASURES
- \*Description:** coupon bearing bond measures
- Return Data Type:** Number (selected from a dropdown menu)
- Func Comments:**

```

CBOND3
CBOND3 values coupon bonds.
Syntax
CBOND3(mty_date, freq, first_date, cpn, yld_cv, choices, cpn_type, start_date,
bas, cpn_cv, am_cv, val_date, bp_sh, interp, extrap, hol, date_conv)

```

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.

## Analytic Functions (COM) - Parameters Page

Use the Analytic Functions (COM) - Parameters page (MTM\_FUNC\_DFN\_COM\_P) to assign parameters to COM-based analytics.

### Navigation

Select the Parameters tab on the Analytics Using COM page.

### Image: Analytic Functions (COM) - Parameters page

This example illustrates the fields and controls on the Analytic Functions (COM) - Parameters page. You can find definitions for the fields and controls later on this page.

Sequence	Parameter Name	Absolute Value	Required
1	MATURITY_DATE		<input checked="" type="checkbox"/>
2	COUPON_FREQUENCY	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3	FIRST_PAYMENT_DATE		<input checked="" type="checkbox"/>
4	COUPON_RATE	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5	COUPON_TYPE		<input checked="" type="checkbox"/>

### 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.

### Related Links

[Analytic Functions \(Excel\) - Parameters Page](#)

## Analytic Calculations - Steps Page

Use the Analytic Calculations - Steps page (MTM\_PROG\_STEPS) to establish instrument to analytic program mapping.

## Navigation

Risk Management, Structure Analytics, Analytic Calculations, Steps

### Image: Analytic Calculations - Steps page

This example illustrates the fields and controls on the Analytic Calculations - Steps page. You can find definitions for the fields and controls later on this page.

*Step Variable	Operand Type	Function	Operator	Operand Type 2
1	Function	DURATION		

This page enables you to further define analytic rules for a specific supplier 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.

## Program Function Details Page

Use the Program Function Details page ( MTM\_PROG\_FUNC\_DETL) to establish evaluation type values for functions.

### Navigation

Click the Function Details/Parameters link on the Analytic Calculations - Steps page.

### Image: Program Function Details page

This example illustrates the fields and controls on the Program Function Details page. You can find definitions for the fields and controls later on this page.

The screenshot shows the 'Program Function Details' page for the 'DURATION' function. It includes a 'Sub Functions' header with navigation options (Find, View All, First, 1 of 1, Last) and a 'Function Sequence' of 1. Below is a table of parameters with their evaluation types and values.

Parameter Name	Evaluation Type	Value
SETTLEMENT	Use SQL	SETTLEMENT_DATE
MATURITY	Use SQL	MATURITY_DATE
COUPON	Use SQL	COUPON_RATE
YIELD	Use SQL	YIELD_TO_MATURITY
FREQUENCY	Use Constant	4

### 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.

## Instrument Analytics Page

Use the Instrument Analytics page (INSTR\_MTMDEFN\_PNL) to map analytic functions to specific instrument types.

### Navigation

Risk Management, Structure Analytics, Instrument Analytics, Instrument Analytics

### Image: Instrument Analytics page

This example illustrates the fields and controls on the Instrument Analytics page. You can find definitions for the fields and controls later on this page.

The screenshot shows the 'Instrument Analytics' page with the following details:

- SetID:** SHARE
- Instrument Type:** IRSWAP PSC
- \*Fair Value Adjustment Type:** Per Period Fair Value
- VaR Export SQL:** (empty search field)
- Details:** Find | View All | First 1 of 3 Last
- Function Usage:** MTM
- Mode:** GENERIC
- Vendor:** FEA\_COM
- Option Line:** (empty)
- Calculation:** SWAP\_VALUATION
- Rate/Index Type:** Customize | Find | View All | First 1-2 of 2 Last

Data Purpose	Market Rate Index	Rate Type		
Volatility	CP1YC	VOL	+	-
Yield	CP1YC	CRRNT	+	-

### 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 *Cmnty* (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.

## **Deal Analytics Page**

Use the Deal Analytics page (MTM\_DEALVAL\_PNL) to set up analytics for the deal.

## Navigation

Risk Management, Reevaluate Deals, Deal Analytics, Deal Analytics

### Image: Deal Analytics page

This example illustrates the fields and controls on the Deal Analytics page. You can find definitions for the fields and controls later on this page.

### Deal Analytics

Unit: US001   Deal ID: T-SECMTM   Instrument Type: CORPBOND

Fair Value at Transaction Date

Initial Fair Value:    Current FV Currency:     Override Fair Value

Run Analytics

As of Date:    Function Usage:    Mode:    [Risk Measures](#)

  Mark to Market Value:  USD

Fair Value History

As of Date	Fair Value	Currency	Fair Value Adjustment	Change in Fair Value

Ad-hoc Override

Currency:    Market Rate Index:    Rate Type:

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

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## 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 has 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.

### **Related Links**

[Understanding Hedge Analytics and Hedge Accounting](#)

[Creating Hedges](#)

[Maintaining Hedges](#)

[Accounting Treatments for Complying with IAS 39](#)

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## 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 documentation.

### 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.

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**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.

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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.

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**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)].

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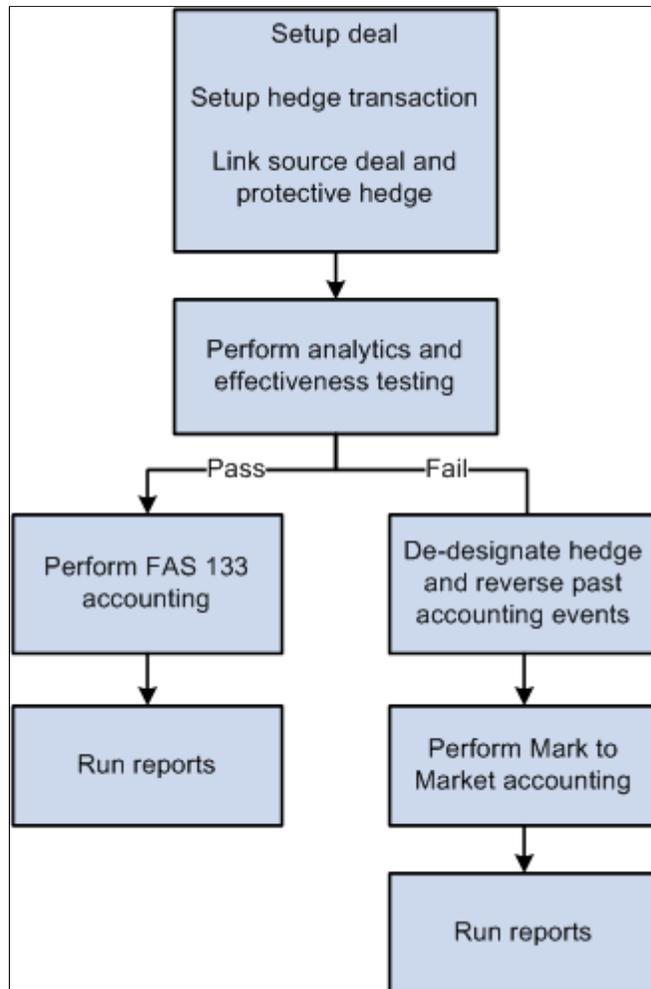
## Hedge De-Designation

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.

**Image: FAS 133 Hedge Accounting overview**

This flowchart provides an overview of FAS 133 hedge accounting.



**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.

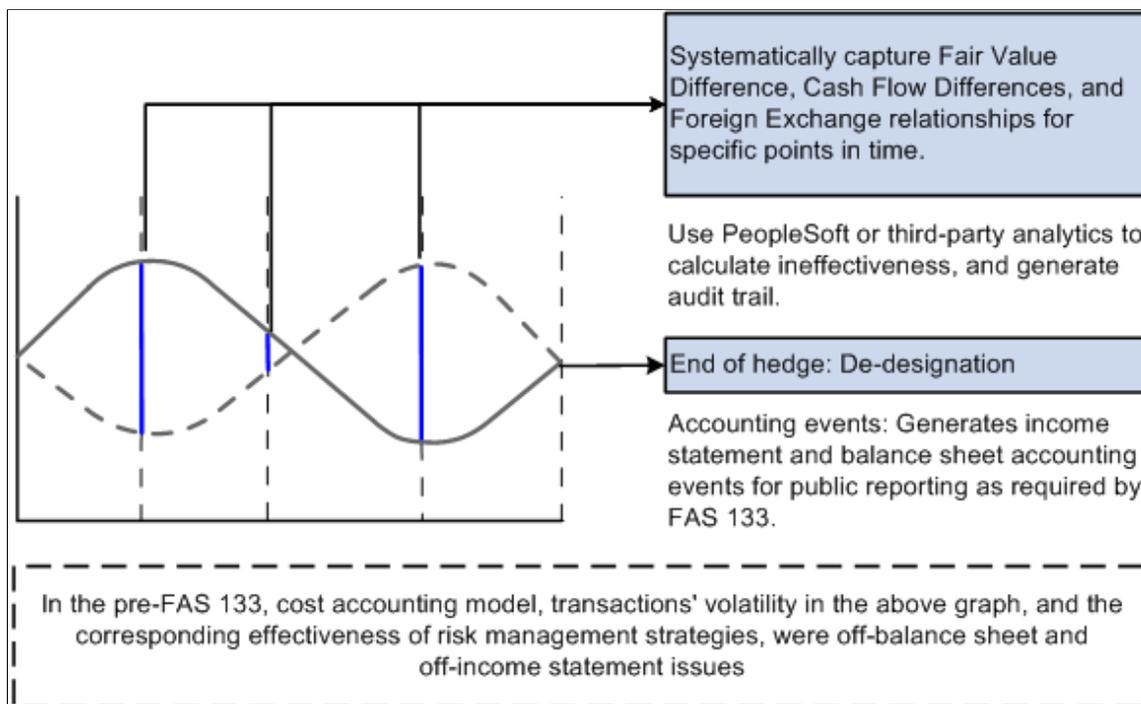
This section discusses:

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

## Risk Management and Hedges

### Image: Handling hedges in Risk Management

This diagram shows how PeopleSoft Risk Management handles hedges.



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

<i>Instrument</i>	<i>Interest Rate</i>	<i>F/X</i>	<i>Fair Value</i>	<i>Cash Flow</i>	<i>Other</i>
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.

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**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).

	<i>Period 1</i>	<i>Period 2</i>	<i>Net Difference</i>
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	

---

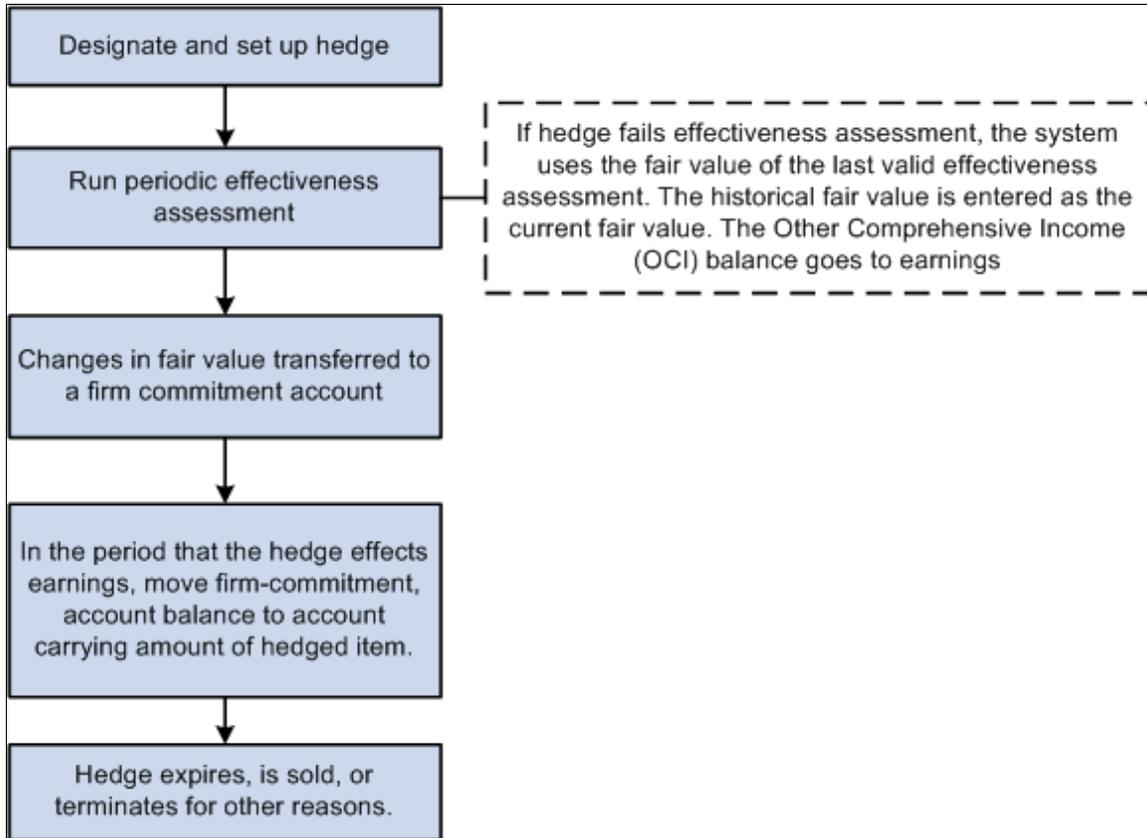
**Note:** *DIG's Fair Value Hedges: Basing the Expectation of Highly Effective Offset on a Shorter Period Than the Life of the Derivative* states: "In documenting its risk management strategy for a fair value hedge, an entity may specify an intent to consider the possible changes (that is, not limited 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."

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

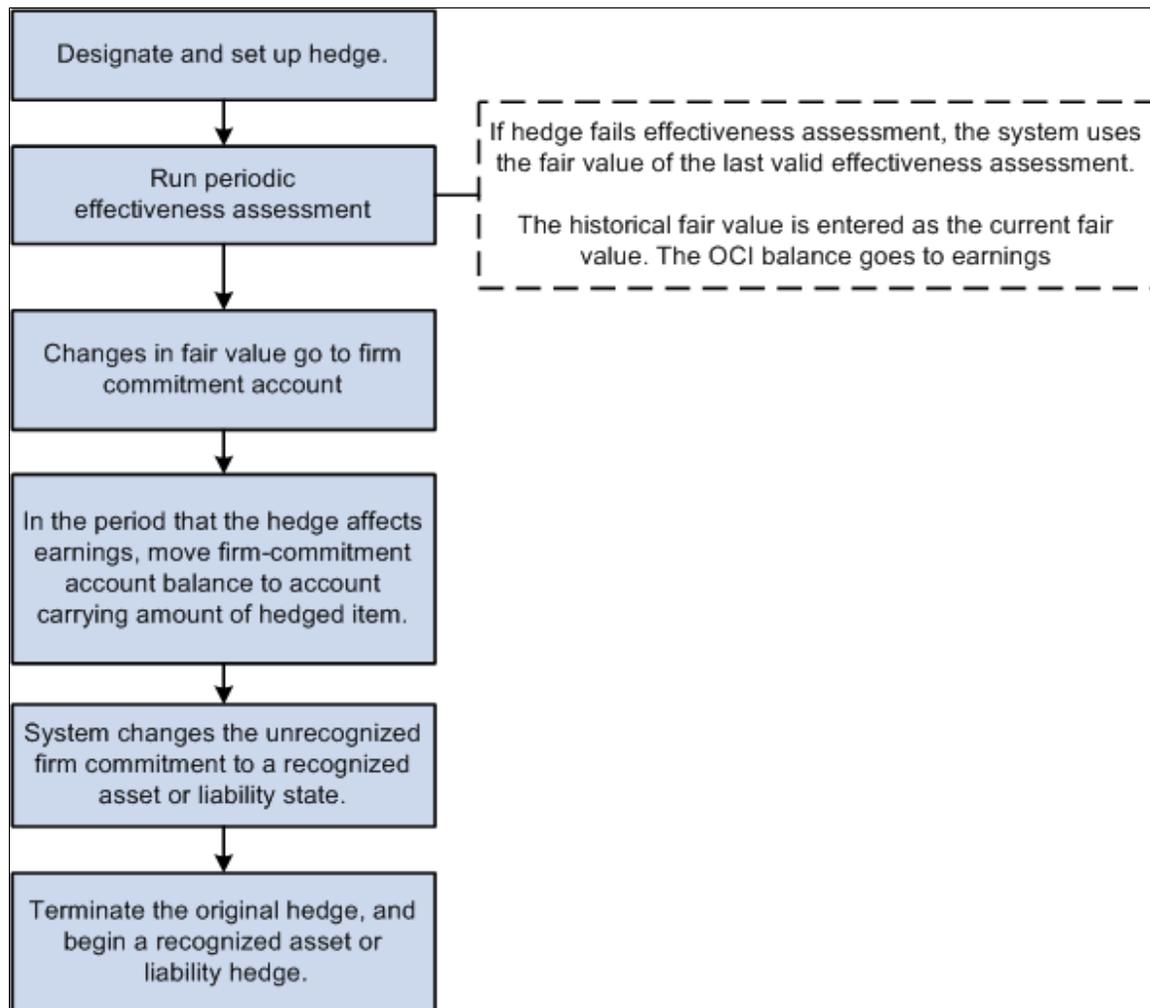
**Image: Fair value hedges in time**

This illustration shows the fair value hedge in time.



### Image: Fair value hedges in time of unrecognized firm commitments

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



## 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.

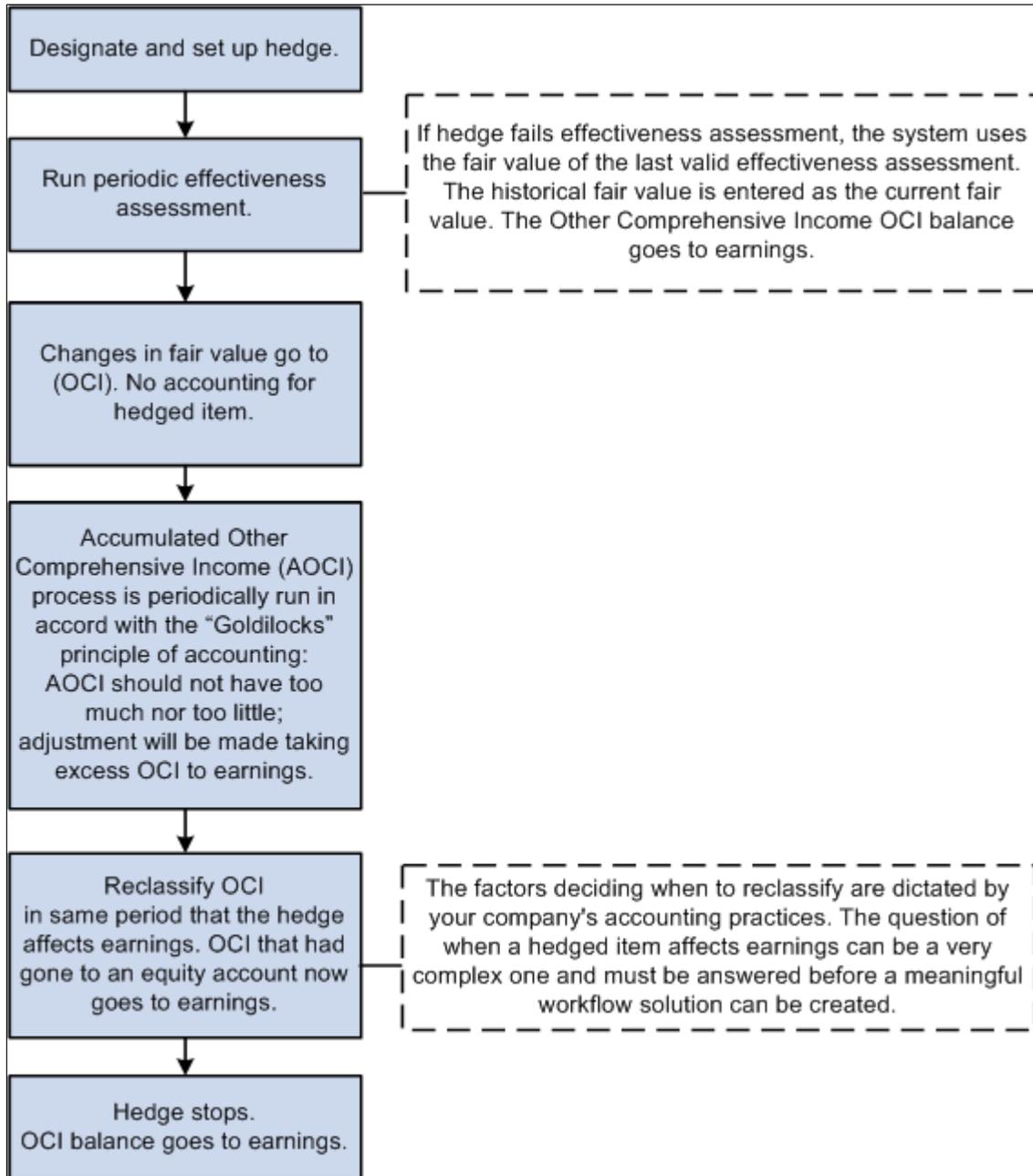
The main purpose of a cash flow hedge is to link a hedging instrument and a hedged item in situations where you expect changes in cash flows to offset one another. Under FAS 133, to achieve this offsetting of cash flows, changes in the fair value of a derivative instrument that is designated and effective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

**Image: Cash flow hedges in time**

This flowchart shows the cash flow hedge occurring 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.

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# 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.

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**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.

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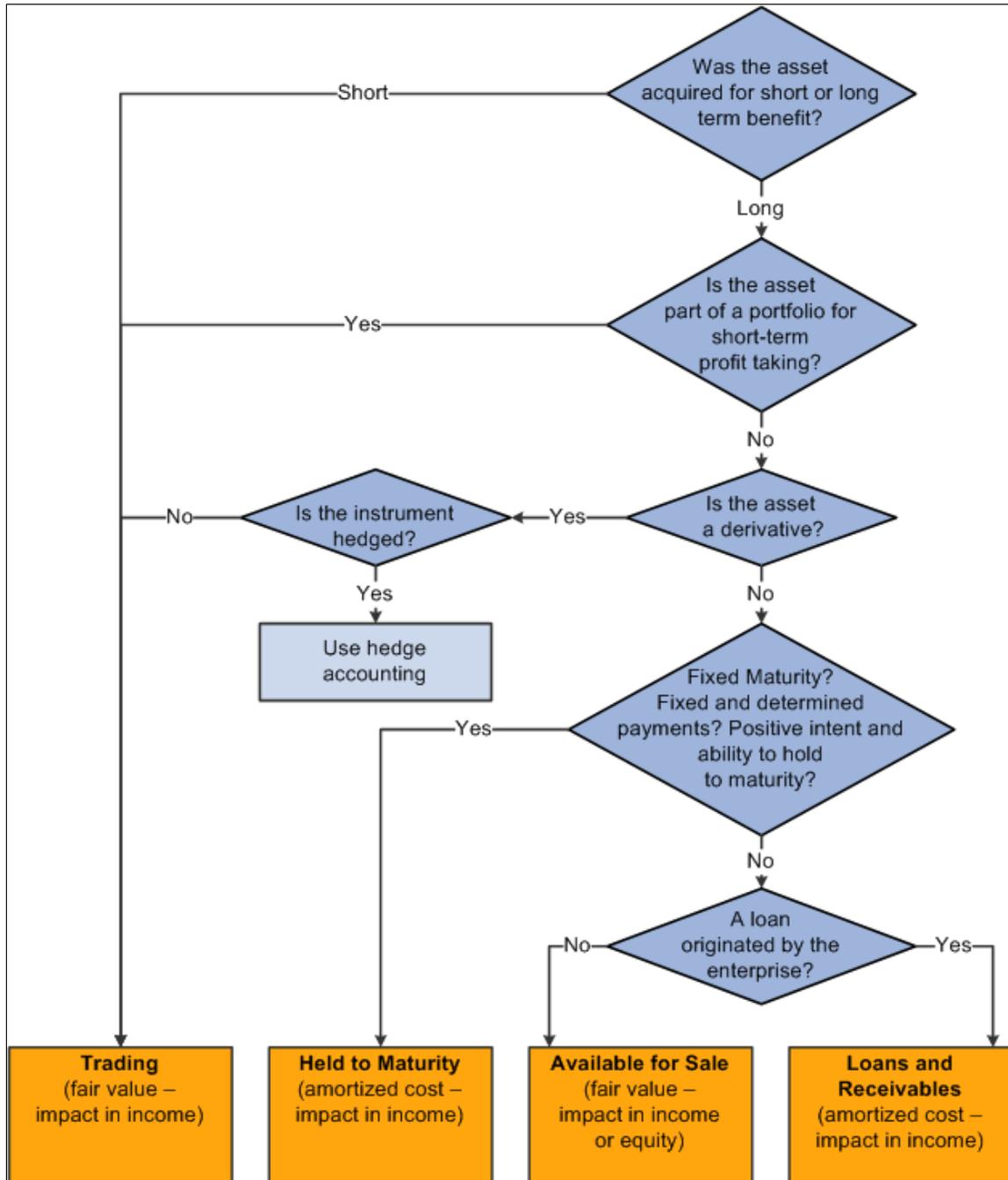
You must examine specific contracts and ask if they contain an embedded derivative, determine how to split the embedded derivative from the host contract, and determine how best to use the Instrument Base Type architecture in PeopleSoft to split the hybrid contract into a host contract and a separated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

## Accounting Treatments for Complying with IAS 39

Once determined, the accounting treatment is entered on the Instrument Detail page.

**Image: Decision tree for determining accounting treatment for IAS 39 compliance**

Use this diagram as an aid to determining the accounting treatment for complying with IAS 39 standards



## Chapter 4

# Analyzing Risk

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## Understanding the Risk Analysis Process

This topic includes:

- Prerequisites.
- Common elements used in the risk analysis process.
- Provided valuation functions.

### Prerequisites

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

### Related Links

[Instrument Analytics Page](#)

## Common Elements Used in the Risk Analysis Process

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

**Related Links**

[Understanding Hedge Creation and Maintenance](#)

## Analyzing VaR

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

### Page Used to Run VaR Analysis

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

### 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).

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

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### 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.

<b>Variance-covariance (analytic VaR)</b>	The most commonly used of the three VaR methods, variance-covariance analyzes volatility and correlation between different risk exposures of an enterprise's portfolio.
<b>Monte Carlo simulation</b>	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.
<b>Historical simulation</b>	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.

## VaR Analysis Page

Use the VaR Analysis page (RSK\_VAR\_RUN\_PNL) to enter analytical parameters and calculate VaR on your portfolios.

### Navigation

Risk Management, Analyze Risk, VaR Analysis, VaR Analysis

### Image: VaR Analysis page

This example illustrates the fields and controls on the VaR Analysis page. You can find definitions for the fields and controls later on this page.

The screenshot shows the 'VaR Analysis' page with the following details:

- SetID:** SHARE **Portfolio:** RTI
- Parameters** (Section Header)
- Vendor:** FEA\_COM (with search icon)
- As Of Date:** (empty date field with calendar icon)
- Calculation:** CAP\_VALUATION (with search icon)
- VaR Method:** MonteCarlo (dropdown menu)
- File Path:** (empty text field)
- \*Currency:** EUR (with search icon)
- Calculate** (button)
- VaR:** 0.00

### Vendor

Select a third-party supplier that will perform the VaR calculation based on the input values selected on this page. The supplier 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 supplier to perform the calculation

### File Path

Specify the output location of the log file for this supplier.

### 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\_FILEEXP), you can export risk analysis data for a specified business unit and portfolio to a third party.

### Page Used to Export Market Risk Files

<i>Page Name</i>	<i>Definition Name</i>	<i>Navigation</i>	<i>Usage</i>
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.

### Export Market Risk File Page

Use the Export Market Risk File page (TR\_FOUR15\_FILE\_EXP) to run the Risk File Export Application Engine process to export risk analysis files to a third-party application.

## Navigation

Risk Management, Analyze Risk, Export Market Risk File, Export Market Risk File

### Image: Export Market Risk File page

This example illustrates the fields and controls on the Export Market Risk File page. You can find definitions for the fields and controls later on this page.

**Export Market Risk File**

Run Control ID: FINSTA      [Report Manager](#)   [Process Monitor](#)  

**Parameters**

\*Unit:  

Portfolio:  

Instrument Type:  

\*File Path:

#### 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

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## Understanding Hedge Creation and Maintenance

This topic includes:

- Prerequisites.
- Common elements used to create and maintain hedges.
- The hedge life-cycle.

### Related Links

[Understanding Hedge Analytics and Hedge Accounting](#)

## 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.

### Related Links

[Understanding the Risk Analysis Process](#)

"Managing Deal Position Worksheets (*PeopleSoft FSCM 9.2: Deal Management*)"

"Understanding the Deal Capture Process (*PeopleSoft FSCM 9.2: Deal Management*)"

"Creating Trade Tickets (*PeopleSoft FSCM 9.2: Deal Management*)"

## Common Elements Used to Create and Maintain Hedges

### 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.

## 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.

### Related Links

[Risk Management and Hedge Accounting](#)

## Creating Hedges

This topic includes 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

<i>Page Name</i>	<i>Definition Name</i>	<i>Navigation</i>	<i>Usage</i>
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.

<b>Page Name</b>	<b>Definition Name</b>	<b>Navigation</b>	<b>Usage</b>
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.
Hedged Transaction Details	HDG_ITEM_FVRAL_DTL	Click the Details link on the Hedged Item page.	Capture higher resolution data about your hedge.
Item Accounting	HDG_HEDGED_ITEM_AC	Risk Management, Analyze Hedge, Hedges, Item Accounting	Set up accounting and effectiveness testing of your hedge.

## Other Hedgeable Items Page

Use the Other Hedgeable Items page (HDG\_EXPOSURE\_PNL) to you can import a database record from another PeopleSoft application or third-party system.

### Navigation

Risk Management, Analyze Hedge, Other Hedgeable Items, Other Hedgeable Items

### Image: Other Hedgeable Items page

This example illustrates the fields and controls on the Other Hedgeable Items page. You can find definitions for the fields and controls later on this page.

### Other Hedgeable Items

Unit: US001 Hedged Item ID: NEXT Status: Active

\*Description: MOUNTBLANC Risk Type:

Details:

\*Type:  Status:

Financial Type:   Foreign Currency Denominated

Period Start:   \*Review Date:

Amount:  Currency:  Quantity:  Unit of Measure:

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

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

**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.

## Hedge Designation Page

Use the Hedge Designation page (HDG\_HEDGE) to capture descriptive information about your hedging purposes and strategies to meet disclosure requirements.

## Navigation

Risk Management, Analyze Hedge, Hedges, Hedge Designation

### Image: Hedge Designation page

This example illustrates the fields and controls on the Hedge Designation page. You can find definitions for the fields and controls later on this page.

The screenshot displays the Hedge Designation page with the following details:

- Unit:** US001 **Hedge ID:** CASE5
- \*Description:** Interest rate swap to offset debt **Status:** Active
- Hedge Type:** FAS 133 Hedge
- \*Hedge Relationship:** Cash Flow Hedge **\*Hedge Strategy:** CASHFLOW
- Effective Assessment Methods:**
  - Retrospective Evaluations:** Assume No Ineffectiveness
  - Prospective Considerations:** Assume No Ineffectiveness
  - Ineffectiveness Method:** Assume No Ineffectiveness,  Shortcut Method for IRS Hedge
- \*Risk Offset:** Symmetrical Offset
- \*Inception Date:** 01/01/2003 **Entered By:** SAMPLE
- Discontinued Date:** **Discontinued By:**
- Risk Being Hedged:**
  - Changes in Overall Fair Value
  - Interest Rate Risk
  - Foreign Exchange Risk
  - Credit Risk
  - Other Risk Name:  [Comments](#)
- [Discontinue](#) [Discontinue Reason](#) [Event Log](#) [Document Sequencing](#)
- [Attachments \(0\)](#)

**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 §§ 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 (§§ 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](http://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.

**Hedging Instrument Page**

Use the Hedging Instrument page (HDG\_HEDGE\_DEAL) to capture information about the deal you will use to protect the hedged exposure.

## Navigation

Risk Management, Analyze Hedge, Hedges, Hedging Instrument

### Image: Hedging Instrument page

This example illustrates the fields and controls on the Hedging Instrument page. You can find definitions for the fields and controls later on this 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.)

**Hedges - Deal Accounting Page**

Use the Hedges - Deal Accounting page (HDG\_HEDGE\_DEAL\_AC) to view the accounting associated with your hedging relationship.

**Navigation**

Risk Management, Analyze Hedge, Hedges, Deal Accounting

**Image: Deal Accounting page**

This example illustrates the fields and controls on the Hedges - Deal Accounting page. You can find definitions for the fields and controls later on this page.

The screenshot shows the 'Deal Accounting' tab selected. At the top, there are tabs for 'Hedge Designation', 'Hedging Instrument', 'Deal Accounting', 'Hedged Item', 'Item Accounting', and 'Hedge Maintenance'. Below the tabs, the 'Unit' is 'US001' and 'Hedge ID' is 'CASE5'. A 'Changes in Fair Value' section contains a 'Find | View All | First | 1 of 1 | Last' navigation bar. Below this are input fields for 'Sequence' (1), 'Initial Fair Value' (0.00), 'Currency' (USD), and a checked 'Use Zero' checkbox. A 'Calculate' button is present. Below these are 'New Value', 'As of Date' (09/17/2009), 'Fair Value' (0.00), 'Fair Value Adjustment' (0.00), and 'Included Component' (0.00) fields, with an unchecked 'Use Values' checkbox. At the bottom is a 'Fair Value History' table with columns: As of Date, Fair Value, Fair Value Included Component, Fair Value Adjustment, Proportion, Change in Fair Value, and Change in Included Component. The table contains two rows of data.

As of Date	Fair Value	Fair Value Included Component	Fair Value Adjustment	Proportion	Change in Fair Value	Change in Included Component
06/30/2003	-75,000.00	-75,000.00	0.00	100.000	25,000.00	25,000.00
06/29/2003	-100,000.00	-100,000.00	0.00	100.000	-100,000.00	-100,000.00

**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 check box 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.

## Hedged Item Page

Use the Hedged Item page (HDG\_HEDGED\_ITEM) to set up the exposure that you will hedge.

### Navigation

Risk Management, Analyze Hedge, Hedges, Hedged Item

### Image: Hedged Item page

This example illustrates the fields and controls on the Hedged Item page. You can find definitions for the fields and controls later on this page.

The screenshot shows the 'Hedged Item' page with the following fields and controls:

- Unit:** US001
- Hedge ID:** CASE5
- Hedged Item Details:**
  - \*Sequence: 1
  - Hedged Item Source: Treasury Deal
  - Financial Type: Financial Item
- Hedged Item / Transaction:**
  - \*Portion: All
  - Deal Business Unit: US001
  - Deal ID: CASE5
  - \*Added to Hedge: 01/01/2003
  - Added By: SAMPLE
  - Removed from Hedge: (empty)
  - Removed By: (empty)

### 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 the Percentage 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.

## Hedged Transaction Details Page

Use the Hedged Transaction Details page (HDG\_ITEM\_FVRAL\_DTL) to capture higher resolution data about your hedge.

### Navigation

Click the Details link on the Hedged Item page.

### Image: Hedged Transaction Details page

This example illustrates the fields and controls on the Hedged Transaction Details page. You can find definitions for the fields and controls later on this page.

The screenshot displays the 'Hedged Transaction Details' form with the following fields and values:

- Expected to Occur Period Start:** 01/01/2003
- Expected to Occur Period End:** 12/31/2007
- Expected Cash Flows:** Payments
- Expected Currency Amount:** (empty field)
- Currency of the Hedged Item:** (empty field with search icon)
- Face Value:** 5,000,000.00
- Face Value Currency:** USD
- Hedged Transaction Details:** 5 Years to 2007-12-31 Debt USD 5.0m. @ LIBOR

At the bottom of the form are 'OK' and 'Cancel' buttons.

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, Asset Liability, 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.

## Hedges - Item Accounting Page

Use the Hedges - Item Accounting page (HDG\_HEDGED\_ITEM\_AC) to set up accounting and effectiveness testing of your hedge.

### Navigation

Risk Management, Analyze Hedge, Hedges, Item Accounting

### Image: Hedges - Item Accounting page

This example illustrates the fields and controls on the Hedges - Item Accounting page. You can find definitions for the fields and controls later on this page.

The screenshot shows the 'Item Accounting' tab selected. Key fields include:

- Unit: US001, Hedge ID: CASE5
- For Hedged Item: Find | View All | First | 1 of 1 | Last
- Sequence: 1, Hedged Item Source: Treasury Deal
- Initial Future Cash Flows Attributable to Hedged Risk: 0.00, Current FV Currency: USD, Use Zero checked.
- As of Date: 09/17/2009, Future Cash Flows: 0.00, Current FV Currency: USD, Cash Flow Adjustment: 0.00.
- Fair Value History table:

As of Date	Future Cash Flows	Cash Flow Adjustment	Percentage	Change in Future Cash Flows
06/30/2003	25,000.00	0.00	100.000	25,000.00

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



Page Name	Definition Name	Navigation	Usage
Hedge Summary	HDG_SUMMARY	Risk Management, Analyze Hedge, Hedge Summary, Hedge Summary	View online report of summarized hedge information a specific hedge.

## Hedge Maintenance Page

Use the Hedge Maintenance page (HDG\_WRKFLW) to designate the hedge relationship or remove the hedged deal from the hedge, or adjust AOCI.

### Navigation

Risk Management, Analyze Hedge, Hedges, Hedge Maintenance

### Image: Hedge Maintenance page

This example illustrates the fields and controls on the Hedge Maintenance page. You can find definitions for the fields and controls later on this 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.

<b>Hedge Type</b>	<b>Page Fields</b>	<b>Description</b>
All hedge types.	Remove Hedged Item from Hedge	Remove hedged item from the hedge. By itself, making this selection does not terminate the hedge.  <b>Note:</b> 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.
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 topic includes how to:

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

## Pages Used to Set Up Hedge Groups

<b>Page Name</b>	<b>Definition Name</b>	<b>Navigation</b>	<b>Usage</b>
Define Hedge Groups	HDG_COLLCTN_HDG	Risk Management, Administer Risk, Define Hedge Groups, Define Hedge Groups	Set up hedge group definition.

<b>Page Name</b>	<b>Definition Name</b>	<b>Navigation</b>	<b>Usage</b>
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.

## Define Hedge Groups Page

Use the Define Hedge Groups page (HDG\_COLLCTN\_HDG) to set up hedge group definition.

### Navigation

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.

## Add to Hedge Group Page

Use the Add to Hedge Group page (HDG\_COLL\_FAV\_A) to search and add individual hedge items to a hedge group.

### Navigation

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.

## Pages Used to Define and Manage Hedge Groups

<b>Page Name</b>	<b>Definition Name</b>	<b>Navigation</b>	<b>Usage</b>
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.
Hedge Group Manager	HDG_COLLECTION_DTL	Risk Management, Analyze Hedge, Hedge Group Manager, Hedge Group Manager	Review and maintain hedge items for a selected hedge group.

## Common Elements Used to Define and Manage Hedge Groups

- Inception Date** Displays the active date of the hedge item.
- Retrospective Evaluations** Displays the retrospective evaluation value for the hedge item.

## My Hedge Groups Page

Use the My Hedge Groups page (HDG\_COLLECTION\_FAV) to aggregate and maintain your hedge groups from a central location.

### Navigation

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.

## My Hedge Groups - Update Page

Use the My Hedge Groups - Update page (HDG\_COLLCTN\_FAV\_A) to add or clear hedge groups from the My Hedge Groups page.

### Navigation

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.

## Hedge Group Manager Page

Use the Hedge Group Manager page (HDG\_COLLECTION\_DTL) to review and maintain hedge items for a selected hedge group.

### Navigation

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

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## Understanding Position Limits and Exposure Positions

This topic includes:

- 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.

You must also determine the method of limit warning notification.

To implement the Position Limit Workflow virtual approval methodology, use PeopleSoft Application Designer to define business processes, activities, business events, worklists, routings, and approval rule sets.

The integration between Treasury and Notification Framework will be delivered as system data to support email and worklist notifications, as shown in this table:

<i>Description</i>	<i>Process Name</i>	<i>Process Category</i>	<i>Navigation</i>
Position Limit Notifications	TR_NOTIFICATIONS	POSITION_LIMIT	Enterprise Components, Events & Notifications, Notifications Framework, Notifications Registry

See the product documentation for *PeopleTools: PeopleSoft Application Designer Developer's Guide* and *PeopleSoft Events and Notifications Framework*.

### Related Links

"Understanding Dealing Trees and Deal Positions (*PeopleSoft FSCM 9.2: Deal Management*)"

## 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

<i>Page Name</i>	<i>Definition Name</i>	<i>Navigation</i>	<i>Usage</i>
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.

### Ad-hoc Limit Check Page

Use the Ad-hoc Limit Check page (POS\_ADHOC\_LIMITS) to verify limits on an ad hoc basis.

#### Navigation

Risk Management, Position Limits, Check Position Limits, Check Position Limits

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.

<b>Tree Name</b>	Displays the tree name specified in the Tree Name edit box.
<b>Tree Node</b>	Displays the tree node, if specified in the Tree Node edit box.
<b>Utilization</b>	Displays the amount of the position limit used.
<b>Limit Min (limit minimum)</b>	Displays the minimum amount for this position limit.
<b>Limit Max (limit maximum)</b>	Displays the maximum amount for this position limit.
<b>Internal/External</b>	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 Warning 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.

### Page Used to Process Limit Warning Notifications

<b>Page Name</b>	<b>Definition Name</b>	<b>Navigation</b>	<b>Usage</b>
Limit Notification	TR_AE_RUNCNTL	Risk Management, Position Limits, Limit Notification, Limit Notification	Run the Limit Notification process (TR_POS_LMT) to run position limit check processing requests.

#### Related Links

"Setting Up Dealing Trees and Deal Positions (*PeopleSoft FSCM 9.2: Deal Management*)"

"Delivered Deal Management Workflows (*PeopleSoft FSCM 9.2: Deal Management*)"

### Limit Notification Page

Use the Limit Notification page (TR\_AE\_RUNCNTL) to run the Limit Notification process and position limit check processing requests.

#### Navigation

Risk Management, Position Limits, Limit Notification, Limit Notification

#### State Record

Bind Variable Name or Value are not necessary for the POS\_NOTIFY\_AET state record. The Limit Notification process includes this information.

## Setting Respondents for Limit Warning Notifications

Indicate users who have responded to notifications regarding position limits.

### Page Used to Set Respondents for Limit Warning Notifications

<i>Page Name</i>	<i>Definition Name</i>	<i>Navigation</i>	<i>Usage</i>
Review Limit Notification	POS_NOTIFY	Risk Management, Position Limits, Review Limit Notification, Review Limit Notification	Specify users who have responded to limit warning notifications.

### Review Limit Notification Page

Use the Review Limit Notification page (POS\_NOTIFY) to specify users who have responded to limit notifications.

#### Navigation

Risk Management, Position Limits, Review Limit Notification, Review Limit Notification

**Responded** Select who has responded to limit warning notifications.

## Defining Limit Warning Notification Exclusions

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

### Page Used to Define Limit Warning Notification Exclusions

<i>Page Name</i>	<i>Definition Name</i>	<i>Navigation</i>	<i>Usage</i>
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.

### Exclude from Limit Notification Page

Use the Exclude from Limit Notification page (POS\_LMT\_NFY\_NOT) to for a specific tree and tree node, define who should not be notified regarding limits.

#### Navigation

Risk Management, Position Limits, Exclude from Limit Notification, Exclude from Limit Notification

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

**Related Links**

"Defining Treasury Business Unit Options (*PeopleSoft FSCM 9.2: Cash Management*)"



# Reevaluating Deals

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## 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.

---

## Common Elements Used to Reevaluate Deals

### 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.

---

## Prerequisites

You must define analytic structures and analytic parameters, set up your third party supplier 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.

### Related Links

"Understanding the Deal Capture Process (*PeopleSoft FSCM 9.2: Deal Management*)"

"Creating Trade Tickets (*PeopleSoft FSCM 9.2: Deal Management*)"

[Understanding the Risk Analysis Process](#)

[Understanding Hedge Creation and Maintenance](#)

## Reevaluating Deals Analytics

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

### Page Used to Define Deal Analytics

<i>Page Name</i>	<i>Definition Name</i>	<i>Navigation</i>	<i>Usage</i>
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.
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.

### Page Used to Process Portfolio Revaluation

<i>Page Name</i>	<i>Definition Name</i>	<i>Navigation</i>	<i>Usage</i>
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.

# Risk Management - Configuring Batch Processes

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## 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.

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**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. See the product documentation for *PeopleTools: PeopleSoft Application Designer Developer's Guide*.

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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. See the product documentation for *PeopleTools: Application Engine*.

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

### Related Links

"Understanding Optimal General Ledger Performance (*PeopleSoft FSCM 9.2: General Ledger*)"



## Appendix A

# Risk Management Reports

## Risk Management Reports: A to Z

This table lists the BI Publisher reports provided with PeopleSoft Risk Management, sorted alphanumerically by report ID.

<b>Report ID and Report Name</b>	<b>Description</b>	<b>Navigation</b>	<b>Run Control Page</b>
TRX3015 FX - Mark to Market	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
TRX4030 Stale Hedges	Generate a report listing all stale hedges.	Risk Management, Reports, Stale Hedges, Stale Hedges	RUN_TRC4030
TRX4031 Hedges	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
TRX4032 Hedge Assessment Tickler	Generate a report of hedges that need an assessment.	Risk Management, Reports, Hedge Assessment Tickler, Hedge Assessment Tickler	RUN_TRC4032
TRX4110R Hedge Summary	Provides a summary of all hedged risk for a single hedge or all hedges of a specified business unit.	Risk Management, Reports, Hedge Summary, Hedge Summary	RUN_TRC4110R

