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PeopleSoft CRM 9.2: Enterprise Pricer

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PeopleSoft CRM 9.2: Enterprise Pricer
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Preface

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 Online Help

You access the PeopleSoft Online Help on Oracle's PeopleSoft Hosted Online Help website, which enables you to access the full help website and context-sensitive help directly from an Oracle hosted server. The hosted online help 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 Online Help website is available in English only.

Note: Only the most current release of hosted online help is updated regularly. After a new release is posted, previous releases remain available but are no longer updated.

Locally Installed Help

If your organization has firewall restrictions that prevent you from using the Hosted Online Help 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 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.

Note: Before users can access the search engine on a locally installed help website, you must enable the Search field. For instructions, select About This Help, Managing Locally Installed PeopleSoft Online Help, Enabling the Search Button and Field in the Contents sidebar of the online help site.

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.

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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 families 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 family. Whether you are implementing a single application, some combination of applications within the product family, or the entire product family, 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: 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.

Typographical Convention	***Description***
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.
. . . (ellipses)	Indicate that the preceding item or series can be repeated any number of times in PeopleCode syntax.
{ } (curly braces)	Indicate a choice between two options in PeopleCode syntax. Options are separated by a pipe (|).
[ ] (square brackets)	Indicate optional items in PeopleCode syntax.

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Typographical Convention	*Description*
& (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

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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)

Translations and Embedded Help

PeopleSoft 9.2 software applications include translated embedded help. With the 9.2 release, PeopleSoft aligns with the other Oracle applications by focusing our translation efforts on embedded help. We are not planning to translate our traditional online help and PeopleBooks documentation. Instead we offer very direct translated help at crucial spots within our application through our embedded help widgets. Additionally, we have a one-to-one mapping of application and help translations, meaning that the software and embedded help translation footprint is identical—something we were never able to accomplish in the past.

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.

PeopleSoft CRM Related Links

PeopleSoft Information Portal

My Oracle Support

PeopleSoft Training from Oracle University

PeopleSoft Video Feature Overviews on YouTube

PeopleSoft Business Process Maps (Microsoft Visio format)

Contact Us

Send your suggestions to PSOFT-INFODEV_US@ORACLE.COM. Please include release numbers for the PeopleTools and applications that you are using.

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Chapter 1

Getting Started with PeopleSoft Enterprise Pricer

Understanding PeopleSoft Enterprise Pricer

PeopleSoft Enterprise Pricer enables real-time dynamic pricing for quotes and orders based on your company pricing policies. You can define rules that determine what discounts, surcharges, or giveaways apply under specific order conditions, such as products ordered, customer, customer region, and so on. The functionality is designed for pricing and marketing managers and includes the capability for development, testing, deployment, and maintenance of price lists, rules, and arbitration plans.

PeopleSoft Enterprise Pricer consists of pricing elements that you use to create your pricing structure:

- Price lists.

  These enable you to select products and conditions where the price list should be overridden. During a transaction, the system determines the product price based on either the predefined search hierarchy for the transaction or on the product's lowest price on any associated active price lists. This price is used as the basis for any further discounts and surcharges.

- Price rules.

  These define the conditions that must be met before the adjustments are applied to the base or recurring price. Multiple rules can apply when conditions of each rule are met.

- Arbitration plans.

  These define how the price rules are applied to the base or recurring price when the transaction is priced.

- Pricing simulator.

  This enables you to test your pricing scenarios to determine whether the pricing adjustments create the desired results.

When you set up your pricing scenario, set up the pricing elements in this order:

1. Price lists.
2. Price rules.
3. Arbitration plans.

Once you have set up all three elements, you can test the setup using the pricing simulator. By specifying some pricing criteria with a particular customer, you can verify if the application is producing expected results. With the simulation tools, you can run tests, view test results, and refine price rules, price lists, and arbitration plans as often as needed before the pricing functionality goes to production. For more

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information on the pricing process flow, how the product base price, pricing adjustments (if applicable) and net price are determined for the calling application, refer to the *Price Determination* topic of *PeopleSoft FSCM Enterprise Pricer*.

Note: PeopleSoft Enterprise Pricer does not implement business unit or setID security.

Enterprise Pricer in PeopleSoft CRM and FSCM

Enterprise Pricer is a common component that is shared between PeopleSoft CRM and FSCM. While both product families adopt most of the functionality of the pricing application the same way, there are areas where the CRM standard implementation is different from the FSCM's. For example:

- PeopleSoft CRM supports only *Order Capture* transactions as delivered.
- PeopleSoft CRM supports the setup and use of price rules for both non-recurring and recurring pricing.

  Important! Recurring pricing support is a CRM-specific implementation; it is not supported in the delivered version of Enterprise Pricer for PeopleSoft FSCM.

- Discounts in PeopleSoft CRM are only off-invoice. PeopleSoft FSCM supports both off-invoice and bill-back adjustments.
- PeopleSoft CRM does not use payment terms and distribution accounting when pricing transactions.
- PeopleSoft CRM does not use pricing enterprise integration points (EIPs) for sending and receiving pricing data with another system.

Throughout this documentation, additional page-level and feature-level differences between a CRM and FSCM implementation will be mentioned wherever appropriate.

Integrating with PeopleSoft Enterprise Pricer

PeopleSoft Enterprise Pricer integrates with these PeopleSoft CRM applications:

- PeopleSoft CRM Order Capture.
- PeopleSoft CRM Order Capture Self Service.
- PeopleSoft CRM Marketing offers.

PeopleSoft Enterprise Pricer 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 documentation. PeopleSoft Sales also provides component interfaces for loading data from an existing system into PeopleSoft Sales tables. Use the Excel to Component Interface utility with the component interfaces to populate the tables. This table lists all of the components that have component interfaces:

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Component	***Component Interface***	***Reference***
Price Rounding Rules (EOEP_ROUND_RULE)	EOEP_ROUND_RULE_CI	See Establishing Pricing Options and Values.
Pricing Dates (EOEP_DATE_VAR)	EOEP_DATE_VAR_CI	See Establishing Pricing Options and Values.
Pricing Variables (EOEP_PRICE_VAR)	EOEP_PRICE_VAR_CI	See Establishing Pricing Options and Values.

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

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Chapter 2

Implementing PeopleSoft Enterprise Pricer

Understanding PeopleSoft Enterprise Pricer Implementation

The setup for Enterprise Pricer is separated into two segments: performing setup tasks and establishing pricing options and values. Setup tasks are optional and are more complex and involve adding additional fields and completing significantly more complex tasks. As for pricing options tasks, they are simpler tasks that involve defining key fields appropriate to the enterprise.

Warning! The Enterprise Pricer application is delivered with standard setup for the *Order Capture* transaction. Changes made to certain delivered data, such as adding a new price transaction code, adding a price-by key for a record that's not already being used by Enterprise Pricer, and creating custom mathematical expressions, are considered system customizations and are not supported by the Global Support Center.

Setup Tasks

Perform setup tasks if you wish to modify Enterprise Pricer system data and alter how the application works in a standard implementation.

Available setup tasks include addition of price-by fields and transaction-specific options. Note that these tasks require customization to the application. For example, if a new pricing key for a record that is not already being used in Enterprise Pricer is added on a setup page, the developer must also customize both online and batch pricing to use the new key.

Setup tasks are *optional* in a standard pricing implementation because it delivers a predetermined set of price-by key fields and price list fields as well as ready-to-use pricing settings for the *Order Capture* transaction.

These setup tasks are:

- Set up new price-by keys: The All Price-by Key Fieldnames page contains the standard list of available fields that are used when defining price rule conditions at the line level.

  All delivered price-by keys are available at implementation. Here you can add fields that are considered for price list determination and price rule creation.

- Set up transaction code options: The options for the *Order Capture* transaction are delivered as system data and appear on the online pricing pages.

Pricing Options and Values

After the price-by keys and transaction code options are defined and specified, an Enterprise Pricer implementer or information technology person can perform these steps to set up other pricing options and values for use in defining price lists, price rules and arbitration plans:

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1. Specify price-by keys to be used by a transaction on the Transaction Price-By Keys component.

   This identifies the price-by keys used by the application when defining price lists and price rules for a transaction. Enterprise Pricer delivers price-by keys for the *Order Capture* transaction.

2. Set up the pricing dates for the application on the Pricing Dates page.

   This defines the date variables used in the creation of price rules and arbitration plans. The dates are used to create breaks on the formula and select price lists. Delivered values are available.

3. Set up the pricing variables for the application on the Pricing Variables page.

   This defines the pricing variables used for price formulas when creating price rules. The Pricing Variables page is used to establish the variables to be used for calculating net prices using mathematical expressions. Delivered values are available.

4. Set up a rounding rule to be used to round up pricing adjustments or net prices if needed.

   Enterprise Pricer delivers a rounding rule called *standard* for use in *Order Capture* transactions.

Setting Up Enterprise Pricer

This section provides an overview of transaction code options.

Note: Tasks in this section are optional; skip this section if there is no need to modify the delivered price-by key fields and transaction code options.

Pages Used to Set Up Enterprise Pricer

Page Name	*Definition Name*	*Usage*
All Price-by Key Fieldnames Page	EOEP_KEYFLDS	Specify fields that can be used as price-by key fields for all PeopleSoft Enterprise Pricer implementations. The values are delivered as system data during installation.
Price Transaction Code Page	EOEP_APP_CODE	Configure the PeopleSoft Enterprise Pricer data entry pages for each application code and relate the transaction to another transaction.

Understanding Transaction Code Options

Each transaction that Enterprise Pricer supports is associated transaction code options, which determines the values and functionality that are available when you define price rules or arbitration plans for the transaction, or when Enterprise Pricer performs arbitrations or calculates pricing.

This table lists the setup options that are delivered as system data for the *Order Capture* transaction:

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Option	*Delivered Values for Order Capture Transaction*
Valid Price Action Types	• Discount/Surcharge • Free Period Promotion • Giveaway/Product Add • Min/Max Target Discount • Min/Max Target Price • Min/Max Target Surcharge • Price List Only Condition • Price Override • Rollup Only Rule • Total Order Discount/Surcharge
Valid Adjustment Methods	• Cascading • Summed
Valid Price Types	• Extended Price • Quantity
Setup and Use of One-Time Only Price Rule	Yes
Use of Mutually Exclusive Price Rule	Yes
Use Quantity in Price List	Yes
Use of Expressions in Price Rule	Yes
Use of External Application Class for Custom Logic Implementation	Yes
Use of Price Variables	Yes
Use of Price Dates	Yes

All Price-by Key Fieldnames Page

Use the All Price-by Key Fieldnames page (EOEP_KEYFLDS) to specify fields that can be used as price-by key fields for all PeopleSoft Enterprise Pricer implementations.

The values are delivered as system data during installation.

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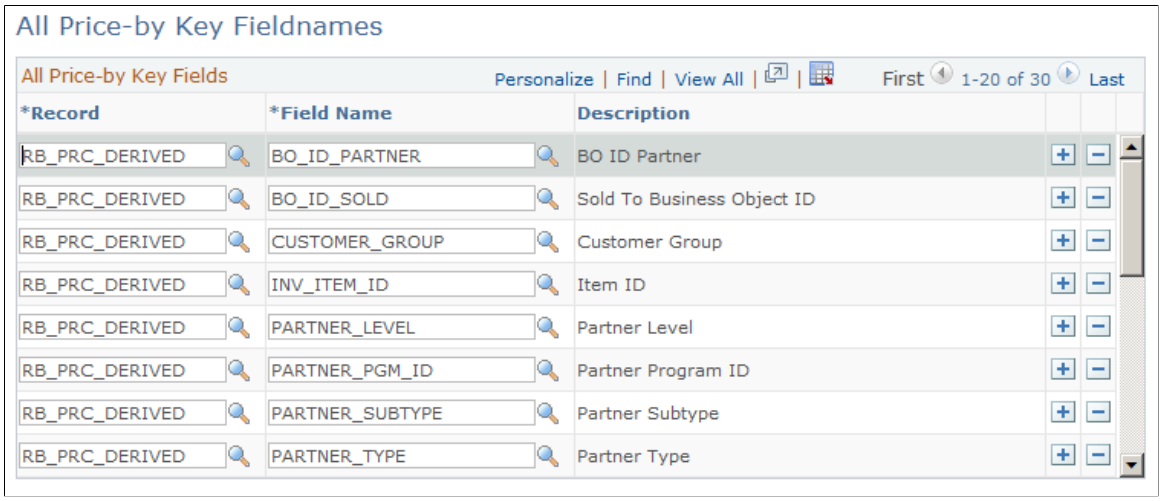
Navigation

Set Up CRM, Product Related, Enterprise Pricer, All Price-by Key Fieldnames, All Price-by Key Fieldnames

Image: All Price-by Key Fields page

This example illustrates the fields and controls on the All Price-by Key Fields page.



Entries on this page are delivered as system data. The system identifies the record and field name for each price-by key specified on this page.

Note: Addition of new price-by key fields on this page for records that are not already being used by Enterprise Pricer is considered a customization.

Price Transaction Code Page

Use the Price Transaction Code page (EOEP_APP_CODE) to configure the PeopleSoft Enterprise Pricer data entry pages for each application code and relate the transaction to another transaction.

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Navigation

Set Up CRM, Product Related, Enterprise Pricer, Price Transaction Code, Price Transaction Code

Image: Price Transaction Code page (1 of 2)

This example illustrates the fields and controls on the Price Transaction Code page (1 of 2).

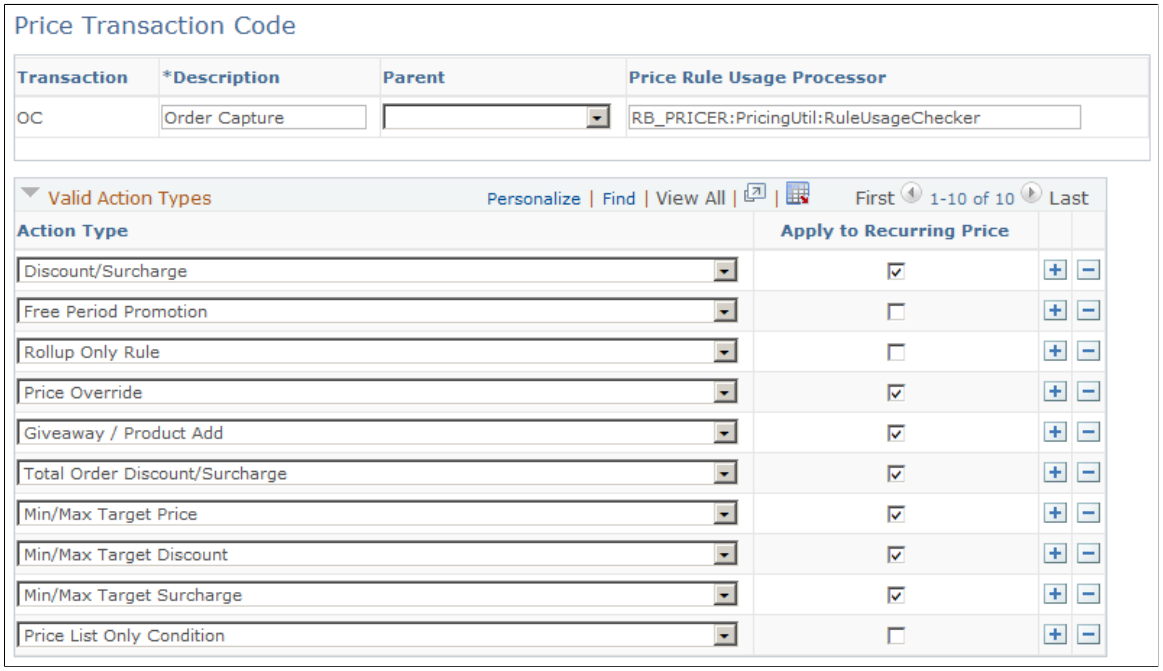
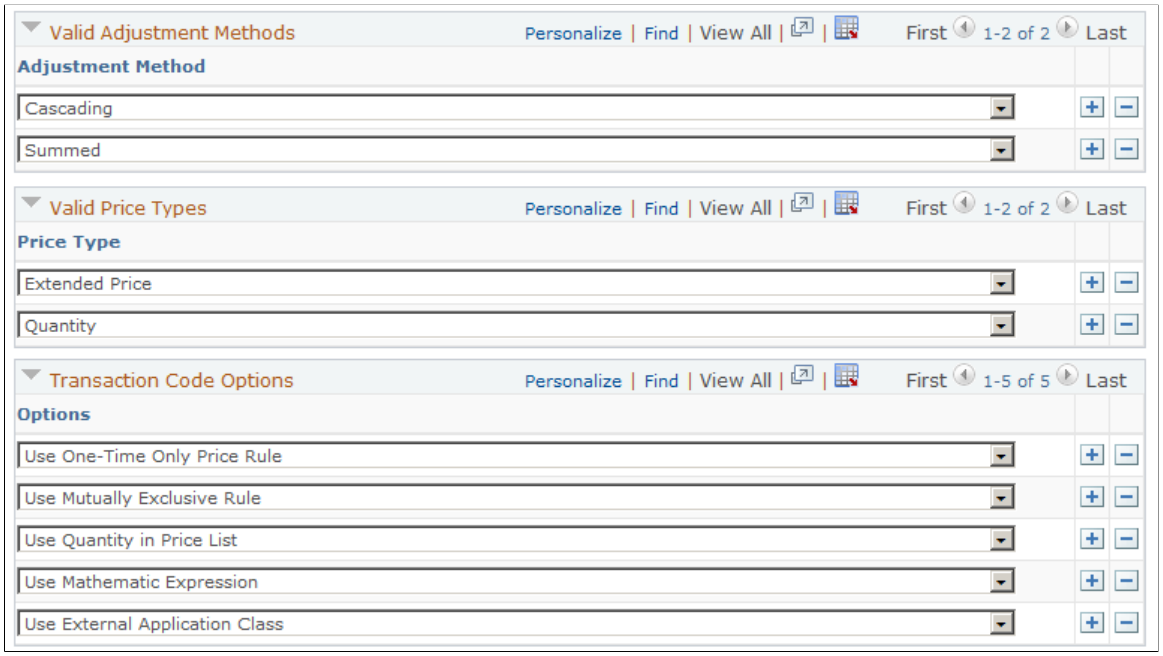


Image: Price Transaction Code page (2 of 2)

This example illustrates the fields and controls on the Price Transaction Code page (2 of 2).



The transaction code setup for the *Order Capture* transaction is delivered as part of the standard Enterprise Pricer implementation.

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Parent

Select a value if you want the transaction to inherit all of the attributes and price by keys of the parent.

Price Rule Usage Processor

Specify an application class that Enterprise Pricer calls to do one of the following:

- To determine whether a one-time only rule has been used.
- To determine if the maximum quantity for a rule has reached.
- To display the rule usage data for the user.

This processor is triggered from Price Rule page. The implementation of the *RuleUsageChecker* subclass is in place to provide the above functions for the *Order Capture* transaction.

Valid Action Types

Action Type

Select valid price action types for the transaction and limit the available options during price rule and arbitration plan entry. Action types that are specified on this page become available values for setting up price rules for the *Order Capture* transaction. They are: (* denotes action types that are delivered as enabled for the *Order Capture* transaction)

**Discount/Surcharge:* Applies a discount or surcharge to the list price on a line.

**Free Period Promotion:* Specifies the number of free periods of a recurring price. The period used is what appears on the order. For example, if you select three free periods and the rule is used on an order with a cell phone for 30 USD per month, then the first three months are free.

**Giveaway/Product Add:* Adds a free product or a discounted product to the line or order.

This action type also supports the use of BOGO (buy one, get one) rules on order lines or orders.

**Min/Max Target Discount* (minimum/maximum target discount): Compares the total discount adjustment and, if it's outside the limit, the system discards the calculated amount and replaces it with the target discount.

**Min/Max Target Price* (minimum/maximum target price): Compares the price adjustment and, if it's outside the specified range, the system discards the calculated amount and replaces it with the target amount.

**Min/Max Target Surcharge:* (minimum/maximum target surcharge): Compares the total surcharge adjustment and, if

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it's outside the specified range, the system applies a target surcharge.

**Price List Only Condition:* Uses the product list price from the price list that is returned as a result of matching the price rule condition with related objects of price lists.

**Price Override:* Replaces the price on a product with this price.

**Rollup Only Rule:* Indicates that the rule is used for rolling up quantities. The rollup rule is then referenced by regular price rules to match the formula break for adjustment consideration.

This type of rules includes only conditions but not formulas. UOM rollup is not used when this option is selected.

**Total Order Discount/Surcharge:* Applies a discount or surcharge to the entire order.

Related Business Objects.

Standard Discount.

Apply to Recurring Pricing

Select to indicate that the corresponding price action type can be used to define price rules that apply to recurring pricing.

As delivered, you can set up price rules for recurring pricing using these action types:

- Discounts/Surcharge.
- Giveaway/Product Add.
- Price Override.

  Additionally, the Min/Max Target Discount, Min/Max Target Price and Min/Max Target Surcharge action types are also available for recurring price rules. While free period promotion pertains only to recurring prices, the Total Order Discount/Surcharge action type does not support recurring pricing.

Valid Adjustment Methods

Adjustment Method

Select how the system applies the adjustment for the *Discount/Surcharge* price action type:

Cascading: Applied as they are found. A second discount is applied to the previously discounted price, a third discount is applied to a price that already was discounted twice, and so on. For example, if the system encounters two discounts: 10 percent and 20 percent off the list price of 100.00 USD, the system applies the discounts in this manner: 10 percent off of 100.00 USD and 20 percent off of 90.00 USD. Thus, the unit price for the order schedule line is 72.00 USD.

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Summed: When the system finds multiple discounts, it adds them together and applies the discounts once. Thus, for the summed example, the system would apply discounts in this manner: the 10 percent and 20 percent discounts are combined for 30 percent off of 100.00 USD. The unit price for the order schedule line is 70.00 USD.

Valid Price Types

Price Type

Select a value that will be available when you select price types for defining price formulas. Values applicable to PeopleSoft CRM are *Extended Price* and *Quantity.*

Transaction Code Options

Options

Select options to be supported by the transaction. When you select an option, the system displays the appropriate processing fields on the Price Rule component. Values are:

Use One-Time Only Price Rule: This option indicates whether or not the specified transaction supports the ability to define price rules that are “limited use” price rules. On the Formulas page, you can indicate that the rule is valid only for one time per rule or one time per customer on the One-Time Only field. This option is valid only for Discount/Surcharge, Price Override, Giveaway/Product Adds, and Total Order Discount/Surcharge price rules.

Use Mutually Exclusive Rule: This option indicates whether or not the specified transaction supports the ability to define price rules that are mutually exclusive rules (using the Mutually Exclusive field on the Formulas page). With multiple exclusive prices rules, if one or more of these rules are matched, only one of them is applied and all other rules, whether they are mutually exclusive or regular rules, are ignored.

Use Quantity in Price List: This option indicates whether or not the specified transaction is allowed to use quantity breaks within the price list.

Use Mathematic Expression: This option indicates whether or not the specified transaction enables Enterprise Pricer to create adjustments using user-defined mathematical expressions on the Formulas page. You must set up pricing variables so the system knows what variables are used in the pricing calculation.

Use External Application Class: This option indicates whether or not the specified transaction enables user-defined application classes to calculate the net price.

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Establishing Pricing Options and Values

To define pricing dates, pricing variables, and price rounding rules, use the Pricing Dates, Pricing Variables, and Price Rounding Rules components, Use the EOEP_DATE_VAR_CI, EOEP_PRICE_VAR_CI, and EOEP_ROUND_RULE_CI component interfaces to load data into the tables for these components.

The section provides an overview of pricing options and values.

Pages Used to Establish Pricing Options and Values

Page Name	*Definition Name*	*Usage*
Price Key Fields Page	EOEP_APPKEY_FIELD	Select the price by fields that are used to price the transaction.
Price List Fields Page	EOEP_APPLIST_FLDS	Select valid price list-related business objects that are used when creating price lists.
Pricing Dates Page	EOEP_DATE_VAR	Set up date variables that can be used in defining price rule conditions and arbitration plans.
Pricing Variables Page	EOEP_PRICE_VAR	Set up variables that are used in price rule formulas when defining mathematical expressions.
Price Rounding Rule Page	EOEP_ROUND_RULE	Set up the rule that is used for rounding purposes during net price calculation.

Understanding Pricing Options and Values

Price lists and price rules are two important elements in the pricing process; price lists are used to determine list prices and price rules used for computing the price adjustments when applied. Prior to defining price lists and price rules, you establish components that are referenced in price lists and price rules for a number of purposes: setting up related objects in price lists, building rule conditions, specifying date ranges and mathematical expressions in rule formulas, as well as the rounding option for use in price rules.

Transaction Price-by Keys

Transaction price-by keys are used in defining conditions in price rules. When Enterprise Pricer is called to compute pricing for an order, it looks for all price rules with conditions that match the order lines for applying price adjustments and price lists (in case when a price list is specified in a price rule).

Price List Fields

Price list fields are used in defining related objects in price lists and are a subset of transaction price-by keys. When Enterprise Pricer finds a list price of the product on an order line that is not list price protected, it retrieves all price lists with related objects that match the order. If multiple matching price

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lists are available, you can set up to either take the best (lowest) product list price found among these price lists, or to use the product list price that comes from the price list with the highest priority score.

Pricing Variables

Pricing variables are used for calculating the net price using mathematical expressions. This table lists the pricing variables that Enterprise Pricer delivers and specifies the ones that are enabled for the *Order Capture* transaction:

Variable Name	***Variable Type***	***Enabled For Order Capture Transaction***
EXT_RECUR_LIST	Extended Recurring List Price	Yes
EXT_RECUR_NET	Extended Recurring Net Price	Yes
LIST_PRICE	List Price (List price of the transaction line)	Yes
NET_PRICE	Net Price (Current calculated net price)	Yes
ORDER_LIST	Order Extended List Price (List price x Quantity)	Yes
ORDER_NET	Order Extended Net Price (Net price x Quantity)	Yes
RECUR_LIST	Recurring List Price	Yes
RECUR_NET	Recurring Net Price	Yes
-	Rollup Amount	-
-	Rollup Quantity	-
-	Rollup Volume	-
-	Rollup Weight	-
-	User Variable	-

Mathematical Expressions

Enterprise Pricer supports the use of these operators and functions when creating custom mathematical expressions:

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Operator/Function	*Description*	*Example*	*Notes*
+	Add	1 + 2 value: 3	If you use negative numbers, do not enter a space between the negative sign and the number.
–	Subtract	2 – 1 value: 1	
*	Multiply	2 * 3 value: 6	
/	Divide	6 / 3 value: 2	
**	Exponential	2 ** 3 value: 8	
( )	Parenthesis	(1 + 2) * 3 value: 9	You can use operation grouping.
Truncate(a,b)	Truncate	Truncate(123.45,1) value: 123.4	You must enter a value for both “a” and “b,” and “b” cannot be a negative number.
Round(a,b)	Round	Round(123.45,1) value: 123.5	You must enter a value for both “a” and “b,” and “b” cannot be a negative number.

Enterprise Pricer provides the ability to validate the syntax of mathematical expressions and evaluate them with the inputs you provide.

Pricing Dates

Pricing dates are used in arbitration plans and in defining date breaks that are referenced in price rule formulas for Order Capture transactions. This table lists the pricing dates that Enterprise Pricer delivers and specifies the ones that are enabled for the *Order Capture* transaction:

Date Name	*Date Type*	*Enabled For Order Capture Transaction*
ARRIVEDATE	Requested Arrival Date	Yes
FULFILLDATE	Fulfillment Date	Yes

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Date Name	*Date Type*	*Enabled For Order Capture Transaction*
ORDERDATE	Order Date	Yes
PRICEDATE	Price Date	Yes
SYSTEMDATE	System Date	Yes
-	Effective Date	-
-	User Date	-

Rounding Rules

Price rounding rules identify the number of decimal points to use based on the base price that is used in the pricing calculation. You can associate each price rule with a rounding rule or use the default rounding rule from the arbitration plan. You can also define whether each adjustment is rounded before it is applied, the net price is rounded after adjustments are applied, or both.

Use the Price Rounding Rules page to specify rounding rules. If rounding rules are not established, the system rounds according to how each application uses Enterprise Pricer. In the case of PeopleSoft CRM, prices are rounded by currency.

Price Key Fields Page

Use the Price Key Fields page (EOEP_APPKEY_FIELD) to select the price by fields that are used to price the transaction.

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Navigation

Set Up CRM, Product Related, Enterprise Pricer, Transaction Price-by Keys, Price Key Fields

Image: Price Key Fields page (1 of 2)

This example illustrates the fields and controls on the Price Key Fields page (1 of 2).

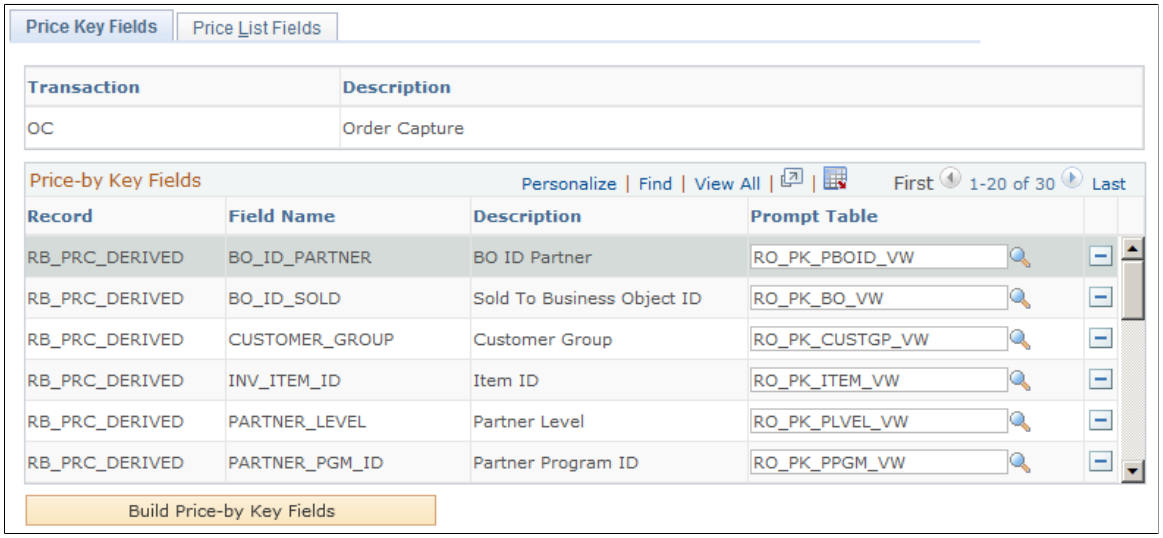
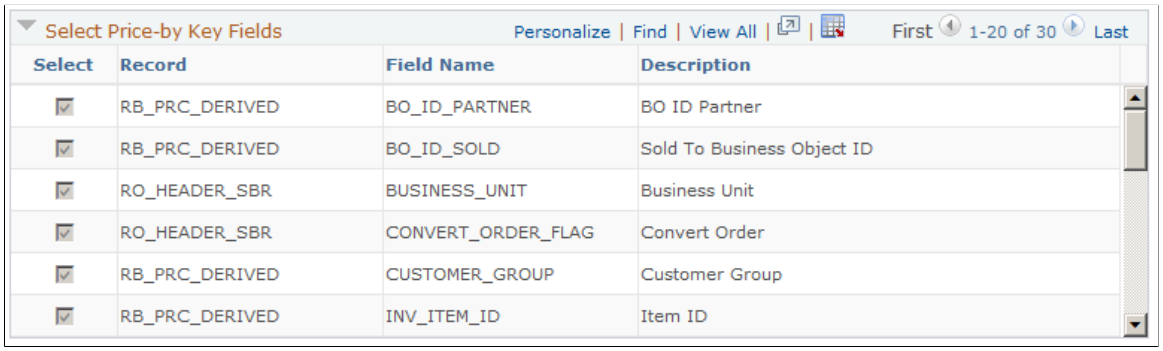


Image: Price Key Fields page (2 of 2)

This example illustrates the fields and controls on the Price Key Fields page (2 of 2).



Price-by Key Fields

This section lists the price-by fields that can be selected for use in the specified *OC* transaction.

Build Price-by Key Fields

Click to add fields to the Price-by Key Fields grid after selecting them from the Select Price-by Key Fields grid.

Note: If a price-by field is currently assigned to a price rule or an arbitration plan, you cannot remove it from the list of values assigned to the pricing transaction.

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Select Price-by Key Fields

This section lists price-by key fields that are currently selected for the transaction, as well as the ones that can be added to the list. For example, if you add a new field to the All Price-by Key Fieldnames page, it is added automatically to this list.

Note: You can define an unlimited number of pricing keys; however, system performance is affected as the number of keys increases.

Price List Fields Page

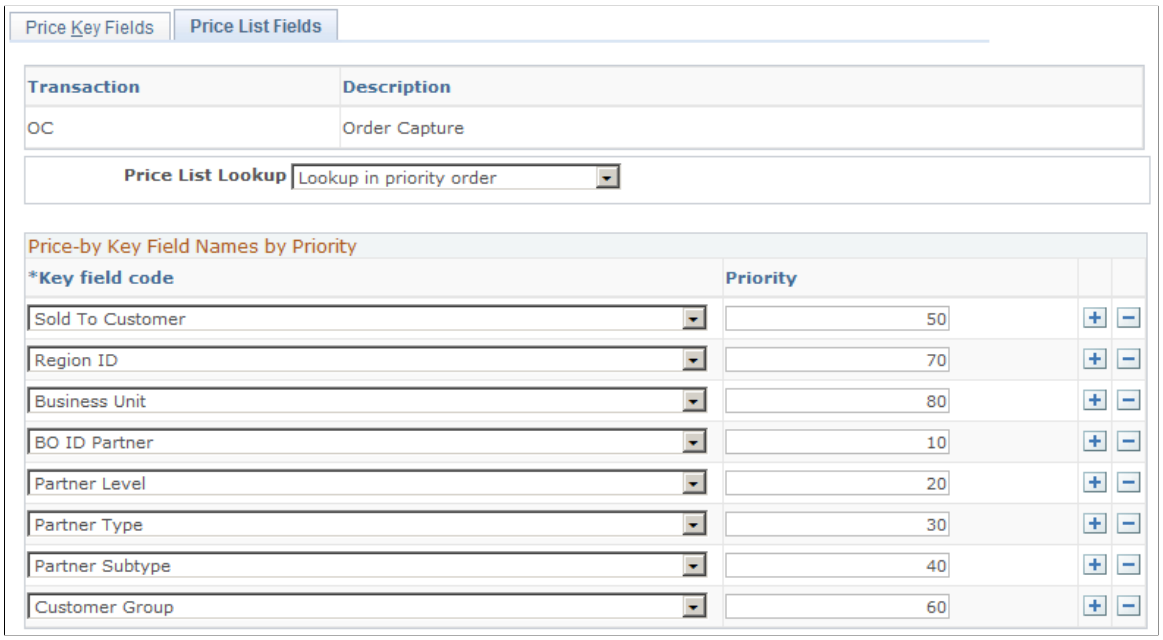
Use the Price List Fields page (EOEP_APPLIST_FLDS) to select valid price list-related business objects that are used when creating price lists.

Navigation

Set Up CRM, Product Related, Enterprise Pricer, Transaction Price-by Keys, Price List Fields

Image: Price List Fields page

This example illustrates the fields and controls on the Price List Fields page.



Price List Lookup

Select how you want the system to perform price list lookup. Values are:

Consider all prices: The system considers all matching price lists based on the related business objects and price rules that you have attached to the price lists. It then selects the lowest price for the product.

Lookup in priority order: The system establishes the order for the price list lookup based on the values in the Price-by Key Field Names by Priority section. Use this method to establish a hierarchical method for selecting the list price for the transaction.

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Note: When using the hierarchical method, price rules tied to price lists are not used, unless a price is not found using the hierarchical method.

Key Field code

Select price-by keys to define the valid related business objects for a price list. These values are available to you as related business objects on the Related Objects page of the Price List component.

Priority

Establish a hierarchical order to price list lookups by entering a numeric value. This field is available only if you select *Lookup in priority order* in the Price List Lookup field.

Pricing Dates Page

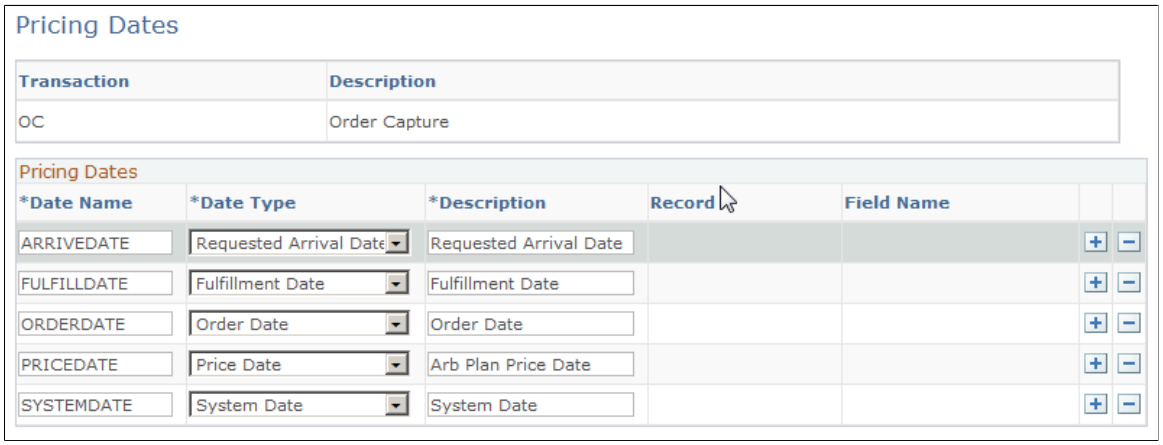
Use the Pricing Dates page (EOEP_DATE_VAR) to set up date variables that can be used in defining price rule conditions and arbitration plans.

Navigation

Set Up CRM, Product Related, Enterprise Pricer, Pricing Dates, Pricing Dates

Image: Pricing Dates page

This example illustrates the fields and controls on the Pricing Dates page.



Use this page to define valid dates that can be used by price rules to create date breaks in rule formulas. Delivered pricing dates are available. You can define multiple rule formulas using multiple date breaks in a price rule.

Date Name

Enter a date variable name. The date name must:

- Start with an alpha character (for example, A-Z)
- Consist of only alphanumeric characters (for example, A-Z, 0-9)

Optionally, you can add “&” to the front of the date name.

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Date Type

Select the date type for the variable.

Effective Date: The date the transaction takes place.

Order Date: The date that the order header is created.

Fulfillment Date: The date when the order is fulfilled in the supply chain management system.

Price Date: The date specified on the arbitration plan.

Requested Arrival Date: The date when the customer wants the order to be arrived on site. This date type is not used in PeopleSoft CRM.

Schedule Ship Date: The date the order line is scheduled to ship.

System Date: The current server date.

User Date: A user defined date. When used, provide a record and field name from where the date value is pulled. A customization of the system is needed to gather and process values properly, if the record and field pair that is selected for the user-defined date is not available in the component buffer.

Record

Select the record from which you wish to pull the date value. Applies only when the pricing variable selected is *User Date.*

Field Name

Select the field from which you want to pull the date value. Applies only when the pricing variable selected is *User Date.*

Pricing Variables Page

Use the Pricing Variables page (EOEP_PRICE_VAR) to set up variables that are used in price rule formulas when defining mathematical expressions.

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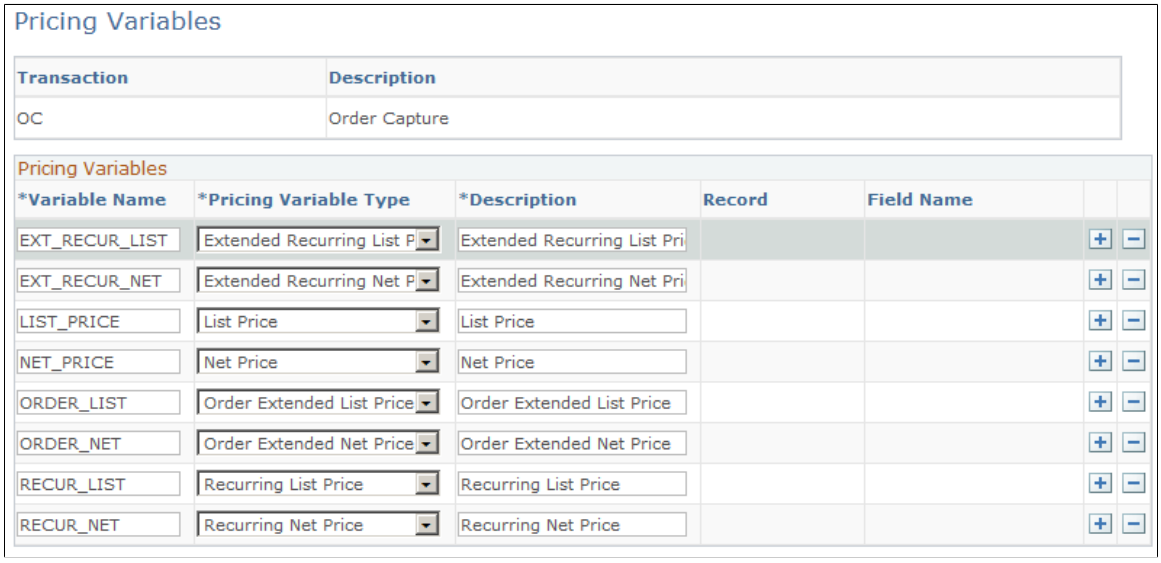
Navigation

Set Up CRM, Product Related, Enterprise Pricer, Pricing Variables, Pricing Variables

Image: Pricing Variables page

This example illustrates the fields and controls on the Pricing Variables page.



Use this page to specify valid variables that can be used in mathematical expressions for calculating pricing adjustments. Delivered pricing variables are available.

Variable Name

Enter a variable name. The guidelines for naming pricing dates apply to pricing variables as well.

Pricing Variable Type

Select a variable type. All of the variable types, except for *User Variable*, are Pricer variables whose values are known to Enterprise Pricer.

Extended Recurring List Price: Sum of the recurring list prices for the whole order.

Extended Recurring Net Price: Sum of the calculated recurring net prices for the whole order.

List Price: The list price of the transaction line.

Net Price: The current calculated net price (running net price).

Order Extended List Price: Sum of the extended list price for the whole order.

Order Extended Net Price: Sum of the extended net price for the whole order.

Recurring List Price: The recurring list price of the transaction line.

Recurring Net Price: The calculated recurring net price of the transaction line.

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Rollup Amount: The rolled-up amount of the transaction lines that match the price rule. This value is used to select the price formula breaks.

Rollup Quantity: The rolled-up quantity of the transaction lines that match the price rule. This value is used to select the price formula breaks.

Rollup Volume: The rolled-up volume of the transaction lines that match the price rule. This value is used to select the price formula breaks.

Rollup Weight: The rolled-up weight of the transaction lines that match the price rule. This value is used to select the price formula breaks.

User Variable: A user defined variable. When used, provide a record and field name from where the variable value is pulled.

Price Rounding Rule Page

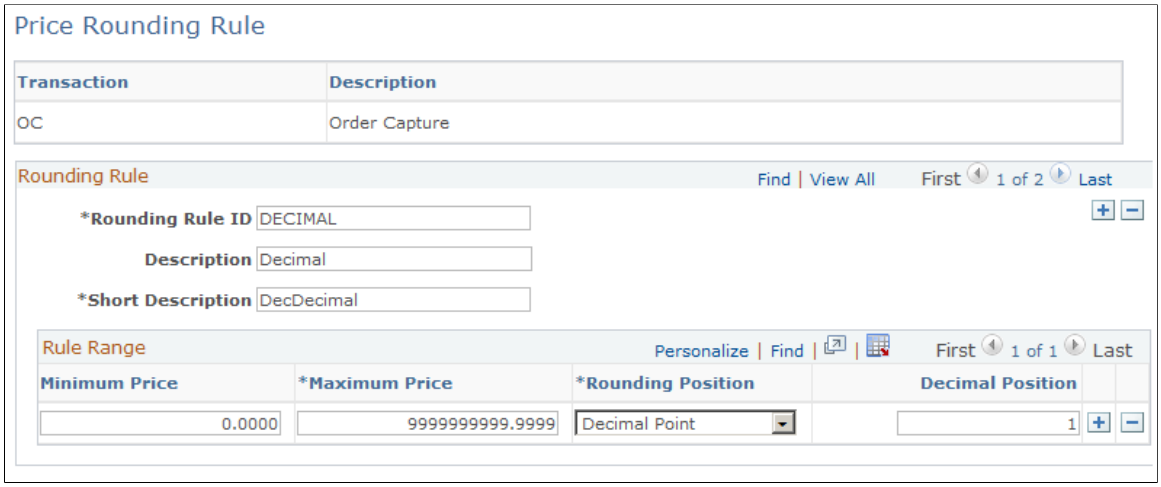
Use the Price Rounding Rule page (EOEP_ROUND_RULE) to set up the rule that is used for rounding purposes during net price calculation.

Navigation

Set Up CRM, Product Related, Enterprise Pricer, Price Rounding Rule, Price Rounding Rule

Image: Price Rounding Rule page

This example illustrates the fields and controls on the Price Rounding Rule page.



Use this page to specify the rule that is used for rounding during net price calculation.

A rounding rule cannot be deleted if it's currently used by an arbitration plan.

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Rounding Rule ID	Enter the name of the rounding rule. This name appears as an available value of the Rounding Rule ID field that appears in the Arbitration Plan page and Formulas page.
Minimum Price and **Maximum Price**	Enter the lowest and highest prices to establish different rounding levels to which the corresponding rounding position applies. Levels should not overlap.
Rounding Position and **Decimal Position**	Select the rounding method. Values are: *Decimal Point:* Rounds prices to a specific decimal point. When selected, specify the number (from 0 to 4) of decimal points to use in the Decimal Position field that appears. *By Currency:* This defines the decimal precision for the currency code of the transaction. This option is the default value.

Adding Price-by Key Fields

You might need to add more price by keys than those delivered with the system data. The following steps provide an example of how to add item weight using the All Price-by Key Fieldnames page. You can follow the same steps to add other fields.

Note: Adding price by key fields for records that are not already being used by Enterprise Pricer is considered a customization.

Follow these steps to add item weight as a pricing key to PeopleSoft Enterprise Pricer:

1. Add the INV_ITEM_UOM record and the SHIPPING_WEIGHT field on the All Price-by Key Fieldnames page.

2. Assign the new SHIPPING_WEIGHT field to the transaction code that you are using on the Price Key Fields page.

   Select the new SHIPPING_WEIGHT field from the list at the bottom of the page. Click the Build Price-by Key fields button to associate the new field to the transaction code.

3. If the new field requires a table to prompt for valid values when the pricing key is used on the price rule, create a view and assign the prompt table to the pricing key on the Price Key Fields page.

   This is the same page you used in step 2.

   If no prompt table is assigned to a pricing key, you can enter any value on the price rule for that field.

You may need to modify the PeopleCode to recognize the new pricing key. When a new pricing key is added to the list of available keys and it is assigned to a transaction code, it may require a change to the PeopleCode method used to pass a value to that new pricing key. The following method in PeopleSoft CRM contains the logic used to pass a value for each pricing key defined for the *Order*

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Capture transaction code. If a new pricing key is added to the transaction code, you should review the following PeopleCode program to make sure that the pricing key is used by the system:

- Application Package: *RB_PRICER:PricingUtil:InputList*
- Method: *CreatePricingKeysLocal( )*

This method is used to assign a value from PeopleSoft Order Capture to each pricing key defined for the *Order Capture* transaction code. If multiple pricing keys are defined for the same record, you modify the PeopleCode only once. Subsequently, you can select any field from that record as a pricing key without having to modify the code. You can modify the code in *CreatePricingKeysLocal( )* to handle all the fields from a specific record without having to specify the field name.

In other cases, the value for a field will require more logic to determine what value to assign to the pricing key. If you must add a new record for which all the fields can be used as pricing keys to the PeopleCode, you use the same logic and add a new condition to the Evaluate logic. For example, if you need to add multiple fields from record INV_ITEM_UOM to the list of pricing keys, you can add the following condition:

```
  When Record.INV_ITEM_UOM
            &recItemUom = createrecord(RECORD.INV_ITEM_UOM);
            &recItemUom.SETID.value = %Super.ProductSetid;
            &recItemUom.INV_ITEM_ID.value = %This.GetInvItemId(&recLine.PRODUCT_   ⇒
   ID.Value);
            &recItemUom.UNIT_OF_MEASURE.value = &recLine.UNIT_OF_MEASURE.value;
            &recItemUom.SelectByKey();
            &strValue = &recItemUom.GetField(@("FIELD." | &strFieldname)).Value;
            Break;
```

You can add the PeopleCode once and then use any field from record INV_ITEM_UOM as a pricing key.

Example

The following example shows the code that you need when more logic is needed in order to determine the value for a specific pricing key. When the pricing key is INV_ITEM_UOM.SHIPPING_WEIGHT, you can run the *GetWeight( )* method to calculate the weight for the item:

```
When Record.INV_ITEM_UOM
         Evaluate &strFieldname
         When Field.SHIPPING_WEIGHT
            &strValue = %This.GetWeight(&recLine.PRODUCT_ID.value, &recLine.UNIT_OF⇒
_MEASURE.value);
            Break;
```

This is the existing and new code for the customization:

```
rem ================================================================
rem  Method:       CreatePricingKeysLocal
rem
rem  Description:  Pass the pricing key information to the engine.
rem ==================================================================;
method CreatePricingKeysLocal
   /+ &objLine as EOEP_PRICER:DataStructure:Line, +/
   /+ &recLine as Record +/
   Local integer &iCount, &iCount2;
   Local Record &recAppkeyFld, &recDestination;
   Local string &strFieldname, &strValue, &strVoid;
   Local number &numBO, &numShipToBoid, &numProfileSeq;
   Local boolean &bRetVal;
   Local RO_CAPTURE:BusinessLogic:Records:Destination &objDestination;
   Local array of string &arrReturn;
```

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```
   For &iCount = 1 To &c_rsPricingKeys.ActiveRowCount
      &recAppkeyFld = (&c_rsPricingKeys)(&iCount).PW_PRCKEY_VW;
      &strFieldname = &recAppkeyFld.FIELDNAME.Value;
      &strValue = "";

      When Record.RO_HEADER
         rem ------------------------------------------------------------;
         rem Copy key value from header                                  ;
         rem ------------------------------------------------------------;
         &strValue = %Super.HeaderRec.GetField(@("FIELD." | &strFieldname)).Value;
         Break;

      When Record.INV_ITEM_UOM
         rem ------------------------------------------------------------;
         rem Copy key value from Inventory Item UOM                      ;
         rem ------------------------------------------------------------;
         &recItemUom = createrecord(RECORD.INV_ITEM_UOM);
         &recItemUom.SETID.value = %Super.ProductSetid;
         &recItemUom.INV_ITEM_ID.value = %This.GetInvItemId(&recLine.PRODUCT_     I⇒
D.Value);
         &recItemUom.UNIT_OF_MEASURE.value = &recLine.UNIT_OF_MEASURE.value;
         &recItemUom.SelectByKey();
         &strValue = &recItemUom.GetField(@("FIELD." | &strFieldname)).Value;
         Break;
      .
      .
      .

      End-Evaluate;

      If &strValue <> "" Then
         %This.AddPricingKey(&objLine, &recAppkeyFld.EOEP_KEY_FLD_CD.Value, &str   ⇒
  Value);
      End-If;
   End-For;
```

This is the new code for the customization to retrieve values from the table and pass them to the pricing engine:

```
When Record.INV_ITEM_UOM
         rem ------------------------------------------------------------;
         rem Copy key value from Inventory Item UOM                      ;
         rem ------------------------------------------------------------;
         &recItemUom = createrecord(RECORD.INV_ITEM_UOM);
         &recItemUom.SETID.value = %Super.ProductSetid;
         &recItemUom.INV_ITEM_ID.value = %This.GetInvItemId(&recLine.PRODUCT_     I⇒
D.Value);
         &recItemUom.UNIT_OF_MEASURE.value = &recLine.UNIT_OF_MEASURE.value;       ⇒
  &recItemUom.SelectByKey();
         &strValue = &recItemUom.GetField(@("FIELD." | &strFieldname)).Value;
         Break;
      .
      .
      .

      End-Evaluate;
```

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Chapter 3

Creating Price Lists

Understanding Price Lists

Price lists are groups of date-controlled product prices that are defined by currency code and transaction. They are associated with business objects (by price-by key field and value pairs) and can be linked to existing price rules. These product prices are intended to replace the product list price defined in the Product Price component when they are associated with a transaction via the related business objects or price rules.

Price list-related business objects are a subset of the existing transaction price-by fields. They are used to define objects (which can be associated with a price list) to look up a list price. A price list can have more than one related business object, such as customer, customer group, product ID, and business unit.

The system uses the appropriate pricing transaction to determine the available price list related business objects. The system attempts to match a particular transaction to one or more price lists based on the transaction values and the price list related business objects. For example, if you are taking an order for customer ABC and customer ABC is defined as a related business object for a specific price list, that price list applies to this order. Furthermore, if any product on the order appears on this price list, the price from the price list is used as the base price for all further pricing calculations, instead of the product's list price. If more than one applicable list is found, the price list lookup defined for that transaction determines which price is used:

- Look up in priority order.

  The system performs a search to match the related business objects in the defined priority order and then selects the first list price that it finds.

- Consider all prices.

  The system performs a search to match the related business objects and their price lists and then selects the lowest price.

Note: Enterprise Pricer supports the definition of zero-valued (0.00) list prices in the Price List component.

After locating the base price for the product, the system performs a separate search of the price rules to find the appropriate adjustments to that price. If you haven't set up price lists or if the system fails to find the product on an active relevant list, the system uses the list price defined for the product in the Product Price component as the default base price for any further price adjustments.

PeopleSoft CRM provides an advanced search capability for looking up existing price lists by price rule conditions in the related business objects.

See Price List Advanced Search Page.

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Quantity Breaks within Price List

Price lists support multiple list price entries for different quantity breaks. When the Use Quantity in Price List option is enabled for the *Order Capture* transaction, Enterprise Pricer looks for the list price that is associated with the matching quantity break as it processes order pricing. To find out which quantity break to use to obtain the list price, the sum of the product by UOM for the whole order is used.

Here is an example of a price list with multiple quantity breaks:

Product ID	***List Price***	***Quantity Break***
10050	USD 4.00	1–50
USD 3.00	51–100	
USD 2.00	101 or more	

Quantity breaks are defined by specifying low and high quantities on the Price List page.

If a customer purchases 120 units of product ID 10050 on an order, the customer will receive the units at the 2.00 per unit price.

In addition to supporting multiple list price entries for different quantity breaks using the Price List component, you can also specify different list prices for a product based on time periods, as illustrated by this table:

Product ID	***List Price***	***Time Break***
10050	USD 4.00	01/01/2008 - 03/31/2008
USD 3.00	04/01/2008 - 06/31/2008	
USD 2.00	07/01/2008 - 09/31/2008	

Last but not least, you can set up one-time and recurring list prices for a product, for example:

Product ID	***List Price***	***Pricing Nature***
10050	USD 50.00	N/A (one-time charge)
USD 10.00	Monthly (recurring charge)	

You can also set up product recurring prices with different frequencies (daily, weekly, monthly and so on) using the Product Price component.

By default, a price list entry for a product is for one-time charge and the list price is intended to apply to all quantities (with one quantity break) at all times (with one time break). You can update existing or

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create new entries to include additional list prices for various time frames, quantity breaks, and charge types as needed.

Setting Up Price Lists

To set up price lists, use the Price List (EOEP_PRICE_LIST) component.

This section lists the common elements used for setting up price lists.

Pages Used to Set Up Price Lists

Page Name	*Definition Name*	*Usage*
Price List Page	EOEP_PRICE_LIST	Define a price list. You can set up price lists in multiple currencies and create start and end dates for each product's price.
Product Notes Page	EOEP_PRC_LIST_NOTE	Create and view product notes associated with a recurring price. These notes are used for information only and are separate from the standard product notes in the product definition component.
Related Objects Page	EOEP_PRCLST_ATTCH	Associate a price list with related business objects, such as a customer, customer group, or region. Also associate price rules directly to a price list.
Search Page	EOEP_SEARCH_PAGE	Search for existing values for the field names on the Related Objects page.
Price List Advanced Search Page	EOEP_PLST_SRCH_PG	Search for existing price lists using related object conditions.

Common Elements Used to Set Up Price Lists

Status

Values are:

Active: Product prices on this list automatically supersede the product list price in transactions involving any related business objects.

Inactive: This list is ignored when calculating product prices.

Product

Use to search for a product ID, enter a new product ID, and view the product IDs in a price list.

Unit of Measure

Each list price is defined by the unit of measure. The unit of measure must be valid for that product, as defined in the product master.

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Price List Page

Use the Price List page (EOEP_PRICE_LIST) to define a price list.

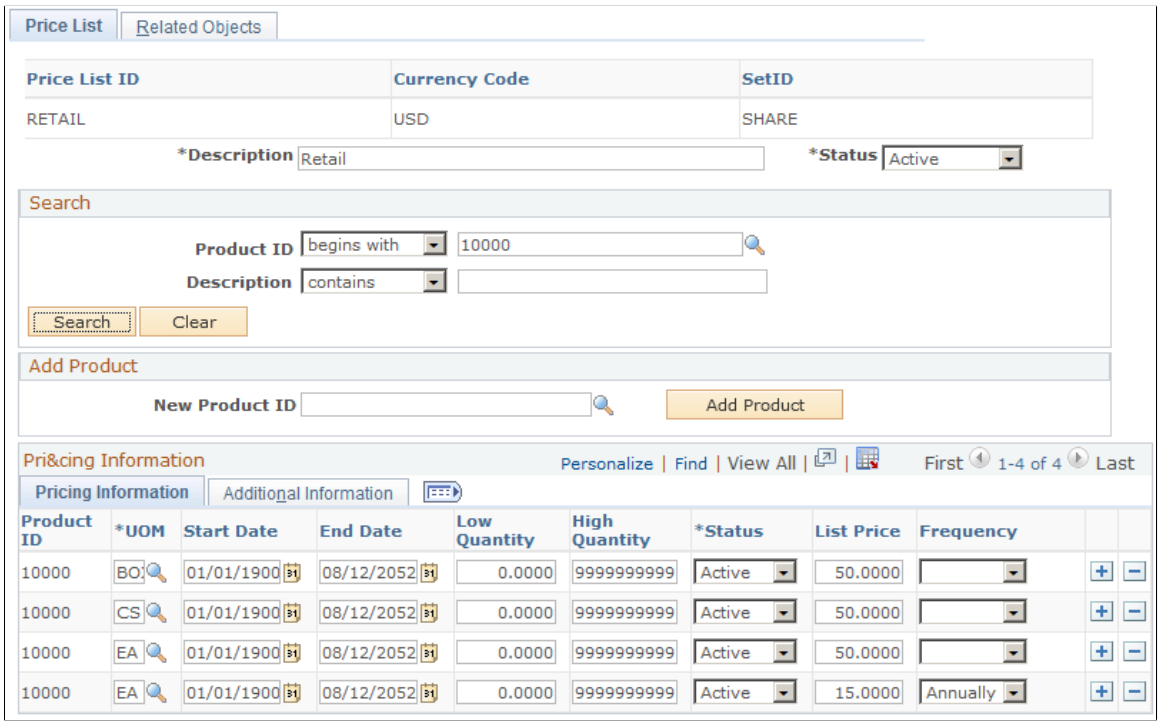
You can set up price lists in multiple currencies and create start and end dates for each product's price.

Navigation

Pricing Configuration, Price List, Price List

Image: Price List page

This example illustrates the fields and controls on the Price List page.



Currency Code

Displays the selected currency when you create this price list. This value is used to establish the same price list with the same price list ID in multiple currencies. The price list is considered if the transaction is entered in the same currency as that of the price list.

Note: For *Order Capture* transactions, if a price is not available in a price list using the transaction currency but a price list is available for the base currency, the system accesses the price from the price list in the base currency and converts it to the transaction currency. The currency is converted as long as conversion rates are defined between the transaction and base currencies. You must also define rate types for the customer and business unit for the currency conversion.

See "Calculating Currency Exchange" (PeopleSoft CRM 9.2: Application Fundamentals).

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Search

Product ID and **Description**	Enter a product ID or product description to search for any of its price list available in the system.
Search	Click to select the price list detail based on the search criteria and to view additional price list information. The price list detail appears on the Pricing Information tab. Click the Clear Search button to remove the search criteria.

Add Product

New Product ID	Search for a product to add to the price list.
Add Product	Click the button after you enter the product ID to add the product to the price list.

Pricing Information

Access the Pricing Information: Pricing Information section.

Error	If an error exists in the price list definition, a red square box appears in this column. This field is visible only if an error exists. For example, if you entered an invalid value, the line is marked as an error. Correct the error as necessary.
UOM (unit of measure)	Use to define a list price for a particular UOM for that product.
Start Date and **End Date**	Specify the effective period (enter start and end dates) of the list price entry.
Low Quantity and **High Quantity**	Specify the product quantity break (enter low and high quantities) to which the corresponding list price applied. **Note:** In order to use the list price in the price list, the quantity of the products on the order must fall within the quantity break for the specified UOM. Also, if the Use Quantity in Price List option is not enabled on the Price Transaction Code page, the quantity break is ignored.
List Price	Enter the product list price that applies to the corresponding quantity level during the specified effective period. Specify a list price with a non-negative value, including zero (0. 00).
Frequency	Select how often does the recurring charge occur, if the corresponding price list line is for recurring pricing. If selected, the amount in the List Price field represents a recurring charge. If this option is blank, the list price represents a one-time charge.

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Valid values are *Annually, Daily, Monthly, Quarterly,* and *Weekly.*

Access the Pricing Information: Additional Information section.

Recurring Note

Click to enter and view notes relating to recurring charges for the product. These notes are informational only and are separate from the standard product notes defined in the product definition component.

Note: This button appears if a recurring frequency is selected in the list price entry.

Protected

Select to not stop the system from applying any pricing adjustment to the list price. The price-protected flag on the transaction is activated.

Note: If a product with the same price is on two different price lists and one is price protected, the price protected one is used in the transaction.

Related Objects Page

Use the Related Objects page (EOEP_PRCLST_ATTCH) to associate a price list with related business objects, such as a customer, customer group, or region.

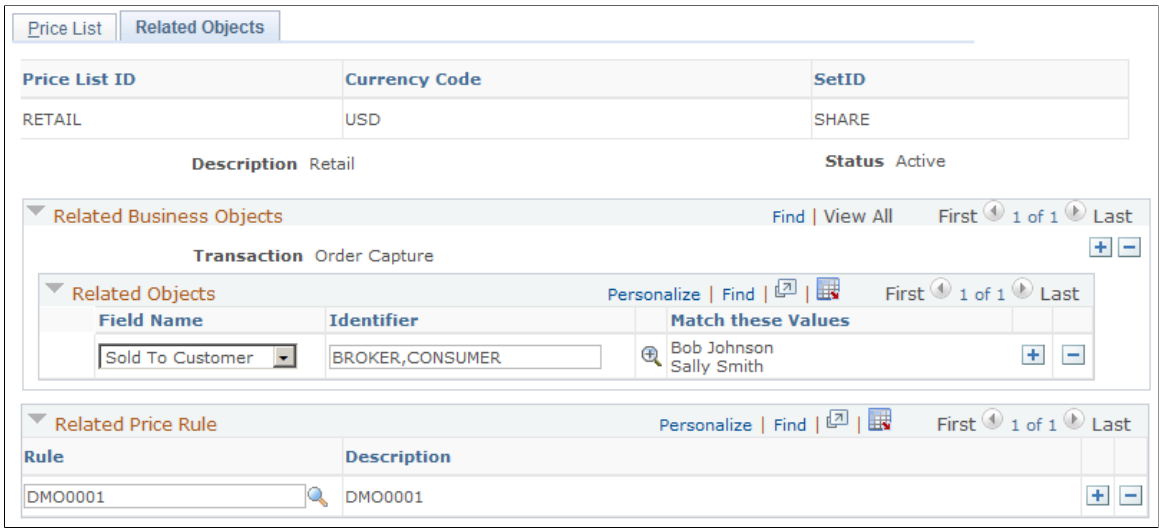
Also associate price rules directly to a price list.

Navigation

Pricing Configuration, Price List, Related Objects

Image: Related Objects page

This example illustrates the fields and controls on the Related Objects page.



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Related Business Objects

Transaction

Displays the transaction to which the price list applies. This value determines the list of available values to select in the Related Objects group box. PeopleSoft CRM supports the *Order Capture* transaction only.

Field Name

Select a value to tie a business object to the price list. Available values in this field are specified on the Price List Fields page for the *Order Capture* transaction.

Identifier

Enter values for the business object, or click the Find External Resource button to search for values.

If the field name and identifier criteria match those on a particular transaction, this price list is considered for that transaction.

Related Price Rule

Rule

Select a price rule to associate the price list to the price rule.

Note: When you directly associate a price rule with the price list, the price rule conditions define the part of the transaction that must match in order for this price list to be considered at pricing time. Price rules are used to define more complicated conditions. Business objects are used to define simpler, less complex conditions.

Price List Advanced Search Page

Use the Price List Advanced Search page (EOEP_PLST_SRCH_PG) to search for existing price lists using related object conditions.

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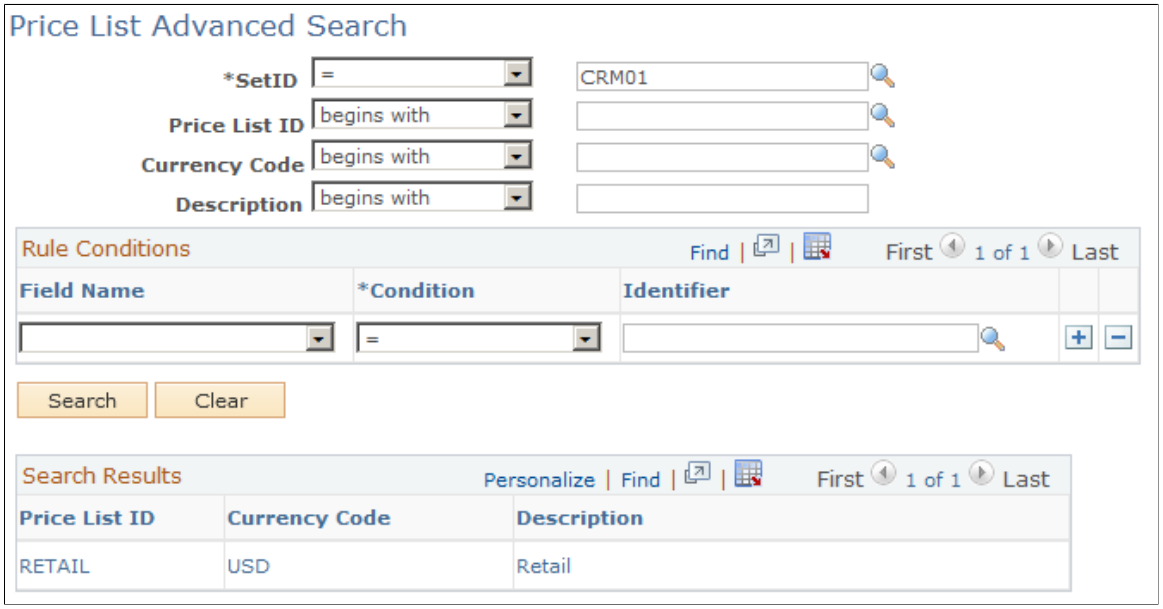
Navigation

Pricing Configuration, Price List Advanced Search, Price List Advanced Search

Image: Price List Advanced Search page

This example illustrates the fields and controls on the Price List Advanced Search page.



In addition to the search fields that are available on the search page of the Price List component, the Price List Advanced Search page provides the ability to find price lists by related object conditions. You can enter price-by key field and value pairs as criteria of a price list search.

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Chapter 4

Creating Price Rules

Understanding Price Rules

This section discusses:

- Price rules.
- Price rule conditions.
- Price rule formulas.
- Price rule setup examples.

Price Rules

A price rule defines the conditions of the transaction that must be met before the adjustments are applied to the base price and the recurring price. The price rule is made up of one or more *price conditions* and one or more *price formulas*. A price condition defines the set of circumstances that make a price rule applicable to a transaction. A price formula defines the actions that occur when the pricing conditions are met.

PeopleSoft CRM provides an advanced search capability for looking up existing price rules by rule conditions.

Price Rule Conditions

Enterprise Pricer supports the definition of price rule conditions in two modes: *basic* and *advanced*. Basic mode enables you to create price rules using the *And* operator. Advanced mode enables you to create more complex conditions. You can use the *Or* operator, in addition to the *And* operator. Advanced mode enables you to enter the valid values directly for the price by fields without having to go through the search or prompt page for the field.

Adding Price Rule Conditions in Basic Mode

To add a price rule condition in basic mode:

1. Add a new price rule for the selected setID. On the Conditions page that appears, select basic mode by clicking the Change to Basic mode link.

   The transaction for which this rule is created is *Order Capture*. This transaction determines the valid price-by field names available for the conditions.

2. Enter a long and a short and description for the price rule.

3. Add a rule condition by first selecting a price-by key field in the Rule Conditions group box.

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Choose the transaction field that you want to price by. For example, if you want this rule to apply to every order in a particular business unit, select *Business Unit.*

4. Click the Search Push Button to select values for the corresponding field.

   When you click the Search Push Button, the system transfers you to a page from which you can search for and select valid values for the field name that you select. For example, if you selected *Business Unit* as a price-by key field, then you would get a list of business units to choose from. Values that were previously selected for the condition automatically appear as selected. You can restrict the search further by entering additional search data in the fields provided at the top of the page and clicking the Search button. Select one or more values that you want to apply to the rule condition and click OK.

   The condition appears in the Rule Definition section. The system displays the rule definition based on the last condition that you built. If you are updating an existing condition, you may need to click the Build Rule Definition button to have the system rebuild the entire price rule condition.

   Enter all the conditions needed for the rule.

5. Update the status of the rule to an appropriate value. Typically, set it to *Ready to Test* to be tested later. A price rule supports these values:

   Pending: Price rule is incomplete.

   Deployed: Price rule is currently in use for pricing in the pricing system.

   Ready to Test: Price rule is complete but can be used by the simulator only, not for pricing calculations.

   Inactive: Price rule is no longer active. Use to inactivate a rule that was previously in use.

6. Save the change.

Adding Price Rule Conditions in Advanced Mode

To add a price rule condition in advanced mode:

1. Add a new price rule for the selected setID. The Conditions page appears in the advanced mode by default.

   The transaction for which this rule is created is *Order Capture*. This transaction determines the valid price-by field names available for the conditions.

2. Enter a long and a short and description for the price rule.

3. Add a rule condition by first selecting a price-by key field in the Rule Conditions group box.

   You may enter multiple fields by inserting a new row for each new field name.

4. Enter the field name values directly in the Identifier field, or click the Search Push Button to find desired values.

   Enter multiple values by separating the values with commas. Alternatively, you can click the Search Push Button. The system transfers you to a page from which you can search and select valid values for the field name that you selected for the condition. Values that were already selected for the

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condition automatically appear as selected. You can further restrict the search by entering additional search data in the fields provided on top of the page and clicking the Search button. Select the fields that you want to apply to the rule condition and click OK.

The field name and value conditions defined in the Rule Conditions section appear in the Combined Conditions section. The individual rows in the Combined Conditions section serve as a foundation for you to create more complex conditions.

5. To create a combined condition with two individual conditions, select the conditions in the Combined Conditions section and a desired operator (*And* or *Or*) to combine them.

6. Click the Build Rule Definition button to create the advanced price rule.

   The system automatically inserts the new condition in the Combined Conditions section. The condition also appears in the Rule Definition section.

   You can create more complex conditions by selecting new rows in the Combined Conditions section, selecting an operator, and clicking the Build Rule Definition button until you have created the desired rule definition.

7. Update the status of the rule to an appropriate value. Typically, set it to *Ready to Test* to be tested later. A price rule supports these values:

   Pending: Price rule is incomplete.

   Deployed: Price rule is currently in use for pricing in the pricing system.

   Ready to Test: Price rule is complete but can be used by the simulator only, not for pricing calculations.

   Inactive: Price rule is no longer active. Use to inactivate a rule that was previously in use.

8. Save the change.

Price Rule Formulas

Enterprise Pricer provides a robust architecture that supports the setup of various types of price rules to suit your needs. You can create price rules that are as simple or as complex as needed. As delivered, the *Order Capture* transaction supports the definition of these types of price rules:

- Discount or surcharge.

  This type of price rule applies a discount or surcharge (either an actual amount or at a percentage) to the product *list* price or *recurring* price in an order line. For the total order discount or surcharge action type, the adjustment applies to the entire order.

- Free period promotion.

  This type of price rule offers no recurring charge to products and services for a specified number of times.

- Giveaway or product add.

  This type of price rule gives away additional products for free or at a discounted price if the customer purchases a particular product (also known as *Buy-One-Get-One* or *BOGO*). For discounted giveaways, the list price or recurring price can be used to calculate the actual discounts.

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For an overview of discounted giveaway rules, refer to the *Discounted Giveaways and "Buy One, Get One Free" Rules* topic in *PeopleSof tFSCM Enterprise Pricer*.

- Minimum or maximum target discount.

  This type of price rule evaluates the sum of discounts that were given to the final product price or recurring price by other applicable price rules; if the discount amount exceeds the range that is set by the minimum and maximum amounts of this rule, an additional adjustment is applied so that the final discount amount falls within the allowable discount range.

- Minimum or maximum target price.

  This type of price rule evaluates the final product price or recurring price after all the pricing adjustments were made; if the price exceeds the range that is set by the minimum and maximum prices of this rule, an additional adjustment is applied so that the final net or recurring price falls within the allowable price range.

- Minimum or maximum target surcharge.

  This type of price rule evaluates the sum of surcharges that were given to the final product price or recurring price by other applicable price rules; if the surcharge amount exceeds the range that is set by the minimum and maximum amounts of this rule, an additional adjustment is applied so that the final surcharge amount falls within the allowable surcharge range.

- Price list only condition.

  This type of price rule matches its rule condition with related objects of price lists and uses the list price of the product from the matching price list.

- Price override.

  This type of price rule replaces the existing list price or recurring price with a new one as defined in the price rule. The definition of this new price can be a simple number value, or a derived value of an expression or an external application class.

- Rollup only rule. This type of price rule is used to roll up quantities. Referenced in other price rules as a rollup option, a rollup rule is used to match the formula break for adjustment consideration. Because a rollup rule is intended to group products for formula consideration, rollup is always by transaction.

One-Time Only Price Rules

Enterprise Pricer supports the creation of price rules that are identified as one-time only, per price rule or per customer. When the one-time only price rule is determined to apply to the order, it can apply to multiple order lines in the same order. An example of a one-time price rule per customer can be "Gives a 10 percent off an order to customer 1005 if the order is made in the month of February and the order total is USD 1000 or more." This rule will be applied to the first matching transaction made by customer 1005 and becomes inactive afterwards.

Note: In addition to orders, one-time only price rules are also applicable to quotes. However, when a quote, using a one-time only price rule for pricing, is expired, that rule becomes available again for the next eligible order or quote.

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Mutually Exclusive Price Rules

Normally you enable the mutually exclusive option on price rules if they are truly very good deals that you don't want other discounts to be applied in conjunction with them. A mutually exclusive arbitration type enables you to create or modify arbitration plans to sort mutually exclusive rules appropriately. An example of a mutually exclusive price rule can be “Gives a 50 percent off the order to customer 1005 if the order total is greater than USD 1000 and the quantity purchased for product 10050 exceeds 200. Not combined with other discounts.” You can limit the occurrence of a mutually exclusive price rule to once simply by enabling the one-time only option.

If one of the matching price rules returned for an order capture transaction is mutually exclusive, the mutually exclusive price rule is used and other price rules are ignored. If more than one mutually exclusive price rule is matched, only the first (use the arbitration plan to specify the order) mutually exclusive price rule is applied and others are ignored.

Price Rules with Mathematical Expressions

Enterprise Pricer enables you to create mathematical expressions in the price rule that are used to calculate the net price for a given product. Suppose you want to give a 5 percent discount plus a discount of USD 5.00 to all orders of product 10050 that are made in the month of February, you can create a price override rule and represent the total discount for each product unit using this expression:

LIST_PRICE * 0.95 - 5

Enterprise Pricer delivers pricing variables that can be used in defining expressions. If you wish to introduce user-defined variables, customization of the system is needed to accept and process values properly, if the record and field pair that is selected for the user-defined variable is not available in the component buffer.

Price Rules with External Classes

In addition to mathematical expressions, you can create custom processes to perform multiple calculations to determine the net price to use, and returns the result to Enterprise Pricer. This is accomplished by creating an application class that conforms to the application programming interface (API) specified and identifying the name of the application class in the price formula. During pricing process, when Enterprise Pricer processes such a formula, instead of performing the calculation, it instantiates the application class to perform the calculation. The application class returns the net price to Enterprise Pricer.

To get an idea on how to build an API-compliant application class that performs pricing calculations, review the class called *EOEP_API:Sample:TestNetPriceCalculator* that is provided in the system. This sample class, when called, gives a 1 percent discount to the first matching product, a 2 percent discount to the second matching product, and so on.

Price Rules with Compound Date and Formula Breaks

When you define a price rule, you need to specify a date range and a formula range that transactions must match (in addition to the conditions specified on the Conditions page) for the price formula to apply. The Price Rule component supports the reference of multiple date ranges and formula ranges (by product price or quantity) in a price formula. For example, you can define a price formula that includes these date and formula ranges:

- Date range #1: 12/31/2010 > order date > 01/01/2000
- Formula range #1: 99999 > Price > 1

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- Formula range #2: 5000 > Quantity > 1

And the price formula will be applicable to transactions that match all of the associated date and formula ranges.

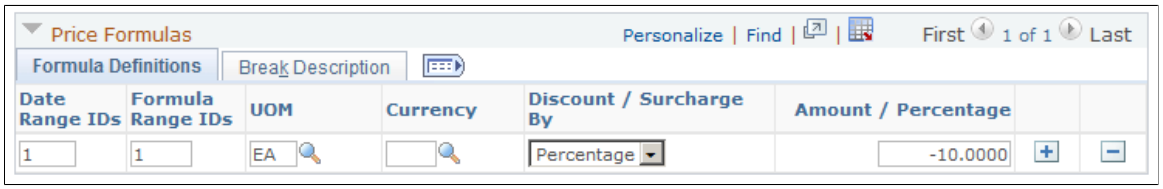
See Formulas Page.

Price Rule Action Types and Supported Adjustments

Price action types support a range of methods used for calculating pricing adjustments. Based on the selected action type and adjustment method, the system updates the display and label of numeric and textual fields so that adjustment information can be entered appropriately. This screenshot shows how the Price Formulas section looks like for the *Discount/Surcharge* price rule action type:

Image: Price Formulas section of the Formulas page

Price Formulas section of the Formulas page



This table lists the adjustment methods that each price rule action type supports, the fields that appear based on selected adjustment method, and the labels of the fields that are updated based on the selected rule action type and adjustment method:

Note: For discount or surcharge action types, use a negative number to indicate discount amounts or percentages, for example, *-10* for a discount of 10 percent or dollar amount. A positive number represents surcharges by percentage or amount.

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Price Rule Action Type	***Label of the Adjustment Field and Supported Method***	***Numeric Field Label***	***Text Field Label***
Discount/Surcharge	Label: Discount / Surcharge By Supported adjustment methods: • Amount • Amount and mathematical expression • Expression • External class • Percentage and expression • Percentage	Label: Amount / Percentage This field appears if the selected adjustment includes calculation by amount or percentage. Example of a valid amount: -10 (a discount of the amount of 10 off the list price) Example of a valid percentage: 15 (a surcharge of 15 percent to the list price)	Label: Class / Expression This field appears if the selected adjustment includes calculation by an expression or external application class. In addition, the Small or Large field is shown for these adjustment types: • Amount and mathematical expression • Percentage and expression Example of a valid external class: *RB_PRICER:AdjustmentCalculator* Example of a valid expression: *LISTPRICE * 0.95*
Free Period Promotion	Label: Free Period By The only supported value is Quantity.	Label: Quantity	N/A
Giveaway / Product Add	Label: Product Add By • BOGO • BOGO and price • Quantity and price • Quantity expression • Quantity	Label: Quantity / BOGO Factor	Label: Expression
Min/Max Target Discount	Label: Target Discount By Supported adjustment methods: • Amount • Percentage	Label: Min Amount / Percentage and Max Amount / Percentage	N/A

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Price Rule Action Type	***Label of the Adjustment Field and Supported Method***	***Numeric Field Label***	***Text Field Label***
Min/Max Target Price	Label: Target Price By The only supported value is Price.	Label: Minimum Price and Maximum Price	N/A
Min/Max Target Surcharge	Label: Target Surcharge By Supported adjustment methods: • Amount • Percentage	Label: Min Amount / Percentage and Max Amount / Percentage	N/A
Price List Only Condition	N/A	N/A	N/A
Price Override	Label: Price Override By Supported adjustment methods: • Expression • External class • Price and expression • Price	Label: Price	Label: Class / Expression In addition, the Small or Large field is shown for the price and expression adjustment.
Rollup Only Rule	N/A	N/A	N/A
Total Order Discount/ Surcharge	Label: Discount / Surcharge By Supported adjustment methods: • Amount • Amount and expression • Expression • External class • Percentage and expression • Percentage	Label: Amount / Percentage	Label: Class / Expression In addition, the Small or Large field is shown for these adjustment types: • Amount and expression • Percentage and expression

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Price Rule Setup Examples

Here are several high-level pricing scenarios that Enterprise Pricer supports.

Note: For detailed examples on how to set up price rules to address these pricing requirements, refer to the Pricing Formula Scenarios topic of *PeopleSoft FSCM Enterprise Pricer*.

Applying Discounts or Surcharges

Pricing scenario: Offers different discount values to orders based on product quantity for customer 1005. Specifically:

- EUR 10.00 dollars for 1-10 units of product 10050 purchased.
- EUR 20.00 dollars for 11-20 units of product 10050 purchased.
- 3% discount for more than 20 units of product 10050 purchased.

Applying Product Adds or Discounted Giveaways

Pricing scenario A: Gives away one product 10049 at no charge for each order with 20-49 units of product 10050 purchased by customer 1005. The promotion is valid through the end of the year.

Pricing scenario B: Gives away one product 10049 at no charge and offers three other units of product 10049 at half price for each order that is made in the month of January by customer 1005.

Applying BOGO (Buy One Get One) Promotions

Pricing scenario: Gives away one product 10049 for free for each purchase of three units of product 10050 by customer 1005 in the month of January.

Applying Adjustment Caps on Product Unit Prices

Pricing scenario: Puts a cap on adjustments made to the unit price of product 10050, so that the final unit price falls within the USD 122.50–144.50 range.

Applying Discounts Based on Date Ranges

Pricing scenario: Gives a 5 percent discount off the order total for customer 1005 for each purchase of USD 1000.00 worth of product 10050 with an order date and schedule ship date in the month of February.

Applying Discounts Based on Product Price and Quantity Ranges

Pricing scenario: Gives a 10 percent discount off the order total for customer 1005 for each purchase with a total amount of USD 50,000 or more AND a total ordered quantity of 500 or more.

Applying Rollup Rule to Price Rules

Pricing scenario: Uses a rollup rule to determine the product quantity of the order that will be used to match against the quantity breaks in an applicable price rule.

For instance, a price rule called *tubs* contains several quantity breaks and each break is associated with a discount rate, the more the quantity ordered the better the rate. Suppose that this price rule references a rollup rule, which calculates a rollup quantity by summing up quantities of products that belong to

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the *Bathroom* product group in an order transaction (rule condition of this rollup rule is *Product Group = Bathroom*). If the *tub* price rule matches an order that has three order lines, each line with a product belonging to the *Bathroom* product group (for example, tub, faucet, and sink), then the total quantity of these three lines becomes the rollup quantity, which will be used to determine the level of discount that the *tub* order line gets. Now, suppose that only two of these three order lines are for products that belong to the *Bathroom* product group, then the total quantity of these two lines becomes the rollup quantity, which may end up falling into lower quantity break with a less attractive discount rate.

Applying Special Pricing to Certain Quantity of Products Purchased

Pricing scenario: Offers special pricing to any product of product group 1234 at USD $25 a unit for a maximum of 10000 units. Once the maximum is reached, the regular product price is used.

For more information, refer to *PeopleSoft FSCM Enterprise Pricer*.

Setting Up Price Rules

This section discusses how to set up price rules using the Price Rule (EOEP_RULE) component.

Pages Used to Set Up Price Rules

Page Name	***Definition Name***	***Usage***
Conditions Page	EOEP_CONDITION	Select the price by fields, values for the price by fields, and the operator (which determines how the price by fields are related to the transaction).
Formulas Page	EOEP_FORMULA	Define the actions that take place when the price rule conditions are met.
Expression Validator Page	EOEP_MATH_EXPR_VAL	Enter and validate mathematical expressions created for the formula.
Price Rule Usage Page	RO_RULEUSAGE	Review price rule usage information.
Price Rule Advanced Search Page	EOEP_RULE_SRCH_PG	Search for existing price rules using rule conditions.

Conditions Page

Use the Conditions page (EOEP_CONDITION) to select the price by fields, values for the price by fields, and the operator (which determines how the price by fields are related to the transaction).

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Navigation

Pricing Configuration, Price Rule, Conditions

Image: Conditions page (1 of 2)

This example illustrates the fields and controls on the Conditions page (1 of 2).

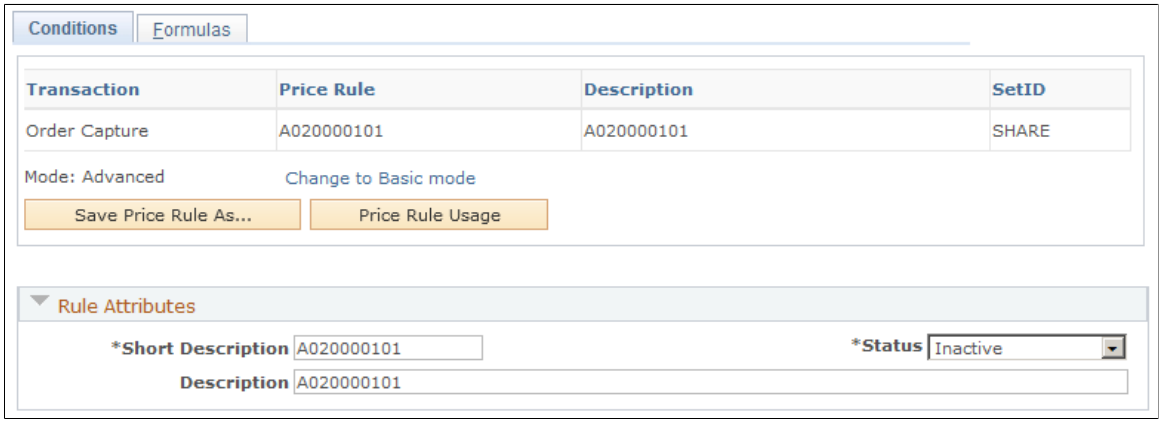
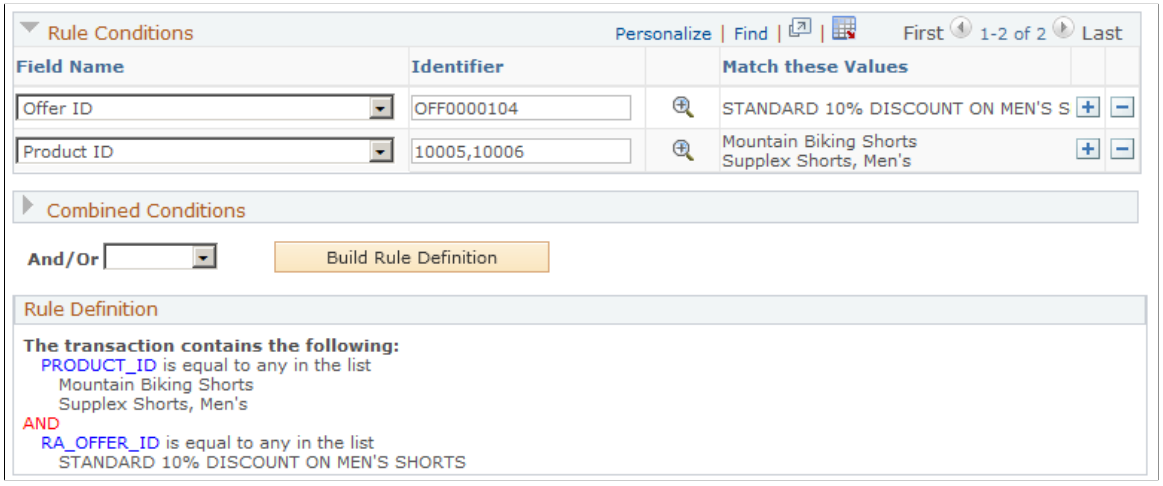


Image: Conditions page (2 of 2)

This example illustrates the fields and controls on the Conditions page (2 of 2).



Mode

Use to determine the data entry method:

Basic: Enables you to search for values for the field names that you selected. The Match These Values column is populated with the description of the values that you selected after you made a selection. Rule conditions are automatically joined with the *And* conditional operator.

Advanced: Basic mode plus additional data entry features. Enables you to manually enter values for the identifiers or search for identifiers. If adding them manually, separate the values by commas without a space between values. The Match These Values column is populated with the description of the identifiers that you enter.

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The Combined Conditions grid is available and automatically populated with the basic field name and value rule conditions. The Combined Conditions grid enables you to create rule conditions that you can combine into more complex conditions. You can use logical *And* or *Or* operators.

Advanced mode is the default.

Save Price Rule As

Click to clone a new price rule from the current one.

Price Rule Usage

Click to access the Price Rule Usage page to review the usage log of the price rule. Information available on this page includes the numbers of customers and orders to which the rule has already applied, total price adjustments that have been made, and so on.

See Price Rule Usage Page.

Rule Attributes

Transaction

Select a value from the available options to create a new price rule. Select a value to populate the list of values for the field names.

This field is visible only in add mode. Once the rule is created for a transaction, you cannot change the transaction.

Note: In PeopleSoft CRM installations, this field is read-only and the default is *Order Capture.*

Status

Values are:

Deployed: Activates the price rule so that it is used to determine price adjustments. You must enter data on the Formulas page before you can save the price rule in this status. You can also use the simulator to test price scenarios in this status.

Inactive: The price rule is no longer active. Use to cancel a rule that was previously in use.

Pending: This status appears by default. You can save the price rule in this status without adding data on the Formulas page. Use this status when you want to save the price rule but you don't want the system to process any edits on the rule. You cannot use a rule in this status in the simulator.

Ready to Test: Use this status to test the rule with the simulator. The rule is available to the pricing system.

Description

Enter a descriptive text for the price rule.

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Short Description

Use for the short description of a rule. The first 20 characters of the description appear by default. This field is used as the label on pages and inquiries.

Rule Conditions

Error

If an error exists in the price rule definition, a red square box appears in this column. Correct the error. This field appears only if an error exists.

Field Name

Select the price by field to use with the rule condition. The valid list of price by fields is established on the Transaction Price By Keys page by the PeopleSoft Enterprise Pricer system administrator. The list of fields available when you create the price rule is determined by the transaction.

Identifier

Enter values for the corresponding price by field. This value is available only if you are using the advanced mode.

(search push button)

Click to access the Search page (EOEP_SEARCH_PAGE) to find valid values for the selected price by field in the price rule condition.

Note: If you selected values previously, those values remain selected until you clear them. You can restrict the search further by entering the appropriate ID and description values at the top of the search page.

Combined Conditions

In the advanced mode, the field names and values that were entered for the rule conditions are included in the Combined Conditions grid when you click the Build Rule Definition button and select an operator. The items in the Combined Conditions grid are a foundation used to build more complex conditions. Select two or more rows to build the complex condition. Every new complex condition that you create is added to the Combined Conditions grid. You can continue to use the new conditions to create more complex conditions for the rule definition.

And/Or

After selecting two or more combined conditions, select either operator to combine the conditions. This option is available if you are using the *Advanced* mode.

Note: In basic mode, the system automatically uses only the *And* operator.

Build Rule Definition

After selecting the conditions to use and the conditional operator, click this button to build the rule definition. The new condition is added to the Combined Conditions grid, and the definition appears in the Rule Definition section.

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Rule Definition

Displays the final definition in both advanced and basic modes. When using the basic mode, the system displays the rule definition automatically. Click Save to save the price rule.

Formulas Page

Use the Formulas page (EOEP_FORMULA) to define the actions that take place when the price rule conditions are met.

Navigation

Pricing Configuration, Price Rule, Formulas

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See Price Transaction Code Page.

Image: Formulas page (1 of 2)

This example illustrates the fields and controls on the Formulas page (1 of 2).

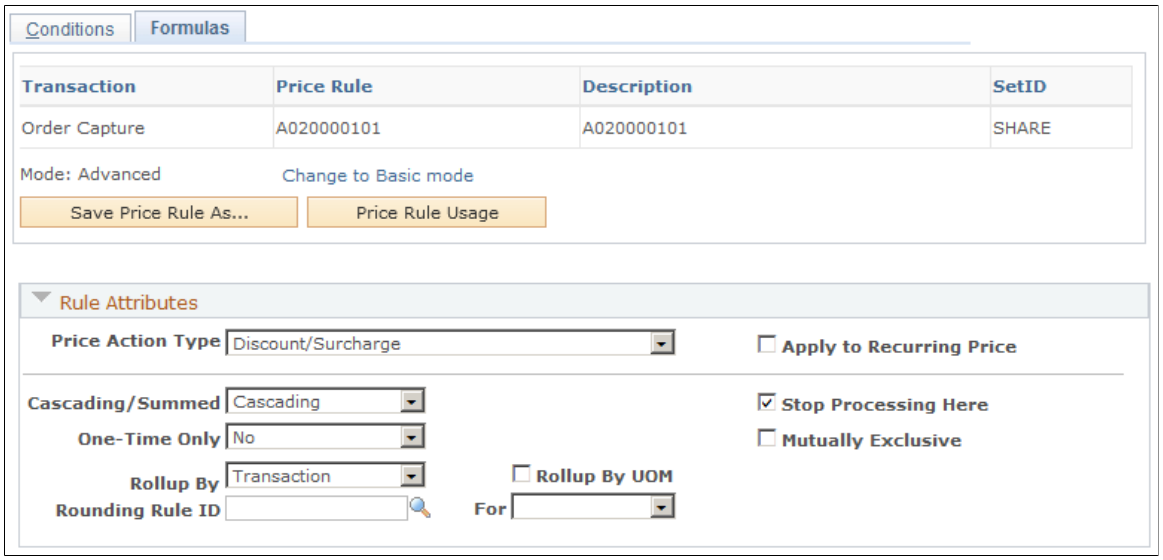
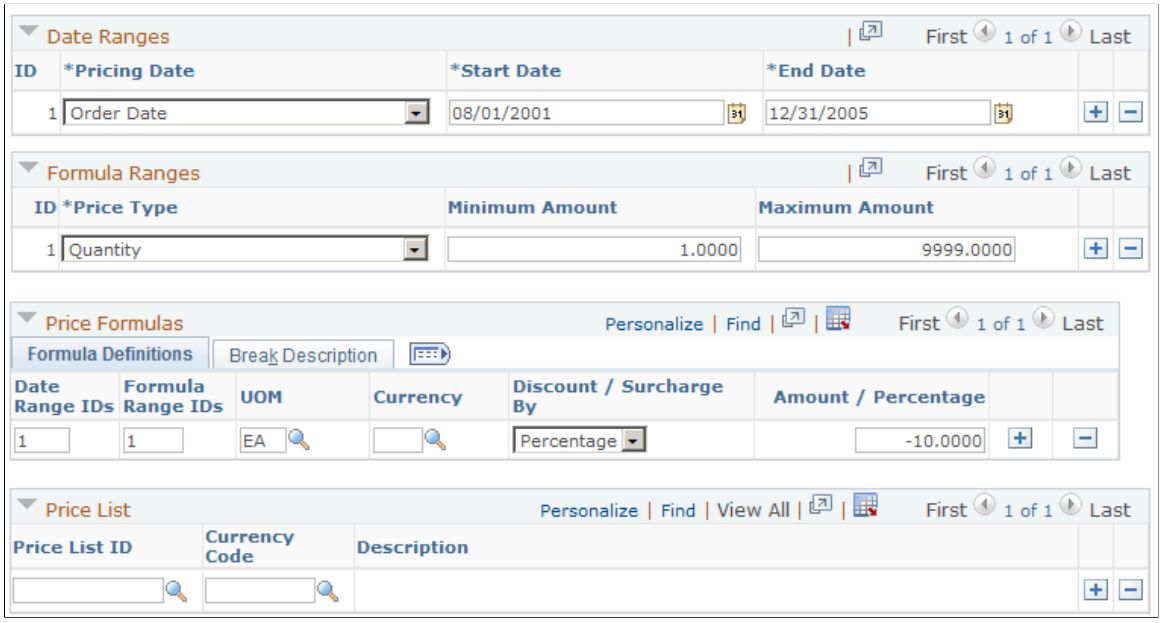


Image: Formulas page (2 of 2)

This example illustrates the fields and controls on the Formulas page (2 of 2).



The price action type that is selected determines the additional data that is required on the price formula. The date ranges and formula ranges are required for each formula. You must create at least one date range and formula range. Date range IDs and formula range IDs on each formula must point to a valid date and formula range.

To apply the formula to a transaction, the transaction must match all the date ranges identified by date range IDs and all of the formula ranges identified by formula range IDs. For example, date range ID 1 that is specified in the Price Formulas section indicates that the formula must match the date range conditions for ID 1 that is specified in the Date Ranges section. The same is true for formula ranges: to

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apply the formula, the transaction must match all of the formula ranges identified by formula range IDs. For example, formula range ID 1 that is specified in the Price Formulas section indicates that the formula must match formula range conditions for ID 1 that is specified in the Formula Ranges section. Click the Price Formulas: Break Description section to see a text description of the rule formula.

See Price Rule Setup Examples.

Rule Attributes

Price Action Type

Select the action that the price rule performs when the rule is applied to a transaction.

Enterprise Pricer delivers a list of price action types and you specify the ones that are supported by a transaction on the Price Transaction Code page of that transaction. The complete list of action types includes:

Discount/Surcharge: Apply discounts or surcharges to order lines. It is selected by default.

Free Period Promotion: Define periods and frequency for which a recurring charge is not applied. The Apply to Recurring Price field is by default selected and unavailable for edit when this price action type is selected.

Giveaway/Product Add: Apply free or discount products that can be based on the line or order.

Min/Max Target Discount (minimum/maximum target discount): Compare the discount adjustment and apply a target discount.

Min/Max Target Price (minimum/maximum target price): Compare the price adjustment and apply a target price.

Min/Max Target Surcharge (minimum/maximum target surcharge): Compare the surcharge adjustment and apply a target surcharge.

Note: Use the target price action types to limit the total adjustments made to the transaction by the pricing engine. For example, if you define a maximum target discount for a product as 25 percent, the system applies discounts to the list price up to 25 percent. If you define a minimum surcharge for a product as 5.00 USD, the system always applies a minimum 5.00 USD surcharge. If you define a minimum target price for a product as 50.00 USD, the system applies adjustments to the base price, but does not discount the price below 50.00 USD.

Price List Only Condition: Use the product list price from the price list that is returned as a result of matching the price rule condition with related objects of price lists.

Price Override: Apply a new price to replace the existing price.

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Note: If the price rule is defined only for product ID, we recommend that you use the Price List feature to define the base price for the product.

Rollup Only Rule: Indicate that the rule is used for rolling up quantities.

Total Order Discount/Surcharge: Apply discounts or surcharges to orders.

See Price Transaction Code Page.

Apply to Recurring Price

Select to indicate that the price rule applies to recurring price calculation.

This field is only available for edit if the corresponding pricing action type is enabled for recurring pricing on the Price Transaction Code page.

See Price Transaction Code Page.

Cascading/Summed

Determines how the system applies the adjustment for the *Discount/Surcharge* price action type.

Cascading: Applies the adjustment as the discounts are found. A second discount is applied to the previously discounted price, a third discount is applied to a price that was previously discounted twice, and so on. For example, if the system encounters two discounts, 10 percent and 20 percent off the list price of 100.00 USD, the system applies the discounts in this way: 10 percent off of 100.00 USD and 20 percent off of 90.00 USD. Thus, the unit price for the order schedule line is 72.00 USD.

Summed: When the system finds multiple discounts, it adds them together and applies the discounts once. For the summed example, the system would combine the 10 percent and 20 percent discounts for 30 percent off of 100.00 USD. The resulting unit price for the order schedule line is 70.00 USD.

Stop Processing Here

Select to prevent the system from applying further price adjustments when the system finds a match with a price rule. This occurs for total order or line adjustments. The system stops applying price adjustments after encountering the first price rule match that has this option selected.

Note: This option applies only for price adjustments. It does not apply for price lists that are associated with price rules. The stop processing option is handled separately for total order and line adjustments.

One-Time Only

Select to limit the applicability of the rule to only once.

Values are:

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No: The rule is not a one-time rule.

Per Customer: The rule can only be applied once for each customer.

Per Rule: The rule can only be applied once in the system.

One-time rules are typically used for price discounts that are so good they are not allowed on multiple orders. The are effective for encouraging large first orders instead of many smaller orders.

Mutually Exclusive

Click to make the price rule the only one that applies to an entire order, if the price rule is found to match the order during arbitration. No other discounts or surcharges apply to the order even if other eligible price rules are available.

Mutually exclusive rules are typically used for discounts that are so good no other discounts are allowed in conjunction with the discount provided by this rule. An example of a mutually exclusive price rule is “Spend USD 10,000 or more, and get 25 percent off the order. No other discounts allowed.” If more than one mutually exclusive price rule is matched, only the first (use the arbitration plan to specify the order) mutually exclusive price rule is applied. All other price rules are ignored, including the normal price rule that is sorted *before* the applied mutually exclusive rule.

Rollup By

Specify the manner in which rollup (totals to select price formulas) is calculated. Values are:

Line: Rollup value is the order line quantity.

Rollup Rule: Rollup quantity is calculated using the rollup only price rule that is specified in the ID field.

Transaction: Rollup is calculated by adding all lines (which match the same price rule) within the *Order Capture* transaction.

Rollup is not available to these price action types: *Free Period Promotion, Price List Only Condition,* and *Rollup Only Rule*. For *Total Order Discount/Surcharge* price rules, the Rollup By field is not editable, and the rollup method is always by transaction.

ID

Enter the rule whose rollup is used to select the matching price formula for the current price rule.

Rollup By UOM (rollup by unit of measure)

Select to set the rollup to be based on the unit of measure of the transaction.

This field appears if the rollup method is by transaction.

Rounding Rule ID

Identify a specific rounding rule to use when determining values such as net price and adjustments.

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For

Select which calculations should have a rounding rule applied to them before arriving at a final value. Values are:

Adjustment: Round each adjustment.

Both: Round both adjustments and the net price.

Net Price: Round only the net price.

None: Do not round adjustments or the net price.

Date Ranges

Use this section to define various date breaks to be referenced in price formulas.

Pricing Date

Select the date of the transaction used for defining the date break.

Available values are established on the Pricing Dates page. For the Order Capture transaction, delivered values are:

Arb Plan Price Date

Fulfillment Date

Order Date

Requested Arrival Date

System Date

In order to apply a price rule to an order transaction, the actual value of the selected pricing date for that transaction must fall within the date break that is specified in the price rule formula.

Start Date and **End Date**

Enter the start and end date to form a date break.

Formula Ranges

Use this section to define various formula breaks to be referenced in price formulas.

Price Type

Select the type of transaction value used for defining the formula break.

Available values for the *Order Capture* transaction are:

Extended Price: Indicates the formula range defined pertains to the order value of the item purchased in the minimum and maximum purchase ranges identified.

Quantity: Indicates the formula range pertains to the number of units of the item purchased in the minimum and maximum purchase ranges identified.

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In order to apply a price rule to an order transaction, the actual transaction value (price or ordered quantity) must fall within the formula break that is specified in the price rule formula.

Minimum Amount and **Maximum Amount**

Enter the lower and higher limits of the range, quantity or purchase total, for the corresponding price type to form a formula break (formula range).

Price Formulas - Formula Definition

Use this section to define price formulas. A price formula comprises at least a date range and a formula range that further specifies when and which transactions that the price rule deems applicable. It also includes the price action details that the system needs to process the price adjustment when this rule is applied.

Fields in this section vary depending on the price action type and price type selected.

Date Range IDs

Enter the ID of the date range that transactions must match for the formula to apply. If you want to include multiple date ranges to a formula, separate the IDs by commas (for example, 1,2,3). If multiple IDs are specified, transactions must meet *all* the date range conditions in order for the price rule formula to apply.

Formula Range IDs

Enter the ID of the formula range that transactions must match for the formula to apply. If you want to include multiple formula ranges to a formula, separate the IDs by commas (for example, 1,2,3). When multiple IDs are specified, transactions must meet *all* the formula range conditions in order for the price rule formula to apply.

UOM (unit of measure)

Enter the unit of measure that transactions must match for the formula to apply. If not provided, all unit of measures are considered.

Frequency and **Recurrence**

Specify how often and the number of times that price adjustments by this recurring price rule need to occur. If recurrence is not specified, price adjustments on the recurring charge are offered as long as the customer of the order has the service. Frequency is required for recurring price rules.

These fields appear if the price rule is set to apply to recurring price calculations.

Currency

Specify the currency in which the price formula is measured. If not provided, apply to all currencies.

Discount/Surcharge By

Select how the discount or surcharge adjustment is performed. This field appears if the selected price action type is *Discount/Surcharge* or *Total Order Discount/Surcharge.*

Values are:

Amount: Indicates that the adjustment is by amount.

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Amt & Expr (amount and expression): Indicates that the adjustment is a calculated value derived by the amount or an expression.

Expression: Indicates that the adjustment is derived from a specific expression.

Ext Class (external class): Indicates that the adjustment is derived from an external class.

Pct & Expr (percentage and expression): Indicates that the discount is a calculated value derived by a percent or an expression.

Percentage: Indicates that the adjustment is by percent.

Important! To indicate a discount, enter a negative value for the amount or percentage. A positive value indicates surcharge.

Amount/Percentage

Enter the adjustment amount (or percent) if the discount (or surcharge) by value is either *Amount* or *Amt & Expr*.

Important! Enter negative numbers for discounts and positive numbers for surcharges.

Class/Expression

Enter the external class (or mathematical expression) to use in the price formula. This field appears if the discount (or surcharge) by value is *Amt & Expr*, *Expression*, *Ext Class*, and *Pct & Expr*.

Small or Large

Specify which net price (smaller or larger) to use as the final net price.

If the selected price action type is either a discount or surcharge (discount/surcharge by value: *Amt & Expr* or *Pct & Expr*) , or a price override (price override by value: *Prc & Expr*), Enterprise Pricer performs two calculations and chooses either the larger or the smaller net price based on the selected value of this field.

For example, the product's list price is 100 USD. The formula is specified as *discount by amount and expression* and the *smaller* net price is used. The discount amount is *-10* and the expression is *LIST_PRICE * 0.95*. Discount by –10 results in a net price of 90. The expression is evaluated as 100 * 0.95=95. Because 90 is smaller than 95, a discount of –10 is applied for a net price of 90.

This field appears if the selected discount (or surcharge) by value is either *Amt & Expr* or *Pct & Expr*, or if the selected price override by value is *Prc & Expr*.

Free Period By

Select *Quantity* as the criterion that is used to apply free promotions to orders with recurring charges. This field appears if the selected price action type is *Free Period Promotion*.

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When you define a free period promotion price rule, specify the free period by value as well as the number of times that the recurring charge should be waived in the Quantity field. For example, if the specified quantity is *3*, and the free period promotion price rule is applied to an order with a cell phone for 30 USD per month, then the first three months are free.

If you want the free period promotion price rule to be applicable only to transactions with certain UOM or frequency (or both), specify the values in the corresponding fields; transactions must match these values for the formula to apply.

Product Add By

Select how the giveaway or product add is performed.

Values are:

BOGO (buy one get one): Enterprise Pricer computes the quantity of the promoted item given away by summing the quantities from the order that match the price rule and dividing them by the BOGO factor, and taking the whole number.

BOGO & Prc: Discounted giveaway, for example, buy one product and get another product at half price. Specify the BOGO factor used to calculate the quantity of the selected product to be given away at a price that is computed using a mathematical expression.

Qty & Prc: Specify the product add quantity to be given away at a price that is computed using a mathematical expression.

Qty Expr: Specify the mathematical expression used to calculate the product add quantity to be given away.

Quantity: Specify the product add quantity to be given away.

Quantity/BOGO Factor

Enter the quantity to be used in the product add formula, or the factor that is used to calculate the product add quantity in the BOGO-specific product add formula.

This field appears if the selected product add by value is any but *Qty Expr*

This is the formula used to compute the final product add quantity for BOGO-specific product add formula:

Total Quantity of Lines Matching the Price Rule/BOGO Factor

The resulting number derived from the calculation is truncated so that only the whole number is used. For example, with a BOGO factor of three, when the customer buys two they get zero free. When they buy three, four, or five items, they get one free. When they buy six, seven, or eight items, they get two free items, and so on.

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Target Discount By or**Target Surcharge By**	Select how target discount (or target surcharge) is calculated, by amount or by percent. The Target Discount By field appears if the price action type is *Min/Max Target Discount*; the Target Surcharge By field appears if *Min/Max Target Surcharge* is the selected action.
Target Price By	Select *Price,* indicating that the target price is matched by item unit price This field appears if the price action type is *Min/Max Target Price.*
Min Amount/Percentage (minimum amount/percentage) and **Max Amount/ Percentage** (maximum amount/ percentage)	Enter the lower and upper amounts or percentages for the corresponding target discount/surcharge by value. This field appears if the selected price action types is *Min/Max Target Discount* or *Min/Max Target Surcharge.*
Minimum Price and **Maximum Price**	Enter both of these values if the selected price action type is *Min/Max Target Price*.
Price Override By	Select how price override is performed. Values are: *Expression:* Indicates that the price is derived from a specific expression. *Ext Class:*Indicates that the price is derived from an external class. *Prc & Expr:* Indicates two prices, one on the Price field that appears and the other derived from an expression. The value of the Small or Large field determines which of the two prices to select as the final net price. *Price:* Indicates item price is defined by the price in the Price field.
Price	Enter the new price, if the price override by value is *Price.* This field appears if the price override by value is *Prc & Expr* or *Price.*

Price Formula - Formula Detail

Select the Formula Detail tab.

Note: This section appears if the selected price rule action type is *Giveaway/Product Add.*

Product ID	Select the ID of the product to be given away for free or at a discounted price for the corresponding price formula. At the time when an order is being evaluated for pricing, if a product add/giveaway price rule is found to be applicable to an order, the specified giveaway product will be added

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	automatically to the Line Summary grid of the Order - Entry Form page, as well as on the Line Details page.
UOM Promo (unit of measure promotion)	Select the UOM for the product that is given away or added to the order.
Product Add Type	Applies to only giveaways. Specify whether the giveaway is applied to each line of the transaction (sales order) or applied only once to the header of the transaction. *Per Line:* The system applies this giveaway to every line. *Per Order:* The system applies this giveaway only once to the entire sales order.

Price Formula - Break Description

Select this section to see a text description of the rule formula.

Price List

If a price list is specified in this section, the pricing engine uses list prices of products that are available in the price list as the base price for calculating net or recurring prices.

Expression Validator Page

Use the Expression Validator page (EOEP_MATH_EXPR_VAL) to enter and validate mathematical expressions created for the formula.

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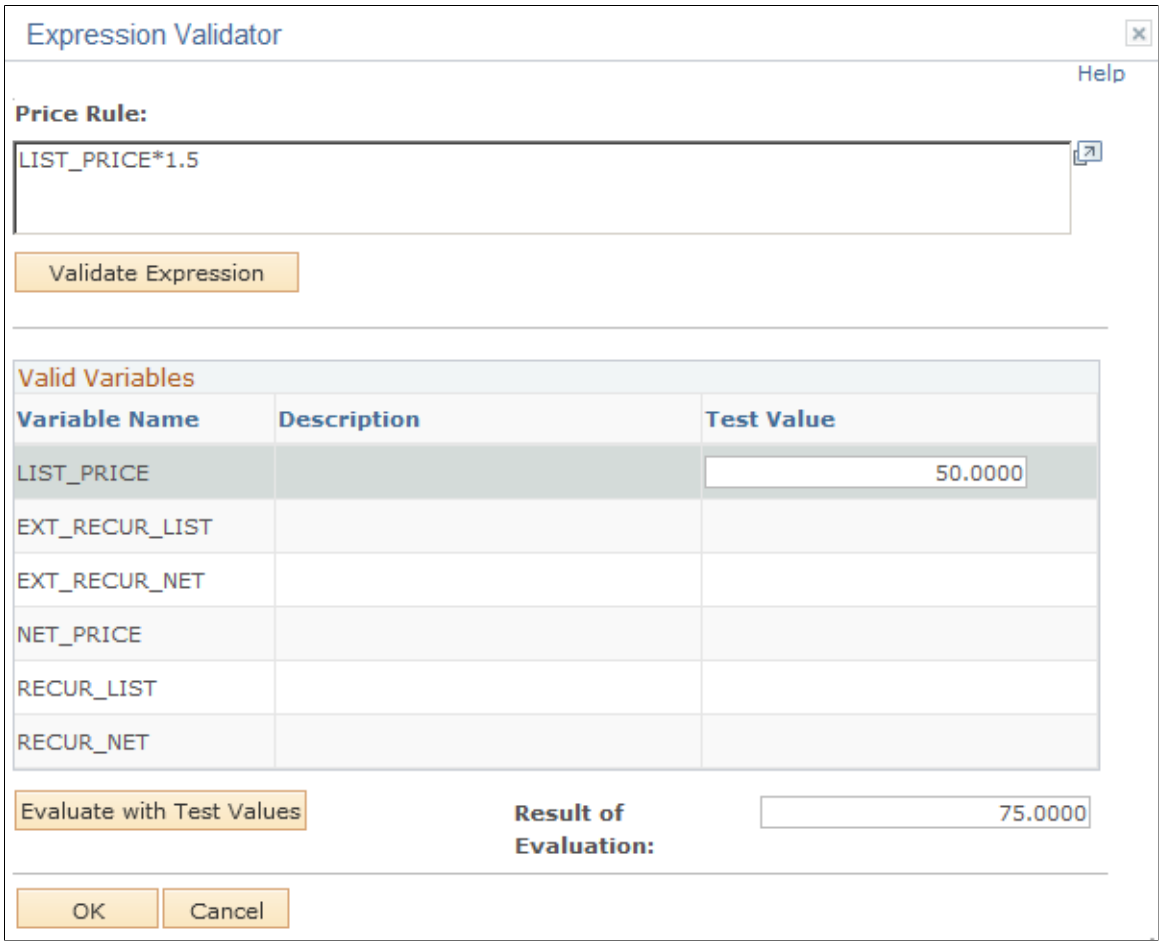
Navigation

Click the Calculator button next to the Class/Expression field on the Formulas page. The Class/Expression field appears if the selected discount/surcharge method is either *Pct & Expr* or *Amt & Expr*.

Image: Expression Validator page

This example illustrates the fields and controls on the Expression Validator page.



Enter the mathematical expression in the text field and click the Validate Expression button to verify it.

Valid Variables

This section lists the available variables that can be applied in the expression.

Test Value	Enter a value for a variable to be used to test the expression.
Evaluate with Test Values	Click to calculate the result of the expression using the test value.

Price Rule Usage Page

Use the Price Rule Usage page (RO_RULEUSAGE) to review price rule usage information.

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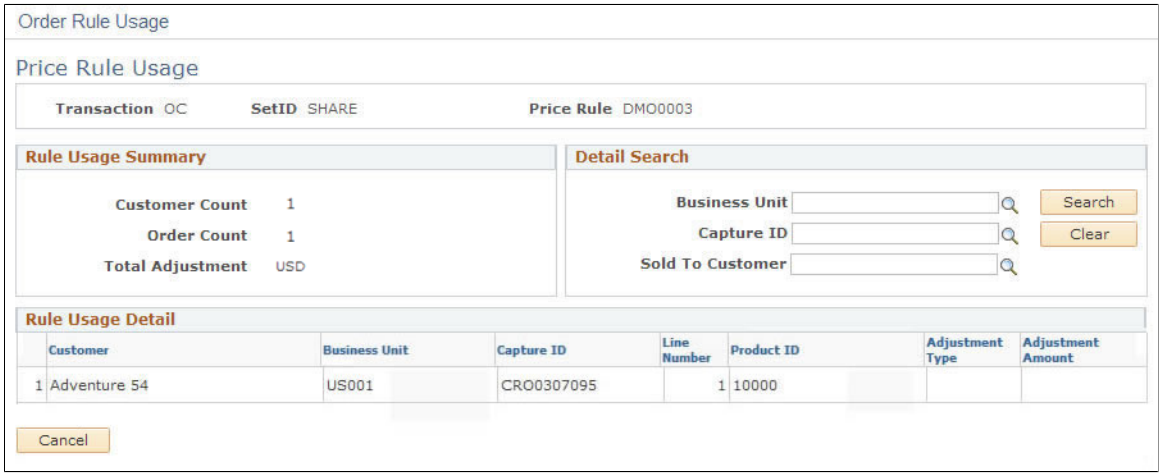
Navigation

Click the Price Rule Usage button on the Formulas page.

Image: Price Rule Usage page

This example illustrates the fields and controls on the Price Rule Usage page.



Rule Usage Summary

Customer Count Displays the number of customers to whom this price rule has applied.

If the price rule has applied to the only one customer multiple times, the customer count is 1.

Order Count Displays the number of orders to which this price rule has applied.

Total Adjustment Displays the total adjustment value that has been made thus far by this rule.

Detail Search

Use this section to perform specific search on price rule usage by business unit, order ID, sold to customer, or any of the combination.

Rule Usage Details

This section displays the summary of all pricing adjustments that were made by this price rule.

Price Rule Advanced Search Page

Use the Price Rule Advanced Search page (EOEP_RULE_SRCH_PG) to search for existing price rules using rule conditions.

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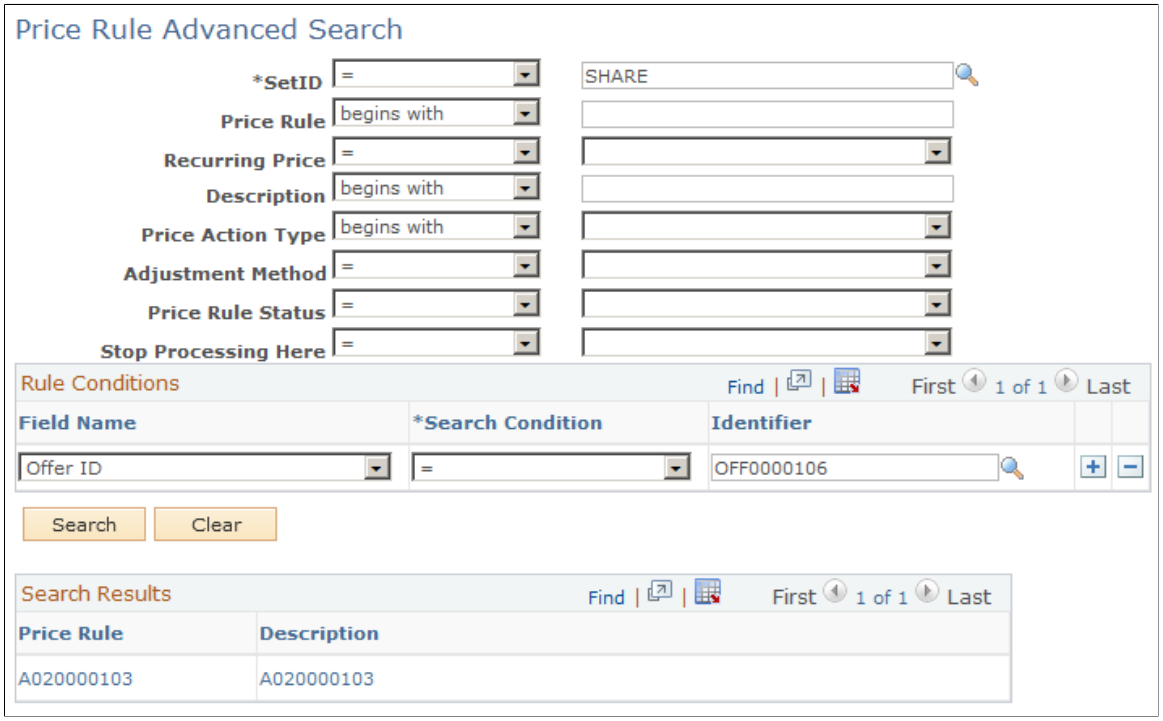
Navigation

Pricing Configuration, Price Rule Advanced Search, Price Rule Advanced Search

Image: Price Rule Advanced Search page

This example illustrates the fields and controls on the Price Rule Advanced Search page.



In addition to the search fields that are available on the search page of the Price Rule component, the Price Rule Advanced Search page provides the ability to find price rules by conditions. You can enter price-by key field and value pairs as criteria of a price rule search. You can also look up price rules that are applicable to recurring pricing.

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Chapter 5

Using the Arbitration Plan

Understanding Arbitration Plans

The arbitration plan is the arbiter when multiple price rules match the transaction. It decides the order in which the price rules are applied to the transaction base price. For price rules that match on the same criteria, you can define the arbitration plan to break those ties and tell the system which rule to apply first. You can also use the arbitration plan to filter the price rules that can be applied to the transaction. The definition of the arbitration plan nodes and the placement of the decision nodes determine the filtering power of the arbitration plan. To verify that the arbitration plan is performing as you expect, use the pricing simulator to test the arbitration plan and price rules.

Placement of certain price action types in the arbitration tree will not affect the order in which the adjustment is applied to the transaction, but it may affect the Stop Processing Here option defined on the price rule. These price action types are:

- Summed.

  Adjustments are always summed and applied after all other adjustments are made.

- Total Order Discounts/Total Order Surcharge.

  Adjustments are always summed and applied to the total order value after all other line level adjustments are made.

Arbitration Plan Use for Non-recurring and Recurring Price Rules

The same arbitration plan is used to support the arbitration of both non-recurring and recurring price rules for PeopleSoft Enterprise CRM. It means that there can be multiple price rules matching the conditions of an order capture transaction, and these price rules can be blend of non-recurring and recurring ones.

The arbitration plan does not differentiate non-recurring price rules from recurring ones in times of arbitration. In the case where two price rules (for example, one for non-recurring charges and one for recurring charges) that serve the same purpose (for example, a discount to product XYZ) are returned for an order capture transaction, one or both price rules may apply depending upon the options specified in the decision selected for the associated node. Suppose that the default arbitration plan for the *Order Capture* transaction has a node called *Discounts* for arbitrating discount price rules and its last subnode is a decision arbitration type with the value *Highest Discount First*. Assume that an order with the purchase of product 10000 is matched by these two price rules:

1. Price rule for non-recurring price to offer discount of 5 percent for product 10000.

2. Price rule for recurring price to offer discount of 10 percent for product 10000.

Based on the arbitration decision type (*Highest Discount First*), rule #2 with 10 percent discount will be applied first. The pricing engine applies rule #1 subsequently if the decision arbitration type is set up to apply more than one price rule adjustment. Now, if either price rule is set to be mutually exclusive, the

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pricing engine applies the mutually exclusive rule to the corresponding order price and ignores that other one.

Related Links

Understanding the Pricing Simulator

Arbitration Plan Examples

The arbitration plan component provides a robust architecture that supports the setup of arbitration plans with a wide range of complexity. A company with only discount-specific price rules may simply need a plan that makes a decision to apply a price rule with the highest discount; for a company that has a short list of price rules with different actions, a multi-node arbitration plan addressing all the involved price rule actions would be necessary. Here are several sample arbitration plans that address simple and some of the more complex scenarios.

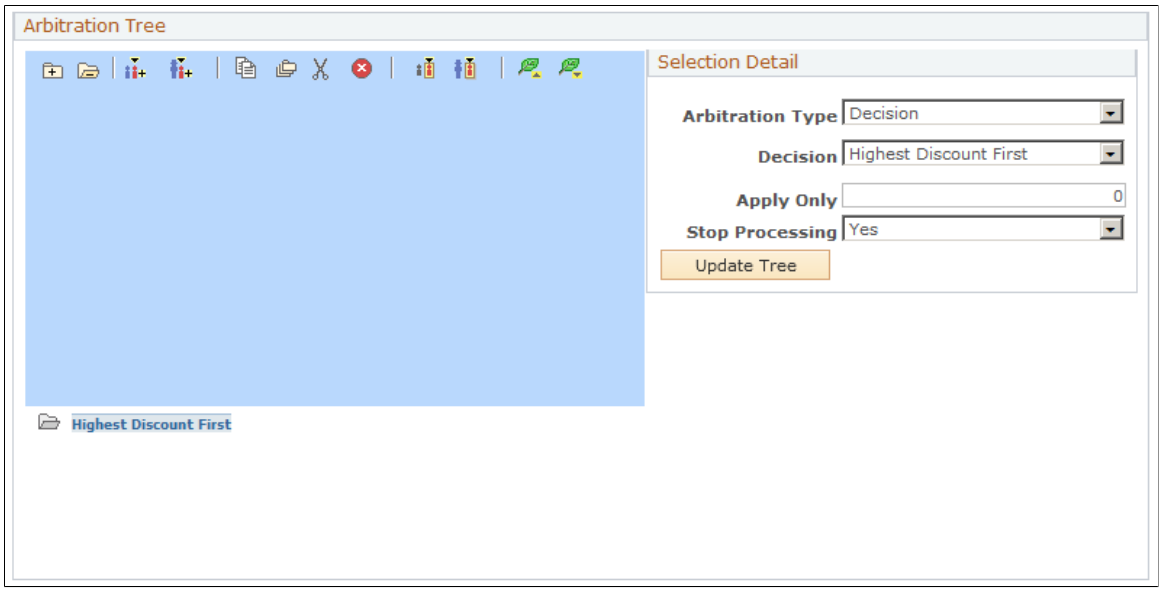
Arbitration Plan 1: Apply Discounts Only

This is an example of a basic arbitration plan, which uses essentially one node to determine how all price rules with conditions that match the transaction are sorted. In this example, the arbitration plan uses the *Highest Discount First* decision to rank all matching price rules for a transaction. The value in the Apply Only field suggests that only the first price rule with the highest discount value would be applied, and there will be no more pricing adjustments afterwards.

This arbitration plan is applicable to situations where you are certain that price rules are defined for only discounts (no price overrides or giveaways).

Image: Example of Arbitration Plan page using the Highest Discount First decision

Example of Arbitration Plan page using the Highest Discount First decision



Arbitration Plan 2: Apply Surcharge Rules Before Discount Rules

This sample arbitration plan applies to situations that involve price rules of these two action types, surcharge and discount.

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In this example, the system selects all price rules with conditions that match the transaction and sorts them first by surcharges and then by discounts. If there are multiple surcharges, the first two rules with the lowest surcharge values are applied. After all the surcharges are applied, the first two discount rule with the are highest discount values are applied. Pricing adjustments stop after all discounts are applied.

Image: Example of Arbitration Plan page using surcharge and discount decisions (1 of 2)

Example of Arbitration Plan page using surcharge and discount decisions (1 of 2)

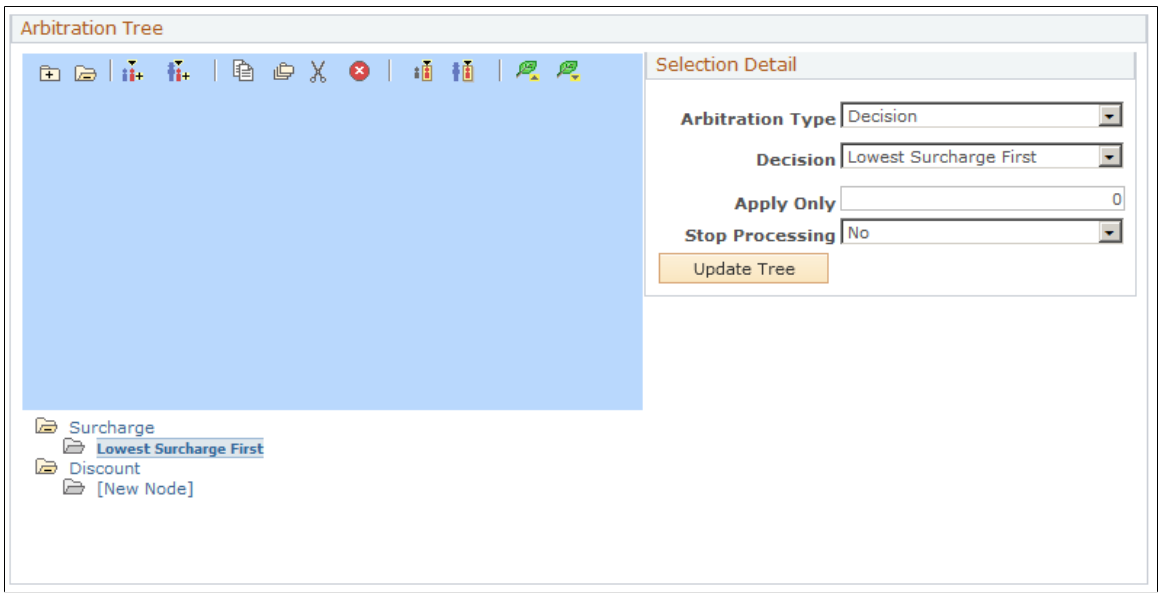
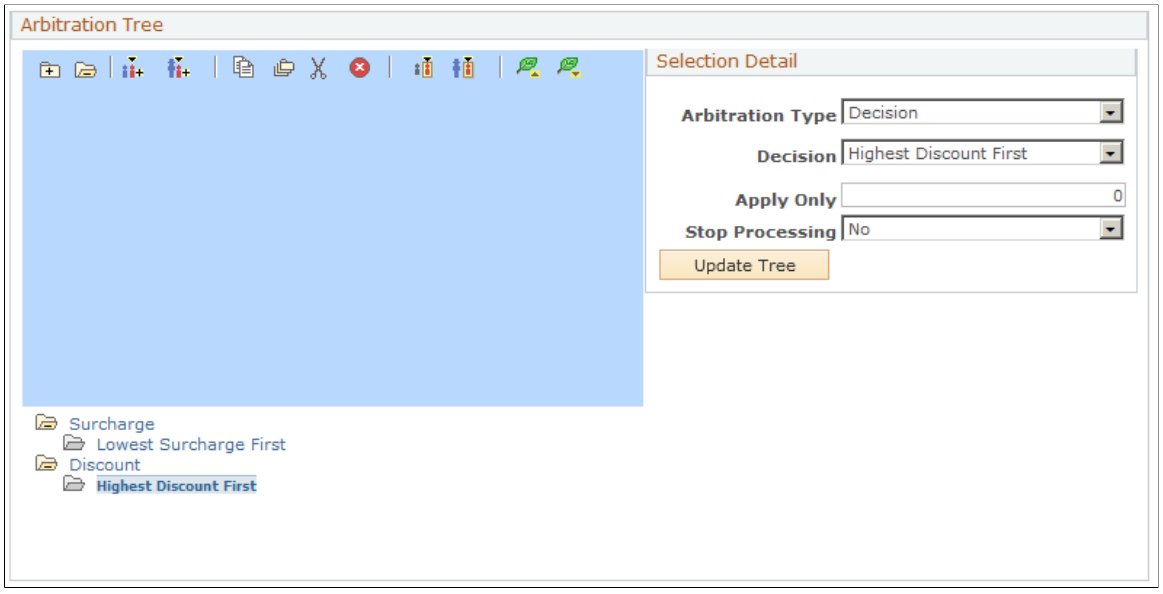


Image: Example of Arbitration Plan page using surcharge and discount decisions (2 of 2)

Example of Arbitration Plan page using surcharge and discount decisions (2 of 2)



You can use the arbitration plan as a filter to apply certain price rules to a transaction and not others. Although some price rules might match the transaction according to the conditions of the price rule, you can define the arbitration plan to bypass some price rules. This example is also a filter because it applies only surcharges and discounts to the transaction. If giveaway or price override price rules that match the transaction are defined, they are not applied when using this arbitration plan.

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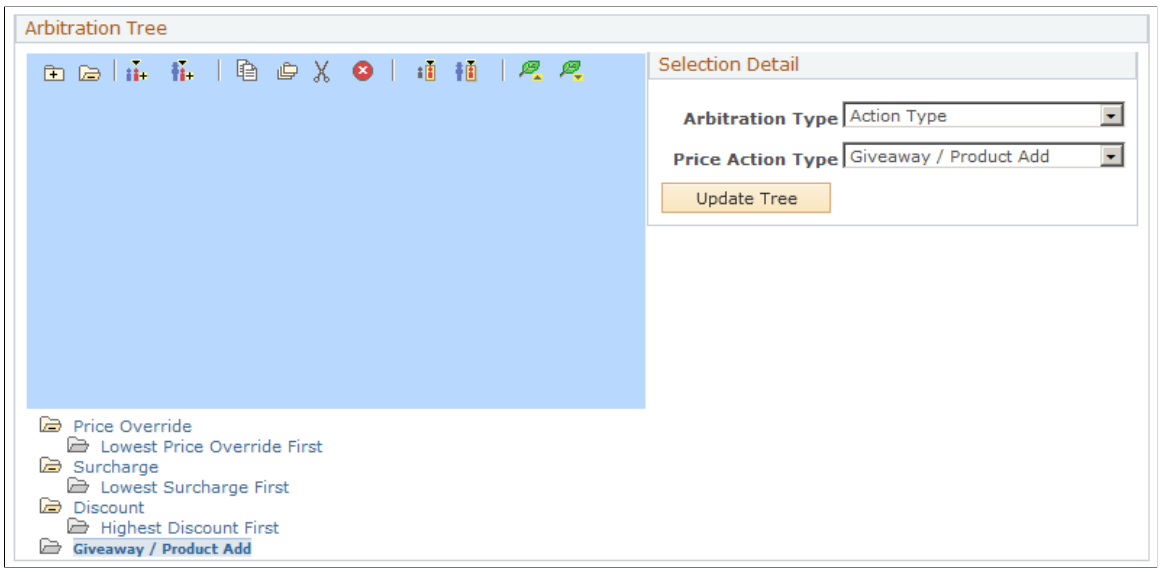
Arbitration Plan 3: Apply Price Override, Surcharge, Discount and Giveaway Rules

This example continues the previous example and shows an arbitration plan applying various (price override, surcharge, discount and giveaway price rules):

Image: Example of Arbitration Plan page using price rules with various actions

Example of Arbitration Plan page using price rules with various actions



In this example, the system selects all price rules with conditions that match the transaction and sorts them first by price overrides, followed by surcharges, discounts and lastly giveaways/product adds. If there are multiple price overrides, the first *n* number of price rules (specified in the Apply Only field) with the lowest price override values are applied. After all the price overrides are applied, matching surcharge price rules are applied, followed by eligible discount and giveaway rules.

Arbitration Plan 4: Apply Filters in Rules

Any arbitration plan that does not have a decision point at the top level of the tree is a filter. Wherever you place the decision node in the tree is where you tell the pricing engine you don't care to further differentiate the price rules, just apply whatever rules match the transaction at that point in the order of the decision.

For example, you want to define an arbitration plan that selects only discount price rules that match certain fields on a transaction. In this case, you define the order in which those matching price rules are applied to the transaction. In this example, let's say you want to match price rules defined only by sold-to customer, product, and region ID. Once the system finds the matching price rules:

- First apply those rules that match all three criteria.
- Then apply the rules that match only the product.

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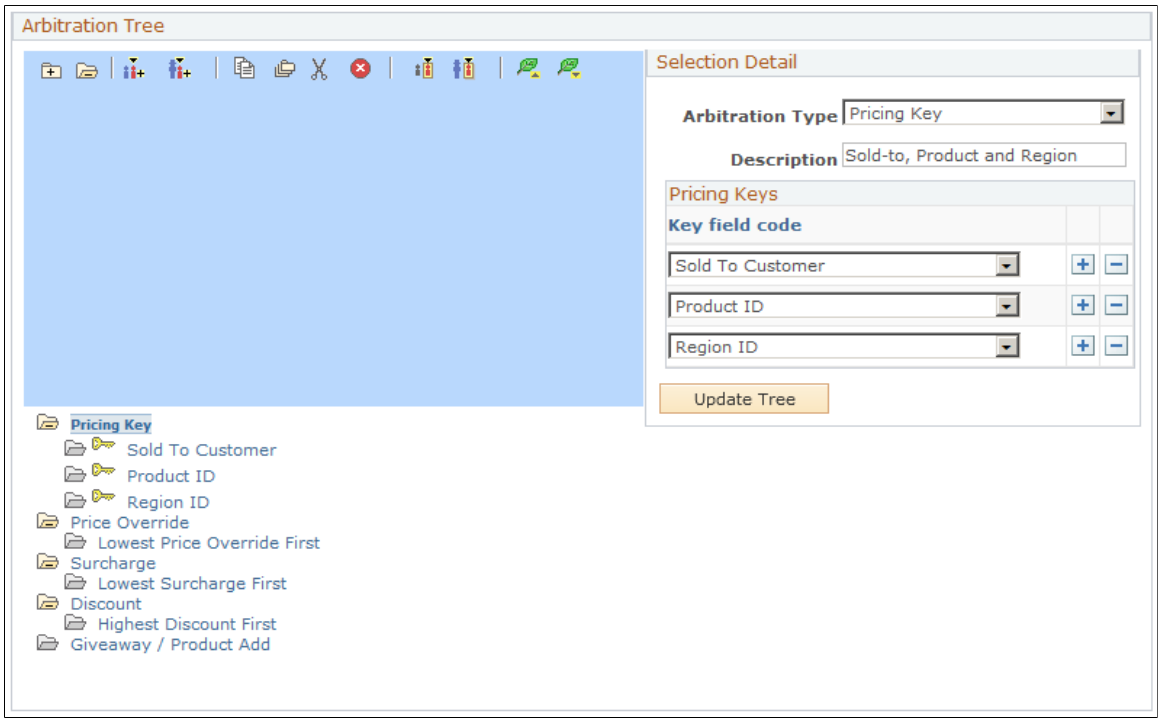
- Lastly apply any discounts that are defined for our favorite customers.

Image: Example of Arbitration Plan page using a filter

Example of Arbitration Plan page using a filter



This arbitration plan considers only discount price rules that are defined by sold-to customer, product, and region; product; or sold-to customer only. It applies the formulas for those price rules in that order. If there is a tie within a node, that is, there are two price rules defined for the product ID, the system sorts those two rules and applies the highest discount first.

In the event where two rules match the same node in the tree, the system finds the next node that is used for each rule until a different node is used by each rule or a decision point is reached. When searching for the node, if the rule does not match a top-level node, it skips any child node and evaluates the next node, which is at the same level or a level higher as the node that is evaluated last. If the rule does not match any node in the tree and there is no final decision point defined at the top level of the tree, the rule is ignored. Every node that is used to break a tie ends in a decision.

You can create price rules without an arbitration plan, but the system does not apply the price rules unless you create an arbitration plan.

Note: The tree node is similar to a sequence used in previous releases. The node is represented as a sequence in the tree.

Important! For more examples on supported basic and complex arbitration plan setup, please refer to *PeopleSoft FSCM Enterprise Pricer*.

Rounding in Arbitration Plans

The arbitration plan, by default, rounds adjustments and prices to a decimal point of 4, or by currency. However, you might want the arbitration plan to round the net price only or the net price and each adjustment before the adjustment is applied, using specific rounding criteria that you define. Enterprise

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Pricer enables you to define rounding rules that are referenced on the arbitration plan. These rules define how Enterprise Pricer rounds the net price and adjustments during the arbitration process.

Many companies use a break structure for rounding rules, which allows them to get significant additional margin. For example:

- If the unit price is less than USD 0.10, round to three decimal points.
- If the unit price is less than USD 1.00, round to two decimal points.
- If the unit price is less than USD 100, round to one decimal points.
- If the unit price is greater than USD 100, round to zero decimal points.

You can specify whether to round each adjustment before it is applied, or only round the net price after all the adjustments are applied, or both, or none.

Note: The rounding rule and rounding flag on the price rule always overrides the rounding rule and rounding flag specified on the arbitration plan. For example, if the rounding value on the arbitration plan is set to use rounding rule 3 which rounds everything to three decimal points, but the price rule rounding flag is set to *None*, the price and adjustments are not rounded when the price rule is used. The rounding rule and flag defined on the arbitration plan are ignored and the rounding rule specified on the price rule is used. If the arbitration plan and the price rule both do not specify a rounding rule, then the application default rounding is applied. In the case of PeopleSoft CRM, default rounding is by currency.
The Rounding Rule and Rounding Flag fields appear on the Arbitration page only if they are defined.

Setting Up an Arbitration Plan

To set up an arbitration plan, use the Arbitration Plan (EOEP_ARB_PLAN) component.

This section discusses how to set up an arbitration plan.

Page Used to Set Up an Arbitration Plan

Page Name	*Definition Name*	*Usage*
Arbitration Plan Page	EOEP_ARB_PLAN	Define how price rules apply to the base or list price when pricing a transaction.

Arbitration Plan Page

Use the Arbitration Plan page (EOEP_ARB_PLAN) to define how price rules apply to the base or list price when pricing a transaction.

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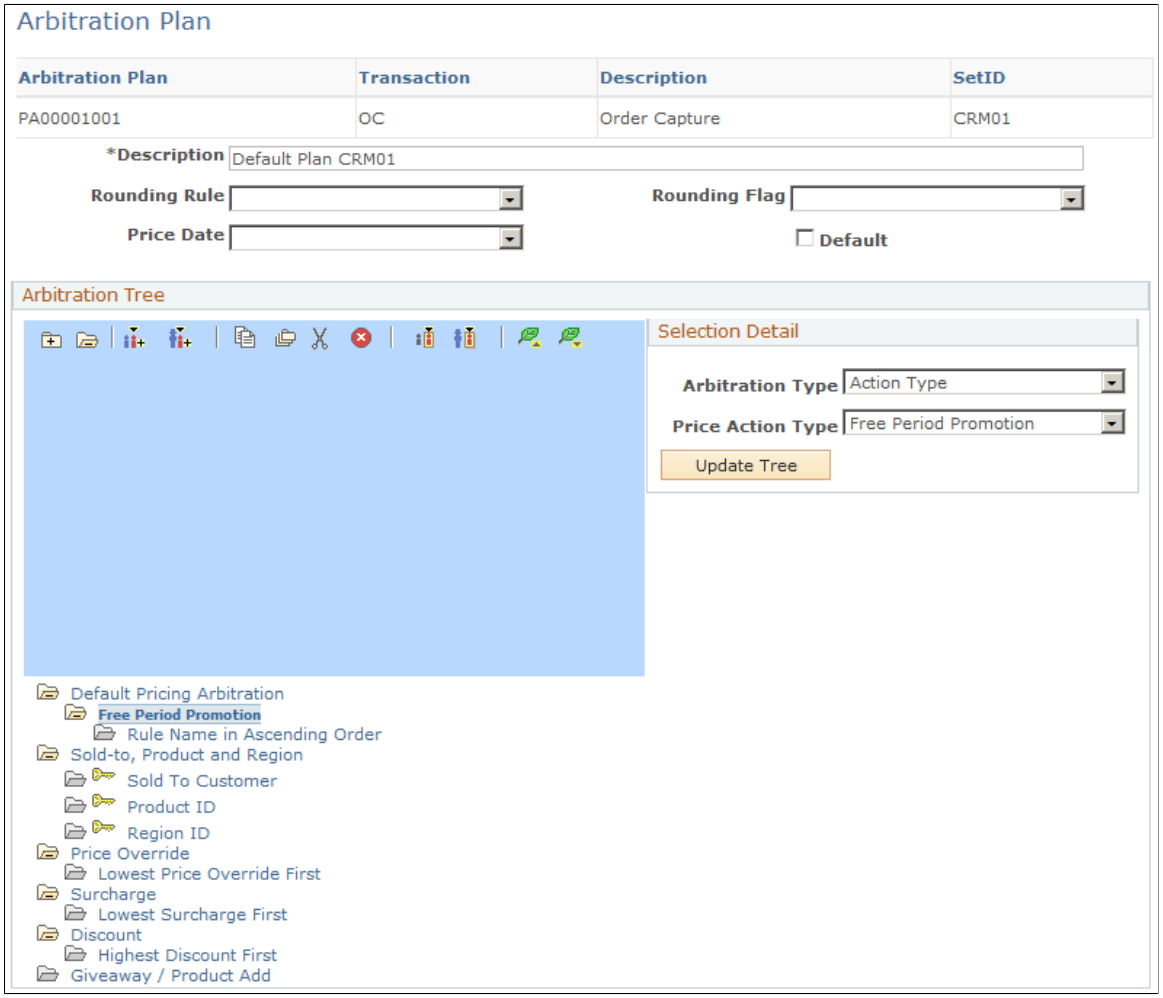
Navigation

Pricing Configuration, Arbitration Plan, Arbitration Plan

Image: Arbitration Plan page

This example illustrates the fields and controls on the Arbitration Plan page.



Transaction

Displays the transaction to be priced in this arbitration plan. In PeopleSoft CRM, the delivered transaction is *Order Capture*.

Arbitration plans are defined by pricing transaction. The system uses this field to verify and limit the price by keys.

Rounding Rule

Select a rounding rule to be used in the arbitration plan. The CRM system delivers the *Standard* rounding rule and values are to be rounded by currency.

Rounding Flag

Select to which value the specified rounding rule applies.

Values are:

Adjustment: Apply rounding to adjustments only.

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Both: Apply rounding to both net prices and each adjustment before the adjustment is applied.

*Net Price:*To apply rounding to net prices only.

None: No rounding to be applied.

Price Date

Select the transaction date that you want the system to use when evaluating date ranges on the price rules that are defined as *Price Date*. This is the date that is used for the start date of individual products that are on the price list.

Values of this field are established on the Pricing Dates page.

Delivered Values are:

Fulfillment Date: The date that the order is fulfilled.

Order Date: The date that the order header is created. The system uses the current date as the default date on a sales order header, but you can enter another date.

Request Arrival Date: The date that the customers want the order to arrive at their site.

System Date: The system date on the application server when the transaction is processed.

Default

Select to establish the default arbitration plan. The system uses the default arbitration plan when a customer doesn't have another associated arbitration plan or doesn't belong to a customer group that has an associated arbitration plan. You must have one default arbitration plan for each transaction.

Note: Customers are associated with customer groups in the Customer Group Link page. Both customers and customer groups can be linked to arbitration plans through price rules.

Arbitration Tree

Use the buttons in this section to edit and navigate the arbitration tree.

Note: You can copy, cut, and paste between different arbitration plans or from an existing arbitration plan to a new one using the buttons.

(expand all)

Click this button to expand all folders in the tree.

(collapse all)

Click this button to collapse all folders in the tree.

(add sibling)

Click this button to add a new node to the same level as the selected node.

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(add child)	Click this button to add a new node under the selected node.
(copy)	Click this button to copy the selected node to the clipboard so you can paste them somewhere else.
(copy branch)	Click this button to copy the selected node and any nodes under it.
(cut)	Click this button to remove the selected branch from the tree. The nodes are copied to the clipboard so that you can paste them elsewhere.
(delete)	Click this button to remove the branch from the tree. The nodes are not copied to the clipboard.
(paste as sibling)	Click this button to paste the nodes from the clipboard. The nodes are inserted at the same level as the selected node.
(paste as child)	Click this button to paste the nodes from the clipboard. The nodes are inserted as a child of the selected node.
(move up)	Click this button to move the selected node up one level.
(move down)	Click this button to move the selected node down one level.

Selection Detail

Arbitration Type

Select from the following options to add nodes to the arbitration tree to instruct the system how to apply the price rules. Values are:

- *Action Type.*
- *Cascading/Summed.*
- *Decision.*
- *Price Rule.*
- *Price Rule Type.*
- *Price Type.*
- *Pricing Key.*
- *[Folder].*

  Use this option to rename nodes and subnodes in the tree. To do so, select a node and select [Folder] as the arbitration type. Then enter the new name as the description and update the tree. You can group nodes of a tree and name them. The name is used for information purposes only.

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Price Action Type

Select an action type if *Action Type* is selected as the arbitration type. Values are:

- *Discount.*
- *Free Period Promotion.*
- *Giveaway/Product Add.*
- *Price Override.*

  The price override is applied at whatever point you define it in the arbitration plan.

- *Surcharge.*
- *Total Order Discount.*
- *Total Order Surcharge.*

  Total order adjustments are always applied to the total net order value after all other adjustments are applied. Setup of *total order* action types in the arbitration plan adds to the filtering function of the arbitration plan, and it helps to define the sort order of the price rules when performing stop-search processing.

Cascading/Summed

This field appears if *Cascading/Summed* is selected as the arbitration type. Select either *Cascading* or *Summed*, which are specified as valid adjustment methods on the Price Transaction Code page.

Summed price rule adjustments are always totaled and applied to the net price after cascading adjustments are applied. Using Cascading/Summed in the arbitration tree helps to define the sort order of the price rules when processing stop-search price rules. It does not affect the way in which the summed price rule formulas are applied to the transaction.

Decision

Select a decision that is used to break a tie in case the system encounters two nodes that match the rule. This field appears if *Decision* is selected as the arbitration type. Values are:

- *Highest Discount First.*
- *Highest Price First* (highest net price first).
- *Highest Price Override First.*
- *Highest Surcharge First.*
- *Lowest Discount First.*
- *Lowest Price First* (lowest net price first).
- *Lowest Price Override First.*

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- *Lowest Surcharge First.*
- *Rule Name in Ascending Order.*
- *Rule Name in Descending Order.*

Apply Only

Specify the number of adjustments allowed for the selected decision type. This field appears if *Decision* is selected as the arbitration type.

Stop Processing

Select either *Yes* or *No* to indicate if the arbitration plan should stop applying further price adjustments once current matching price rule(s) are applied. This field appears if *Decision* is selected as the arbitration type.

Description and **Price Rule**

Enter a description and select a price rule. These fields appear if *Price Rule* is selected as the arbitration type.

Rule Type

Select the type of price rule to arbitrate. Select:

- *Mutually Exclusive*: to build a node that addresses how Enterprise Pricer should arbitrate mutually exclusive price rules.
- *Regular*: to build a node that addresses how Enterprise Pricer should arbitrate regular price rules.

This field appears if *Price Rule Type* is selected as the arbitration type.

Price Type

Select either *Extended Price* or *Quantity* as the price type used for arbitration.

This field appears if *Price Type* is selected as the arbitration type.

If you specify a price type node (for example, extended price) in the arbitration plan, price rules that use *extended price* as the price type in their formula ranges will be considered for arbitration.

Description and **Pricing Keys**

Enter a description and select pricing key fields for use in the arbitration plan. The list of values is based on the pricing keys established for the transaction type. You can define a node similar to the price rule sequence used in previous releases.

These fields appear if *Pricing Key* is selected as the arbitration type.

Update Tree

Click this button to apply the selections to the arbitration tree.

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Chapter 6

Working with the Pricing Simulator

Understanding the Pricing Simulator

The pricing simulator enables you to test the pricing information that you set up. Use it to view the outcome of pricing under different scenarios or use it to test specific pricing criteria with a particular customer. You can adjust the price rules, price lists, and arbitration plan until you receive the desired pricing adjustments.

Note: This pricing simulator framework is used for testing both non-recurring and recurring price rules.

Running the Pricing Simulator

This section discusses how to run the pricing simulator.

Pages Used to Run the Pricing Simulator

Page Name	*Definition Name*	*Usage*
Simulator Page	EOEP_TEST	Test the pricing information setup with PeopleSoft Enterprise Pricer and select values for the transaction price by keys used in the pricing simulation.
Pricing Criteria Page	EOEP_TEST_LN_KEY	Select and view the line level pricing criteria used in the pricing simulation.
Header Adjustments Page	EOEP_TEST_HD_ADJST	View the details of the adjustments that apply at the order level. The fields on this page are the same as those that you set up on the Price Rule and Price Arbitration page.
Line Adjustments Page	EOEP_TEST_LN_ADJST	View the details of the adjustments that apply to the line. The fields on this page are the same as those that you set up on the Price Rule and Price Arbitration page.

Simulator Page

Use the Simulator page (EOEP_TEST) to test the pricing information setup with PeopleSoft Enterprise Pricer and select values for the transaction price by keys used in the pricing simulation.

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Navigation

Pricing Configuration, Simulator, Simulator

Image: Simulator page (1 of 2)

This example illustrates the fields and controls on the Simulator page (1 of 2).

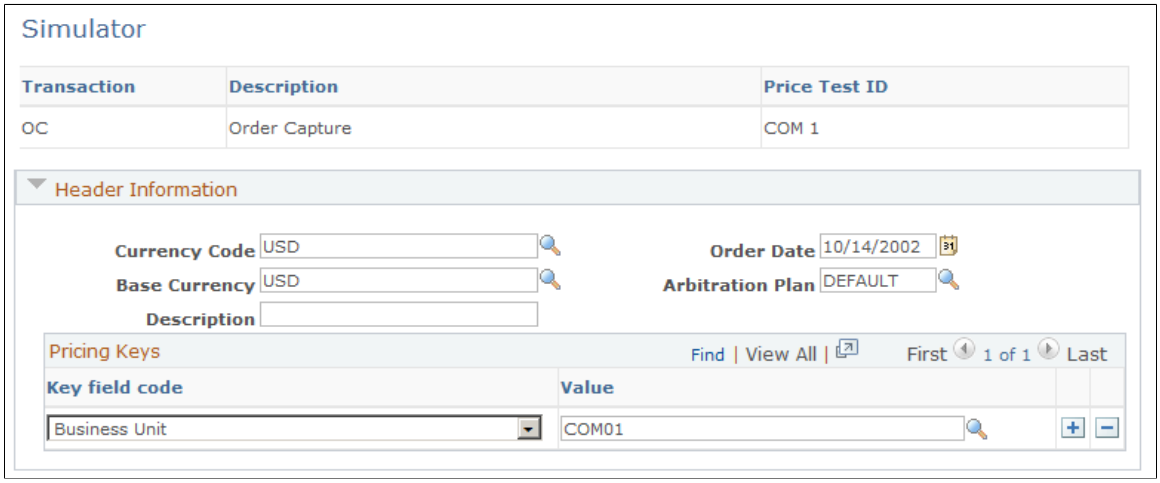
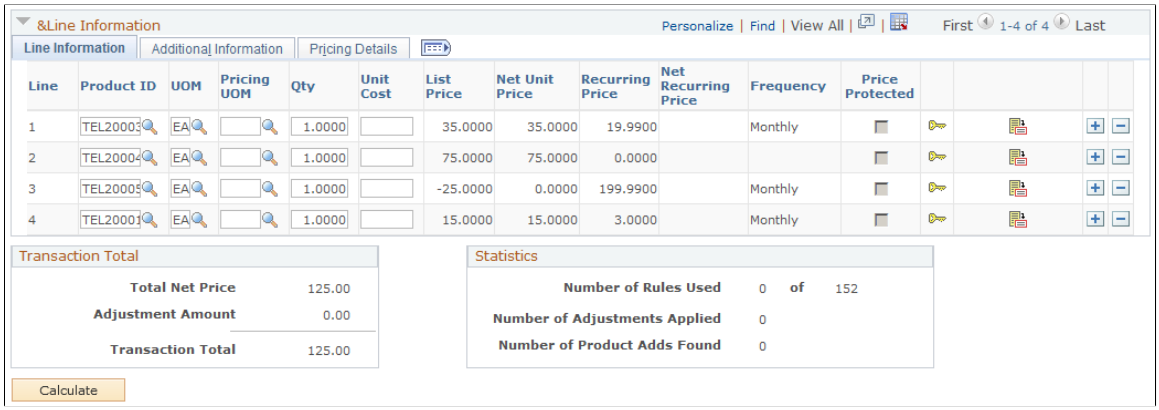


Image: Simulator page (2 of 2)

This example illustrates the fields and controls on the Simulator page (2 of 2).



Note: You update the pricing keys in the simulator in two places. Update the header level pricing keys in the Header Information section of the simulator, or the line level pricing keys on the Pricing Criteria page (by clicking the Pricing Criteria button).

Description Enter descriptive text for the simulation. You can save a simulation for later use.

Header Information

Select information to simulate the transaction header and lines.

Currency Code Enter the currency code of the simulated transaction.

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Base Currency Enter the base currency of the business unit for the simulated transaction.

Order Date Use to determine applicable price formulas. The current date appears by default.

Arbitration Plan The list of available options is based on the transaction that you selected. If you don't select an arbitration plan, the default is used.

Pricing Keys

The data in this section represents the transaction header and line information.

Key field code Represents the transaction field used to match to the price rules. The available values are based on the pricing keys established for the transaction.

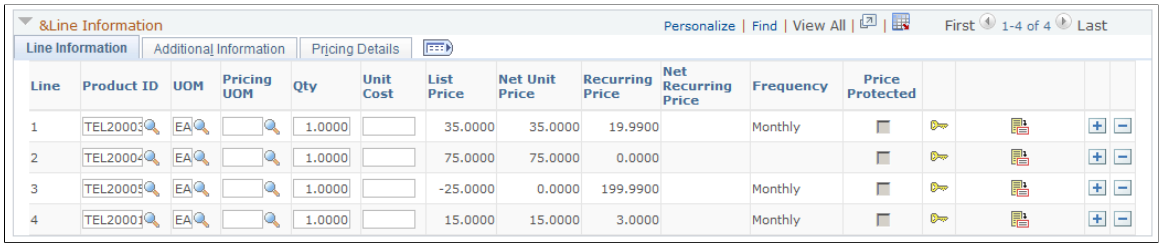
Value Represents the transaction value of the key field code. The available values are based on the selection in the Key field code field.

Line Information

Select the Line Information tab.

Image: Line Information: Line Information section of the Simulator page

This example illustrates the fields and controls on the Line Information: Line Information section of the Simulator page.



Line	Product ID	UOM	Pricing UOM	Qty	Unit Cost	List Price	Net Unit Price	Recurring Price	Net Recurring Price	Frequency	Price Protected
1	TEL20003	EA		1.0000		35.0000	35.0000	19.9900		Monthly	
2	TEL20004	EA		1.0000		75.0000	75.0000	0.0000			
3	TEL20005	EA		1.0000		-25.0000	0.0000	199.9900		Monthly	
4	TEL20001	EA		1.0000		15.0000	15.0000	3.0000		Monthly	

Select product, unit of measure, and quantity to simulate the transaction line detail.

List Price Displays the list or base price for the product.

Net Unit Price and **Net Recurring Price** Displays the one-time and recurring prices after the adjustments are applied.

Recurring Price and **Frequency** Displays the list recurring price defined for the corresponding product. The origin of these field values is as specified in the List Price Origin field in the Pricing Details tab.

Free Periods Indicates any applicable free period promotion.

Price Protected Select if the product is price protected on the applied price list.

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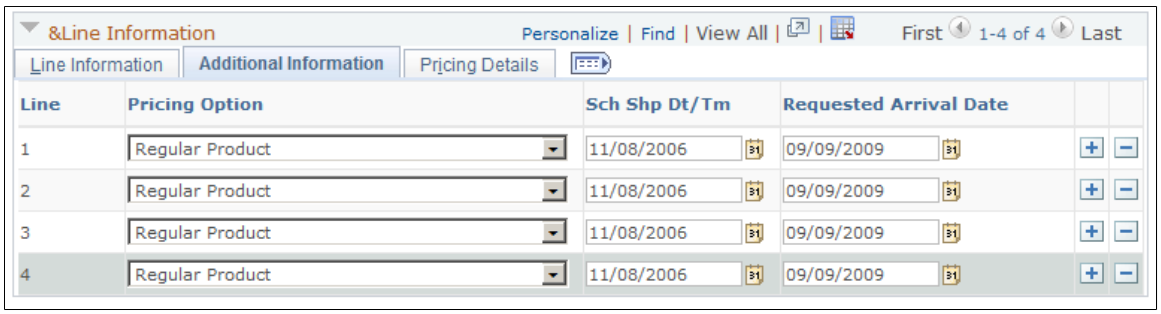
Pricing Criteria Click to access the Pricing Criteria page to edit or view the pricing keys for additional line level transaction information (in addition to the pricing keys on the Simulator page). The available values are based on the pricing keys established for the transaction.

Line Adjustments Click to access the Line Adjustments page to view the line level price adjustments for the simulation. The button is visible only if header or line adjustments exist that match the criteria of the price simulation.

Select the Additional Information tab.

Image: Line Information: Additional Information section of the Simulator page

This example illustrates the fields and controls on the Line Information: Additional Information section of the Simulator page.



Default schedule ship and arrival dates for the order are available here and they can be updated as necessary.

Select the Pricing Details tab.

Image: Line Information: Pricing Details section of the Simulator page

This example illustrates the fields and controls on the Line Information: Pricing Details section of the Simulator page.

List Price Origin Displays the origin of the list price. Values are:

Price List: The price is retrieved from a price list. The price list ID appears next to the Price List Origin field.

Price List (base): The price is retrieved in the base currency from a price list. The price list ID appears next to the Price List Origin field.

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Product Price: The price is retrieved from the Product Price definition.

Product Price (base): The list price is retrieved in the base currency from the Product Price definition.

Price List ID Displays the ID for the price list from which the list price was retrieved. It applies to the *Price List (base)* origin.

Pricing Base Price Displays the base price for the item in the pricing UOM.

Pricing List Price Displays the list price for the item in the pricing UOM.

Pricing Net Unit Price Displays the net unit price for the item in the pricing UOM.

Pricing Recurring Price Displays the recurring price for the item in the pricing UOM.

Payment Terms Displays the terms retrieved from the price rule that match the simulation.

Note: This option is used in PeopleSoft SCM installations only.

Margin Violated This box is checked if the line violates any minimum or maximum margin rules.

Product Adds

This section, if applicable, displays any giveaway/product adds price rules that applied to any given order lines in the simulation.

Image: Product Adds section of the Simulator page

This example illustrates the fields and controls on the Product Adds section of the Simulator page.

Transaction Total

View the total net price (one-time charge) for the simulated transaction including adjustments that apply to the entire order (total order discounts and total order surcharges).

Statistics

This section displays statistical results of the simulation.

Calculate

Calculate Click to calculate or recalculate the price simulation and view the price adjustments.

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Pricing Criteria Page

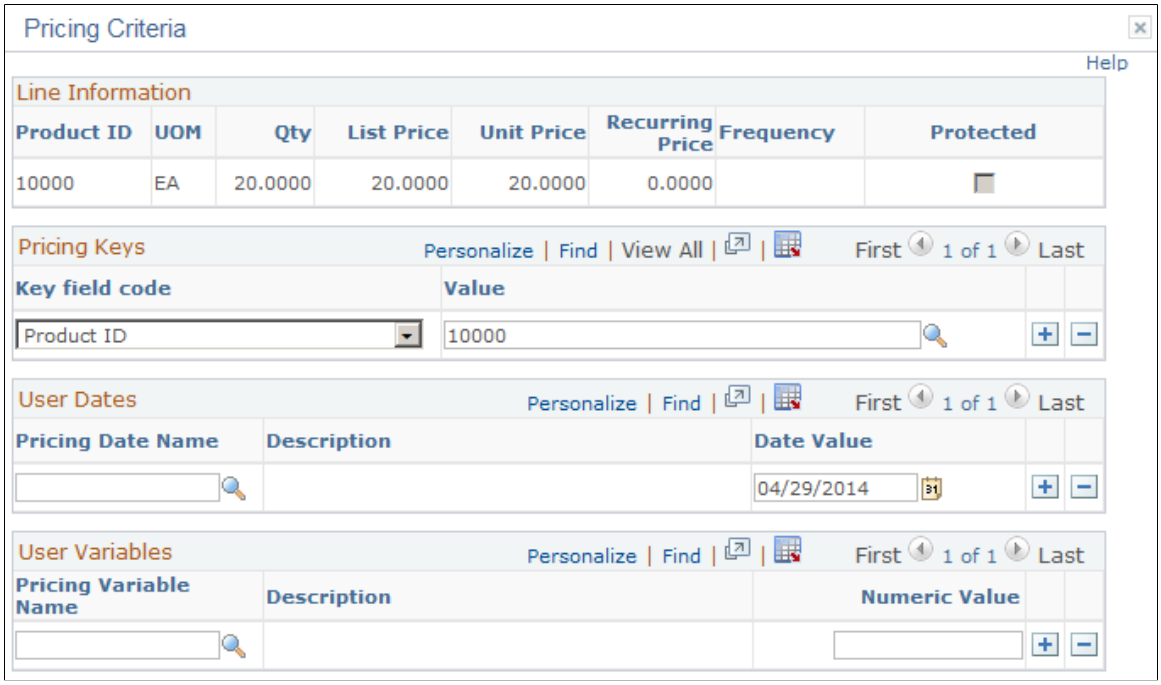
Use the Pricing Criteria page (EOEP_TEST_LN_KEY) to select and view the line level pricing criteria used in the pricing simulation.

Navigation

Click the Pricing Criteria button on the Simulator page.

Image: Pricing Criteria page

This example illustrates the fields and controls on the Pricing Criteria page.



Line Information

Represents the transaction line level information.

Pricing Keys

Key field code Displays values based on the pricing keys established for the transaction. You can select different value to create different pricing simulations.

Value Displays values based on the selection in the Key field code field. After updating the field, click the Calculate button on the Simulator page to view the results.

User Dates

Displays the dates that are used in the simulation.

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User Variables

Displays any pricing variables that are used in the simulation.

Header Adjustments Page

Use the Header Adjustments page (EOEP_TEST_HD_ADJST) to view the details of the adjustments that apply at the order level.

The fields on this page are the same as those that you set up on the Price Rule and Price Arbitration page.

Navigation

Click the button in the Transaction Total section of the Simulator page.

This page lists the price rule adjustments that are applied at the order level in the simulation. The Adjustments section of the Header Adjustments page and the Line Adjustments page is the same.

Line Adjustments Page

Use the Line Adjustments page (EOEP_TEST_LN_ADJST) to view the details of the adjustments that apply to the line.

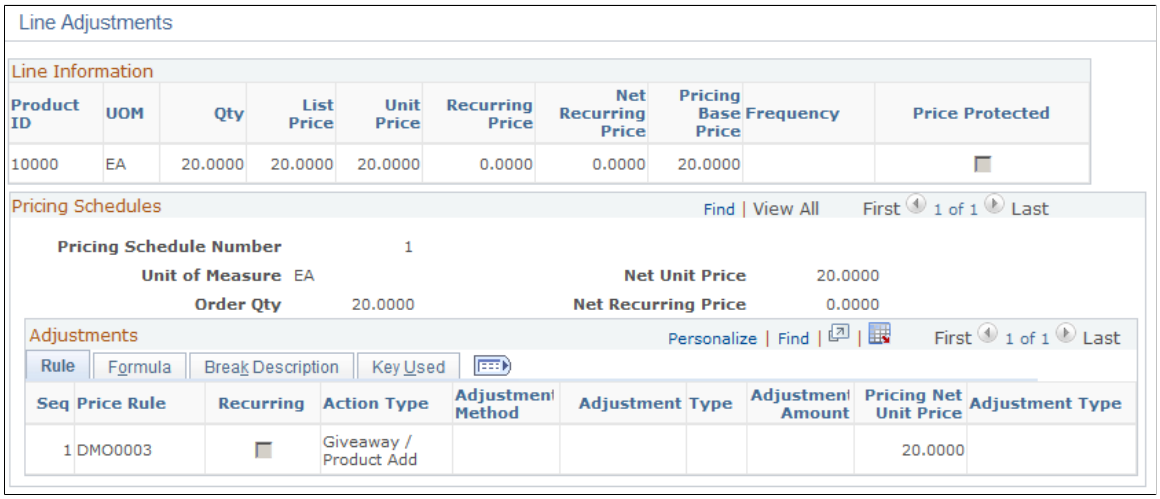
The fields on this page are the same as those that you set up on the Price Rule and Price Arbitration page.

Navigation

Click a button in the Line Information section of the Simulator page.

Image: Line Adjustments page

This example illustrates the fields and controls on the Line Adjustments page.



This page lists the price rule adjustments that are applied to the order line being viewed in the simulation.

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