Oracle® Advanced Pricing
User’s Guide
Release 12.2
Part No. E48845-01

September 2013
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**Send Us Your Comments**

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Windows and Navigation Paths

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Oracle welcomes customers' comments and suggestions on the quality and usefulness of this document. Your feedback is important, and helps us to best meet your needs as a user of our products. For example:

- Are the implementation steps correct and complete?
- Did you understand the context of the procedures?
- Did you find any errors in the information?
- Does the structure of the information help you with your tasks?
- Do you need different information or graphics? If so, where, and in what format?
- Are the examples correct? Do you need more examples?

If you find any errors or have any other suggestions for improvement, then please tell us your name, the name of the company who has licensed our products, the title and part number of the documentation and the chapter, section, and page number (if available).

Note: Before sending us your comments, you might like to check that you have the latest version of the document and if any concerns are already addressed. To do this, access the new Oracle E-Business Suite Release Online Documentation CD available on My Oracle Support and www.oracle.com. It contains the most current Documentation Library plus all documents revised or released recently.

Send your comments to us using the electronic mail address: appsdoc_us@oracle.com

Please give your name, address, electronic mail address, and telephone number (optional).

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If you require training or instruction in using Oracle software, then please contact your Oracle local office and inquire about our Oracle University offerings. A list of Oracle offices is available on our Web site at www.oracle.com.
Preface

Intended Audience


This guide assumes users have a working knowledge of the following:

- Principles and customary practices of the business area.

- Oracle Advanced Pricing
  Oracle suggests that users who have never used Oracle Advanced Pricing attend one or more of the Oracle Applications training classes available through Oracle University.

- Oracle Self Service Web Applications
  To learn more about Oracle Self Service Web Applications, read the Oracle Self-Service Web Applications Implementation Manual.

- Oracle Applications graphical user interface
  To learn more about the Oracle Applications graphical user interface, read the Oracle E-Business Suite User’s Guide.

Other Information Sources

You can choose from many sources of information, including documentation, training, and support services, to increase your knowledge and understanding of Oracle Advanced Pricing.

When this manual refers to other Oracle Applications documentation, use only the Release 12 versions of those guides.
Online Documentation

All Oracle Applications documentation is available online (HTML or PDF).

- PDF Documentation: See the Online Documentation CD for current PDF documentation for your product with each release. This Documentation CD is also available on My Oracle Support and is updated frequently.

- Online Help: You can refer to Oracle Applications Help for current HTML online help for your product. Oracle provides patchable online help, which you can apply to your system for updated implementation and end user documentation. No system downtime is required to apply online help.


See Related Information Sources on page xiii for more Oracle E-Business Suite product information.

Documentation Accessibility

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

Access to Oracle Support

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

Structure

1 Oracle Advanced Pricing
2 Price Lists
3 Modifiers
4 Formulas
5 Qualifiers and Qualifier Groups
6 Multicurrency Conversion Lists
7 Agreements
8 Archiving and Purging Pricing Entities
9 Pricing Engine Request Viewer
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11 Reports and Concurrent Programs
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Related Information Sources

Oracle Advanced Pricing shares business and setup information with other Oracle Applications products. Therefore, you may want to refer to other guides when you set up and use Oracle Advanced Pricing. You can read the guides online by choosing Library from the expandable menu on your HTML help window, by reading from the Oracle Applications Document Library CD included in your media pack, or by using a Web browser with a URL that your system administrator provides. If you require printed guides, you can purchase them from the Oracle Store at http://oraclestore.oracle.com.

Integration Repository

The Oracle Integration Repository is a compilation of information about the service endpoints exposed by the Oracle E-Business Suite of applications. It provides a complete catalog of Oracle E-Business Suite’s business service interfaces. The tool lets users easily discover and deploy the appropriate business service interface for integration with any system, application, or business partner.

The Oracle Integration Repository is shipped as part of the E-Business Suite. As your instance is patched, the repository is automatically updated with content appropriate for the precise revisions of interfaces in your environment.

You can navigate to the Oracle Integration Repository through Oracle E-Business Suite Integrated SOA Gateway.

Guides Related to All Products

Oracle E-Business Suite User’s Guide

This guide explains how to navigate, enter data, query, and run reports using the user interface (UI) of Oracle E-Business Suite. This guide also includes information on setting user profiles, as well as running and reviewing concurrent requests.

Guides Related to This Product

Oracle Advanced Pricing Implementation Guide

This manual contains the information you need to set up, implement, and administer Oracle Advanced Pricing and related functionality such as pricing security.

Oracle Order Management User’s Guide

This guide describes how to enter sales orders and returns, copy existing sales orders, schedule orders, release orders, create price lists and discounts for orders, and create
Installation and System Administration

Oracle Advanced Pricing Implementation Guide
This manual contains the information you need to set up, implement, and administer Oracle Advanced Pricing.

Oracle E-Business Suite Concepts
This book is intended for all those planning to deploy Oracle E-Business Suite Release 12, or contemplating significant changes to a configuration. After describing the Oracle E-Business Suite architecture and technology stack, it focuses on strategic topics, giving a broad outline of the actions needed to achieve a particular goal, plus the installation and configuration choices that may be available.

Oracle E-Business Suite Installation Guide: Using Rapid Install
This book is intended for use by anyone who is responsible for installing or upgrading Oracle E-Business Suite. It provides instructions for running Rapid Install either to carry out a fresh installation of Oracle E-Business Suite Release 12, or as part of an upgrade from Release 11i to Release 12. The book also describes the steps needed to install the technology stack components only, for the special situations where this is applicable.

Oracle Applications Upgrade Guide: Release 11i to Release 12.1.1
Refer to this guide if you are upgrading your Oracle applications. This guide describes the upgrade process and lists database and product-specific upgrade tasks. You must be either at Release 10.7 (NCA, SmartClient, or character mode) or Release 11.0, to upgrade to Release 11i. You cannot upgrade to Release 11i or newer releases directly from releases prior to 10.7.

Oracle E-Business Suite Setup Guide
This guide contains information on system configuration steps, including defining concurrent programs and managers, enabling Oracle Applications Manager features, and setting up printers and online help.

Oracle E-Business Suite Maintenance Guide
This guide provides information for frequent tasks such as monitoring your system with Oracle Applications Manager, administering Oracle E-Business Suite Secure Enterprise Search, managing concurrent managers and reports, using diagnostic utilities including logging, managing profile options, and using alerts.
Oracle E-Business Suite Security Guide
This guide describes User Management, data security, function security, auditing, and security configurations.

Oracle Alert User's Guide
This guide explains how to define periodic and event alerts to monitor the status of Oracle Applications data.

Oracle E-Business Suite Developer's Guide
This guide contains the coding standards followed by the Oracle E-Business Suite development staff. It describes the Oracle Application Object Library components needed to implement the Oracle E-Business Suite user interface described in the Oracle E-Business Suite User Interface Standards for Forms-Based Products. It provides information to help you build your custom Oracle Forms Developer forms so that they integrate with Oracle E-Business Suite. In addition, this guide has information for customizations in features such as concurrent programs, flexfields, messages, and logging.

Other Implementation Documentation

Oracle Workflow Administrator's Guide
This guide explains how to complete the setup steps necessary for any Oracle Applications product that includes workflow-enabled processes, as well as how to monitor the progress of runtime workflow processes.

Oracle Workflow User's Guide
This guide explains how Oracle Applications users can view and respond to workflow notifications and monitor the progress of their workflow processes.

Oracle Workflow API Reference
This guide describes the APIs provided for developers and administrators to access Oracle Workflow.

Oracle E-Business Suite Flexfields Guide
This guide provides flexfields planning, setup, and reference information for the Oracle E-Business Suite implementation team, as well as for users responsible for the ongoing maintenance of Oracle E-Business Suite product data. This guide also provides information on creating custom reports on flexfields data.

Oracle eTechnical Reference Manuals
Each eTechnical Reference Manual (eTRM) contains database diagrams and a detailed
description of database tables, forms, reports, and programs for a specific Oracle
Applications product. This information helps users convert data from existing
applications, integrate Oracle Applications data with non-Oracle applications, and write
custom reports for Oracle Applications products. Oracle eTRM is available on My
Oracle Support.

Oracle Applications Message Manual

This manual describes all Oracle Applications messages. The guide is available in
HTML format on the documentation CD-ROM.

Training and Support

Training

Oracle offers a complete set of training courses to help users and their staff master
Oracle Advanced Pricing and reach full productivity quickly. These courses are
organized into functional learning paths, so users take only those courses appropriate to
their jobs or areas of responsibility. You have a choice of educational environments. You
can attend courses offered by Oracle University at any one of our many education
centers, you can arrange for our trainers to teach at your facility, or you can use Oracle
Learning Network (OLN), Oracle University’s online education utility. In addition,
Oracle training professionals can tailor standard courses or develop custom courses to
meet your needs. For example, you may want to use your organization structure,
terminology, and data as examples in a customized training session delivered at your
own facility.

Support

From on-site support to central support, our team of experienced professionals provides
the help and information needed to keep Oracle Advanced Pricing working for all
users. This team includes the technical representative, account manager, and Oracle's
large staff of consultants and support specialists with expertise in your business area,
managing an Oracle server, and your hardware and software environment.

Do Not Use Database Tools to Modify Oracle E-Business Suite Data

Oracle STRONGLY RECOMMENDS that you never use SQL*Plus, Oracle Data
Browser, database triggers, or any other tool to modify Oracle E-Business Suite data
unless otherwise instructed.

Oracle provides powerful tools you can use to create, store, change, retrieve, and
maintain information in an Oracle database. But if you use Oracle tools such as
SQL*Plus to modify Oracle E-Business Suite data, you risk destroying the integrity of
your data and you lose the ability to audit changes to your data.

Because Oracle E-Business Suite tables are interrelated, any change you make using an
Oracle E-Business Suite form can update many tables at once. But when you modify Oracle E-Business Suite data using anything other than Oracle E-Business Suite, you may change a row in one table without making corresponding changes in related tables. If your tables get out of synchronization with each other, you risk retrieving erroneous information and you risk unpredictable results throughout Oracle E-Business Suite.

When you use Oracle E-Business Suite to modify your data, Oracle E-Business Suite automatically checks that your changes are valid. Oracle E-Business Suite also keeps track of who changes information. If you enter information into database tables using database tools, you may store invalid information. You also lose the ability to track who has changed your information because SQL*Plus and other database tools do not keep a record of changes.
This chapter covers the following topics:

- Overview of Oracle Advanced Pricing
- Pricing Security
- Using Oracle Advanced Pricing in the HTML Interface
- Pricing Components

### Overview of Oracle Advanced Pricing

Oracle Advanced Pricing supports e-business applications by providing a flexible pricing engine that executes pricing and promotional calculations for Oracle Order Management and other Oracle Applications. This application is licensed as Oracle Advanced Pricing.

**Note:** For more information on implementation steps, setup procedures, and profile options, see: *Oracle Advanced Pricing Implementation Guide*.

Oracle Advanced Pricing provides the flexibility to meet the needs of complex pricing situations for a range of demanding industry business requirements which include:

- Consumer goods, telecommunications, services, high technology, automotive businesses, and aerospace/defense businesses that sell to other businesses.

- Telemarketing, mail order catalog, and web store businesses that sell directly to consumers.

Oracle Advanced Pricing provides advanced pricing capabilities that enable you to set up your pricing information and to model complex data relationships to determine the correct price.

With Oracle Advanced Pricing, you can perform the following functions:
• Create a list price for an item or item hierarchy.

• Set a list price based on volume breaks.

• Assign security privileges to pricing users to control their view or maintain access to price lists and modifiers. You can also control which operating units can use price lists or modifiers.

• Define price breaks using block pricing to evaluate prices as a single block. For example, if item weight is between 5 and 15 pounds, then the price is $5. If the weight is between 16 and 30 pounds, then the price is $10.

• Maintain price lists by performing tasks such as searching across a single or multiple price lists and updating the price, formula, or effective dates of price list lines.

• Usage pricing and counter pricing: calculate price based on usage brackets.

• Use price breaks.

• Set a list price and discounts at multiple levels of flattened hierarchies and use precedence to select the right price or discount.

• Define a formula to dynamically calculate the price based on a simple or a complex formula or to create a price relation (for example, the price of item A is the price of Item B + $20).

• Create multiple currency conversion criteria for a single base currency price list.

• Set up General Services Administration (GSA) prices.

• Define pricing agreements.

• Get a price or discount from an external source (for example, my price = competitor’s price - 5 percent).

• Set a percent/fixed/lump sum discount or surcharge.

• Apply N-Dimensional Pricing (for example, if the width is between 2 and 4 and thickness is between 1 and 3, then multiply the price by 0.3).

• Apply a benefit/surcharge based on the total volume of multiple order lines of the same order.

• Set up deals and promotions.
  • Buy one get one free.
• Coupon issue (spend more than $1,000 and get a coupon valued at $100 for a future purchase).

• Other item discount (for example, buy A and B, and get 20 percent off on C).

• Item upgrade (for example, for the price of a 12-oz. shampoo, get a 16-oz. shampoo).

• Term substitution (spend more than $100 and get upgraded to air shipment).

• Set discounts as to be accrued.

• Set up freight and special charges.

• Mark discounts as exclusive or incompatible to each other.

• Create cascading discounts (discounts to be applied on subtotals).

• Set spending and usage constraints to stop application of a promotion when the limit is reached.

• Query on multiple modifier criteria across all modifier setups.

• Create your own eligibility conditions by grouping the qualifiers.

• Define your own qualifier and qualifier mapping rules (for example, if today = Sunday, then give a 10 percent discount).

• View the criteria that the engine uses to select price and modifiers for a pricing request.

Oracle Advanced Pricing and its pricing engine work through open, business object oriented application programming interfaces (APIs). For more information about APIs, see Oracle Order Management Open Interfaces, API, & Electronic Messaging Guide.

**General Pricing Concepts**

The pricing engine receives transaction information, prepares pricing requests, selects price lists and modifier lists, and applies price adjustments (benefits) to the transaction. The pricing engine, which appears in the diagram shown later in this section, evaluates the following questions to determine a price:

• Who qualifies for prices and benefits?

• What is the product hierarchy and what pricing attributes pertain to this item or service?
• How should I adjust the order price or order line price?

Who Qualifies?
Pricing qualifiers control who is eligible for certain prices (price lists) and benefits (modifiers).

Some examples of qualifiers are:
• Customer Class = VIP
• Order Type = Special

What is the Product Hierarchy and the Pricing Attributes?
The product hierarchy and pricing attributes control what is being priced or modified on a price list or modifier list.

An example of a product hierarchy with pricing attributes is All plastic items of grade B quality get a 50 percent discount.

How Should I Adjust the Price?
Pricing modifiers control how a modifiers affect the final price (selling price).

Some examples of modifiers are:
• Receive discount of 2 percent
• Buy 1, get 1 free
• Get 480-ml shampoo for the same price as 360-ml shampoo
• Get a coupon for 100 currency units if you buy more than 1,000 currency units

Pricing Engine
The advanced, flexible pricing engine performs pricing and benefit calculations for Oracle Order Management products and Oracle Customer Relationship Management products through open APIs.

The pricing engine performs the following functions:
• Prepares the price request structure
  The calling applications submit price requests, which the pricing engine configures into a pricing request structure. The pricing request structure provides information about all the qualifiers and product pricing attributes.

• Selects applicable price lists and modifier lists
  This function selects which price lists are eligible for the current pricing request. It uses the qualifiers and pricing attributes to select an eligible list of prices or modifiers that it can apply to the pricing request lines according to the certain rules.
• **Determines base list price**

This function takes the validated price list lines and applies them to the pricing request lines. You can specify the list price on a price list as unit price, percent price, or formula.

• **Applies benefits and adjustments (from modifier lists) to list price to determine selling price**

This function takes the validated modifier list lines and applies them to the pricing request lines to provide price adjustments, such as discounts, price breaks, surcharges, coupons, item and term substitutions, and other item discounts. Discount and surcharge modifiers affect the selling price; freight charge modifiers do not affect the selling price.

• **Calculates final selling price**

This pricing overview diagram shows the relationship of the main pricing concepts described previously in the text:

- A sales order
- The qualifier hierarchy
- The pricing request
- The pricing engine
- The list price and adjustments
- The setup entities: price lists, qualifiers, modifiers, products, formulas, and pricing attributes
Pricing Security

In Oracle Applications, a basic level of security called *function security* is used to manage users’ access to each application and to control their access to windows, functions, and reports within an application.

Typically, the System Administrator administers function security and assigns system access at the responsibility or user level. See the *Oracle E-Business Suite Security Guide* for more information about function security.

Oracle Advanced Pricing provides an additional level of security (in addition to the existing functional security) called *pricing security*. Pricing security can be used to
restrict pricing activities such as updating and viewing pricing entities to users granted specific access privileges. Pricing security is set up and maintained in the HTML user interface (UI) by a user who is assigned the Oracle Pricing Administrator responsibility. See the Oracle Advanced Pricing Implementation Guide, Pricing Security section, for more information on pricing security.

Security Privileges
Security privileges enable you to define who can access each pricing entity and the level of access permitted: View Only or Maintain. The Pricing Administrator is typically responsible for setting up security privileges. For more information on security privileges and other security features, see Oracle Advanced Pricing Implementation Guide.

Related Topics
Oracle Advanced Pricing Implementation Guide, Pricing Security

Using Oracle Advanced Pricing in the HTML Interface
For many pricing features, Oracle Advanced Pricing provides an HTML-based user interface (UI) that features guided steps and user-friendly pages for setting up and maintaining modifiers, price lists, and qualifiers. You can use the HTML UI to complete many of the pricing tasks that were previously available only in the Oracle Forms-based interface.

To access the HTML UI, select the Oracle Pricing User responsibility and click the Home link to display the Oracle Advanced Pricing Home page.

Note: The HTML UI is available only in Oracle Advanced Pricing.

The following examples compare the HTML UI and Forms-based UI used in Oracle Advanced Pricing. The first example shows an Oracle Advanced Pricing HTML page used to create a price list.
The second example shows an Oracle Advanced Pricing Forms-based window used to create a price list.
You can use the HTML UI to complete the following common pricing tasks:

- Create price lists, price list lines, and price break lines for price lists.

- Create the following modifier list types:
  - Deal List
  - Discount List
  - Promotional Goods
  - Surcharge List

- Create the following modifier line types:
  - Discount
  - Surcharge
  - Price Break
  - Promotional Goods
• Maintain price lists in the Price List Maintenance feature.

• Create qualifiers for price lists and modifiers.

• Search for price lists and modifiers.

Cross-Format Compatibility
Pricing entities such as price lists, modifiers, or qualifiers created in one format, such as the HTML UI, can be maintained in the other. For example, if you created a price list in the Forms-based UI, you could update and maintain that price list in the HTML UI.

For features unavailable in HTML, you can still use the Forms-based UI to set up and maintain pricing functions and features, as in previous releases. If an entity cannot be created in HTML, for example, qualifier groups, then you must use the Forms-based UI for these tasks.

Related Topics
Oracle Advanced Pricing Home page (HTML Interface), page 2-39
Using Modifiers in the HTML User Interface, page 3-62
Using Price Lists in the HTML User Interface, page 2-2
Creating Qualifiers (HTML Interface), page 5-4
Using the Price List Maintenance feature (HTML Interface), page 2-62

Pricing Components

Qualifiers and Qualifier Groups
Qualifiers control who receives benefits, and can be used to assign list prices, discounts, and promotions to:

• Specific customers

• Customer groups

• Order types

• Order amount

• Specific customer or group of customers

Qualifier groups allow you to group multiple conditions and to assign them to a single benefit. For more information, see Oracle Advanced Pricing User’s Guide, Qualifiers.
Attributes and Attribute Mapping

Pricing attributes control the items being priced or modified on a price list or modifier list.

Qualifier and product attributes are used to define customer or product hierarchies:

- A product hierarchy element defines product pricing characteristics, such as a product item, item number, category, or brand.

- A customer hierarchy element defines customer pricing characteristics, such as customer name or customer number.

Attribute mapping enables you to extend your pricing capabilities by using data from a wide variety of nonstandard sources to drive your pricing actions. The data sources for the qualifiers and pricing attributes can be from within or outside of Oracle Applications. Using the attribute management feature, you can complete the following tasks:

- Create new contexts and attributes.

- Update existing contexts and attribute properties.

- Disable existing attributes.

For information about creating new contexts and attributes, attribute management, mapping rules, and associated functionality, see the *Oracle Advanced Pricing Implementation Guide*.

Price Lists

Price lists contain prices and currencies associated with products and services. Each price list contains basic header information with one or more item lines. Price lists can have:

- Prices for specific products and services or for product groups

- Prices as absolute values, percents of other prices, or as formulas

- Prices applicable to the entire organization or to one operating unit

- Negative prices

Service Items

The pricing engine prices service items in the same way that it prices inventory items. You can price service items as follows:

- Unit price: Set a list price for the service item.
• Percent price: Set a percentage; the price of the service item is that percentage of the serviceable item list price.

For more information, see Oracle Advanced Pricing User’s Guide, Price Lists.

Modifier Lists

Pricing modifiers control how the pricing engine can modify the pricing requests and pricing request lines. You can select from the following modifier list types and then add modifier lines to define the actual adjustments or benefit such as a 10 percent discount:

• Deal

• Discount List

• Freight and Special Charge List

• Promotion

• Surcharge List

The following table shows scenarios with examples of the qualifiers, modifiers, and pricing attributes that support them:

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Qualifier</th>
<th>Modifier</th>
<th>Product Hierarchy</th>
<th>Pricing attribute</th>
</tr>
</thead>
<tbody>
<tr>
<td>XYZ Corporation gets 10% discount on all the products</td>
<td>Customer = XYZ Corporation</td>
<td>10% discount</td>
<td>Null</td>
<td>Null</td>
</tr>
<tr>
<td>If Order_Type = Return and customer class = Retail then apply 15% surcharge for all electronic items.</td>
<td>Order Type = Return, Customer Class = Retail</td>
<td>15% surcharge</td>
<td>Electronic items</td>
<td>Null</td>
</tr>
<tr>
<td>Grade B motor oil gets $20 off</td>
<td>Null</td>
<td>$20.00 discount</td>
<td>Motor oil</td>
<td>Grade B</td>
</tr>
</tbody>
</table>

For more information on modifier list and line types and using modifiers, see Oracle Advanced Pricing User’s Guide, Overview of Modifiers, page 3-1.
**Formulas**

Pricing formulas allow the pricing engine to determine item prices based on the following:

- A combination of pricing attributes and factors based on the value of a pricing attribute
- The list price on the price list line to which the formula is attached
- The list price on any specific price list line
- A numeric constant
- A customizable function

You can also attach a formula to a modifier line to calculate discounts. A price list line uses two types of formulas:

- Static: Specify the formula and execute a concurrent process that calculates absolute price values.
- Dynamic: Specify the formula, and the pricing engine uses the formula in its calculations each time that someone orders the product.

For more information, see *Oracle Advanced Pricing User’s Guide, Formulas, page 4-1.*

**List Prices**

Decide whether your prices are at an individual product level, at the product hierarchy, or both. Also, determine the precedence levels in your organization. Determine if you base list prices on the volume purchased. Plan the number of price lists. To get a better performance, minimize the number of price lists and price list lines by using a combination of qualifiers, modifiers, pricing attributes, and formulas.

**Modifier Types**

Categorize your discounts and promotions into the appropriate modifier types. Each modifier type produces different results: for example, the Other Item Discount requires the customer to order the original item as a prerequisite to offering the discount; however, the Promotional Goods discount adds a new line to the order.

**Buckets**

The pricing engine may calculate different selling prices depending on how you group your discounts into buckets. Plan your cascading discounts so that you can assign discounts to buckets based on the subtotal on which each discount needs to be applied.
Phases

The pricing phase assigned to a modifier determines when the adjustment or benefit of the modifier is applied. For example, a modifier assigned to the List Line Adjustment phase is applied after leaving the order line, while a modifier assigned to the All Lines Adjustment phase is applied only after the order line is saved.

Decide to which event and phase each discount and promotion belongs. You should place:

- Line-level discounts in the Line Adjustments phase
- A promotion such as Buy items A and B and get a discount on Item C in the All Lines phase
- Modifiers to apply when orders ship in a ship event

Phases are also associated with order events. To apply a discount only when an order is shipped, assign the modifier to a phase that runs in the SHIP event.

Suppose you create a Discount modifier (10 percent discount) and assigned it to the All Lines Adjustment phase. Then suppose a sales order for Item AS54888 (with list price $200) and an ordered quantity of 1 qualifies for that modifier. If the order line is entered but not saved, only the list price ($200) is retrieved. However, when the order line is saved or you move to the next line, the modifier assigned to the All Lines Adjustment phase is applied and the price changes to $190.

See the Oracle Advanced Pricing Implementation Guide for more information on pricing phases.

Incompatibility Groups and Exclusivity

Assigning modifier lines to an incompatibility group enables the pricing engine to use incompatibility processing to resolve incompatibility between multiple eligible modifier lines. If an incompatibility occurs, the pricing engine reviews the modifier lines in the incompatibility group (assigned for a specific phase), evaluates their precedence value from highest to lowest priority, and then selects the modifier line with the highest priority. In Precedence processing, the lower value has the higher precedence (number 1 has the highest priority). The precedence value is evaluated from both the product precedence and qualifier precedence. The highest precedence (lowest value) is determined based on the precedence values in the qualifier and product precedence fields. For more information, see Oracle Advanced Pricing Implementation Guide, Incompatibility Groups and Exclusivity.

Modifier Levels

Categorize the modifiers into line, group line, and order modifiers. How the pricing engine treats a modifier can change, depending on your classification.
Automatic, Override, Asked for, and Accrual Flags

It is important that you understand how the pricing engine operates with these flags so that you can set them to reflect your business needs. Analyze all of your discounts, promotions, and charges in terms of these features.

Other Setups

Precedence preferences, profile options, break types, and pricing attributes control the behavior of the pricing engine. Determine the values for these settings that reflect your business needs.

Precedence Setups

Evaluate default precedence values for qualifiers and product hierarchy-related attributes and change them to reflect your business needs. When incompatibility is encountered between price lists or modifier lists, the pricing engine attempts to resolve the incompatibility by ordering the qualifier attributes and product attributes from highest to lowest priority (number 1 is the highest priority).

For more information, see Oracle Advanced Pricing Implementation Guide, Precedence and Best Price.

Units of Measure

Decide the pricing units of measure for each item. The pricing units of measure determine if the pricing engine selects a modifier.

The list price in the order unit of measure overrides the precedence. When the pricing engine processes a pricing request, it first chooses eligible price list lines whose unit of measure matches the calling unit of measure. If multiple price list lines with matching units of measure exist, the pricing engine chooses the price list line with the greatest precedence (the lower the number, the greater the precedence). If no price list lines with matching units of measure exist, the pricing engine looks for price list lines with a selected primary unit of measure flag for that item, and then it chooses the best precedence price list line (attributes are defined with a precedence value to resolve incompatibility).

For more information, see Oracle Advanced Pricing Implementation Guide, Unit of Measure.
This chapter covers the following topics:

- Overview of Price Lists
- Creating a Price List
- Creating Price List Lines
- Defining Price Breaks for a Price List Line
- Defining Price Breaks with Block Pricing
- Finding Price List Lines
- Creating a GSA Price List
- Maintaining Price Lists
- Adding Items to a Price List
- Adjusting Prices for a Price List
- Copying a Price List
- Copying a Price List Line
- Oracle Advanced Pricing Home page (HTML Interface)
- Using Price Lists in the HTML User Interface
- Creating a Price List (HTML Interface)
- Creating Price List Lines (HTML Interface)
- Searching for Price Lists (HTML Interface)
- Searching for Price List Lines (HTML Interface)
- Updating a Price List (HTML Interface)
- Updating Price List Lines (HTML Interface)
- Archiving, Deleting, and Purging Price List Information
- Using the Price List Maintenance feature (HTML Interface)
• Searching for Price Lists and Price List Lines (HTML Interface)
• Making Detail Changes across a Selected Group of Lines
• Making Bulk Changes across a Selected Group of Lines

Overview of Price Lists

Price lists are essential to ordering products because each item entered on an order must have a price. Price lists, like modifiers, consist of a header region that defines general information such as effective dates and currency, and price list lines that define item and/or item category prices. For price list lines, you can define price breaks, pricing attributes, and qualifiers.

Note: You can only view or update a price list for your pricing transaction entity and source system. Therefore, the profile options QP: Pricing Transaction Entity profile and QP: Source System Code must match the pricing transaction entity for the price list. For example, if updating an intercompany price list, the profile options should be set to QP: Pricing Transaction Entity = Intercompany Transaction (INTCOM) and QP: Source System Code = Oracle Inventory (INV).

Using Price Lists in the HTML User Interface

Oracle Advanced Pricing provides an HTML-based user interface (UI) that features guided steps, user-friendly pages, and shortcut links for setting up and maintaining modifiers, price lists, and qualifiers.

You can use this HTML format for many tasks that were previously available only using the Oracle Forms-based interface. Tasks that can be completed in HTML are identified by (HTML Interface) in the task title, for example, Creating a Price List (HTML Interface).

Price List Terms

The following defines common price list terms that you will see when setting up and maintaining price lists:

• Effective Dates: Use starting and ending dates to prepare price lists ahead of when they are valid and to ensure they are not used until their start dates.

Important: You cannot create a future-dated price list that has the same name as an existing price list. For example, suppose you have a price list named Price List A, with effective dates 01-Jan-2006 to 31-Dec-2006, and you want to create a second price list named Price
List A, effective 01-Jan-2007 to 31-Dec-2007. The system will not allow you to create the second price list because a price list with the same name already exists.

- Inactive Price Lists: You can temporarily or permanently inactivate a price list by deselecting the Active check box. For inactive price lists, you can still complete the following actions:
  - Query the inactive price list.
  - Update it.
  - Base a formula on an inactive price list.

  **Note:** The pricing engine does select inactive price lists when doing a pricing request. Other applications can call an inactive price list and use relevant information.

- Currency: If you have global customers or do pricing in different currencies, the multi-currency feature enables you to maintain a single price list for multiple currencies. For more information on multi-currency price lists, see Overview of Multicurrency Conversion Lists, page 6-1.

- Round To: The Round To value defines the number of places to the right or left of the decimal point to which the pricing engine rounds prices from price lists and modifiers from modifier lists:
  - A positive number such as 2 indicates the number of places to the left of the decimal point. For example, a round to factor of 2 indicates rounding to the nearest hundreds so 107 rounds to 100.
  - A negative number such as -3 indicates number of places to the right of the decimal point. For example, a round to factor of -3 indicates rounding to the nearest thousands so 1.1445 rounds to 1.145.

The pricing engine rounds the base price and all discount amounts before using them in calculations.

You can limit the rounding factor value by the number of positions you specify in the extended precision format of the price list's currency. The value returned depends on the value that was set for the profile option QP: Unit Price Precision Type:

  - Standard: The rounding factor defaults to the currency’s precision value. You can override the rounding factor to any value greater than or equal to the
currency’s precision value.

- Extended: The rounding factor defaults to the currency’s extended precision value. You can override the rounding factor to any value greater than or equal to the currency’s extended precision value.

  **Note:** If multicurrency is enabled, the Round To field will be disabled and will reflect the Round To value defined for the Multi-Currency Conversion window.

The profile option QP: Selling Price Rounding Options affects the rounding of adjustments. For more information on this and other profile options, see *Oracle Advanced Pricing Implementation Guide*, Profile Options.

- Secondary Price List: The pricing engine uses secondary price lists when it cannot determine the price for an item using the price list assigned to an order. Primary and secondary price lists have the same currency.

  **Note:** You can only add a secondary price list once you enter the currency for the primary price list. This ensures that the secondary price list has the same currency as the primary price list.

If the item you are ordering is not in the primary price list, the pricing engine looks for the price on any attached secondary price list. If the item is found, the pricing engine uses the highest precedence secondary price list (the secondary price list with the lowest value in the precedence field).

If an item appears in both the primary and a secondary price list with the same effective dates, the pricing engine uses the primary price list to price the item. If an item appears on the primary price list but is not active (the effective end date has passed), the pricing engine uses the price on the secondary price list.

  **Note:** The pricing engine does not evaluate qualifiers on secondary price lists; however, some user setups may require them to be evaluated. In these cases, the System Administrator must change the profile QP: Qualify Secondary Price Lists to Yes. See *Oracle Advanced Pricing Implementation Guide*, Profile Options for more information.

- Agreement Price List: Oracle Advanced Pricing allows you to establish agreements with your customers that define the prices, payment terms, and freight terms that you negotiate.

  There are two methods by which you can manage agreements:
• Standard agreements which use standard price lists (PRL)

• Pricing agreements which use agreement price lists (AGR)

  **Note:** If you are unable to query or update the price list after saving or exiting from the window, consult with your Pricing Administrator for access privileges. Your security access privilege may not allow you to access the price list windows.

**Related Topics**

*Oracle Advanced Pricing Implementation Guide*, Pricing Security

Using Oracle Advanced Pricing in the HTML Interface, page 1-7

Using Price Lists in the HTML User Interface, page 2-42

**Creating a Price List**

Price lists consist of a header region where you can define general information such as effective dates and currency, and price list lines that define item and/or item category prices. You can define and maintain multiple price lists.

  **Note:** Oracle Advanced Pricing also provides an HTML-based user interface for setting up and maintaining price lists. See Creating a Price List (HTML Interface), page 2-43.

  If you are using the multicurrency conversion feature, see Overview of Multicurrency Conversion Lists, page 6-1.

You can define the following types of prices for price list lines:

• Unit price: A fixed price.

• Percent Price: A price which is a percent of the price of another item.

• Formula: Multiple pricing entities and constant values related by arithmetic operators. For example, you define the price of an item to be a percentage price of another price list line.

• Price Break: If the price of an item varies with the quantity ordered, you can define bracket pricing or price breaks. The following table displays an example of a price break setup:
**Example of Price Setup**

<table>
<thead>
<tr>
<th>Price Break</th>
<th>Attribute</th>
<th>Value</th>
<th>Value From</th>
<th>Value To</th>
<th>Unit Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Item Number</td>
<td>A11111</td>
<td>0</td>
<td>11</td>
<td>$50</td>
</tr>
<tr>
<td>2</td>
<td>Item Number</td>
<td>A11111</td>
<td>11</td>
<td>100</td>
<td>$45</td>
</tr>
</tbody>
</table>

**Service Items**

The pricing engine prices service items in the same way that it prices inventory items. You can price service items as follows:

- **Unit price**: You set a list price for the service item.
- **Percent price**: You set a percentage; the price of the service item is that percentage of the serviceable item list price. For more information on using service items in price lists, see Service Items, page 2-48.

**Qualifier Grouping Number Options**

You can attach both qualifiers and qualifier groups to a price list. When you attach qualifier groups, all the qualifiers in the qualifier group are attached. You can use qualifier grouping numbers to indicate to the pricing engine how to evaluate the qualifiers. For more information on qualifier groups, see Using Qualifier Grouping Numbers, page 5-12 and Using Qualifier Grouping Numbers across Qualifier Groups, page 5-16.

**To create a price list:**

1. Navigate to the Advanced Pricing - Price Lists window.
2. Enter a Name for the price list.

**Note:** The price list Name should be unique across PTEs (Pricing Transaction Entities) otherwise an error occurs. For example, if a price list named Corporate is created in the Order Management PTE, an error message displays if you create a Corporate price list in the Purchasing PTE.

3. Select the Mobile Download box if you are using an Oracle Mobile application and want to download specific price lists onto a mobile device such as a laptop computer. The default value is No. You can select or clear the Mobile Download box either when creating or updating a price list.

4. To activate the price list, select the Active box.

5. Enter a Description of the price list.

6. Select a price list Currency.

7. Enter a Round To value that is applied to the price list. A positive number indicates the number of places to the left of the decimal point. A negative number indicates number of places to the right of the decimal point. The default is -2. The pricing
engine rounds the base price and all discount amounts before using them in calculations.

The value returned depends on the value that was set for the profile option QP:
Unit Price Precision Type:

- Standard: The rounding factor defaults to the currency’s precision value. You can override the rounding factor to any value greater than or equal to the currency’s precision value.

- Extended: The rounding factor defaults to the currency’s extended precision value. You can override the rounding factor to any value greater than or equal to the currency’s extended precision value.

8. Enter the starting and ending Effective Dates for the price list. The Start Date defaults to the current date.

   - You cannot create a future-dated price list that has the same name as an existing price list. For example, suppose you have a price list named Price List A, with effective dates 01-Jan-2006 to 31-Dec-2006, and you want to create a second price list named Price List A, effective 01-Jan-2007 to 31-Dec-2007. The system will not allow you to create the second price list because a price list with the same name already exists.

   - The effective dates of a QUALIFIER (when attached at the header-level of a modifier or price list) determine the effective dates for the associated price or modifier list. For example, suppose you create a price list with an effective start date of 23-NOV-2005 and no end date. Then you create a qualifier at the header level with effective dates of 10-NOV-2005 and 12-NOV-2005 for customer Computer Service and Rentals. However, after 12-NOV-2005, the price list will not be valid for Computer Service and Rentals or any other customer because the price list has expired.

9. The Global box field is visible only when pricing security is turned on. The Global box is selected by default. If cleared, then the Operating Unit field is displayed for the price list.

10. Operating Unit: Restricts the usage of the price list to the named operating unit.

    If multiorg access is not enabled, the operating unit defaults from profile MO: Operating Unit. This operating unit field cannot be updated by users. If multiorg access is enabled, operating unit default from profile MO: Default Operating Unit. Users can override this default and select an operating unit that they have access to
as defined by MO: Security Profile.

11. Select the default Payment Terms.

12. Select the default Freight Terms and Freight Carrier.

**In the Other Tab**

13. Select the Other tab.

**Advanced Pricing - Price Lists window: Other tab**

14. The Other tab displays the following information, and if applicable, details about the related Sales Agreement:
   - List Source Document Number: The number of the sales agreement associated with the price list.
   - List Source Code: Displays the code for the price list source (BSO will be the source code for sales agreement).
   - Pricing Transaction Entity: Displays the name of the pricing transaction entity creating the price list. This field cannot be updated.
   - Source System Code: Displays the code name for the source system creating the price list such as QP for pricing. This field cannot be updated.
**Note:** The Pricing Transaction Entity and Source System fields display for all price lists regardless of whether there is a related Sales Agreement.

- Shareable box: Indicates if the modifier is shared or not. If non-shareable (the default), then this modifier is specific to that agreement and cannot be used with other sales agreements.

  If shared, the modifier is not exclusive to the sales agreement and can be selected for use with other agreements. Source Document Number: This is the Number of the sales agreement associated with the price list.

  Once you have completed entries in the price list header, you can add price list lines that define the actual items and list prices for the price list.

**Related Topics**

Creating Price List Lines, page 2-10

**Creating Price List Lines**

In the List Lines tab of the price list, you can add price list lines to define the actual items on the price list and their list prices.

**To create price list lines:**

1. Select the List Lines tab in the Advanced Pricing - Price Lists window.
2. Select Item from the Product Context field.

3. Select a Product Attribute for the Item such as Item Number, Item Category, or All Items.

   **Note:** Use All Items to apply the same price to all items in your product hierarchy.

4. Enter a Product Value for the selected product attribute.

5. The UOM (unit of measure) field defaults from the item master of the validation organization. You can change it to any valid unit of measure for that item.

6. Select the Primary UOM box to select the primary pricing unit of measure for the item.

   For example, an item (such as item A11111) in a price list may have two price list lines: one with a UOM of Each (EA)--the primary UOM--and the other with a UOM of Boxes. The pricing engine uses the pricing Primary UOM and the Oracle Inventory UOM conversion information to price an order whose unit of measure does not have a price list line. If an order for item A11111 is placed in the unit of measure Case (CS), the pricing engine accesses the unit of measure conversion tables to convert Case to Each (EA).
7. Select one of the following Line Types:
   - Price Break Header: To set up price breaks for the price break header. For more information, see Defining Price Breaks for a Price List Line, page 2-18
   - Price List Line: To enter a base list price for the item.

8. Select an Application Method:
   - Unit Price: For inventory items and item categories.
   - Percent Price: For service items. You will only see Percent Price as an Application Method if the price list line is a service item.
   - Block Price: For information on setting up price breaks with Block Price, see Defining Price Breaks with Block Pricing (for application method Block Price), page 2-21.

9. Enter a Value which is typically the base list price of the item. The Value field is grayed out if you are creating price breaks.
   
   **Note:** If the QP: Price Rounding profile option is set to Enforce Currency Precision, and you enter a list price greater than the precision amount allows, you will be unable to save the price list. An error message only displays when you try to save the price list, not when you first enter the list price.

10. Select either a Static Formula or Dynamic Formula. If Price Header is selected as the Line Type, you cannot select a formula.
    - For Static Formulas, run the Build Formula Package program to calculate the value. The result of the calculation changes the Value.
    - For Dynamic Formulas, you only need to enter Value if the formula includes list price as one of the formula components. At pricing time, the pricing engine calculates the price of the item using the formula. If the formula does not return a price, the engine uses the value of Price as the price.

11. Enter the Start Date and End Dates for the price list line. The dates should be within the effective start and end dates of the price list.
    This Precedence value defaults based on the product attribute selected. The pricing engine uses precedence values to resolve conflicts if more than one price list line is selected from a price list.

12. Save your work.
To define pricing attributes:
1. Click Pricing Attributes in the List Lines tab to display the Pricing Attributes window.

**Pricing Attributes window**

2. Select a Product Context and Product Attribute/Value for the selected item.
3. Select an Operator value.
4. Enter Value From/To.
5. Save your work.

**Note:** The pricing attributes are joined as AND conditions since they apply to one price list line.

To select a secondary price list:
1. In the Secondary Price List tab, select a Secondary Price List. For more information, see Secondary Price List, page 2-4.
If the item you are ordering is not in the primary price list, the pricing engine looks for the price on any attached secondary price list. If the item is found, the pricing engine uses the highest precedence secondary price list (the secondary price list with the lowest value in the Precedence field).

2. Save your work.

   **Note:** The pricing engine does not evaluate qualifiers on secondary price lists; however, some user setups may require them to be evaluated. In these cases, the System Administrator must change the profile QP: Qualify Secondary Price Lists to Yes. See *Oracle Advanced Pricing Implementation Guide*, Profile Options for more information.

**To create qualifiers:**
1. Select the Qualifiers tab.
2. Enter a qualifier Grouping Number. Qualifier lines with the same grouping number generate an AND condition and qualifiers with different grouping numbers generate an OR condition.

   For more information on qualifier grouping numbers, see Using Qualifier Grouping Numbers, page 5-12.

3. Select the Qualifier Context.

4. Select the Qualifier Attribute. For example, if you selected Qualifier Context = Volume, then all the qualifier attributes for volume are listed (except Order Amount which cannot be used).

5. Value From/Value To: If you define a Value From/To range using negative numbers, enter the range from lowest to highest value. For example, to define a Volume Order Amount between -99999 to -1, enter the Value From = -99999 and the Value To = -1.

6. Applies To Party Hierarchy: This check box is enabled only for attributes that are based on Oracle TCA (Trading Community Architecture) Parties and Party Hierarchy Enabled flag has been selected for this attribute on attribute management setups. See the Oracle Advanced Pricing Implementation Guide for more details.

   Hierarchies consist of tiered relationships where one party is ranked above another such as in a corporate hierarchy where different companies are related as parent,
subsidiary, headquarters, division and so on. Here is an example of a hierarchy for a fictitious company XYZ Corporation:

---XYZ Global
-----XYZ US (Global Subsidiary of XYZ Global)
------XYZ HQ (Global Subsidiary of XYZ Global)
-------XYZ Branch (Division of XYZ HQ)

If Applies To Party Hierarchy is selected, then the modifier adjustment or price list (depending on what the qualifier is set up for) would be available to the parent party selected in the Attribute field and its subsidiaries. So, for example, if Applies To Party Hierarchy is selected for XYZ Global, then the qualifier would also apply to its related subsidiaries: XYZ US, XYZ HQ, and XYZ Branch. This saves you time from creating multiple qualifiers one for each subsidiary or division.

7. Enter an Operator and Value From/To. Enter Value To only when the Operator is BETWEEN.

Note: Some list of values for qualifiers (such as Customer) may have large value sets that may prolong your query. To reduce the number of items that display in the list of values, enter additional search criteria in the field. You can set the profile option QP: Valueset Lookup Filter to avoid seeing a system warning about queries.

The Value From Meaning field displays additional details of the qualifier when you query a qualifier after saving it. For example, if the context is CUSTOMER and the attribute is Ship To, the Value From field displays the customer name and Value From Meaning field displays the site use location for the customer. If the context/attribute combination has no additional details, Value From and Value From Meaning are identical.

8. Enter a range for the Start/End Dates. If a qualifier has effective dates, then the pricing entity (such as a price list) will be applied if the conditions of the qualifier are met within the specified dates. Once the qualifier expires, the pricing engine will not evaluate that pricing entity. The alternative is to delete the qualifier from the list.

For example, suppose you create a price list with an effective start date of 23-NOV-2005 and no end date; then you create a qualifier at the header level with effective dates from 10-NOV-2005 to 12-NOV-2005 for customer Computer Service and Rentals. However, after 12-NOV-2005, the price list will not be valid for Computer Service and Rentals or any other customer and the price list becomes expired.
To copy qualifier groups (to the price list):

1. In the Qualifiers tab (Price Lists window), click Copy Group to display the Qualifier Groups window:

   **Qualifier Groups window**

   ![Qualifier Groups window](image)

   - Select the qualifier group(s) whose qualifiers you want for the price list.
   - **Warning:** When a qualifier group for a price list is copied, any qualifier lines within that group that have Order Amount or Price List defined as attributes are not copied over.

2. Select one of the grouping options: Retain Grouping Numbers Across Qualifier Groups or Generate Unique Grouping Numbers Across Qualifier Groups. For more information, see Using Qualifier Grouping Numbers across Qualifier Groups, page 5-16.

3. Click OK to copy the qualifiers from the selected group(s) to the price list. The qualifiers display in the Qualifiers tab. The name of the originating Group associated with the qualifier displays in the Group field.

   **Note:** After selecting the qualifier groups, confirm that the grouping numbers display the correct combination of AND and OR
5. Save your work.

Defining Price Breaks for a Price List Line

You can use price breaks (bracket pricing) to define prices that vary with the quantity ordered. For example, if you buy up to 10 items the price is $20 per item, but if you buy more than 10 items, you get a lower price per unit.

Note: If you define a price for an Item Category, then all items within the category are eligible for the price break.

The following table displays an example of a price break setup:

<table>
<thead>
<tr>
<th>Price Break</th>
<th>Pricing Context</th>
<th>Pricing Attribute</th>
<th>Value From-To</th>
<th>Price</th>
<th>Application Method</th>
<th>Recurring Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Volume</td>
<td>Item Quantity</td>
<td>0-11</td>
<td>$50</td>
<td>Unit Price</td>
<td>--</td>
</tr>
<tr>
<td>2</td>
<td>Volume</td>
<td>Item Quantity</td>
<td>11-99999</td>
<td>$45</td>
<td>Unit Price</td>
<td>--</td>
</tr>
</tbody>
</table>

Note: To use price breaks, the following values must be selected in the Price Lists window:

- Line Type: Price Break Header
- Application Method: Unit Price or Block Price

To define price breaks:

1. Complete your entries in the List Lines tab (selected fields described):
   - Line Type: Price Break Header
   - Price Break Type: When setting up price breaks, you can define either point or range breaks:
     - Point break
     Defines prices based on the price bracket in which the total quantity falls. For example, if you ordered 16 units of Item A11111, the total quantity falls
into the Price Break 2 bracket where the unit price is $45. So the total price is calculated as follows:

Total price = 16 * $45 each = $720

- **Range break**

Defines prices based on the ranges of the defined price breaks. For each range, the engine calculates a price and sums across all ranges to obtain the list price.

For example, if you ordered 16 units of Item A11111, the unit price from each price (Price Breaks 1 and 2) is applied as follows:

<table>
<thead>
<tr>
<th>Price Break</th>
<th>Line Quantity</th>
<th>Unit Price</th>
<th>Initial Extended Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Price Break 1</td>
<td>11</td>
<td>$50.00</td>
<td>$550.00</td>
</tr>
<tr>
<td>Price Break 2</td>
<td>5</td>
<td>$45.00</td>
<td>$225.00</td>
</tr>
</tbody>
</table>

To calculate the unit selling price, the sum of the initial extended amount is used:

1. Initial extended price: $550.00 + $225.00 = $775.00
2. Unit selling price: 775.00/16 = $48.44

2. Click Price Breaks in the List Lines tab of the Price Lists window to display the Price Breaks window.
3. Define each price break:

- Pricing Context: Volume (default value).

- Pricing Attribute: Item Quantity (default value). Optionally, select a different value.

- Value From and Value To
  Price ranges for breaks must start with 0 with no gaps between breaks. If you leave the Value To field blank, a value of 999999.. (15 digits long) defaults in the database, but does not display in the Value To field.

- Price
  - For inventory items and item categories, enter the base list price of the item.
  
  - For service items: If the Application Method is Unit Price, enter the base list price of the item. If the Application Method is Percent Price, enter a percent of another item’s price.

- Application Method
  - Unit Price: For inventory items and item categories.
  
  - Percent Price: For service items. You will only see Percent Price as an Application Method if the price list line is a service item.
• Block Price: Using block pricing, you can apply a lumpsum price rather than a per unit price to a price list line. Block pricing also allows pricing setups that price by recurring values within blocks. For information on setting up price breaks with Block Price, see Defining Price Breaks with Block Pricing (for application method Block Price), page 2-21.

   **Note:** Block Price can only be selected if the line type is Price Break Header (PBH) and Block Price is selected as the Application Method for the price list line.

For more information, see Application Method, page 3-4.

• Formula: Enter the value of the dynamic formula to be attached to the price break header (PBH) line. At pricing time, the pricing engine calculates the price of the item using the formula.

   **Notes**
   - A formula can be attached to the PBH line only when the Application Method is Unit Price.

   - You can only attach dynamic formulas to a PBH line, not static formulas.

• Recurring Value: Optionally, enter a Recurring Value for a block price. For example, if the Recurring Value is 100, then the range is priced for every 100 items within the block.

   **Note:** The Recurring Value field is enabled when the following values are selected:
   - Break type is Range.

   - The application method of Block Price is selected for both the price list line and price break line.

**Related Topics**

Defining Price Breaks with Block Pricing (for application method Block Price), page 2-21

**Defining Price Breaks with Block Pricing**

Using block pricing, you can apply a lumpsum price rather than a per unit price to a price list line. Block pricing also provides flexibility when the unit of measure (UOM) of the header is different from the pricing attributes of each break range.
• In non-block pricing price breaks, the UOM of the break range lines is the same as that of the header.

• In block pricing, the break ranges can have different units of measure than the header. Lastly, block pricing also allows pricing setups that price by recurring values within blocks.

In regular breaks, lines have the application method of unit price (for inventory items) and percent price (for service items only). For block pricing breaks, unit price or percent price is replaced by block price to differentiate between the line UOM and the header UOM. Like regular breaks, block pricing can be defined for either Point or Range price types.

When the break type is Range, and application method is BLOCK, you can define a recurring value for that block. For example, if the Recurring Value is 100, then the range is priced for every 100 items within the block.

  **Note:** If the recurring value does not divide evenly into the block, the resulting price is a prorated amount, not a flat rate, of the block price.

The following examples show how price breaks with block pricing could be used:

• Shipments between 100 and 200 lbs cost a flat rate of $50, regardless of the UOM. Without block pricing, the rate would be calculated by multiplying $50 against the unit quantity. So, a 100 lb shipment would be calculated at $5,000 (100 lbs X $50) instead of $50.00.

• For the first 1 to 100 the price is always fixed at a total amount or lump sum. After that, charge is by the unit: for example, each hour based on a price break.

• $10 for every hundred items until 1200. After that, $5 for every 50 items until 2,000. After that, $0.30 per unit.

• $10 for every hundred until 1200 items. After that, $30 for every hundred in addition to the cost of the first 1200. For example, with block pricing you would be able to create a price list and price setup, where the total cost for 1300 units will be $150 ($120 for the first 1200, $30 for every additional 100 units).

  **Note:** The Block application method can only be selected if the price list line type is Price Header (PBH).

**Example 1: Example of Block Price Using a Recurring Value**

You can apply a block price and have the price repeat for defined intervals (the recurring value); for example, to charge $10 per 100 items up to 1,000 items. In this example, the recurring value is 100.
Note: You cannot use Recurring Value if the Price Type is Point.

When a recurring value is used with price breaks, the Block price repeats for every interval defined by the Recurring Value column. In this example, for the first 1200 units, the price is $10 for each 100 units up to 1200 units.

For over 1200 units and more, you could create a second price to define a price of $30 for each 100 units.

Therefore, if 1,300 units were purchased, the total cost would be $150, which is calculated as follows:

- Block price 1: Price for first 1200 (1200/100 = 12 X $10): $120 (first price break)
- Block price 2: Price for each additional block of 100 units beginning with 1201 units: $30 (second price break)

Example 2: Using Block price and Unit price with Price Breaks

For additional pricing flexibility, a Block Price and Break Unit Price can be applied in a price break. This is commonly found in minimum price scenarios.

Example 2a)

A $100 flat price is charged for 1 to 100 minutes of cellular phone usage, after which the customer is billed a Break Unit Price of $1.00 per minute. This can be done by setting up a Block Price with a recurring value: for example, $10 per 100 minutes, and then applying a Break Unit Price of $1.00 for each minute over 100 minutes.

Example 2b)

- Block Price: $10 for every 100 units (the recurring value) up to 1,200 units (first price break)
- Block Price: $5 for every 50 units (the recurring value) from 1,200 up to 2,000 units (second price break)
- Break Unit Price: $0.30 per unit above 2,000 units (third price break)

The following tables displays the Block Price and Break Unit Price setup in the Price Lists window.

This table displays the Block Price setup:

<table>
<thead>
<tr>
<th>Item</th>
<th>UOM</th>
<th>Line Type</th>
<th>Price Type</th>
<th>Application Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALL</td>
<td>Each (EA)</td>
<td>Price Header</td>
<td>Range</td>
<td>Block Price</td>
</tr>
</tbody>
</table>

This table displays the Per Unit pricing setup:
### Pricing Context

<table>
<thead>
<tr>
<th>Pricing Context</th>
<th>Pricing Attribute</th>
<th>Value From-To</th>
<th>Price</th>
<th>Application Method</th>
<th>Recurring Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Volume</td>
<td>Item Quantity</td>
<td>0 - 1,200</td>
<td>$10</td>
<td>Block Price</td>
<td>100</td>
</tr>
<tr>
<td>Volume</td>
<td>Item Quantity</td>
<td>1,200 - 2,000</td>
<td>$5</td>
<td>Block Price</td>
<td>50</td>
</tr>
<tr>
<td>Volume</td>
<td>Item Quantity</td>
<td>2,000 - 999,999</td>
<td>$0.30</td>
<td>Break Unit Price</td>
<td>Null</td>
</tr>
</tbody>
</table>

---

**Block Price with Application Method of BLOCK PRICE and BREAK UNIT PRICE**

If BLOCK PRICE is selected as the application method in the price header for a price list (this is possible only with Range breaks), you can select the following application methods for the price lines:

- **BLOCK PRICE**

- **BREAK UNIT PRICE**

When the BREAK UNIT PRICE application method is used in the line, the price specified is the break unit price per attribute. For example, if the price is based on the price attribute Item Weight, the price to be specified is price per unit weight.

When setting up the price break, the price provided should be the break unit attribute price. The break unit price for the ordered item is calculated by multiplying the BREAK UNIT PRICE with the sourced Volume Attribute value divided by the ordered quantity.

For example: if the Item Weight in lbs is used as the Volume Attribute in the following price breaks ($10 is the price per lb.):

<table>
<thead>
<tr>
<th>Pricing Attribute</th>
<th>Value from</th>
<th>Value to</th>
<th>Price</th>
<th>Application method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item Weight</td>
<td>0</td>
<td>50</td>
<td>10</td>
<td>Break unit price</td>
</tr>
<tr>
<td>Item Weight</td>
<td>50</td>
<td>100</td>
<td>8</td>
<td>Break unit price</td>
</tr>
</tbody>
</table>

The Item Weight is sourced from the total line weight of a sales order line. For example, if a sales order is entered for three items each weighing 2 lbs, then the unit list price returned from the preceding price would be: \([10 \times 6] / 3 = $20\). Six is the total line weight (2 x 3) lbs.
In the preceding context, the pricing attribute and its sourcing are important factors; therefore, it is important to ensure that the appropriate pricing attribute is used when setting up Break Unit Price lines to get the correct results.

If any Volume attribute that sources a constant value is used, the list price in a sales order varies with the ordered quantity even though the ordered quantity falls in the same break. It is recommended to use sourced volume attributes whose value changes with the ordered quantity such as Item Weight, Item Volume, and Item Quantity.

These considerations apply when using cross order volume attributes too. For example, if the cross-order volume pricing attribute *Period 1 Item Amount* is used in the line, the break unit price will be the price for unit period 1 amount.

Unless there is specific business requirement, it is not recommended to use Cross Order Volume attributes with BLOCK PRICE at the Header level and BREAK UNIT PRICE for the line. Instead, consider using UNIT PRICE at the Header level for such scenarios.

**Related Topics**

Defining Price Breaks for a Price List Line, page 2-18

**Finding Price List Lines**

When querying price list lines, use the Find Price List Lines window to find specific price list lines. You can select the product attribute context (for example, Item), then select the product attribute (for example, Item Number) and a specific product attribute value (for example, Product A) to refine your search results.

In the Find Price List Lines window, you can search using the following combinations:

- Item
- All Items
- Item Number or Item Category
- Product Value

**Note:** You cannot query or search by Product Description. If you search using the Find Price List Lines window instead of using a query-by-example on the Advanced Pricing - Price Lists window, you may reduce your search time.

**Creating a GSA Price List**

A General Services Administration (GSA) designation identifies a price list belonging to a United States government customer. For products on the GSA price list, a fixed price
must be used and defined on the GSA contract.

You can create a GSA price list for your GSA customers. The items on the GSA price list cannot be sold to commercial customers for a price equal to or less than the government price. Therefore, the price offered to the government must be the minimum in the market. A GSA violation occurs when a non-United States government customer is offered a price equal to or less than the GSA Price. You can set up multiple GSA price lists that are effective during the same period.

**To create a GSA price list:**

1. Navigate to the Define Modifier - Define GSA Price window. In this window, you can set up a GSA price list and GSA prices.

**Define Modifier - Define GSA Price window: Main Tab**

![Define Modifier - Define GSA Price window: Main Tab](image)

2. Complete your entries in the Main tab:
   - **Type:** select Discount List.
   - **Active and Automatic:** The Active and Automatic check boxes are selected by default and cannot be updated.
   - **Global:** The Global box is selected when the Pricing Security Control profile option is set to ON. This means that the price list can be used by all operating units for pricing transactions. If deselected, then the Operating Unit field is displayed for the price list.
• Operating Unit: Restricts the usage of the price list to the named operating unit (if Global box is not selected). The operating unit defaults if:
  • You copy from an operating unit-specific price list.

  **Note:** You can only copy a GSA price list using the Copy Modifiers concurrent program.

• Your responsibility has security access to the operating unit.

  If not, then the Global check box is selected instead.

  If Multi-Org Access Control is enabled, this field defaults to the value of the profile MO: Default Operating Unit. You can select another operating unit if you have access to as defined by MO: Security Profile. Only transactions (for example, sales orders) with the same operating unit can use that price list.

• Currency: The Currency value defaults.

3. In the Modifiers Summary tab, enter information about the modifier lines:
  • Modifier No: Uniquely identifies the modifier line.
  
  • Level: Defaults to Line, and the Modifier Type defaults to Discount.
  
  • Start/End Dates: Enter the Start/End Dates of this GSA price list line.

  **Note:** The Start and End Dates for the discount line must be between the Start Date and End Date of the GSA price list. The pricing engine uses the discount line dates to confirm that the dates are in effect for each line.

  • Override: If selected, the GSA price can be overridden for the selected price list line. Deselect the Override box to prevent a user from overriding the GSA price for the selected price list line.

  • Pricing Phase: Defaults to List Line Adjustment and the Incompatibility Group defaults to Level 1 Incompatibility.

  • Product Attribute: Select a Product Attribute value such as Item Number, Item Category, or All Items. Use All Items to define a modifier that applies to all items in your product hierarchy.

  • Product Attribute Value: Select a Product Attribute Value. If you select ALL_ITEMS for Product Attribute, the Product Attribute Value is ALL.
• UOM (unit of measure): Select the corresponding Unit of Measure for the item such as Each or Carton.

4. Complete your entries in the Discounts/Charges tab:
   • Application Method: Defaults to New Price.
   • Value: Enter the Value for the item. The value is related to the selected Application Method. For example, if the Application Method is New Price then the Value is expressed in currency units.

5. In the Other tab, you can view the following including details about any related Sales Agreement:
   • List Source Document Number: No value displays for GSA price list.
   • List Source Code: No value displays for GSA price list.
   • Pricing Transaction Entity: Displays the pricing transaction entity associated with the GSA price list. The Pricing Transaction Entity value defaults from the PTE that created the GSA price list. This field cannot be updated.
   • Source System Code: Displays the source system code such as QP for pricing.  
     Note: The Pricing Transaction Entity and Source System fields display if there is no related Sales Agreement.
   • Shareable: Indicates if the GSA price list is shared or not. If non-shareable (the default), then this GSA price list is specific to that sales agreement and cannot be used with other sales agreements.
     If shared, the GSA price list is not exclusive to the sales agreement and can be selected for use with other agreements.

**To create GSA list qualifiers:**
To create qualifiers for a GSA price list, you can select a qualifier context such as customer and then a qualifier attribute that defines the context further such as customer name.

**Note:** You may be unable to select existing groups from the Qualifiers tab because GSA price lists restrict the type of qualifiers that can be attached.

You can select one of the following Qualifier Contexts:
- Customer: For this qualifier context, you can select either Customer name (GSA customers only) or site as a Qualifier Attribute.

- Modifier List: For this qualifier context, you can select Price List as the Qualifier Attribute.

  **Note:** You can only attach customers only at the list (header) level. You cannot assign line level qualifiers.

  Do not change the qualifier sequence for the GSA qualifier in attribute management.

1. Click List Qualifiers.

  **Note:** Do steps 2-10 for each customer that is eligible for the GSA price.

2. Enter the Grouping Number.

  **Note:** Since Qualifier Context is Customer, make OR conditions by creating each qualifier with a different grouping number.

3. Select either Customer or Modifier List for Qualifier Context.

4. Enter the Qualifier Attribute.

   - If you selected Customer for the Qualifier Context, select either Customer name (GSA customers only) or site.

   - If you selected Modifier List for the Qualifier Context, select Price List as the Qualifier Attribute.

5. Enter Operator value and the Value From/To.

6. Enter the Start/End Date.

7. The Precedence value defaults from the qualifier setup (from context and attributes).

8. Enter the customer name in Value From.

9. Enter start date and end date for the customer.

10. Save your work.
Maintaining Price Lists

You can maintain your existing price lists by adding more inventory items, adjusting prices within a single price list, or copying an existing price list to another price list.

For more complex tasks, such as searching across multiple price lists or adjusting prices for the same item across many price lists, Oracle Advanced Pricing provides a price list maintenance feature that enables you to:

- Search for price list and line information across many price lists.
- Do mass updates to price lists and price list lines.

Note: You need View Only privileges to view price list and related windows. However, you must have Maintain privileges to make any updates. If you are unable to access or update this window, you may not have the appropriate access privileges. Consult your Pricing Administrator.

The following provides an overview of the common tasks you can do to maintain price lists and price list lines:

Adding Inventory Items to a Price List

When you add inventory items to a price list, you can specify an item status, such as active or planned; an item category, such as hardware or software; or a range of items. If a hierarchy category is specified, all items for that category as well as child categories will be added to the price list. You can request the price to be either zero or the items' costs in a specific inventory organization. Later, you can adjust the prices to your selling price.

The process only adds items that exist in the item validation inventory organization and that are not on the price list, even if they are inactive on the price list. To add items from an item category, you must first define the default inventory category set. When you add items from an item category, the process adds all items of the item category to the price list; it does not add the item category.

Adjusting Price Lists

You can increase or decrease the list price of price list lines by an amount or percentage within a price list. You can adjust prices for all lines on the price list, lines that belong to an item category, lines with items of a certain status, lines created on a specified date, or lines having a range of items.

- For information on making simple adjustments to a single price list, see Adjusting
Prices for a Price List, page 2-34.

- For information on making mass changes to a single price list or across price lists using the Price List Maintenance feature, see Making Bulk Changes across a Selected Group of Lines, page 2-70.

**Updating Prices (manually) for Price List Lines**
You can always manually change the price on an existing price list line. If you type over the existing price, the new price is effective for new orders as soon as you save your changes.

If you use price list line effectivity dates, you can maintain a historical record of your prices.

**Copying Price Lists**
You can quickly create a new price list by copying an existing price list. Only active price list lines (those with an effective end date later than the current date) can be copied. You can also copy active discounts and effective dates from the original price list.

**Note:** All newly copied price lists with price breaks will be defined as continuous price breaks.

**Maintain Price Lists Using the Price List Maintenance Feature**
The Price List Maintenance feature enables you to search across a single or multiple price lists, select related entities such as specific price list items, and make updates to price list or price list lines across a single price list or multiple price lists.

**Related Topics**
- Using the Price List Maintenance feature (HTML Interface), page 2-62
- Making Detail or Bulk Changes to Price Lists (HTML Interface), page 2-62
- Searching for Price Lists (HTML Interface), page 2-55
- Archiving, Deleting, and Purging Price List Information, page 2-62

**Adding Items to a Price List**
Use this process to add items from the item master file to price lists. You must define the price list header information before you can add items.

You can add inventory items to a price list by selecting:

- A range of Items
- Item Category Set such as Inventory Items or Purchasing
- Item Category such as Hardware or Software (categories can be hierarchical or
flattened categories).

- Item Status such as Active or Planned

You can set the price to be either zero or equal to the items’ costs from a specific inventory organization. Later, you can adjust the prices to your selling price.

The process only adds existing items from the item validation inventory organization and that are not on the price list, even if they are inactive on the price list.

To add items from an item category, you must first define the default inventory category set. When you add items from an item category, the process adds all items of the item category to the price list; it does not add the item category. If category set is hierarchical, then all items within the hierarchy will be added.

- Pricing submits a concurrent process when you add inventory items. The concurrent process only adds new items to a price list; it does not replace existing items, even if the existing items are ineffective.

- The add items submit request system processes but does not validate input information. So, for example, if you enter Items from 1 to 100, the system does not validate whether Items 1 or 100 exist in the organization.

**To add items to a price list:**

1. Navigate to the Add Items to Price List window.
2. Select the Price List to which you want to add items.
   Do one or more of the following steps to select criteria of the items to be added to your price list:

3. Enter an item or range of Items to be added to the price list. You cannot use a wild card such as % when you specify the beginning and ending item numbers.
   When you enter an item or items, the System Items window appears. It features Low/High fields that enable you to define a range of items.
   If you enter a Low value for an item such as PS-2 and click Tab, the same value automatically defaults to the High field. However, if you then change the Low value, and click Tab, the High field does not reflect the changed value. You must manually change the High field to the desired value.

4. Select an Item Category Set.
   If you specify only an Item Category Set, then all the items that belong to the specified Item Category Set will be added to the specified price list.

5. To define selected items within an Item Category Set, select an Item Category.
6. Enter an Item Status to select items by their status.

7. Select the Set List Price Equal to Cost From check box if you have Oracle Inventory installed and to set the list price of the inventory item equal to its cost.

   **Note:** The list price becomes zero if:
   - You clear the Set List Price Equal to Cost From check box.
   - The Inventory Organization does not use the standard costing method.

8. Enter an Inventory Organization to limit the source of the items to add to those in the organization. If you do not enter an organization, the process uses the organization specified in the profile option QP: Item Validation Organization.

9. Click Submit, and use the Request ID that displays to track your request status.

### Adjusting Prices for a Price List

Use this process to adjust the prices for a price list. You can adjust prices for the entire price list or selected items, item category sets, and item categories. You can define your criteria further by selecting the item status or creation date of the items to adjust.

   **Note:** Oracle Advanced Pricing also provides an HTML-based user interface for adjusting prices on price lists. See Using the Price, page 2-62.

For example, you can specify a category so that only the price list lines for the selected category are adjusted. If you leave any of the fields blank, pricing adjusts the price list regardless of that field.

You can adjust the price by either an amount or percent:

- **Percent:** Enter a value to adjust list prices by a certain percentage. For example, when adjusting by a percentage, entering 10 raises list prices by 10 percent while -10 lowers list prices by 10 percent.

- **Amount:** Enter a value to adjust list prices by a fixed amount. For example, when adjusting by an amount, entering 5 increases list prices by five whole units of currency. Entering -5 decreases list prices by five whole units of currency.

While adjusting prices:

- If only the Item Category Set is specified, then all the items that belong to the specified Item Category Set and are present in the specified price list will be
adjusted.

- If both the Item Category Set and Item Category are specified, then all the items that belong to the specified Item Category Set and Item Category and are present in the specified price list will be adjusted. If a hierarchical category is specified, all items in the child categories will be adjusted.

To adjust a price list:

1. Navigate to the Adjust Price List window.

2. Select the name of the Price List to adjust.

   The default Currency and Description of the price list displays.

   - To adjust prices for the complete price list only, go to step 8.

   - To adjust the prices of specified items, item category sets, or item categories in a price list, complete the following steps in the Item Prices to Adjust section. Select only the criteria to adjust:

3. Enter an Item or range of Items whose prices you want to adjust. You cannot use wild cards when you specify the beginning and ending item numbers.
Note: For System Items, the list of values (LOV) is not available. For these items, you may need to use an API.

4. Select an Item Category Set.
   When you select an Item Category Set only, all item prices in that category set are adjusted.

5. To restrict items within a selected Item Category Set, select additional criteria in the Item Category field.

6. Select the Item Status to include items of a specific status.

7. Enter a Creation Date to adjust the prices of items added to the price list on that date.

8. In the Adjust By field, select Percent or Amount:
   • Percent: Enter a value to adjust list prices by a certain percentage. For example, when adjusting by a percentage, entering 10 raises list prices by 10 percent while -10 lowers list prices by 10 percent.
   • Amount: Enter a value to adjust list prices by a fixed amount. For example, when adjusting by an amount, entering 5 increases list prices by five whole units of currency. Entering -5 decreases list prices by five whole units of currency.

9. Enter a Value that corresponds to the percent or amount to be adjusted.

10. Choose Submit. The request ID is displayed in the Request ID field.

Copying a Price List

You can quickly create a new price list by copying an existing price list. Only active price list lines (those with an effective end date later than the current date) can be copied.

You can also copy:
   • active discounts from the original price list.
   • the effective dates from the original price list lines.

You can copy an existing Standard price list type to a new Standard price list, or an existing Agreement price list to a new Agreement price list. After the price list is copied, you can create a new agreement and attach the new price list to the agreement. Since price list names cannot be duplicated, each price list name must be unique.
• When you copy a price list, the new price list has the same currency as the original price list. If you are using multi-currency enabled price lists, the multi-currency conversion attached to the original will be attached to the new price list.

**Note:** Copying price breaks created in releases earlier than R12: When you copy a price list, all price break lines from the original price list are copied to the new price list. However, any price breaks created in releases earlier than R12 are converted from *non-continuous* to the standard *continuous* price break format (available in release R12 and newer). Since the conversion results in changes to the price break setup and break calculations, you should review the copied price break lines and make any required changes to ensure correct pricing results. For more information on price breaks and their impact on pricing adjustments, see Continuous Price Breaks, page 3-78.

**To copy a price list:**

1. Navigate to the Copy Price List window.
   
   Select one of the following options:

   • To copy the entire price list, enter the new price list information in the Copy To region.

   • To copy only selected items, select the Items, Item Category Set, or Item Category to be copied in the Copy From region. If you select Items, you can also enter a range of Items to copy.

   **Note:** You cannot use wild cards when you specify the beginning and ending item numbers. For System Items, the list of values (LOV) is not available. For these items, you may need to use an API.

2. Complete your entries in the Copy From region:

   • Price List: Select the name of the price list to be copied. This can be from either a Standard (PRL) or Agreement (AGR) price list. The default Currency and Description display for the selected price list.

   • Item Category Set and Item Category: Select an Item Category Set and Item Category of the items to add. When you add items from an Item Category, all items from the item category are added to the price list; it does not add the item category.
Note: You must enter both Item Category Set and Item Category for this criteria to be effective.

- Include Discounts: Select this to copy modifiers of type Discount List (DLT).
  
  Note: This enables users of Release 11 to copy the modifier type of DLT (Discount List) to the new price list. When selected, only the modifier type of Discount List is copied but not any 11 i modifiers. If you are not copying modifiers from version 11, you do not need to select Include Discounts.

- Retain Effective Dates: Select Retain Effective Dates to copy the effective dates from the existing price list lines to the new price list lines. Even if Select Retain Effective Dates is selected, only the most current price list lines (current as defined by their effective dates) will be copied. Duplicate lines that have expired will not be copied.
  
  Note: The process does not copy the effective dates of the price list, only the price list lines. You must enter effective dates for the new price list.

3. Complete your entries in the Copy To region:

- Price List: Enter the new name for the price list. It can be either a Standard (PRL) or Agreement (AGR) price list.

- Global: If the price list you are copying from is Global (meaning available to all operating units), then the Global Check box is selected by default. You can deselect or select the Global value to disable or enable global access to the new price list.

- Operating Unit: Restricts the usage of the price list to the named operating unit (if Global box is not selected). The operating unit defaults if a) you copy from an operating unit-specific price list and b) your responsibility has security access to the operating unit. If not, then the Global check box is selected instead.

4. Click Submit to copy the price list or selected lines. The request ID is displayed in the Request ID field.

Copying a Price List Line

You can duplicate an existing price list line for a price list. This saves you time from
manually re-entering a new pricing line. Although the price list information and pricing attributes are duplicated, price details from the source line are not copied.

Price list lines will be considered duplicate unless the:

- Product value is different.
- Effective dates are different.
- Product attributes are different.
- Comparison Operator Code is different.

**Note:** Copying price breaks created in releases earlier than R12: When you copy a price break line created in releases earlier than R12, the price breaks are converted to the continuous price break format (standard in release R12 and newer). Since the conversion results in changes to the price break setup and break calculations, you should review the copied price break lines and make any required changes to ensure correct pricing results. For more information on price breaks and their impact on pricing adjustments, see Price Breaks, page 3-78.

**To copy a price list line:**
1. Enter a new price list or query an existing price list.
2. Navigate to the line below the price list line to be copied.
3. Select one of the following to duplicate the line:
   - Select the Shift+F6 keys.
   - From the Edit menu, select Duplicate > Record Above to duplicate the price list line.
4. You can change Product Value or Effective Dates to avoid a duplicate list line error from occurring in the same price list.
5. Save your work.

**Oracle Advanced Pricing Home page (HTML Interface)**

The Oracle Advanced Pricing Home page provides centralized access to your main pricing tasks. From this page, you can:
- Search for price lists and modifier lists.
• Use the Shortcuts links to quickly navigate to the pages that enable you to create and manage price lists and modifiers.

• Use the Work Queue to view recently-created price lists and modifiers.

The following graphic shows the Oracle Advanced Pricing Home page featuring the Search, Shortcuts, and Work Queue regions:

Oracle Advanced Pricing Home page

The following section describes the tasks that can be completed from the home page:

To search for price lists and modifiers:

1. In the Search field, select the pricing entity to search for:
   • Price List: To search for price lists.
   • Modifier List: To search for modifier lists.

2. Select a search category, then enter additional criteria to narrow your search results. For example, if you selected Price Lists and then Name, enter the specific name of the price list.
   • For Modifier Lists: Select Currency, Number, Type, Modifier Line Number, or Name.
   • For Price Lists: Select Name or Currency.

3. Click Go to display the search results in the Lists tab.

   Note: You can only view price and modifier lists, and depending on your security privileges, update lists.
To use the Shortcuts region:
The Shortcuts region provides the following links that enable you to quickly navigate to the pricing task or feature you want. For example, click the Create Price List link to create a price list. Select from the available Shortcut links:

- Create Price List: To create a new price list.
- Price List Maintenance: To maintain or update one or many price lists.
- Create Deal List: To create a Deal List.
- Create Discount List: To create a Discount List.
- Create Promotion List: To create a Promotion List.
- Create Surcharge List: To create a Surcharge List.

Click the link to display the related setup or feature pages. Additional online help for each topic is available by clicking the Online Help icon in the destination page.

To use the Work Queue region:
In the Work Queue region, you can view modifiers or price lists that you recently created. The Work Queue displays the price lists and modifier lists created by the user who is logged in.

1. In the Work Queue region, select the type of pricing entity to be viewed:
   - Recently Created Price Lists
   - Recently Created Modifier Lists

2. Click Go to display the entities in chronological order (newest to oldest). General information about each modifier list or price list is also listed in the table.

3. Optionally, click the Update icon to update the list, or click the Details icon to view additional details.

Related Topics
Updating a Modifier (HTML Interface), page 3-92
Using Modifiers in the HTML User Interface, page 3-62
Using Price Lists in the HTML User Interface, page 2-2
Updating a Price List (HTML Interface), page 2-58
Using Price Lists in the HTML User Interface

Oracle Advanced Pricing provides an HTML-based user interface (UI) that features guided steps, user-friendly pages, and shortcut links for setting up and maintaining modifiers, price lists, and qualifiers.

You can use the HTML UI to complete many of the pricing tasks that you previously completed in the Oracle Forms-based user interface such as:

- Searching for price lists and price list lines.
- Creating price lists.
- Creating price list lines.
- Maintaining price lists using the Price List Maintenance feature.
- Creating qualifiers for price lists.

Tasks available in HTML are identified with HTML Interface in the task title; for example, Creating a Price List (HTML Interface).

Oracle Advanced Pricing still provides the Oracle Form-based interface for completing tasks that are currently unavailable in the HTML interface such as creating qualifier groups.

**Note:** Pricing security can affect the View and Maintain features associated with the Update and Details icons in the HTML user interface. For more information, see *Oracle Advanced Pricing Implementation Guide*, Pricing Security.

Related Topics

Using Oracle Advanced Pricing in the HTML Interface, page 1-7  
Creating a Price List (HTML Interface), page 2-43  
Creating Price List Lines (HTML Interface), page 2-49  
Searching for Price Lists (HTML Interface), page 2-55  
Creating Qualifiers (HTML Interface), page 5-4  
Updating Price List Lines (HTML Interface), page 2-60  
Using the Price List Maintenance feature (HTML Interface), page 2-62
Creating a Price List (HTML Interface)

Price lists are essential to ordering products because each item on an order must have a price. Each price list contains basic price list information and price list lines that define the items and their list prices. Creating a price list in the HTML interface is a flow-based process that consists of the following guided steps:

1. Enter general price list information to define general information about the price list such as the price list name, effective dates, currency, pricing controls, rounding factor, and shipping defaults.

2. Create qualifiers that define eligibility rules for the price list. You can use qualifiers to restrict the price list to certain customers by qualifying customers for a particular price list. For example, the customer must be a Gold class customer to receive the price list.

3. Review and then save the price list.

4. Add price list lines that define the items on your price list and their list prices.

   Note: Pricing security can affect the View and Maintain features associated with the Update and Details icons in the HTML user interface. See Oracle Advanced Pricing Implementation Guide, Pricing Security for more information.

To create a price list:

1. Navigate to the Create Price List: General Information page.
2. Complete your entries in the General Information region (selected fields are described below):

- **Name and Description**: Enter the Name and Description for this price list. The price list Name should be unique across Pricing Transaction Entities (PTEs), otherwise an error occurs. For example, if a price list named Corporate is created in the Order Management PTE, an error message appears if you create a Corporate price list in the Purchasing PTE.

- **Pricing Transaction Entity/Source System**: The Source System and Pricing Transaction Entity values are provided by default from the profiles QP: Pricing Transaction Entity and QP: Source System Code. For example, the Source System default is Oracle Pricing.

- **Currency**: Select a base Currency for the price list, such as US dollars (USD). For more information, see Currency, page 2-2.

- **Multi-Currency Conversion**: Select a Multi-currency Conversion Criteria list. This field appears only if the profile QP: Multicurrency Enabled is set to Yes.

- **Round To**: Enter a Round To value for the price list. For more information, see Round To, page 2-3.
• Freight Carrier: Select the default Freight Carrier.

• Freight Terms: Select the default Freight Terms.

• Payment Terms: Select the default Payment Terms, such as Cash On Delivery (COD).

• Enter the effective Start Date and End Date.

  • You cannot create a future-dated price list that has the same name as an existing price list. For example, suppose you have a price list named *Price List A*, with effective dates 01-Jan-2006 to 31-Dec-2006, and you want to create a second price list named *Price List A*, effective 01-Jan-2007 to 31-Dec-2007. The system will not allow you to create the second price list because a price list with the same name already exists.

  • The effective dates of the qualifier (when attached at the header-level of a modifier or price list) determine the effective dates for the associated price list or modifier list. For example, suppose you create a price list with an effective start date of 23-NOV-2005 and no end date. Then you create a qualifier at the header level with effective dates of 10-NOV-2005 and 12-NOV-2005 for customer Computer Service and Rentals. However, after 12-NOV-2005, the price list will not be valid for Computer Service and Rentals or any other customer because the price list has expired.

• Pricing for Global Use: If the Pricing for Global Use check box is selected, then the price list can be used by all operating units for pricing transactions. If cleared, then the Operating Unit field appears for the price list:

  **Note:** The Pricing for Global Use check box appears only if pricing security is activated.

  • If multi-org access is not enabled, the profile MO: Operating Unit provides the operating unit default. This Operating Unit field cannot be updated by users.

  • If multi-org access is enabled, the profile MO: Default Operating Unit provides the operating unit default. You can over-ride this default and select an operating unit that you can access, as defined by MO: Security
Profile.

- Mobile Download: Select the Mobile Download check box if you are using an Oracle Mobile application and want to download specific price lists onto a mobile device such as a laptop computer. The default value is No.

**Secondary Price Lists Region**

3. Click Add Another Row to add a blank row where you can select a secondary price list.

4. Click the Search icon and select the price list to be attached as a secondary price list. The Description appears by default based on the price list selected. It is view-only. The Precedence number is provided by default and can be updated.

**Note:** If the item is listed on multiple secondary price lists, the precedence value is used to determine which secondary price list the item is selected from.

The lower the precedence number, the higher its precedence ranking. Therefore, a secondary price list with a Precedence value of 100 is selected before a precedence of 200, and a value of 200 is selected before 300, and so on.

Optionally, to delete this price list as a secondary price list, click Delete, and then click Apply to save your changes.

5. Click Next to display the Create Price List: Qualifiers page. Qualifiers define the eligibility rules that define who qualifies for the modifier. Define any qualifiers for the price list.

6. When you have completed your entries, click Finish to skip the review page, or click Next to display the Price List Review page.
7. In the Price List Review page, you can review the price list information before applying the final changes. If changes are required, click the Back button to return to the page and make your changes. If no changes are required, click Finish to save the price list.

A Confirmation message confirms that the price list has been created and asks if you want to add price list lines. Price list lines define the items and prices for the price list.

Note: Once created, the price list remains in Inactive status. You must update the price list and select the Active box to activate the price list.

8. To add price list lines, click Yes. Click No, if you do not want to add price list lines now. You can add price list lines in the future.

Pricing Service Items in Oracle Order Management:
The pricing engine prices service items in the same way that it prices inventory items. Oracle Order Management passes both the serviceable item (which is the parent item in Order Management) and the service item to the pricing engine; the pricing engine first
prices the serviceable item and then prices the service item.

You can price service items by:

- Unit price: Set a list price for the service item.

- Percent price: Set the price of the service item as a percentage of the serviceable item list price. To use this method, select the Service Item check box in the Service tab when you define the item.

**Example of Oracle Order Management Service Item**

This example compares how pricing calculates service pricing using unit price and percent price methods. The following setups are used in the calculations:

- Price list setup for laptop computer:
  - Product: Laptop Computer
  - Application Method: Unit Price
  - UOM Code: EA
  - List Price: $1,000

- Price list setup for computer service: unit price and percent price setups:

<table>
<thead>
<tr>
<th>--</th>
<th>Pricing Method: Unit price</th>
<th>Pricing method: Percent price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product</td>
<td>Computer Service</td>
<td>Computer Service</td>
</tr>
<tr>
<td>Application Method</td>
<td>Unit Price</td>
<td>Percent Price</td>
</tr>
<tr>
<td>UOM Code</td>
<td>Month</td>
<td>Month</td>
</tr>
<tr>
<td>Price</td>
<td>List Price: $10</td>
<td>Percent Price: 2</td>
</tr>
</tbody>
</table>

- Order line
  - Product: Computer Service
  - Ordered Quantity: 1
  - Ordered UOM: Month
  - Service Period: Year
Service Duration: 1

Serviceable Item: Laptop Computer

List price calculation for computer service
- Unit price method: $10 per month * 12 months service period/duration = $120
- Percent price method: ($1,000 laptop computer * 2 percent computer service percent price) * 12 months service period/duration = $240

Related Topics
Creating Qualifiers (HTML Interface), page 5-4
Updating a Price List (HTML Interface), page 2-58
Creating Price List Lines (HTML Interface), page 2-49

Creating Price List Lines (HTML Interface)
You create price list lines to define the actual items on the price list and their list prices. When setting up a price list lines, you can define the prices by the following product levels:
- All Items (applies the same price to all items in your product hierarchy)
- Item Number such as AS54888
- Item Category such as Hardware or Software
- iStore Section

Note: You must define the price list header before you can add price list lines.

You can use negative price, positive prices, or set the price to be zero. You can use modifiers to adjust the prices to your selling price.

From the Price List Lines page, you can create following types of price list lines:
- Price list lines: Create a price list line and assign a unit or formula-based price to a product.
- Price break lines: Create price breaks or bracket pricing to define prices using different price tiers. For example, if 10 items are ordered, the price is $10 per item; but if 12 items are ordered, then the price drops to $8 per item. If you define a price
break for an item category, all the items within the category are eligible for the price break. For additional pricing flexibility, you can apply a Block Price and Break Unit Price to a price break. You usually apply these in minimum-price scenarios.

**To create a price list line:**


2. Click Create Price List Line to create a price list line and assign a unit or formula-based price to a product. For example, you could add line item AS54888 with a selling price of $11 each.

   Alternatively, to create a price break click, click Create Price Break Line. For steps on creating a price break line, see To create a price break line, page 2-52.

**Create Price List Line page**

3. Complete your entries in the Product region:
   - **Product:**
     - Item Number: Applies the price against a particular item number.
     - Item Category: Applies the same price against items in the selected item category.
• All Items: Applies the same price to all items in your product hierarchy. The default Product Description is based on the product selected.

• UOM and Primary UOM: Select a UOM (unit of measure) for the item, and select the Primary UOM box to indicate if the specified UOM is the primary unit of measure.

For example, an item such as A11111 in a price list may have two price list lines: one with a UOM of Each (EA) - the primary UOM - and the other with a UOM of Boxes. The pricing engine uses the pricing Primary UOM and the Oracle Inventory UOM conversion information to price an order whose UOM does not have a price list line. If an order for item A11111 is placed in UOM Case (CS), the pricing engine accesses the UOM conversion tables to convert CS to EA, which is the primary UOM.

  **Note:** The default Precedence value is based on the Product Level. You can change the Precedence value if desired.

4. Complete your entries in the Pricing Attributes region:
   
   • Attribute: Select attributes to further define how you want to price the product for the price list line. For example, if you selected toothbrush as the product, you can use attributes such as color to define the toothbrush to be priced.

   • Value From and Value To: Defines the attribute values. For example, if Color is selected as an attribute, then the values could be some color such as Red or White.

      **Note:** If you define a Value From/To range using negative numbers, enter the range from lowest to highest value. For example, to define a Volume Order Amount between -99999 to -1, enter the Value From = -99999 and the Value To = -1.

5. Complete your entries in the Price Detail region:

   • Line Type: The default is Price List Line (read-only value).

   • Application Method:
     
     • Unit Price (default): For inventory items and item categories. This is the per unit price of the item.

     • Percent Price: For service items. Percent Price displays if the price list line is a service item.
• Price: Enter a list Price.

• Formula Type: If using a formula to calculate prices, select a Formula Type and Formula Name. At pricing time, the pricing engine calculates the price of the item using one of these formulas:
  • For Static Formulas, run the Build Formula Package program to calculate the value. The result of the calculation changes the value. For more information, see Build Formula Package program, page 11-5.
  • For Dynamic Formulas, you only need to enter a value if the formula includes list price as one of the formula components.

If you selected Create Price Break Line, then complete the following price break details:

**To create a price break line:**
1. Navigate to the Update Price List: Price List Lines page and click Create Price Break Line to create price breaks. Use price breaks (or bracket pricing) to define prices that vary with the quantity ordered.

**Create Price List Line - Break Rules Region**

2. Complete the Product and Attributes regions described in defining a price list line.

3. In the Break Rules region, define the details for each price break:
   • Line Type (Price Detail region): Price Break. This value is read-only.
   • Break Type: Select one of the following break types:
• Point: Price is based on the price bracket in which the total quantity falls.

• Range: Price based on the ranges of the defined price breaks. For each range, the engine calculates a price and sums across all ranges to obtain the total extended price. If break type is Range and application method is block price, the Recurring Value field appears. For more information, see Break Types, page 3-78.

• Application Method: The fields displayed in the Break Details region vary depending on if you select Block Price or Unit Price.

  • Block Price: Block pricing, which is applicable only for price breaks, enables you to apply a lumpsum price rather than a per unit price to a pricing line. Like regular breaks, block pricing can be defined for either Point or Range price types. A Block Price method is appropriate for the situation described in the following example:

    Shipments between 100 and 200 pounds cost a flat rate of $50, regardless of the UOM. Without block pricing, the rate would be calculated by multiplying $50 against the unit quantity. Therefore, a 100-pound shipment would be calculated at $5000 (100 lbs * $50) instead of $50.

    Note: Recurring Value: If Block Price is selected for a range break, you can define a Recurring Value that repeats a price for a defined interval; for example, charging $10 per 100 items up to 1,000 items. In this example, the recurring value is 100.

• Percent Price: For service items (non blocking related).

• Unit Price: Defines the price for each item.

• Volume Based On: This can be any volume attribute, such as Item Quantity or Group Amount.

If Unit Price is selected in the Application Method field, complete these additional fields:

  • Break UOM: Select a Break UOM such as Each to define the UOM for the price break. The unit of measure (UOM) can be different from the pricing attributes of the child line.

  • Break UOM Attribute: Select a Break UOM Attribute.

**Break Details region**

  • Value From and Value To: Enter a Value From and Value To range that defines
the price break.

For example, to define a break for the first 10 items ordered, create a range from 0 to 10. To do this, enter 0 in Value From field and 10 in the Break Value To field. If the Value To field of the price break is left blank, a value of 9999….99 (15 digits) is provided by default. This value is hidden from the end user and does not appear in the Value To field.

- Price: Enter a list Price.

- Application Method: This field appears only when Block Price and Break Type of Range are selected. Select an Application Method.
  - Block Price applies a lumpsum price rather than a per unit price to a pricing line.
  - Break Unit Price applies a per unit price, for example, $0.30 per unit above 2,000 units.

  **Note:** For additional pricing flexibility, both a Block Price and Break Unit Price can be created as separate break lines. This is commonly found in minimum price scenarios. For example, a $100 flat price is charged for 1 to 100 minutes of cellular phone usage, after which the customer is billed a Break Unit Price of $1.00 per minute.

- Formula: Enter the value of the dynamic formula to be attached to the price break header (PBH) line. At pricing time, the pricing engine calculates the price of the item using the formula.

  **Notes**
  - A formula can be attached to the PBH line only when the Application Method is Unit Price.
  - You can only attach dynamic formulas to a PBH line, not static formulas.

- Recurring Value: This field appears only when Break Type is Range and Application Method is Block Price. Enter a Recurring Value to define a price for a defined interval. When a recurring value is used with price breaks, the defined Block Price repeats for the interval defined in the Recurring Value field. For example, to charge $10 per 100 items up to 1,000 items, enter 100 as the Recurring Value.

4. Click Apply to save your changes. A Confirmation message appears if the price list line was successfully created.
Note: Copying price breaks created in releases earlier than R12:
When you copy a price break line created in releases earlier than R12, the price breaks are converted to the continuous price break format standard in release R12 and newer. Since the conversion results in changes to the price break setup and break calculations, you should review the copied price break lines and make any required changes to ensure correct pricing results.

Related Topics
Creating a Price List (HTML Interface), page 2-43

Searching for Price Lists (HTML Interface)
On the Price Lists page, you can search by price list name, currency, dates, or status to find information essential to your business such as:

• All price lists in a specific currency.
• Specific price lists.
• All price lists created on a specific date.

You can specify additional search criteria to narrow your results. For example, you can specify the type of currency, such as US dollars (USD) to find only price lists with USD as the base currency.

Once the search results are returned, you can view a summary of price lists or select a specific price list to view additional details. In addition to viewing the price list, you can choose to update a selected price list, or create a new price list.

Note: You must be assigned Maintain privileges in pricing security to update or create a new price list. The Details icon is enabled if you have view or update privileges assigned through pricing security.

To search for price lists:
1. Navigate to the Price Lists page.
2. Select a search category from the Search list, and then enter additional criteria (where applicable) to narrow your search results. Select from the following search categories:

- **Currency**: Select a specific currency such as USD to find all modifier lists set up in USD.
- **Dates**: Search by price list dates. These Start and End dates must match exactly to the dates in the price list setup.
- **Price List Name**: Search by the price list name.
- **Status**: Search by Active or Inactive price lists.
  - **Active**: Finds all Active modifier lists.
  - **Inactive**: Finds all Inactive modifier lists.

3. Click Go to display the search results in a table.

4. Optionally, select a price list and click Update to update the price list, or click Details to view price list details.

**Related Topics**

- Creating a Price List (HTML Interface), page 2-43
- Updating a Price List (HTML Interface), page 2-58
- Searching for Price List Lines (HTML Interface), page 2-57
Searching for Price List Lines (HTML Interface)

You can search by the following criteria to find price list lines within a specific price list:

- Dates: Search by a specific date range.
- Items: Search by item(s).

To search for price list lines (HTML Interface):


2. Select the search criteria:
   - Dates: To search by a specific date range. Enter the Start Date and End Dates to find price list lines within a specified date range.
   - Items: To search by item or items. Define additional search criteria by selecting Item Number or a combination of Item Number and UOM or Item Category. You cannot search only by UOM.

3. Click Go to display the price list lines related to the price list.
Updating a Price List (HTML Interface)

In the Update Price List: General Information page, you can update general details about the price list such as the description, currency, active status, and other information.

**Note:** Pricing security can affect the View and Maintain features associated with the Update and Details icons in the HTML user interface. See *Oracle Advanced Pricing Implementation Guide*, Pricing Security for more information. You must be assigned Maintain security privileges to update the price list, otherwise only the Details icon is enabled.

**To update a price list:**

1. Navigate to the Update Price List: General Information page.
2. Make any required changes or corrections to the price list. You can update the following fields:

- Freight Carrier/Terms
- Description
- Payment Terms
- Currency
- Active box: If selected, then the price list is active. If cleared, then the price list is inactive and will not be available for pricing orders.
- Start/End Dates
- Comments
- Multi-currency Conversion
- Round To
3. In the Secondary Price List region, you can update any secondary price lists. If no secondary price list is listed, click Add Another Row to add a secondary price list.

4. Click Apply to save the changes. A Confirmation note appears if the price list was updated successfully.

**Note:** You should familiarize yourself with certain navigational flow considerations in the HTML UI when updating, changing, saving, or deleting data for price lists, modifiers, qualifiers, and their related lines. For more information, see Navigation flow, page C-1.

**Related Topics**

Creating a Price List (HTML Interface), page 2-43

Updating Price List Lines (HTML Interface), page 2-60

**Updating Price List Lines (HTML Interface)**

Once a price list line has been created, you may need to occasionally update the information, for example, to change the price or unit of measure. On the Update: Price List Lines page, you can search for price list lines within the selected price list, display the price list lines, and update information for a price list line.

To change price list line information across multiple price lists, for example, to change the price of an item listed on several price lists, consider using the price list maintenance feature. This saves you time from updating each price list separately.

In addition to updating a price list line, you can add or delete an existing line.

- You cannot update the Product level or Product fields. The Product Description is read-only.

- Pricing security can affect the View and Maintain features associated with the Update and Details icons in the HTML user interface. For more information, see Pricing Security (HTML Interface), page 3-63.

**To update price list lines:**

1. Navigate to the Update Price List: Price List Lines page. Price list lines related to the price list display in a table.

   Optionally, in the Search region, select the Search criteria to find specific price list
lines for the price list, then click Go to display the search results.

2. Select the price list line to be updated, and click Update to display the price list line in the Update Price List Line page.

3. Update the information that requires changes, then click Apply to save your changes.

    **Note:** If you click Apply to save your changes and then click Cancel on the List Lines Search page, the changes you have already saved will not be cancelled.

**Related Topics**

Searching for Price List Lines (HTML Interface), page 2-57

Using the Price List Maintenance feature (HTML Interface), page 2-62

Creating Price List Lines (HTML Interface), page 2-49
Archiving, Deleting, and Purging Price List Information

You cannot delete a price list once it has been created. However, when a price list is no longer required, you can enter an end date when the price list becomes inactive. You can delete price list lines.

For price list lines, you can use the archive feature to archive price list lines from the pricing application tables to archiving tables for long-term data storage. Once the pricing data is copied to the archive tables, it is deleted from the application tables.

**Note:** Price list and modifier list header information is copied to archive tables but is not deleted from the pricing application tables.

When the archived data is no longer required, you can purge the data from the archive tables.

Related Topics

Archiving Pricing Entities, page 8-2
Purging Pricing Entities, page 8-8

Using the Price List Maintenance feature (HTML Interface)

Use the Price List Maintenance feature to make changes to price list lines for a single price list or across many price lists. The frequency of these changes depend largely on your business processes and how often you update your prices--daily, monthly, quarterly, or annually. To make changes, search for the price list or price list lines to be changed in the Price List Maintenance page, then do a detail change or bulk change to update the value, formula or effective dates. Changes can be made for a single price list or across multiple price lists for price list lines.

For example, you could adjust all plastic items by 3 percent, metal items by 5 percent, and extend the end date from September 30, 2005, to December 31, 2005, for a Corporate price list. Depending on your business requirements, click either the Detail Change or Bulk Change button to make changes.

You can review your results before applying your changes, which is useful for modeling your pricing scenarios before submitting the final changes.

**Note:** You must have Maintain privileges to make any updates. If you are unable to access or update this window, you may not have the appropriate access privileges. Consult your Pricing Administrator.

You can use Price List Maintenance to complete the following tasks:
• Search for price lists and price list lines
  • Do simple or advanced searches for a single or multiple price lists/price list lines.
  • Display search results in a hierarchal format.

• Make changes to price lists and price list lines
  • Do detail changes or bulk changes to change price list lines for a single price list or across price lists.
  • End date and create new line in Bulk Change.
  • Duplicate line in Detail Change.
  • Do mass maintenance across multiple price lists.

  **Note:** You can only select those price list lines with Line Type of Price List Line. Price list lines with Line Type of Price Header cannot be selected. You cannot select price lists that belong to a different pricing transaction entity (PTE) or source system.

**Searching for Price Lists and Price List Lines (HTML Interface)**

Use the Price List Maintenance feature to do simple or advanced searches to find price lists and price list lines:

• Search: Search by price list name (for example, Spring price list) and/or product.

• Advanced Search: Search by the following price list criteria: price list header, price list line, pricing attribute(s), qualifier details, and secondary price list.

  **Note:** You can also search for price lists from the Price Lists Search page. See Searching for Price Lists (HTML Interface), page 2-55.

You can search across one price list or multiple price lists. For example:

• Find all price lists where the price list header specifies Start Date = 12 Dec 2000 and Price List Header End Date = 12 Feb 2002

• Find all price lists where price list has a qualifier specifying Customer Name = Vision Operations AND where a price list line specifies Product Attribute of Item Number = telephone
• Find all price lists where one or more of the price list lines specifies Item Category = Soda and Pricing Attribute = Diet

To do a simple search:
1. Navigate to the Price List Maintenance page.

2. In the Search region, select the search criteria:
   • Price List: Enter a specific price list name, or click the Search icon and enter the percent sign (%) to list all price lists. (You can also use partial search strings, such as Pr%, in the Search By field.)
   • Product: Select a product attribute such as All Items, Item Number, or Item Category and a corresponding Product to search by Product criteria. You must provide either Price List or Product or a combination of both to perform a search.

3. When you have completed your entries, click Go to display the search results.
   The search results display detailed information about each price list including price list lines, pricing attributes, and qualifiers. Click the Expand icon to view the price list lines and qualifiers for the selected price list.
Note: Only price list lines can be updated in this feature. You cannot update price break lines in Price List Maintenance.

To do an advanced search:

1. Navigate to the Price List Maintenance page.
2. Click Advanced Search to display the Advanced Search page.

Advanced Search page

3. Select your search criteria.
   
   Note: Click the Search icon (where applicable) to display the available values for each field.

4. When your entries are selected, click Search to display the search results. The search results display in the Price List Maintenance page.

5. From the search results, select the check box next to the price list and/or price list line(s) to be changed. You can change pricing entities such as Value, Pricing Formula, and the Start and End Dates of price list lines.
When a price list is selected, all the price list lines in the search results for that price list will be available for change.

**Note:** You can only select those price list lines with Line Type of Price List Line. Price list lines with Line Type of Price Header cannot be selected. You cannot select price lists that belong to a different PTE or source system.

**To view the search results:**
The search results appear in the Results region of the Price List Maintenance page; the price list is the top-most node. Click the Expand icon (+) next to the price list name to view additional details nested beneath the node. For a price list, you can view related information pertaining to the selected price list such as price list lines, qualifiers, and related information. To view a particular price list if more than one is listed, click the Focus icon. Use the Focus icon to select a particular entity to examine it in more detail.

- **Price Lists Node**
The top node is the Price Lists node if your results include more than one price list. If a single price list is returned in your search results, then the name of the price list appears as the top node.

  If you click a price list node, for example, Corporate Price List, then two additional nodes appear: a Lines node and a Qualifier node. Each row under this node identifies the price list name and its description.

- **Lines Node**
  Click the Lines node to display the price list lines (of the price list) that meet the search criteria. Each price list line displays the item number, item description, unit of measure, value, static or dynamic formula, start date and end date. If no line criteria such as lines, products and pricing attributes are entered in the search criteria, all the price list lines of the price list are displayed.

  Also, if a price list line has associated price breaks or pricing attributes, the Expand icon (+) displays next to the product attribute value. Click the Expand icon (+) for the product attribute value to display the Breaks and Pricing Attributes node.

- **Price Breaks Node**
  Click the Price Breaks node to display all the price breaks for the product attribute value. Each row displays the individual price breaks along with the value.

- **Pricing Attributes Node**
  Click the Pricing Attributes node of the product attribute value to display the pricing attributes that match the query criteria. If no pricing attribute criteria is entered in the Search Criteria, all the pricing attributes of the price list line display.
Each row displays the pricing attribute and pricing attribute value.

- Qualifiers Node

Click the Qualifiers node to display all the qualifiers of the price list that meet the search criteria. If no qualifier criteria is entered in the Search Criteria, all the qualifiers of the price list appear. Each qualifier displays the qualifier attribute and qualifier attribute value in the Description column.

**Making Detail Changes across a Selected Group of Lines**

For Detail Changes, updates must be made for each price list line separately. For example, to increase the price for selected items on a price list, you would have to manually update each price list line separately.

If a product has overlapping dates on a price list, an error message appears; for example, if you end date a price list line when the item is no longer sold.

**To make detail changes:**

1. After you have completed your search in the Price List Maintenance page, select the price lists or price list lines to be changed.

2. Click Detail Change to display the Detail Change: Make Changes page.

**Detail Change: Make Changes page**

On this page, you can update selected price list lines. To view additional details about a price list line, click Show. For each price list line, you can make the changes to the existing line. You can also click the Duplicate Line icon and then make changes to the new price list line.
3. To change the value of a price list line, for example, to increase its price, select the Type of Value Change. Select one of the following values:
   • No Change: The value of all the price list line remains the same.
   • Replace Value: The value of the price list line will be changed to the value entered in the Value Change By field.
   • Amount: The value of the price list line will be increased/decreased by the value entered in the Value Change By field.
   • Percent: The value of the price list lines will be increased/decreased by the percentage value entered in the Value Change By field.
   • Clear Value: The value of all the price list lines is changed to Null.

4. If you selected Replace Value, Amount, or Percent in the Type of Value Change field, enter a value or percentage in the Value Change By field.

The Changed Value field displays the changed value after you have completed your changes and click Refresh Data. For example, if the original value is 100, and you enter the following values: 110:
   • Type of Value Change: Increase by Percent
   • Value Change By: 10

After you click Refresh Data, the Changed Value field displays 110.

5. Enter a Changed Start Date to replace the existing start date. You can then make further changes to the Changed Value for this price list line.

6. Enter a Changed End Date to replace the price list line end date.

   If the price list line has a dynamic formula or static formula attached, the formula name is displayed in either the Static Formula or Dynamic Formula field.

7. To update or add a static or dynamic formula for a price list line, make your changes in the Static Formula or Dynamic Formula field. Select only one type of formula.

   **Note:** To update or add a formula value, click the Search icon next to the Changed Static Formula or Changed Dynamic Formula fields to view the available static and dynamic formulas.

8. Click the Duplicate Line icon to duplicate the current line. You can change values of the current and the duplicated line.
9. Click Refresh Data or Continue process the changes.

**Example of Detail Change:**
This example shows how to use the Detail Change page to make the following changes to price list lines for a fictitious price list (Corporate):

- Increase the price for price list line Item A by 10 percent.
- Add a formula to calculate price for price list line Item B.
- Create a new price list line for Item C and change the Start Date and the End Date.

1. From the Price List Maintenance page, search for the Corporate price list.

2. Select the Corporate price list and click Detail Change to display the Detail Change page.

3. Select or enter the following values for each price list line to be changed:
   - To increase the price for price list line Item A by 10 percent:
     - Type of Value Change = Percent
     - Value Change By = 10
   - To add a formula to calculate price for price list line Item B:
     Click the Changed Static Formula or the Changed Dynamic Formula icon to select one of the available formulas. Select one formula type or the other, not both.
   - To create a new price list line for Item C and change the Start and End Dates:
     - Click the Duplicate Line icon for Item C to duplicate the price list line. When duplicating a line, remember to enter an end date for the previous line.
     - For the new line, enter the new Start Date and optionally, the End Date. When duplicating a line, ensure that the effective dates for a price list line do not overlap. Change the effective dates of the overlapping line to make the price list line unique. The New Line box is selected to indicate new lines.

4. Click Refresh Data to view all the updated and newly-created price list lines.

5. If satisfied with your changes, click Continue to go to the Detail Change: Review Changes page.
6. Click Finish to save the changes. A Confirmation message confirms if all changes to the price list lines have been saved.

Making Bulk Changes across a Selected Group of Lines

The Bulk Change feature enables you to make the same updates across all selected price list lines: for example, to adjust the price by $5. This saves time from updating each price list line separately. These changes are made in the Bulk Change: Make Changes page.

Unlike the Detail Change feature, which requires you to update each price list line separately, the Bulk Change feature enables you make your changes once and update all selected price list lines. For example, bulk change could be used to:

- Adjust all lines on Corporate Price list and Spring Price List by 10 percent
- Adjust all lines on VIP price list and the first two price list lines of Fall price list (out of 10 price list lines), and change the end date to 12-Dec-2006.

When making changes to the price list line, you can end date the existing line and create a new price list line with the changes. The existing line will be end-dated, and the changes are reflected only in the new line.

In Bulk Change, you can choose to make a date change by selecting either the Override option or End Date and Create New option from the Action region. When end dating and creating a new line, you can also retain the existing start and end dates. Otherwise, they can override the start and end date of the existing line.

If a product on a price list has overlapping dates, the system will display an error; for example, if you end date a price list line when the item is no longer sold.

To make bulk changes across a selected group of line:

1. After you have completed your search in the Price List Maintenance page, select the price lists or price lines to update.

2. Click Bulk Change to display the Bulk Change: Make Changes page. The Bulk Change feature enables you to do the same change across all the selected lines rather than to update each line separately (Detail Change).
**Bulk Change: Make Changes page**

The selected price list lines display in the Price List Lines region of the Bulk Change: Make Changes page. To view additional details about a price list line, click Show.

In the Maintenance Criteria region, you can make changes to the effective Start and End Dates, Formula, and Value and apply theses changes to the price list lines.

3. In the Action region, select one of the following:
   - **End Date and Create New**: Each selected price list line is end-dated and a new price list line is created with the changes specified in the Effective Date, Formula and Value regions. The Start Date or End Date for each price list line is updated.

   This feature is useful for keeping a version history of a price list line. If one item has multiple price list lines for the same item (with different effectivity dates), the price list line with the most forward effectivity dates will be end dated and a new line will be created. Any changes will be reflected on the new line.

   - **Override**: Each selected price list line will be updated with the changes you specify in the Effective Date, Formula and Value regions.

4. Select the Type of Date Change:
   - **No Change**: The dates remain the same.
• Change Date: The dates are changed to those entered in the Start Date, End Date, New Line Start Date, and New Line End Date.

5. If you selected Change Date in the Type of Date Change field, enter the new dates in the following fields:
   • Start Date: This changes the start date of all the price list lines.
   • End Date: This changes the end date of all the price list lines.

   • If you selected End Date and Create New in Action region, these additional fields appear:
     • New Line Start Date: This date changes the start date of all the new price list lines created as a result of selecting the Action: End Date and Create New.
     • New Line End Date: This date changes the end date of all the new price list lines created as a result of selecting the Action: End Date and Create New.

   • Retain Existing Start Date: If selected, you do not need to enter a Start Date for the existing line. If deselected, the date in the Start Date field replaces the current Start Date.

   • Retain Existing End Date check box: If selected, you do not need to enter an End Date for the existing line. If deselected, the date in the End Date field will replace the current End Date.

6. In the Formula region, select the Type of Formula Change:
   • No change: The formulas remain the same.

   • Remove Static and Dynamic Formula: You can select from Any Formula or from available formula names. If you select a particular formula, then the matching formula attached to the price list lines will be removed. If Any Formula is selected, all formulas will be removed from price list lines.

   • Replace All Formulas with Dynamic Formula: The Dynamic Formula of all the price list lines will be changed to the Formula entered in the Name field.

   • Replace All Formulas with Static Formula: The Static Formula of all the price list lines will be changed to the Formula entered in the Name field.

7. Select the Formula Name. Do not select a Formula Name if you selected No Change from the Type of Data Change list. Click the Search icon to display all the dynamic and static formulas.
Note: Formulas with Modifier Value as a formula type will not appear in the List of Values.

8. In the Value region, select how the value should be changed for the selected price list lines:
   - No Change: The value of all the price list lines remains the same.
   - Replace Value: The value of all the price list lines will be changed to the value entered in the Change By field.
   - Amount: The value of all the price list lines will be increased/decreased by the value entered in the Change By field.
   - Percent: The value of all the price list lines will be increased/decreased by the percentage value entered in the Change By field.
   - Clear Value: The value of all the price list lines is changed to Null.

9. When you have completed your entries, click Refresh Data to view your changes.
   Note: Any validation errors appear at the top of the page. You may be able to resolve the error by changing the start and end date values for the price list line.
   The Bulk Change: Make Changes page displays both the new and original values.

10. Click Continue to review the updated price list lines:
    - Changed Value (view-only): Displays the changed value if you entered a value for Type of Value Change and Value Change By.
      For example, if the original Value = 100, and you selected Type of Value Change = Increase by Percent, and Value Change By = 10 and clicked Apply, the new Changed Value that displays is 110.
    - Changed Start/End Date: Displays the changed start and end dates.
    - Changed Static Formula: Displays the changes static formula.
    - Changed Dynamic Formula: Displays the changed dynamic formula.

11. To make revisions (for Bulk Changes), change your entries in the Maintenance Criteria region and click Continue or Refresh Data to process your changes.
Note: If you click Refresh Data, the changes are applied to the original value displayed on the price list lines in the search results, not to the price list line values that are currently in the Bulk Change Window. Therefore, if you updated your price list by 10 percent from 100 to 110 and you decide you want to update to 20 percent, the price is now 120, not 132.

To view validation errors:
Validation errors appear at the top of the page where the error occurred. Depending on the error, you can change the values in this price list line to resolve the error. Click Refresh Data again to ensure the error disappears.

Note: Whenever you change the maintenance criteria and click Refresh Data, the changes are applied to the price list lines, not to the price list lines values.

Examples of Using Bulk Changes:
The following examples describe how to change values for price list lines using the bulk change feature:

Example 1: Bulk Change to increase all price list lines on the Corporate Price List and the Spring Price List by 10 percent
From the Price List Maintenance page, do a search to find the Corporate Price List and Spring Price List. For example, you could do an Advanced Search using a qualifier such as Order Type = Standard to display related price lists. Click Search to view the results.

1. Select the Corporate and Spring price lists from the results and click Bulk Change to display the Bulk Change: Make Changes page.

2. Select the following values:
   - Override box = Selected
   - Type of Value Change = Percent
   - Change By = 10

3. Click Refresh Data to view the new changes. All the price list lines of the Corporate and Spring price lists display with the changes applied as above.

4. Click Continue to display the Bulk Change: Review Changes page.

5. Click Finish to save the changes. A Confirmation message displays on the Price List Maintenance page.
Example 2: Bulk Change to override the end date for selected lines
The following example shows how Bulk Change can be used to adjust all lines on the VIP price list and the first two price list lines of the Fall price list (out of 10 price list lines). The end date of the price list lines will also be changed to 12-Dec-2003.

1. In the Advanced Search page, do a search to find the VIP and Fall price lists.

2. Select the VIP price list. For the Fall price list, click the Expand icon to view all the price list lines, then select the first two list lines.

3. Click Bulk Change to display the **Bulk Change: Make Changes** page. In the Maintenance Criteria region, select the following values:

<table>
<thead>
<tr>
<th>Field Name</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Override box</td>
<td>Selected</td>
</tr>
<tr>
<td>Type of Date Change</td>
<td>Change Dates</td>
</tr>
<tr>
<td>Existing End Date</td>
<td>December 12, 2003</td>
</tr>
</tbody>
</table>

4. Click Refresh Data to review your changes.

5. All the lines of VIP price list and first two price list lines of the Fall price list are displayed in a table with the changes applied as above.

6. Click Finish to display the Bulk Change: Review Changes page.

7. Click Finish to save the changes. A confirmation message is also displayed.

Example 3: Bulk Change to change the price of an item by 10 percent
The following example shows how the bulk change feature can be used to adjust the price for an item category, for example, orange juice, for all price lists. The current prices will be end-dated by May 31, and the new prices (discounted 10 percent) will take effect from June 1, 2006, to August 3, 2006.

1. In the Advance Search page, select the following search values:

<table>
<thead>
<tr>
<th>Field Name</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product Attribute</td>
<td>Item Category</td>
</tr>
<tr>
<td>Product Value</td>
<td>Orange Juice</td>
</tr>
</tbody>
</table>
2. Click Search to view your search results.

3. Select all price lists and click Bulk Change to display the Bulk Change: Make Changes page.

4. In the Maintenance Criteria region, select the following values:

<table>
<thead>
<tr>
<th>Field Name</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>End Date and Create New</td>
<td>Selected</td>
</tr>
<tr>
<td>Type of Date Change</td>
<td>Change Dates</td>
</tr>
<tr>
<td>Existing End Date</td>
<td>May 31, 2006</td>
</tr>
<tr>
<td>Retain Existing Start Date box</td>
<td>Selected</td>
</tr>
<tr>
<td>New Start Date</td>
<td>June 1, 2006</td>
</tr>
<tr>
<td>New End Date</td>
<td>August 31, 2006</td>
</tr>
<tr>
<td>Type of Value Change</td>
<td>Percent</td>
</tr>
<tr>
<td>Change By</td>
<td>10</td>
</tr>
</tbody>
</table>

5. Click Apply. All the lines of the Corporate price list are displayed with the changes applied as above.

6. Click Next to go to the Bulk Change: Review Changes page.

7. Click Submit to save the changes. A confirmation message confirms that the changes have been made.

**Example 4: Use Bulk Change to update an item to a Dynamic Formula**

The following example shows how Bulk Change can be used to update the price of item AS54888 on Vision Operations’ price lists to a Dynamic Formula (F1) by clearing the Value and attaching a dynamic formula.

1. In the Search Price Lists region of the Price List Maintenance page, enter the search criteria:
2. Click Go to view the results.

3. Select the Vision Operations price list and then click Bulk Change to display the Bulk Change: Make Changes page.

4. In the Maintenance Criteria region, select the following values:

<table>
<thead>
<tr>
<th>Field Name</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Override</td>
<td>Selected</td>
</tr>
<tr>
<td>Type of Formula Change</td>
<td>Replace All Formulas with Dynamic Formula</td>
</tr>
<tr>
<td>Name</td>
<td>F1</td>
</tr>
<tr>
<td>Type of Value Change</td>
<td>Clear Value</td>
</tr>
</tbody>
</table>

5. Click Refresh Data to review the applied changes.

6. Click Continue to display the Bulk Change: Review Changes page.

7. Click Finish to save the changes. A confirmation message confirms that the changes have been made.
Overview of Modifiers

Modifiers enable you to set up price adjustments (for example, discounts and surcharges), benefits (for example, free goods and coupons), and freight and special charges that can be applied immediately to pricing requests or accrued for later disbursement. Using modifiers, you can:

- Set up a modifier list with multiple modifier lines that define the terms of the price adjustment.
- Create eligibility rules for modifiers by assigning list and line level qualifiers.
- Define modifiers that are incompatible with other modifiers.
- Create exclusive modifiers.
- Create cascading modifiers.
- Accrue monetary and nonmonetary benefits.
- Create monetary or usage limits that a customer can receive for a promotion, deal, or other modifier.
  - If you use the multicurrency feature with price lists and modifiers, see Creating a Multicurrency Conversion List, page 6-6.
  - You can only view or update a modifier in your pricing transaction entity. The profile QP: Pricing Transaction Entity must match the pricing transaction entity of the modifier. You can only view or update a modifier in your source system. The
profile QP: Source System Code must match the source system of the modifier. Otherwise, the modifier is view-only.

Using the HTML User Interface with Modifier Lists and Modifier

Oracle Advanced Pricing provides an HTML-based user interface (UI) that features guided steps, user-friendly pages, and shortcut links for setting up and maintaining modifiers, price lists, and qualifiers.

You can use this HTML format for many tasks that were previously available only using the Oracle Forms-based interface. Tasks that can be completed in HTML are identified with the words HTML Interface in the task title, for example, Creating a Modifier List (HTML Interface).

Related Topics

Using Modifiers in the HTML User Interface, page 3-62

Modifier Concepts

Using modifiers, you can set up price adjustments, benefits, freight and special charges, and promotional limits to control spending or usage. You can define simple discounts and surcharges as well as more advanced deals and promotions. The following list describes the main modifier concepts and related entities:

- Modifier lists contain one or more modifiers. Modifiers have list level and line level components. Each list level must have one or more lines associated with it.

- By defining qualifiers at the list and line levels, you define a customer’s eligibility for the modifier.

- Control features that influence modifiers are products and product groups, pricing attributes, phases, incompatibility groups, levels, and buckets.

- The use of modifiers can result in volume breaks, additional buy/get products, and benefits.

The following diagram provides an overview of modifiers and related concepts, such as modifiers, modifier lists, and qualifiers:
Modifier Lists and Lines

Using modifier lists, you can create groupings of price adjustments, benefits, and freight and special charges that you offer and report together to meet various business needs. At the header level of the modifier list, you define criteria that is common to the modifier lines.

Create modifier lines for a modifier list to define the type of price adjustments, benefits, or freight and special charges that the pricing engine applies to pricing requests.

Adjustment Method

The adjustment method (also known as the application method in the forms-based UI)
determines how the modifier applies the price adjustment. You can select from the following adjustment methods:

- **Percent**: Creates a percentage price adjustment on each unit based on the percentage entered in the Value field. For example, to apply a 10 percent discount, select percent as the adjustment method.

- **Amount**: Creates a fixed price adjustment on each unit using the amount entered in the Value field.

- **Lumpsum**: Creates a price adjustment for this lump sum amount on the entire line.

- **New price**: Overrides the selling price of this item and makes the new price (defined in the Value field) the new selling price. Creates a price adjustment for the difference between the list price and the new price.

The following table shows examples of how the pricing engine uses the adjustment method to calculate the extended selling price of an order line:

<table>
<thead>
<tr>
<th>List Price</th>
<th>Item A</th>
<th>Quantity Ordered</th>
<th>Adjustment Method</th>
<th>Value</th>
<th>Price Adjustment</th>
<th>Extended Selling Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>200</td>
<td>Amount</td>
<td>5</td>
<td>5 per unit</td>
<td>1,000</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>200</td>
<td>Percent</td>
<td>5</td>
<td>5% per unit</td>
<td>1,900</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>200</td>
<td>New Price</td>
<td>5</td>
<td>5</td>
<td>1,000</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>200</td>
<td>Lumpsum</td>
<td>5</td>
<td>5 off for the entire line</td>
<td>1,995</td>
<td></td>
</tr>
</tbody>
</table>

The adjustment method for a modifier line depends on the level selected for that modifier line: Order, Line, or Group of Lines. The following tables show the adjustment methods available for each level: Order Level, Line Level, or Group of Lines. The Formula column shows if you can use a formula for the value of the modifier:

<table>
<thead>
<tr>
<th>Level</th>
<th>Modifier Type</th>
<th>Adjustment Method Available</th>
<th>Use with Formula?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Order</td>
<td>Discount</td>
<td>Percent</td>
<td>Yes</td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>Level</th>
<th>Modifier Type</th>
<th>Adjustment Method Available</th>
<th>Use with Formula?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Order Level</td>
<td>Surcharge</td>
<td>Percent</td>
<td>Yes</td>
</tr>
<tr>
<td>Order Level</td>
<td>Freight/Special Charges</td>
<td>Lumpsum</td>
<td>Yes</td>
</tr>
<tr>
<td>Line Level</td>
<td>Discount</td>
<td>Percent, Amount, New Price,</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>or Lumpsum</td>
<td></td>
</tr>
<tr>
<td>Line Level</td>
<td>Surcharge</td>
<td>Percent, Amount, New Price,</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>or Lumpsum</td>
<td></td>
</tr>
<tr>
<td>Line Level</td>
<td>Freight/Special Charges</td>
<td>Percent, Amount, Lumpsum</td>
<td>Yes</td>
</tr>
<tr>
<td>Line Level</td>
<td>Other Item Discount (Get)</td>
<td>Percent, Amount, New Price,</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td></td>
<td>or Lumpsum</td>
<td></td>
</tr>
<tr>
<td>Line Level</td>
<td>Price Break</td>
<td>Percent, Amount, New Price,</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>or Lumpsum</td>
<td></td>
</tr>
<tr>
<td>Line Level</td>
<td>Promotional Good (Get)</td>
<td>Percent, Amount, New Price,</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td></td>
<td>or Lumpsum</td>
<td></td>
</tr>
<tr>
<td>Group of Lines Level</td>
<td>Discount</td>
<td>Percent, Amount, New Price,</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>or Lumpsum</td>
<td></td>
</tr>
<tr>
<td>Group of Lines Level</td>
<td>Surcharge</td>
<td>Percent, Amount, New Price,</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>or Lumpsum</td>
<td></td>
</tr>
<tr>
<td>Group of Lines Level</td>
<td>Other Item Discount (Get)</td>
<td>Percent, Amount, New Price,</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td></td>
<td>or Lumpsum</td>
<td></td>
</tr>
<tr>
<td>Group of Lines Level</td>
<td>Price Break</td>
<td>Percent, Amount, New Price,</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>or Lumpsum</td>
<td></td>
</tr>
<tr>
<td>Group of Lines Level</td>
<td>Promotional Good (Get)</td>
<td>Percent, Amount, New Price,</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td></td>
<td>or Lumpsum</td>
<td></td>
</tr>
</tbody>
</table>

**Lumpsum Adjustment Method with Group of Lines**

When Lumpsum is selected as the adjustment method for a modifier line, the pricing engine creates a price adjustment for the defined lumpsum amount. The lumpsum can be based on group quantity (sum of item quantities) or an item amount (a monetary amount).
Note: When the modifier is automatic, the lumpsum is treated as a lumpsum for the entire order. When the modifier is manual, the lumpsum is applied to the line. If the manual modifier is applied to the next line on the order, then an additional lumpsum is applied to the order.

For example, consider a lumpsum modifier of 1000 that is applied to an order with two lines. When the modifier is automatic, the order has a total discount of 1000. When the modifier is manual and applied to the first line, then a lumpsum discount of 1000 is applied. Now apply the lumpsum modifier to the second line, and a discount of 1000 is applied to the second. Therefore, the order has a lumpsum discount of 2000; whereas, when the modifier is automatic, no matter how many order lines, the order has a lumpsum discount of 1000.

Two examples are provided to compare how the lumpsum amount is calculated if either 1) Group Quantity or 2) Item Amount is selected.

The following Discount list modifier is used in each example.

<table>
<thead>
<tr>
<th>Level</th>
<th>Modifier Type (line level)</th>
<th>Product Attribute</th>
<th>Product Attribute Value</th>
<th>Value</th>
<th>Adjustment Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group of Lines</td>
<td>Discount</td>
<td>All Items</td>
<td>All</td>
<td>1000</td>
<td>Lumpsum</td>
</tr>
</tbody>
</table>

Lumpsum calculations (Group Quantity Selected)

The following example demonstrates how the adjustment amount is calculated when the Lumpsum modifier is applied against the group quantity of an order:

<table>
<thead>
<tr>
<th>Line</th>
<th>Item</th>
<th>Quantity</th>
<th>Price</th>
<th>Adjustment Amount Calculated when Lumpsum Modifier Applied</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>AS54888</td>
<td>10</td>
<td>$80</td>
<td>$20 * 10 qty</td>
</tr>
<tr>
<td>2</td>
<td>AS54999</td>
<td>40</td>
<td>$20</td>
<td>$20 * 40 qty</td>
</tr>
</tbody>
</table>

The pricing engine calculates the adjustment amount as follows:

1. The pricing engine calculates the Group Quantity value, which is the sum of all item quantity lines. Therefore, the Group value is 50 (10 + 40).

   Group value for Line 1: 50
Group value for Line 2: 50

2. To obtain the adjusted amount, the value (from the Value field of the modifier - in this case, 1,000) is divided by the group value (50):
   
   • Line 1: $1,000 / 50 = 20$
   
   • Line 2: $1,000 / 50 = 20$

   The adjustment amount per quantity is $20. The total adjusted amount for the entire order is $1,000: Line 1 is $200, and Line 2 is $800.

**Lumpsum Calculations (Item Amount Selected)**

The following example demonstrates how an adjustment for lumpsum modifier is calculated based on the item amount (the monetary amount for each item). Suppose the Lumpsum modifier is applied against the following items on a sample sales order:

<table>
<thead>
<tr>
<th>Line</th>
<th>Item</th>
<th>Quantity</th>
<th>Price</th>
<th>Adjustment Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>AS54888</td>
<td>10</td>
<td>$80</td>
<td>50</td>
</tr>
<tr>
<td>2</td>
<td>AS54999</td>
<td>40</td>
<td>$20</td>
<td>12.5</td>
</tr>
</tbody>
</table>

The engine calculates the lumpsum based on item amount as follows: value divided (/) by group value:

1. Group value is calculated as follows:

   \[
   \text{Group value} = \text{Sum of all lines' unit price} \times \text{quantity/unit price per line}:
   \]

   \[
   \text{Total group value} = 80 \times 10 + 20 \times 40 = 1600
   \]

   • Group value for Line 1 = 1600 / 80 = 20
   
   • Group value for Line 2 = 1600 / 20 = 80

2. To obtain the adjusted amount per unit, the value (from the Value field of the modifier, in this case, 1,000) is divided by the group value for each line:

   • Line 1: $1,000 / 20 = 50$
   
   • Line 2: $1,000 / 80 = 12.5$

   Therefore, the adjustment amount for the first line is 50 and for the second line 80.
Using Modifiers with Negative Unit Selling Prices

A Discount or Surcharge modifier can be used to adjust the final unit selling price, regardless of whether the item list price is a positive or negative value.

Example 1: Positive priced item
If a product is $100 and the customer gets a 40 percent discount, then the customer gets a $40 discount, which means the price would be $60.

The following calculations are used to get this result:

List price * modifier percent = line discount amount
List price - line discount amount = line price

Example 2: Negative priced item
If a product is <$100> and the customer gets a 40 percent discount, then the customer gets a <$40> discount, which results in a price of <$60>.

Note: The brackets (<>) indicate a negative price.

The following calculations are used to get this result:

<list price> * modifier percent = <line discount amount>
<list price> - <line discount amount> = <list price> + line discount amount = <line price>

Example 3: Surcharge with negative-priced items
The following example shows the results when a Surcharge modifier is applied to a price list line with a negative price:

1. Create a simple modifier (ABC-MN) with type = Surcharge of 10 percent.
2. Create a price list line (ABC-N) with a value of <$100>.
3. Enter a sales order with price list ABC-N and the item of the price list ABC-N.
4. Save the order.
5. The surcharge is applied, and the unit selling price is <$-110.00>.

Incompatibility Processing

When a customer is eligible for more than one modifier, you can use incompatibility processing to determine which of the modifiers the pricing engine should select and apply to an order or order line. For more information, see Changing Modifier Incompatibility, page 3-100.
Buckets

When setting up a modifier, you can assign a modifier line to a particular bucket, such as Bucket 1, 2, or 3, to define cascading price adjustments. This setup controls how discounts and other benefits are calculated.

Manual Modifiers

For manual modifiers, the modifier adjustment is not applied automatically. Rather, you must manually select the adjustment to be applied to an order line. The following modifier types can be manual:

- Discounts
- Freight and special charges
- Price breaks
- Surcharges

Manual modifiers can also be used with price break lines. You can set manual modifiers at the order, line, and group of lines levels, and can override them.

Pricing Buckets with Manual Modifiers

Pricing buckets can be used with manual modifiers at the line or group of line level for the discounts, surcharges, freight and special charges, and price break modifiers. You can use this feature if the profile option QP: Allow Buckets for Manual Modifiers is set to Yes.

Once created, the manual modifier can be selected from the View Adjustments window in Order Management or the Price Adjustments window in Oracle Quoting. If a manual modifier is applied in an earlier bucket, then all subsequent adjustments will be recalculated. Alternately, when you overtype the selling price on the order line in Order Management, you can only apply manual adjustments in the null bucket. See the Oracle Order Management User’s Guide, Pricing chapter and the Oracle Quoting User’s Guide for more information on using manual modifiers.

Events

Events are points in the process flow when the calling application sends a pricing request to the pricing engine (similar to a workflow event). The information that the pricing engine returns, for example, base prices, price adjustments, promotions, or freight charges, depends on the pricing phases of the event.

For example, if you need to price sales orders at shipment, use the Reprice Line event and insert the Reprice Line workflow activity into the order process workflow to invoke the repricing. The pricing engine uses the price list and modifiers that are in effect at order entry to meet booking requirements such as credit check.
**Accruals**

You can create monetary and non-monetary accruals. For example, a customer accrues 10 airline frequent flyer credits for each item they purchase. The pricing engine uses the accruals in price calculations and passes them to the calling application.

Accruals:

- Do not affect the selling price of an order line.
- Do not appear as chargeable items on invoices.
- Create an adjustment record in the database.

You can:

- Assign expiration dates to accruals.
- Mark accruals as redeemed.
- Assign monetary accruals to buckets. Since accruals do not affect the selling price of an order line, the pricing engine does not include them in bucket calculations. However, it uses bucket numbers to determine the price from which to calculate the accrual value.

**Accruals Using Buckets**

The following table shows how accruals are calculated using buckets. In this table:

- The Price Adjustment column shows the value of each modifier.
- The Bucket Subtotal column shows the total value of all modifiers for the bucket.
- The Selling Price column shows the price at the beginning of the calculation and after the application of each bucket subtotal.
- The value Null in a cell means that the cell has no value; the value Null Bucket means that the modifier is grouped in the null bucket:

<table>
<thead>
<tr>
<th>Bucket</th>
<th>Modifier</th>
<th>Price Adjustment</th>
<th>Bucket Subtotal</th>
<th>Selling Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Null</td>
<td>Null</td>
<td>Null</td>
<td>Null</td>
<td>100.00</td>
</tr>
<tr>
<td>Null</td>
<td>Null</td>
<td>Null</td>
<td>Null</td>
<td>Null</td>
</tr>
<tr>
<td>1</td>
<td>Null</td>
<td>Null</td>
<td>(7.00)</td>
<td>93.00</td>
</tr>
<tr>
<td>Bucket</td>
<td>Modifier</td>
<td>Price Adjustment</td>
<td>Bucket Subtotal</td>
<td>Selling Price</td>
</tr>
<tr>
<td>--------</td>
<td>----------</td>
<td>------------------</td>
<td>-----------------</td>
<td>--------------</td>
</tr>
<tr>
<td>2</td>
<td>Null</td>
<td>Null</td>
<td>(5.00)</td>
<td>88.00</td>
</tr>
<tr>
<td>3</td>
<td>Null</td>
<td>Null</td>
<td>(6.80)</td>
<td>81.20</td>
</tr>
<tr>
<td>Null Bucket</td>
<td>Null</td>
<td>Null</td>
<td>(15.00)</td>
<td>66.20</td>
</tr>
<tr>
<td>Null</td>
<td>Null</td>
<td>Null</td>
<td>Null</td>
<td>Null</td>
</tr>
<tr>
<td>1</td>
<td>10% accrual</td>
<td>(10.00)</td>
<td>Null</td>
<td>Null</td>
</tr>
<tr>
<td>1</td>
<td>5% accrual</td>
<td>(5.00)</td>
<td>Null</td>
<td>Null</td>
</tr>
<tr>
<td>2</td>
<td>10% accrual</td>
<td>(9.30)</td>
<td>Null</td>
<td>Null</td>
</tr>
</tbody>
</table>

**Example of Nonmonetary Accruals**

The following is an example of a setup for a non-monetary accrual.

If an accrual conversion rate is used, then the value equals the monetary value of the points. The value in the Accrual Value field is calculated using the Benefit Quantity value * the Accrual Conversion Rate value:

- 5 * 0.5 = 2.5

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Volume Type</td>
<td>Item Quantity</td>
</tr>
<tr>
<td>Break Type</td>
<td>Recurring</td>
</tr>
<tr>
<td>Operator</td>
<td>Between</td>
</tr>
<tr>
<td>UOM</td>
<td>EA</td>
</tr>
<tr>
<td>Value From</td>
<td>2</td>
</tr>
<tr>
<td>Value to</td>
<td>999999999</td>
</tr>
<tr>
<td>Adjustment Method</td>
<td>Lumpsum</td>
</tr>
</tbody>
</table>
### Qualifier Groups and Grouping Numbers

When qualifiers are assigned to qualifier groups, all the qualifiers in the qualifier group are attached to the modifier. Before you attach multiple qualifier groups, you must indicate how the process should coordinate the grouping numbers.

### Cross Order Volume

You can provide extra benefits to customers after they place a certain amount of business with you. The cross order volume feature allows you to create modifiers that are qualified across an accumulation of orders and applied when a customer meets certain volume levels. It accumulates and sums order amount, item quantity, and item amount across the orders of each customer.

### Related Topics

- Cross Order Volume Load concurrent program, page 11-6
- Cross Order Volume Report, page 11-7
- Using Qualifier Grouping Numbers across Qualifier Groups, page 5-16

### Creating a Modifier List

Using modifier lists, you can create groupings of price adjustments, benefits, and freight and special charges that you offer and report together to meet various business needs. At the list level, you define criteria such as the modifier currency that applies to the modifier and any modifier lines you add to the modifier list.

**Note:** Oracle Advanced Pricing also provides an HTML-based UI for setting up and maintaining most modifier and modifier line types. For information on using the HTML UI with modifiers, see Using Modifiers

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accrual Value</td>
<td>2.5</td>
</tr>
<tr>
<td>Benefit Quantity</td>
<td>5</td>
</tr>
<tr>
<td>Benefit UOM PN (for Points)</td>
<td>PN</td>
</tr>
<tr>
<td>Accrual Conversion Rate</td>
<td>0.5</td>
</tr>
</tbody>
</table>
You can create the following modifier list types:

- Deal
- Discount list
- Freight and special charge list
- Promotion
- Surcharge list

To create a modifier list:

1. Navigate to the Advanced Pricing-Define Modifier window.

   Note: If you cannot query or update the modifier after saving it or exiting, consult your Pricing Administrator for access privileges. Your security privileges may not allow you to access this window.
2. On the Main tab, select the Modifier Type.

3. Enter a modifier list value in the Number field.

4. Select or clear the Active check box. The pricing engine evaluates the modifier only if the Active check box is selected (inactive modifiers are not evaluated further by the pricing engine). The pricing engine performs more effectively if the Active check box is cleared for expired modifiers. You can query inactive modifier lists.

5. Select or clear the Automatic check box:
   - If selected, the Automatic check box is also selected at the line level, and the pricing engine automatically applies the modifier.
   - If cleared, then the modifier is considered a manual modifier and the adjustment must be applied manually rather than automatically.

   **Note:** If the Automatic option is enabled at the modifier list level, you can still manually apply line types of Discount, Surcharge, and Freight/Special Charges by clearing the Automatic check box at the line level.

6. Enter a value in the Name field to identify the modifier.
The modifier name should be unique across all Pricing Transaction Entities (PTEs), otherwise an error occurs. For example, if a modifier named Corporate is created in the Order Management PTE, an error message appears if you create a Corporate modifier in the Purchasing PTE.

7. A Global check box appears if the Pricing Security Control Profile is set to ON. If the check box is selected, the modifier list can be used by all operating units for pricing transactions. If cleared, the modifier’s use is restricted to the operating unit of the user creating the modifier list.

8. Enter a version if the modifier Type is Promotion or Deal.

9. Enter the Start and End Date range for the modifier.

   • When a qualifier is attached to a price list or modifier header, the effective dates of that qualifier determine the effective dates for the price list or modifier list, not the effective dates defined in the price list or modifier list window. For example, suppose you create a price list with an effective start date of 23-NOV-2005 and no end date; then you create a qualifier at the header level with effective dates of 10-NOV-2005 and 12-NOV-2005 for customer Computer Service and Rentals. However, after 12-NOV-2005, the price list will not be valid for Computer Service and Rentals or any other customer.

   • If you do not enter dates and select Active, the list is effective from the creation date.

10. Choose one of the following:

    • Select a currency. If a currency is selected such as US dollars (USD), the sales order must match the modifier currency to determine pricing for the order.

    • Optionally, select Optional Currency to leave the Currency field in the modifier list blank. This option can be selected for modifiers where currency is not used as a criteria to select modifiers for the order. For more information, see Optional Currency, page 3-65.

11. Enter a description for the modifier list. If the modifier list Type is Promotion or Deal, select the Advanced tab.

12. Save your work.

**On the Advanced tab**

13. If the modifier list Type is Promotion or Deal, select the Advanced tab.
**Note:** The modifier list types of Promotion and Deal have a parent-child relationship for reporting purposes. A Deal modifier list must be associated with a parent Promotion by providing the promotion name and version. Since this association is for reporting purposes, information that you define on the promotion is independent of and does not affect the information on the Deal modifier.

14. Enter the Parent Number and Parent Version to specify the promotion to which the deal is associated.

15. Select the Ask for box to create an Ask for modifier. This means the customer must specifically request that the modifier benefit be applied (for example, by providing a special discount number), otherwise it will not be applied. The Ask for box is only available for modifier list types of Deal and Promotion.

**Note:** If the pricing engine selects multiple modifiers to apply to an order line, Ask for promotions receive a higher preference than other modifiers.

16. In the Date Type I field, specify Order Date and a date range.
17. In the Date Type II field, specify Scheduled Ship Date and a date range. The Order Date and Scheduled Ship Date are passed by Order Management and cannot be changed. If you enter dates for both Order Date and Scheduled Ship Date, the sales order must meet both dates to be eligible for the modifier.

18. Save your work.

   **Note:** The same results can be achieved by creating qualifiers for Order Date and Ship Date and attaching them to the modifier. These qualifiers are sourced and the user can override the mapping rules for these qualifiers.

**On the Other tab**

19. This tab displays the following information including details about any related sales agreement:

    **Advanced Pricing - Define Modifier window: Other tab**

    ![Advanced Pricing - Define Modifier window: Other tab](image)

    - List Source Document Number: This is the number of the sales agreement associated with the modifier.
    - List Source Code: Displays the code associated with the modifier source. For example, BSO indicates sales agreement.
    - Pricing Transaction Entity (PTE): Displays the pricing transaction entity.
associated with the modifier. The Pricing Transaction Entity value defaults from the PTE that created the modifier. This field cannot be updated.

- **Source System Code**: Displays the source system code of the modifier, such as QP for pricing.

  **Note**: The values for the Pricing Transaction Entity and Source System Code fields are provided by default based on the PTE and Source System profile options. For more information on profile options, see the *Oracle Advanced Pricing Implementation Guide*. The Pricing Transaction Entity and Source System fields appear for all modifiers, regardless of whether a related Sales Agreement is available.

- **Shareable box**: Indicates if the modifier is shared or not. If non-shareable (the default), then this modifier is specific to that sales agreement and cannot be used with other sales agreements. If shared, the modifier is not exclusive to the sales agreement and can be selected for use with other agreements. You cannot update this value.

**Related Topics**

- Creating List Level Qualifiers, page 3-18
- Overview of Promotional Limits, page 3-110

**Creating List-Level Qualifiers**

You can create qualifiers to determine the eligibility of who can receive modifiers at the list level. If an order is not eligible for a modifier list, it is not eligible for the line-level modifiers of that list even if the lines have qualifiers for which the order is eligible.

**Warning**: The effective dates defined for the qualifier determine the effective dates for the price list or modifier list, not the effective dates defined in the price list or modifier list window (when the qualifier is attached to the price list or modifier). For example, suppose you create a price list with an effective start date of 23-NOV-2007 and no end date. Then you create a qualifier at the header level with effective dates of 10-NOV-2007 and 12-NOV-2007 for customer Computer Service and Rentals. However, after 12-NOV-2007, the price list will not be valid for Computer Service and Rentals or any other customer.
To create list-level qualifiers:

1. Navigate to the Advanced Pricing - Define Modifier window.

2. On the Main tab, click List Qualifiers to display the Qualifier Groups window. If qualifiers are associated with the modifier list, then the Qualifier Groups window does not display.

Qualifier Groups window

3. If you do not want to add qualifiers from qualifier groups, click Cancel. Alternately, to add qualifiers from qualifier groups, select one or more qualifier groups that you want to attach.

4. Select one of the grouping options (Retain Grouping Numbers Across Qualifier Groups or Generate Unique Grouping Numbers Across Qualifier Groups). For more information, see: Using Qualifier Grouping Numbers across Qualifier Groups, page 5-16.

5. Click OK for the system to display the Qualifier window. In this window, the qualifiers associated with the qualifier groups are listed.
6. You can add, change, and delete individual qualifiers and change the grouping numbers or dates. If you have attached qualifier groups, verify that the grouping numbers in the window display the correct combination of and or conditions.

7. Enter the Grouping Number. Qualifiers with the same grouping number generate an and condition, and qualifiers with different grouping numbers generate an or condition. If -1 is used as a qualifier grouping number, the qualifier is used as an and condition for each qualifier group so you do not have to manually add it to each qualifier group. For more information, see: Using Qualifier Grouping Numbers, page 5-12.

8. Enter the Qualifier Context and Qualifier Attribute.

   **Note:** After you save a qualifier with Qualifier Context of Modifier List and Qualifier Attribute of Coupon Number, you cannot modify or delete it because the pricing engine has generated coupons and a qualifier for each coupon.

9. Enter the Operator, Value From, and Value To.

   - If you define a Value From/To range using negative numbers, enter the range from lowest to highest value. For example, to define a Volume Order Amount between -99999 to -1, enter the Value From = -99999 and the Value To = -1.

   - Enter Value To only when the Operator is BETWEEN.
10. The Value From Meaning field provides additional details about the selected qualifier. For example, if the qualifier context is CUSTOMER and the attribute is Ship To, the Value From displays the customer name and Value From Meaning displays the site use location for the customer. If the context/attribute combination has no additional details, Value From and Value From Meaning are identical.

11. The Applies To Party Hierarchy check box is enabled only for attributes that are based on Oracle TCA (Trading Community Architecture) Parties and for which the Party Hierarchy Enabled flag was selected for this attribute on attribute management setups. Select the Applies To Party Hierarchy check box to use the party hierarchy functionality for the qualifier attribute. See the Oracle Advanced Pricing Implementation Guide for more details.

Hierarchies consist of tiered relationships wherein one party ranks higher than another; for example, a corporate hierarchy where different companies are related as parent, subsidiary, headquarters, division, and so on. If Applies To Party is selected, then the modifier adjustment or price list (depending on what the qualifier is set up for) would be available to the parent party specified in the Attribute Value field and its subsidiaries. This setting saves you time from creating multiple qualifiers, one for each subsidiary or division.

**Note:** The Applies To Party Hierarchy check box is not available in Basic Pricing. The profile option QP: Pricing Party Hierarchy Type enables the use of TCA hierarchy-enabled attributes.

12. Click Copy Groups to add qualifiers from other qualifier groups, and enter Start and End dates of the qualifier. For more information on qualifiers, see Oracle Advanced Pricing User’s Guide, Qualifier Groups.

13. View and, if necessary, adjust the precedence numbers that default from the qualifier definition.

The pricing engine uses the Precedence to resolve incompatibility. If multiple modifiers are eligible within the same phase and incompatibility level, the modifier with the lowest precedence is applied.

14. Click OK and save your work.

**Note:** The start and end dates of the list qualifiers must be within the start and end date of the modifier list.

### Creating Modifier Lines

You can add modifier lines to a modifier list to define the type of price adjustments, benefits, or freight and special charges that the pricing engine applies to pricing.
requests.

**Note:** Oracle Advanced Pricing also provides an HTML-based user interface (UI) for setting up and maintaining most modifier and modifier line types. For more information, see Using Modifiers in the HTML UI, page 3-62.

For each list type that you define, you can select certain modifier line types. The following modifier types can be selected at the modifier line level:

- **Coupon Issue:** Issues a coupon on one order that the customer can redeem for a price adjustment or benefit on a later order.

- **Discount:** Creates a negative price adjustment, such as a 10 percent discount.

- **Freight/Special Charge:** Applies a freight charge.

- **Item Upgrade:** Replaces a specific item ordered with another item for the same price.

  **Note:** The Item Upgrade modifier type supports standard items only.

- **Other Item Discount:** Gives a price adjustment or benefit to a specified item on an order when the customer orders one or more other items on the same order.

- **Price Break Header:** Applies a variable discount or surcharge price adjustment to a pricing request based meeting the condition of a break type. You can use both point and range type breaks.

- **Promotional Goods:** Adds a new item with a price adjustment or benefit when the customer orders one or more other items on the same order.

- **Surcharge:** Creates a positive price adjustment.

- **Term Substitution:** Replaces freight charges, shipping charges, and payment terms with typically more favorable charges.

The following table details the modifier line types that can be used with a selected modifier list type. The modifier line types are listed in the left column, and the modifier list types are listed in the top row. A *Yes* in a row indicates that you can use the modifier line type with a particular list type, and a *No* indicates that you cannot:
<table>
<thead>
<tr>
<th>Modifier Line Type (listed in column below)</th>
<th>Deal Discount List</th>
<th>F&amp;S Charge List</th>
<th>Promotion List</th>
<th>Surcharge List</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coupon Issue</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Discount</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Freight/Special Charge</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Item Upgrade</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Other Item Discount</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Price Break Header</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Promotional Goods</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Surcharge</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Terms Substitution</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
</tbody>
</table>

After you have created and saved a modifier line, you cannot edit or change the Product Attribute Value (or primary buy item) for the line. To change the Product Attribute Value for a line, you should end date the existing modifier and create a new modifier.

This following section describes general setup information common to most modifier line types. For information on setting up specific modifier line types, see the following tasks:

- To create a Discount/Surcharge modifier line, page 3-30
- To create a Freight/Special Charge modifier line, page 3-32
- To create an Item Upgrade modifier line, page 3-34
- To create a Terms Substitution modifier line, page 3-35
- To create a Coupon Issue modifier line, page 3-36
To create general modifier line information:
1. Navigate to the Advanced Pricing - Define Modifier window.

2. On the Modifiers Summary tab, in the Modifier No field, a default modifier number identifies the modifier line. You can change this value; however, the Modifier No for each modifier line must be unique within the modifier list.

3. Select the level at which the modifier is applied:
   - Order: If the line is eligible to receive the modifier, the pricing engine applies the modifier at the order level.
   - Line: If the line is eligible to receive the modifier, the pricing engine applies the modifier at the line level.
   - Group of Lines: If the pricing request is eligible to receive the modifier, the pricing engine considers the item quantity or item amount consumed for a group of order lines. The following table displays the available modifier types and volume types that can be selected for a modifier line when Group of Lines
is selected:

<table>
<thead>
<tr>
<th>Level</th>
<th>Modifier Types that Can Be Created with Group of Lines</th>
<th>Volume Types that Can be Used with Group of Lines</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group of Lines</td>
<td>Discount, Item Upgrade, Other Item Discount, Price Break Header, Promotional Good, and Surcharge</td>
<td>Item Quantity, Item Amount</td>
</tr>
</tbody>
</table>

**Note:** When Group of Lines is selected as the modifier level, then the Volume Type, Product Attribute, and Product Attribute Value fields become mandatory fields. This condition is true regardless of the modifier type selected, such as (Discount, Surcharge, PBH, and so on).

4. Select a modifier type.

5. Enter the Start/End Dates for the modifier line.

   **Note:** The start and end date for the modifier line must be between the start and end date on the modifier list. The pricing engine confirms that the dates for the modifier line are valid so that the modifier line can be applied.

   The Print On Invoice field is reserved for future use and is not assigned to any function currently.

6. Select or clear the Automatic box:
   - Select Automatic to have the pricing engine automatically apply this modifier. The Automatic box for each modifier line also becomes selected.
   - Clear the Automatic box if you want the modifier to be manually applied. For more information on manual modifiers, see Manual Modifiers, page 3-9.

   **For Promotional Limits:** If you are using promotional limits with the modifier, the Automatic check box must be selected and remain selected at both the modifier header and line levels. Limits do not function with a modifier that is applied manually.

   **Note:** In the Advanced Pricing - Define Modifier window, you can deselect the Automatic check box for these line-level
modifiers: Discount, Surcharge, and Freight/Special Charges.

7. Select Override to enable the modifier adjusted price to be manually overridden. If not selected then the modifier adjusted price cannot be overridden.

8. Enter the Pricing Phase for this modifier line. Only valid phases for this modifier level appear in the list of values.

   Note: If you attach a phase with a PRICE event to the following promotional modifier types - Promotional Goods/Other Item Discount/Item Upgrade/Terms Substitution/Coupon Issue - and save the modifier line, then the following error message appears:
   The pricing phase for this modifier is attached to a PRICE event and cannot be used for this modifier type. Please change the pricing phase or remove a PRICE event for this phase from the Event Phases form.

9. Select an Incompatibility Group. For more information about incompatibility groups, see Changing Modifier Incompatibility, page 3-100.

10. Enter a Bucket value.

   Note: The Proration Type field is reserved for future use.

11. Enter a numeric Comparison Value. The pricing engine uses this value to compare modifier types of Item Upgrade, Other Item Discount, and Term Substitution to resolve incompatibilities and determine which modifiers to apply. This value is used when the pricing phase incompatibility resolution is Best Price.

   • Best Price processing cannot be used for order-level modifier list types of Discount and Surcharge.

   • For Freight and Special charges, if an Incompatibility Group is not selected for the modifier line, the pricing engine will apply BEST_PRICE regardless of the Incompatibility Resolve Code set for the event phase. In these cases, the best price is the higher charge, not the lower charge.

12. Select a Product Attribute value such as Item Number, Item Category, or All Items. Use All Items to define a modifier that applies to all items in your product hierarchy.
13. Select a Product Attribute Value. If you select ALL_ITEMS for Product Attribute, the Product Attribute Value is ALL.

If you do not enter values for Product Attribute and Product Attribute Value, the Pricing Engine applies the modifier line as if you selected ALL_ITEMS for Product Attribute.

14. The Precedence value will appear by default based on the precedence value defined with the product attribute. For example, the precedence value for item number is 220. This value can be updated.

If precedence processing cannot be resolved for two or more modifiers, then the engine uses best price processing to resolve the issue without going below the established precedence.

15. Enter a Volume Type, such as Item Quantity and Item Amount, to instruct the pricing engine which volume attribute to use when qualifying for a modifier.

16. Select either Point or Recurring as the break type.

- Example: If RECURRING is selected where Value from = 1 and Value to = 10, then for every quantity of 1, the discount is applied up to a quantity of 10. Therefore, if a sales order is created with order quantity 10, then the (lumpsum) discount is applied to all 10 quantities.

The break type is optional for the following modifier types:

- Discount
- Surcharge
- Freight Charge
- Promotional Goods
- Coupon Issue

**Example of Point Break Setup**
The following table provides an example of the setup for a point break.

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Break Type</td>
<td>Point</td>
</tr>
<tr>
<td>Modifier Line Type</td>
<td>Discount</td>
</tr>
<tr>
<td>Product Attribute</td>
<td>Item</td>
</tr>
</tbody>
</table>
The pricing engine interprets this point setup as follows:

- If you order 100 cases of item A, you get a 2 currency unit discount.
- If you order 200 cases of item A, you get a 2 currency unit discount.

**Example of a Recurring Discount Setup**
The following table details an example setup for a recurring discount (recurring is not supported for price break):

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Break Type</td>
<td>Recurring</td>
</tr>
<tr>
<td>Modifier Line Type</td>
<td>Discount</td>
</tr>
<tr>
<td>Product Attribute</td>
<td>Item</td>
</tr>
<tr>
<td>Product Attribute Value</td>
<td>Item A</td>
</tr>
<tr>
<td>Volume Type</td>
<td>Item Quantity</td>
</tr>
<tr>
<td>Operator</td>
<td>Between</td>
</tr>
<tr>
<td>UOM</td>
<td>Cases</td>
</tr>
<tr>
<td>Value From</td>
<td>100</td>
</tr>
<tr>
<td>Application Method</td>
<td>Amount</td>
</tr>
<tr>
<td>Value</td>
<td>2</td>
</tr>
<tr>
<td>Field</td>
<td>Value</td>
</tr>
<tr>
<td>-----------------------</td>
<td>----------------------------------------------------------------------</td>
</tr>
<tr>
<td>Value From</td>
<td>100</td>
</tr>
<tr>
<td>Application Method</td>
<td>Lumpsum (Application method will always Lumpsum when break type is Recurring.)</td>
</tr>
<tr>
<td>Value</td>
<td>2</td>
</tr>
</tbody>
</table>

The pricing engine interprets this recurring setup as follows:
- If you order 100 cases of item A, you get a 2 currency unit discount.
- If you order 200 cases of item A, you get a 4 currency unit discount.

17. Select a volume type to calculate the volume break.

18. Select an Operator value such as = or BETWEEN; for example, item quantity = 5 or item quantity BETWEEN 5 and 20. If you select Recurring for the Break Type, you must select BETWEEN.

19. Select the unit of measure (UOM) for the item or item category. If the line type is Promotional Goods, Other Item Discount, Item Upgrade and Volume Type is Item Quantity, then the UOM is mandatory.

**Note**: For promotional limits:
- If no product UOM is defined for a modifier line, line limits with a basis of Item Quantity will not be created.
- If no benefit UOM is defined for a modifier line, line limits with a basis of Accrual Units will not be created.
- If no benefit or product UOM is defined, neither Item Quantity nor Accrual Units appears in the Basis list of values (LOV) to prevent line limits from being created.

20. To create greater than and less than conditions, leave From Value and To Value blank, as follows:
- From Value = 5 and To Value is blank creates the condition Value > 5
- From Value is blank and To Value = 100 creates the condition Value < 100
• From Value = 5 and To Value = 100 creates the condition Value >= 5 and value <= 100. Enter the Value From/To.

To create a Discount modifier line:
Creates a negative price adjustment, such as a 10 percent discount.

1. Navigate to the Define Modifier window, Discounts/Charges tab.

In the Discount/Charges tab

2. Complete your entries in the Discounts/Charges tab:
   • Modifier Type: Select Discount.
   • Include on Returns check box: The Include on Return check box is only applicable to modifiers of type Freight and Special Charge. This modifier type is selected by default so that the freight charges are also included with returns. Alternately, if Include on Returns is cleared, then pricing will not apply the charge automatically on the return line.
   • Formula: Optionally, select a formula for the following modifier types: Discount, Surcharge, or Freight Charge. If the Modifier Type is Price Break Header, click the Define Details button when setting up a price break line to select a formula.
     If the formula includes a Modifier Value (MV) in its equation, then this value is
derived from the Value field on the Discounts/Charges tab. If a formula does not have an MV component, then the Value field is not used during the formula calculation when the final discount is returned.

For example, consider a formula with the following equation:

\[ \text{List Price} \times \text{MV} = \text{Final Discount} \]

<table>
<thead>
<tr>
<th>Formula</th>
<th>List Price (LP)</th>
<th>Modifier Value (MV)</th>
<th>Final Discount</th>
</tr>
</thead>
<tbody>
<tr>
<td>( \text{LP} \times \text{MV} = \text{Final Discount} )</td>
<td>20</td>
<td>3</td>
<td>60</td>
</tr>
</tbody>
</table>

At order entry, when the modifier is selected and the formula \( \text{LP} \times \text{MV} \) is applied, the list price of the item on the order (LP) is multiplied by the value that is entered in the modifier’s Value field. In this case, the value is 3; therefore, the final discount is \( 20 \times 3 = 60 \).

A formula without an MV component can be attached to a modifier even if a value is entered on the modifier line. In this case, the formula takes precedence and the MV is not used. Instead, the number returned by the formula is considered as the final discount.

- **Value:** Select an Application Method and a numeric value. The Application Method selected determines how the value is applied. For example, if the application value is Percent, then the value such as 10 is applied as a percent.

- **Accrual:** Complete the remaining fields to enter an accrual:
  - **Accrue:** Select the Accrue check box to enter accrual information.
  - **Benefit Qty and Benefit UOM:** Enter values for the Benefit Qty and Benefit UOM of the benefit to be accrued. Use the benefit columns to define nonmonetary accruals.
  - **Expiration Date:** Define when the accrued transactions expire.
  - **Expiration Period and Period Type:** The pricing engine calculates the expiration date. The Expiration Period begins when an item begins to accrue.
  - **Accrual Redemption Rate:** You can enter or modify the redemption rate after the Accrue box is selected.
  - **Accrual Conversion Rate:** Defines the conversion of the Benefit UOM to the primary currency. For example, if one air mile is 0.50 currency units, the
accrual conversion rate is 0.50.

To create a Freight/Special Charge modifier line:
1. Enter the following information in the Modifiers Summary tab:
   - Level: Use Line or Order
   - Modifier Type: Use Freight/Special Charge
   - Phase: If Level is Line: use Line Charge or Line Manual Charge. If level is Order, select Charges Header: All Lines.

   Typically, you select one of the following pricing phases for a Freight and Special charge:
   - 50 - Line Charges
   - 60 - Line Charges - Manual
   - 70 - Charges Header: All Lines

   However, you typically would not select the pricing phase 40 - Header Level Adjustments, which is a header level adjustment, because when Order Management or a similar calling application passes the Calculate Price Flag value as Partial Price, only those freight charges in phases 50, 60, and 70 are applied (but not those in pricing phase 40). However, users can still override the Calculate Price Flag to enable modifiers assigned to other phases to be applied.

   • Bucket
2. On the Discounts/Charges tab, select a Charge Name such as Transportation Charge.

3. The Include on Returns check box is only relevant for modifiers of type Freight and Special charge List. The Include on Returns box is selected by default so that freight charges are included with returns. Alternatively, if Include on Returns is cleared, then pricing will not apply the charge automatically on the return line.

   When you create a return order (and the price on the original order for which the return line is being created is retained), Oracle Order Management copies all the adjustments and only those freight charges that have the Include on Returns check box selected. If a return line is repriced, then all the charges are evaluated and applied. To have certain charges applied to a return line when the line is repriced, create a qualifier with a \texttt{not=} condition.

4. Enter a Formula name to use a formula to calculate a discount, surcharge, or freight charge.

5. Select an Application Method that defines how the modifier is applied. For more information, see Application Method, page 3-4.

   \textbf{Note}: For Freight/Special Charge modifiers, you must select Lumpsum as the Application Method.
6. Enter a Value unless you are using a formula.

7. Save your work.

**Notes**
- For Freight/Special Charges, if an Incompatibility Group is not selected for the modifier line, then the pricing engine will use BEST PRICE incompatibility processing instead of Precedence. Precedence is defined as the Incompatibility Resolve Code in the Event Phases window.

- When defining a freight charge modifier, select a seeded pricing phase whose Freeze Override Flag value is set to Yes. For example, the Freeze Override Flag is set to Yes for the Line Charges phase, but not for the List Line Adjustment phase. When you set up a freight charge modifier, and select the Line Charges phase instead of the List Line Adjustment phase, then your Return Merchandise Authorization (RMA) line with the Calculate Price Flag of Partial Price would qualify for the freight charge modifier.

**To create an Item Upgrade modifier:**
In the Promotion Upgrades tab, you can define an Upgrade Item that replaces a specific item ordered for the same price. The item upgrade item is applied on the same order.

**Note:** Item upgrade is supported for standard items only.

1. Navigate to the Define Modifier window, Modifiers Summary tab.
2. Select Item Upgrade as the Modifier Type.

3. In the Promotion Upgrades tab, define the Upgrade Item that replaces a specific item ordered for the same price.
   - The upgrade relationship between the original item and the upgrade item must be set up in Oracle Inventory (the Relationship Type is Promotional Upgrade). When the relationship is set up, the related item appears in the list of values. When the item is upgraded, the UOM is retained from the original item.
   - When the pricing engine applies the qualifying item on the order line, the original item is replaced with the upgraded item and the price of the original item is retained.

**To create a Term Substitution modifier line:**
Create a Term Substitution modifier line in the Promotion Terms tab to replace freight charges, shipping charges, and payment terms with typically more favorable charges. When the Operating Unit field appears:
- If multi-org access is not enabled, the operating unit appears by default from profile
MO: Operating Unit. You cannot update the Operating Unit field.

- If multi-org access is enabled, the operating unit appears by default from profile MO: Default Operating Unit. You can override this value and select an available operating unit that you can access, as defined by the profile option MO: Security Profile.

1. Navigate to the Define Modifier window.

![Advanced Pricing - Define Modifier window: Promotion Terms tab](image)

2. In the Modifiers Summary tab, select Term Substitution as the Modifier Type.

3. On the Promotion Terms tab, enter the new terms in the Terms Attribute and Terms Value fields. The pricing engine substitutes the terms on the order or order line with the terms that you specify.

To create a Coupon Issue modifier line:

You can issue a coupon for an order that a customer can redeem for a price adjustment or other benefit on a later order. When setting up a coupon issue, two modifier lines must be set up: the first defines the benefit or price adjustment, such as a 10 percent discount, and the second defines the coupon issue details, such as the coupon name and expiration date. The following steps outline how to create a coupon issue modifier.

**Note:** Both the coupon issue and coupon benefit lines must be defined
To define the coupon benefit

1. On the Modifiers Summary tab, create a modifier line to define the benefit or adjustment issued when the coupon is redeemed. For example, a 10 percent discount or $6 off the order. Select a modifier line type of Discount or Promotional Goods to define the benefit.

The modifier number (Modifier No) on the modifier line generates a unique number series for the coupon, and the coupon number is passed to the calling application. The customer must quote the coupon number to redeem the coupon in the calling application.

When the customer redeems the coupon, the pricing engine validates the coupon number against the qualifier. It also validates the qualifiers for the discount or promotional goods benefit.

Note: Typically, the coupon is issued for an order and the actual discount line (the benefit the coupon applies) is applied to a subsequent order when the coupon is redeemed. However, if you set up a line-level qualifier for the discount line with the following settings, then both the discount line and coupon line can be applied to the same order:

- Grouping Number = -1
- Grouping Number = Any of the coupon modifier numbers

If you intentionally include a line-level qualifier on the discount line that has a grouping number not equal to any of the coupon modifier numbers and not equal to −1, it means that you actually want the discount to be applied independent of coupon redemption.

All qualifier conditions with grouping number = -1 must also be met in order to redeem the coupon benefit modifier.

To define the coupon issue details

In a second modifier line, you define the coupon details, such as the coupon name and its expiration date. This line is the Coupon Issue line. After you define the coupon details, you link the benefit line to the coupon issue line:

2. Select Coupon Issue as the Modifier Type.

3. Enter a Redemption Rate to specify the percentage probability that customers might redeem this coupon.
4. Enter the Expiration Date, which is the last date that the customer can redeem the coupon.

Alternatively, if you enter values for the Expiration Start Date, Expiration Period, and Expiration Period Type, the pricing engine automatically calculates the Expiration Date. For example, for the following coupon setup, the pricing engine calculates an expiration date of 20 July:

- Expiration Period Start Date: 20 April
- Expiration Period: 3
- Expiration Period Type: Month

If you do not enter an Expiration Period Start Date, the pricing engine will use the date when the calling application issued the coupon.

5. Enter the Coupon Modifier Number (from the coupon benefit line) to link the Coupon Issue modifier line to the benefit modifier line.

Note: The Benefit Quantity, Benefit UOM, and Coupon Conversion Rate fields are not supported for a coupon issue line.

To create a Promotional Goods and Other Item Discount modifier lines:

To reward a customer who orders one or more specified items in the same order, you can create a Promotional Goods modifier line to add a new item to an order and provide a price adjustment or benefit for the item. The reward item does not need to be in the original order. Even if the item is in the order, the pricing engine creates a new line for the item.

You must specify a quantity, and you can use any UOM set up on your system.

- For the scenario Buy X and Y, get Z as free, list line adjustments (Event phase 10) are not applicable for promotional modifiers unless the Save event is added to the list-line adjustments phase.

- When you create or duplicate a modifier, you can change the primary buy item, additional buy items, and get items. However, once the modifier is saved, the additional buy or get items cannot be changed or deleted. You can still add additional buy and get items.

- Deleting and reapplying a Promotional Goods modifier line: If you apply a modifier line of type Promotional Goods to an order and then delete the modifier line, you cannot reapply the deleted
Promotional Goods modifier line.

**Other Item Discount**
When the customer orders one or more other specified items (the buy items) on the same order, the Other Item Discount modifier provides a price adjustment or benefit to another item (the get item) on the order. The buy item (including additional buy) and get items must all be on the same order for the benefit to apply. The Other Item Discount modifier must be applied at the Group of Lines level.

**Note:** Recurring other item discounts are not supported.

**To enter promotional goods**
Complete the following fields to create promotional goods:

1. On the Modifiers Summary tab, define the required buy product (or category) that the customer must order to get the benefit. For example, buy a toothbrush and get a free bottle of mouthwash.
   - **Modifier Type:** Promotional Goods
   - **Pricing Phase:** To have a PRG modifier applied in conjunction with an order-level modifier, then select All Lines Adjustment as the Pricing Phase for the PRG modifier. This selection enables both the PRG modifier and the order-level modifier to be applied in conjunction to an order.
     
     **Tip:** To prevent changes to the quantity of a free promotional good added to the order line (for example, to prevent changing the quantity of the free good from 1 to 2), select Pricing Phase 30 (All Lines adjustment) when you create the promotional modifier.
   - **Product Attribute/Product Attribute Value:** Select the required buy product (or category) that the customer must order to get the benefit.

2. Click Define Details to display the Define Modifier Details window. In the Products tab > Additional Buy Products region, define any additional products that the customer must buy in addition to the original product defined in the Modifiers Summary tab:
   **Additional Buy Products Region**
   - **Group No:** Defines the and or or condition of the buy side of the modifier. To join lines with and, use the same group number on each line. To join lines with or, use a different group number on each line
• Pricing Attribute: This is a volume pricing attribute; use either item quantity or item amount.

3. In the Get region, define the get product that the customer receives. For promotional modifiers (such as buy one, get one), when you define the Get Product, the Get Price field does not display lines for service items with formulas, block price, percent price, or price break lines.

**Get Region**

• Get Product Attribute: Item Number is the default value. Benefit items in the Get region can only be defined at the item level.

You should not define a Get Line for a PRG using price list lines with the following setups:

• Dynamic formulas.

• Arithmetic operator of Block price or Percent price.

**Note:** Once you save the Promotional Goods or Other Item Discount line, you cannot update the Primary Buy, Additional Buy, or Get Product attributes.

If you manually delete or change a free good line for an order or a quote line on the order (for example, change the number of free good items from three to two on the Sales Order pad), for subsequent repricing calls, the overridden manual entry is retained.

For example, suppose a customer buys Item A and gets two of Item B free. If you manually change the quantity of free goods that the customer gets from two to one on the Sales Order pad, then on subsequent repricing, the manually overwritten amount is retained and the customer gets the one free good.

**Examples of Promotional Goods Modifiers**

You can create as many *must buy* items as desired and as many get items as required. Here are some sample scenarios of must buy and get promotional modifiers:

• Customer must buy A to get B

• Customer must buy A and B to get C

• Customer must buy A and B and C to get D

However, you cannot create a combination of *must buy* products or *get* products where the promotional goods modifier must evaluate multiple items. For example, the customer receives 20 units free of the following products or a combination of
products A, B, C if the customer buys at least 20 units from the specified products (X or Y) or a combination.

Instead you must specify explicit must buy and get amounts; for example, the customer must buy 10 of Product X and 10 of Product Y to get 20 free units of Product A.

**Note:** If you are using Promotional Good (PRG) type of Modifier Line with Multi-Currency, see Using Promotional Good type of Modifier Line, page 6-14.

**Using a Promotional Modifier as a Qualifier for Another Modifier**

You need to consider the following when setting up a promotional modifier as a qualifier for another modifier:

Situation: Suppose you want to apply two automatic, promotional modifiers named XXXX and YYY using the following setups:

- Promotion Modifier 1: XXXX
- Promotion Modifier 2: YYY
  - Qualifier = Promotional Number with value as XXXX

In this setup, the second modifier YYY will not get applied to the order because the qualifier attribute of Promotional Number is not mapped at runtime. (Its attribute mapping method is User Entered, and will not be evaluated during the pricing call.)

To ensure that you can use the Promotional Number as a qualifier in another modifier, you need to complete the following steps:

1. Create a custom qualifier attribute by writing a function to source the attribute: its values will be TRUE or FALSE based on if the modifier XXXX is applied to that particular line or not.
2. Use this custom qualifier attribute in the modifier YYY.
3. Attach the modifier XXXX to the pricing phase List Line Adjustments and attach modifier YYY to the pricing phase All Lines Adjustments.

When the order line is entered, the modifier XXXX will get applied first and then, while saving the order line, modifier YYY will get applied because the modifier XXXX has already been applied while entering.

**To enter other item discount:**

1. On the Modifiers Summary tab, define the required *buy* product (or category) that the customer must order to get the benefit. For example, buy a toothbrush and get a
discount on a bottle of mouthwash.

- Modifier Type: Other Item Discount

- Product Attribute/Product Attribute Value: Select the required buy product (or category) that the customer must order to get the benefit

2. Click Define Details to display the Define Modifier Details window.

3. In the Products tab - Additional Buy Products region, define any additional products that the customer must buy in addition to the original product defined in the Modifiers Summary tab:
   - Group No: Defines the and or or condition of the buy side of the modifier:
     - To join lines with and, use the same group number on each line.
     - To join lines with or, use a different group number on each line.
   - Pricing Attribute: This is a volume pricing attribute; use either item quantity or item amount.

4. In the Products tab - Get region, define the other item discount product (the get item) that the modifier provides a price adjustment or benefit for on the order:
• Get Product Attribute: Item Number is the default value. Benefit items in the Get region can only be defined at the item level.

• Get Product Value: Select an item. Product Description is the default based on the product selected.

   **Note:** After you save the Promotional Goods or Other Item Discount line, you cannot update the Primary Buy, Additional Buy, or Get Product attributes.

**To create a price break modifier line:**
Create a price break modifier line to apply a variable discount or surcharge price adjustment to a pricing request based on the price breaks.

1. Complete the following fields:
   
   • Level: Group of Lines or Line.

   • Break Type:
     
     • Point: The pricing engine charges each unit of volume at the price of the break within which the total falls.

     • Range: The pricing engine charges each unit of volume at the price of the break within which it falls.

   • Product Attribute and Product Attribute Value

   • UOM

   • Volume Type

2. Select the Price Breaks tab.
3. Select an adjustment Type such as Discount or Surcharge.

4. Select an Accumulation Attribute if you are setting up range price breaks that accumulate across orders. This option is available for Range breaks only. See Using Accumulated Range Breaks, page 3-48 for more information.

5. The Net Amount Calculation field enables you to calculate the selling price based on the net amount (bucketed amount). You can select from the following values:

   - When the For matching products option is selected, the order lines that match the modifier Product criteria (such as the Item Number or Item Category) are selected and grouped. The sum of the amounts from these order lines is selected and then used as the group amount for the net amount calculations.

   - When the For all matching attributes option is selected, the order lines that match all the criteria (not just the Product criteria) defined in the price break modifier are selected and grouped. The sum of the amounts from these order lines is then used as the group amount for the net amount calculations.

   **Note:** To use net amount, the following values must also be selected:

      - If Line is selected as the modifier line level, then you can only
select For All Matching Attributes from the Net Amount Calculation field.

- Level: Line or Group of Lines level (select Group of Lines to select For matching products from the Net Amount Calculation field.)

- Modifier Type for the modifier line must be Price Break Header, and related price breaks must be set up.

- Automatic check box for the modifier line must be selected.

- Override check box must be cleared.

- Volume Type: Amount

**Promotional Goods and Net Amount Calculation**

Promotional goods amounts will not be included in the net amount calculation. For example, if an order line gets a promotional good (buy A, get B free or discounted), the new line will not contribute to any net amount calculation of any modifier in the order.

For examples, see Examples of using net amount in price breaks, page 3-46.

6. To use the price break to calculate an accrual, select Accrue.

   **Note:** The Accrual box can only be used if Discount is selected as the Adjustment Type.

   1. If using accruals, enter an Expiration Date to specify when the accrued transactions expire.

   2. Enter Expiration Start Date, Expiration Period, and Period Type. The pricing engine calculates expiration date. The expiration period begins when the item begins to accrue.

      Credit Memo, which is the Rebate Transaction Type default, is reserved for future use.

7. Click Define Details to display the Define Modifier Details window.
8. The values for Break Line Type, Break Type, and Net Amount Calculation are provided by default from the modifier line.

9. Enter Value From and Value To values.

   **Note:** If you leave Value To of the last break blank, a value of 99999. (15 digits) automatically defaults. This value is hidden from the end-user and does not display in the Value To field.

10. Optionally, select a Formula.

11. Select an Application Method. For more information, see Application Method, page 3-4.

12. For nonmonetary accruals, enter the Accrual Conversion Rate to specify the conversion of Benefit UOM to the modifier primary currency. For example, if 1 air mile is 0.50 currency units, the Accrual Conversion Rate is 0.5.

13. If applicable, enter the Benefit Quantity and Benefit UOM.

14. Save your work.

**Examples of Using Net Amount in Price Breaks**

The Net Amount Calculation field enables you to calculate the selling price based
on the net amount (bucketed amount). For example, suppose you create a price break modifier line with the following setup:

- Product: Item Number = AS54888
- Net Amount Calculation: For matching products selected
- Pricing Attribute: Red

If this modifier is applied to the following order, then all order lines that match the product defined in the price break modifier line (for example, Item Number = AS54888) are grouped together for the net amount calculation (regardless of other qualifying criteria):

<table>
<thead>
<tr>
<th>Order Line</th>
<th>Product</th>
<th>Pricing Attribute</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Item Number: AS54888 Red</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Item Number: AS54888 Blue</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Item Number: AS54888 Red</td>
<td></td>
</tr>
</tbody>
</table>

The item amount is based on the item amount for all three lines, but the discount will be applied to lines 1 and 3:

- Lines used for Net Amount Calculations: All order lines with Product Item Number = AS54888 are grouped together.
- Lines that get discount: The modifier adjustment (such as a discount) are only applied to Lines 1 and 3 because they match the modifier's remaining qualifying criteria (pricing attribute must be Red.)

The following table displays a modifier setup that will calculate the net amount for an order using a break range type of Point:

<table>
<thead>
<tr>
<th>Modifier Setup</th>
<th>Bucket</th>
<th>Discount</th>
<th>Break Ranges</th>
</tr>
</thead>
<tbody>
<tr>
<td>Line 1: Discount A</td>
<td>1</td>
<td>40%</td>
<td>n/a</td>
</tr>
<tr>
<td>Line 2: Discount B</td>
<td>1</td>
<td>30%</td>
<td>n/a</td>
</tr>
<tr>
<td>Line 3: Price Break Header (PBH) C</td>
<td>2</td>
<td>5%</td>
<td>$0-1,000</td>
</tr>
</tbody>
</table>
### Modifier Setup

<table>
<thead>
<tr>
<th>Modifier Setup</th>
<th>Bucket</th>
<th>Discount</th>
<th>Break Ranges</th>
</tr>
</thead>
<tbody>
<tr>
<td>-</td>
<td>-</td>
<td>7%</td>
<td>$1,000-2,000</td>
</tr>
<tr>
<td>-</td>
<td>-</td>
<td>10%</td>
<td>$2,000-9,999</td>
</tr>
</tbody>
</table>

### Example

Suppose this modifier were applied to the following order:

<table>
<thead>
<tr>
<th>Order Item</th>
<th>List price</th>
<th>Order quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>AS54888</td>
<td>$2,000 each (per unit)</td>
<td>2</td>
</tr>
</tbody>
</table>

If the modifier were applied to this order, the Net Amount selling price would be calculated as follows:

1. First Discount A (40 percent) is applied resulting in the unit adjusted amount of $800.
2. Then Discount B (30 percent) is applied resulting in a unit adjusted amount of $600.
3. The unit selling price at the end of Bucket 1 is $2,000 - ($800+$600) = $600. This amount becomes the unit selling price for the next bucket.
4. For PBH C to apply: the Net Amount Calculation is ($2,000*2) - (800*2) - (600*2) = $1,200. This amount qualifies for the second break of C, which is 7 percent.
5. PBH C applied: the unit adjustment amount is 7 percent*600 = $42. This amount is applied to the unit selling price of the previous bucket.

The final unit selling price is $600 - 42 = $558.

### Using Accumulated Range Breaks

Setting up modifiers with accumulated range breaks provides additional flexibility to existing price break processing. Using accumulated range breaks, you can set up range price breaks that accumulate within and across orders based on some attribute value (for example, quantity) that is accumulated from previous orders or order lines.

The pricing engine uses the accumulation value as the starting point of the break calculation. Oracle Advanced Pricing does not store these accumulated values. The value is passed by the calling application in the engine request or the engine dynamically sources the attribute from a customer API.
Values can be accumulated across different orders or within an order. For example, suppose a customer places the following two orders:

- Order A: 2 of Item Shampoo
- Order B: 3 of Item Shampoo

Under regular range price break processing, each order would be evaluated independently of the other. However, with accumulated range price breaks, the accumulated quantity value from Order A is the starting point for evaluating the range break for Order B.

The value of the accumulation attribute is sourced from the pricing request when evaluating accumulated range price breaks for modifiers. Customers are responsible for accumulating and maintaining the values from previous transactions in any manner they choose. This value is the starting point for range price breaks in subsequent transactions that are passed to the pricing engine.

**Setting the Profile Option and Volume Attribute**

To begin using the accumulation attribute feature, the profile QP: Accumulation Attributes Enabled must be set to Yes. Typically, this value is set by the System Administrator. The profile option also enables the Accumulation Attribute field in the Price Breaks tab on the Define Modifier window. Complete the following steps to set up this feature (no seeded attributes are provided for this feature).

1. You can create two types of accumulation volume attributes in Attribute Management to use this feature:
   - Use the mapping method of Attribute Mapping to source the accumulation value from the pricing request.
   - Use the new attribute mapping method Runtime_Sourced to enable the pricing engine to source the attribute and accumulation values from a custom API. A new package has been created, QP_RUNTIME_SOURCE, containing a specification for the custom API. Customers are required to write a corresponding body to this package. See the *Advanced Pricing Implementation Guide* for more information.

2. Set the profile QP: Accumulation Attributes Enabled to Yes at Site, Application, or both levels. The profile enables the Accumulation Attribute field in modifier lines. Price break details are defined in Define Details.

3. Define a modifier line with the following setup:
   - Line type: Price Break Header (or Price Break in HTML)
   - Break type: RANGE
   - Select Accumulation Attribute from the list of values.
Using Accumulated Range Break Across Orders

When using accumulated range breaks, the accumulation total must be passed as the starting point for each pricing request. For example, suppose the following discount is set up to give a discount across orders.

<table>
<thead>
<tr>
<th>Volume Attribute From</th>
<th>Volume Attribute To</th>
<th>Adjustment Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>5</td>
<td>5%</td>
</tr>
<tr>
<td>5</td>
<td>10</td>
<td>10%</td>
</tr>
<tr>
<td>10</td>
<td>15</td>
<td>15%</td>
</tr>
</tbody>
</table>

If a customer then places three separate orders for five items each, then the adjustment amount is calculated as follows:

<table>
<thead>
<tr>
<th>Order No.</th>
<th>Quantity</th>
<th>Accumulated Value</th>
<th>Adjustment Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>5</td>
<td>0</td>
<td>5%</td>
</tr>
<tr>
<td>2</td>
<td>5</td>
<td>5</td>
<td>10%</td>
</tr>
<tr>
<td>3</td>
<td>5</td>
<td>10</td>
<td>15%</td>
</tr>
</tbody>
</table>

The adjustment calculations for the preceding example are as follows:

- For the first order, the accumulated value is 0. A discount of 5 percent is given because the order quantity of 5 satisfies the first quantity range break of 0 to 5.

- For the second order, the accumulated value passed to the pricing engine is 5 (5 from Order 1). A discount of 10 percent is given, because the break is evaluated starting with quantity 6, which satisfies the range of 5 to 10.

- Finally, for the third order, the accumulated value passed to the pricing engine is 10. A discount of 15 percent is given, because the break is evaluated starting with quantity 11, which satisfies the range of 10 to 15.

Using Accumulated Range Breaks Within an Order

Accumulated range price breaks can be used to evaluate the volume of order lines within the same order.
For example, if a customer orders three lines of the same item that is eligible for a discount, then each line is priced based on the accumulated value of the previous qualifying line for the same product.

Suppose a price break modifier is set up with the following volume ranges and adjustment amounts:

<table>
<thead>
<tr>
<th>Volume Attribute From</th>
<th>Volume Attribute To</th>
<th>Adjustment Amount (Percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>5</td>
<td>5%</td>
</tr>
<tr>
<td>5</td>
<td>10</td>
<td>10%</td>
</tr>
<tr>
<td>10</td>
<td>15</td>
<td>15%</td>
</tr>
</tbody>
</table>

When this discount is applied, the accumulated values and adjustment amounts are calculated as follows:

<table>
<thead>
<tr>
<th>Line No.</th>
<th>Quantity</th>
<th>Accumulated Value</th>
<th>Adjustment Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.1</td>
<td>3</td>
<td>0</td>
<td>5%</td>
</tr>
<tr>
<td>4.2</td>
<td>6</td>
<td>3</td>
<td>8.33%</td>
</tr>
<tr>
<td>4.3</td>
<td>4</td>
<td>9</td>
<td>13.75%</td>
</tr>
</tbody>
</table>

The accumulation value and discounts are evaluated as follows:

- The first line is given a discount of 5 percent because an accumulation value of 0 is passed and the order quantity of 3 satisfies the range 0 to 5.

- Line 4.2 is evaluated with starting at the accumulated value of 3. Two of the ordered quantity 6 fall within the range of 0 to 5, and 4 falls within the range 5 to 10, resulting in an 8.33 percent adjustment.

- Line 4.3 is evaluated with a starting point of (3+6) = 9 passed by the calling application and an order quantity of 4. One of quantity 4 falls within the range 5 to 10 and 3 fall within the range of 10 to 15, resulting in a 13.75 percent adjustment.

**Attaching Pricing Attributes to Modifier Lines**

You can attach attributes to the items and item categories that you define for modifier
lines. When the pricing engine determines eligibility for a modifier, it validates the pricing attributes along with the item number or item category.

**Note:** Pricing attributes apply only to the primary items that you define in the Modifiers Summary tab. They do not apply to items that you define for additional buy items and get items.

**To attach pricing attributes to modifier lines:**
1. Navigate to the Advanced Pricing - Define Modifier window.
2. Select the Modifiers Summary tab and select a modifier line.
3. Click Pricing Attributes to display the More Pricing Attributes window.

**More Pricing Attributes window**

4. Enter a Pricing Context.
5. Enter a Pricing Attribute.
6. Enter an operator value such as = or BETWEEN.
7. Enter a Value From and a Value To.

   **Note:** Enter Value To only when the Operator is BETWEEN.

8. Click OK and save your work.
Excluding Items from a Modifier

Use this process to exclude items from a modifier. When the pricing engine evaluates order lines, if an order line contains an item or item category that is defined as an excluded item or item category, then these lines are considered ineligible and will not be evaluated for the modifier.

The following example shows the difference between a modifier defined without an excluded item and one defined with an excluded item.

**Example of a Modifier Without an Excluded Item**
The following example shows the effects of applying a modifier when no excluded item is defined for the modifier. The modifier, Modifier_Shampoo1, is set up with the following criteria:

- **Level:** Group of Lines
- **Item Category:** Shampoo
- **Quantity:** > 100 quantity

To be eligible for the modifier, the item category of the ordered items must be Shampoo and the total item quantity of the eligible order lines must be greater than 100.

Suppose a customer then places the following order for two shampoo items and one conditioner item:

<table>
<thead>
<tr>
<th>Order Line ID</th>
<th>Qty</th>
<th>Item</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>100</td>
<td>Shampoo1</td>
<td>Shampoo</td>
</tr>
<tr>
<td>2</td>
<td>20</td>
<td>Shampoo2</td>
<td>Shampoo</td>
</tr>
<tr>
<td>3</td>
<td>30</td>
<td>Conditioner1</td>
<td>Conditioner</td>
</tr>
</tbody>
</table>

The modifier will be applied because the item total for the eligible group of lines is 120 (the sum of 100 + 20).

**Example of a Modifier with an Excluded Item**
The following modifier, Modifier_Shampoo2, has been set up, and the item Shampoo1 is defined as the excluded item:

- **Level:** Group of Lines, Item Category: Shampoo
- **Quantity:** > 100 quantity
- **Excluded Item:** Shampoo1
Suppose a customer then places the following order for two shampoo items and one conditioner item, as in the previous order:

<table>
<thead>
<tr>
<th>Order Line ID</th>
<th>Item</th>
<th>Quantity (Qty)</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Shampoo1</td>
<td>100</td>
<td>Shampoo</td>
</tr>
<tr>
<td>2</td>
<td>Shampoo2</td>
<td>20</td>
<td>Shampoo</td>
</tr>
<tr>
<td>3</td>
<td>Conditioner1</td>
<td>30</td>
<td>Conditioner</td>
</tr>
</tbody>
</table>

To be eligible for this modifier, the item category of the ordered items must be Shampoo and the item quantity of the eligible order lines must be greater than 100. However, the item Shampoo1, which is defined as an excluded item for this modifier, will not be evaluated. The group of lines from the order is evaluated against the modifier requirements as follows:

- Order Line 1: Rejected because it contains the excluded item (Shampoo1).
- Order Line 2: Accepted because the Category is Shampoo.
- Order Line 3: Rejected because the Category is not Shampoo.

Then, the modifier evaluates the total quantity of the eligible order lines. If the total item quantity is greater than 100, then the modifier is applied. Since the quantity of the eligible lines is 20 (Order Line 2), the modifier will not be applied.

**To add exclude items to a modifier:**

1. Navigate to the Advanced Pricing - Define Modifier window (Summary tab) and select a modifier. You cannot add excluded items if the modifier level is Order.

2. Click Exclude to display the Exclude Items window.
3. Enter a Product Attribute and Product Value to be excluded.

4. Select Exclude and click OK.

5. Save your work.

Creating Line-Level Qualifiers

You can create qualifiers for modifiers at the line level. The pricing engine evaluates qualifiers to determine eligibility for line-level modifiers. The pricing engine evaluates line-level qualifiers in addition to the header-level qualifiers to qualify the modifier against the order header or line.

If the item is evaluated from the secondary price list, the customer does not receive the discount unless the qualifier also includes Price List B.

**To create line-level qualifiers:**

1. Navigate to the Advanced Pricing - Define Modifier window.

2. Choose the Modifiers Summary tab and select a modifier line.

3. Click the Line Qualifiers button.
4. If this modifier line has no qualifiers, the Qualifier Groups window appears. Do one of the following:
   • To add qualifiers from qualifier groups:
     1. Select the qualifier group.
     2. Select a grouping option: Retain Grouping Numbers Across Qualifier Groups or Generate Unique Grouping Numbers Across Qualifier Groups. For more information on qualifier groups, see: Using Qualifier Grouping Numbers across Qualifier Groups, page 5-16.
     3. Click OK to display the Qualifier - Line Level Qualifiers window. The qualifier and qualifier conditions from the selected qualifier group(s) appear in this window.
        The Group name (from the related Qualifier Group) appears in the Group column. Verify that the Grouping Number that is provided by default from the qualifier group creates the and and or conditions that you want.
   • To add qualifiers and skip the Qualifier Groups window, click OK and go to step 5.

5. In the Qualifier - Line Level Qualifiers window, you can add, change, and delete...
qualifiers, change the grouping numbers, and change the dates.

**Qualifier - Line Level Qualifiers**

6. If you are entering a new qualifier, enter a Grouping Number. Qualifiers with the same grouping number generate an AND condition, while qualifiers with different grouping numbers generate an OR condition. For more information on grouping numbers, see Using Qualifier Grouping Numbers, page 5-12.

7. Enter the Qualifier Context.

8. Enter the Qualifier Attribute.

   **Note:** After you save a qualifier with Qualifier Context of Modifier List and Qualifier Attribute of Coupon Number, you cannot modify or delete it. Since the pricing engine creates coupons (and a qualifier for each coupon), these coupon qualifiers are not subject to manual changes and deletions.

   View the Precedence numbers that appear by default from the qualifier definition. The pricing engine uses precedence for resolving incompatibility. If multiple modifiers are eligible within the same phase and incompatibility level, the modifier with the lowest precedence is applied.

9. Select or clear the Applies To Party Hierarchy check box. This check box is enabled only for attributes that are based on Oracle TCA (Trading Community Architecture) Parties and if the Party Hierarchy Enabled flag has been selected for this attribute on attribute management setups. The Applies To Party Hierarchy check box must be selected to use the party hierarchy functionality for the qualifier attribute. See the *Oracle Advanced Pricing Implementation Guide* for more details.
Hierarchies consist of tiered relationships where one party is ranked above another; for example, a corporate hierarchy where different companies are related as parent, subsidiary, headquarters, division, and so on. If Applies To Party is selected, then the modifier adjustment or price list (depending on what the qualifier is set up for) would be available to the parent party specified in the Attribute Value field and its subsidiaries. This setting saves you time because you don’t have to create multiple qualifiers, one for each subsidiary or division.

**Note:** The Applies To Party Hierarchy check box is not available in Basic Pricing. The profile option QP: Pricing Party Hierarchy Type enables the use of TCA hierarchy-enabled attributes.

10. Enter the Operator, Value From, and Value To (if applicable).
   - If you define a Value From/To range using negative numbers, enter the range from lowest to highest value. For example, to define a Volume Order Amount between -99999 to -1, enter the Value From = -99999 and the Value To = -1.
   - Enter Value To only when the Operator is BETWEEN.

11. Enter additional details about the selected qualifier in the Value From Meaning field. For example, if the qualifier context is CUSTOMER and the attribute is Ship To, then the Value From field displays the customer name and the Value From Meaning field displays the site-use location for the customer. If the context/attribute combination has no additional details, then Value From and Value From Meaning are identical.

12. Click Copy Group to add qualifiers from other qualifier groups.

13. Click OK.

14. Save your work.

   **Note:** The start and end dates of the line qualifiers must be within the start and end date of the modifier list.

---

**Copying a Modifier List**

You can create a new modifier list by copying an existing one. The following modifier information is copied from the original modifier to the new one:

- Modifier lines
• Pricing attributes, such as price breaks, other item discounts, coupons, and promotional goods.

• Qualifiers (list and line levels)

When you copy a modifier, you can enter a unique number and name for the new modifier and either update or keep the effective dates for the modifier list and lines. The combination of modifier name, number, and version must be unique across modifier lists. Although it is possible to copy an existing modifier name, you must enter a unique number for the new modifier.

Promotional limits attached to the original modifier are not copied. The promotional limits must be created again for the new modifier. You can review the newly converted price breaks in the View Log of the concurrent request.

• If you do not see the modifier list that you are trying to copy, you may not have access privileges to it. You must have at least View Only security privilege to copy a modifier list. Consult your Pricing Administrator.

To copy a modifier list:
1. Navigate to the Copy Modifiers window.
2. In the Copy From region:
   • Number: Select the modifier list to be copied. The currency and name appear for the selected modifier.
   • Retain Effective Dates: Select the Retain Effective Dates to copy the effective dates from the original to the new modifier.

   If you select Retain Effective Dates, then the effective dates from the original modifier lines are copied to the new modifier lines. If you do not select this option, you can add effective dates to the new modifier lines once they are created.

   Note: Selecting the Retain Effective Dates check box retains the effective dates only for the modifier lines not for the modifier list.

3. In the Copy To region:
   • Number: Enter a name for the new modifier in the Number field. Optionally, enter a description in the Name field and the effective dates for the modifier.
- Global: If the modifier you are copying from is Global (meaning available to all operating units), then the Global check box is selected by default. You can clear or select the Global value to disable or enable global access to the new modifier list.

- Operating Unit: Verify the value in the Operating Unit field. This value restricts the usage of the modifier list to the named operating unit (if Global is not selected). The operating unit value appears by default if you copy from an operating unit-specific modifier list and your responsibility has security access to the operating unit. If these two conditions do not exist, then the Global check box is selected instead.

  **Note:** The Global check box and Operating Unit fields are visible only if pricing security is enabled. See the *Oracle Advanced Pricing Implementation Guide* for further details on how to enable pricing security.

4. Click Submit to copy the modifier. A Request ID number appears so that you can track your copy request. Select View > Requests and search by your Request ID number to view your request status.

  **Important:** The copied modifier list is always inactive, so you must select the Active check box to make the modifier active.

5. Search for the new modifier in the Find Modifier Lists window.

6. Select the modifier, and then select Active to activate the modifier.

**Copying a Modifier Line**

You can quickly copy an existing modifier line to a new line record in the Advanced Pricing - Define Modifier window. The following information is copied to the new modifier line:

- All the contents of the modifier summary and all other tabs.
- All the Exclude Products attached to this modifier line.
- All the Pricing Attributes attached to this modifier line.
- All the Line Qualifiers attached to this modifier line.
- All the Line Details (additional and get products, price break lines) attached to this modifier line.
All fields that are copied can be updated except for the Level and Modifier type fields. The Product Attribute and Product Value fields can be updated even after you click Define Details. However, once the new modifier line is saved, these fields cannot be updated.

- **Copying price breaks created in releases earlier than R12:** When you copy a modifier line, all price break lines are copied from the old to the new modifier line. However, any price breaks created in releases earlier than R12 are converted automatically from non-continuous to the continuous price break format (standard in release R12 and newer). Since the conversion results in changes to the price break setup and break calculations, you should review the copied price break lines and make any required changes to ensure you are getting the correct results. You can review the newly converted price breaks in the View Log of the concurrent request. For more information on price breaks and their effect on pricing adjustments, see Continuous Price Breaks, page 3-78.

- **Duplicate Modifiers:** Basic Pricing provides a profile option, QP: Allow Duplicate Modifiers, that can be set to yes or no to control if duplicate modifiers are permitted. This functionality is for Basic Pricing only. In Advanced Pricing, this profile option does is non-functional and, therefore, does not restrict your ability to copy a modifier line. See the Oracle Advanced Pricing Implementation Guide, Profiles Option for more information about this profile option.

**To copy a modifier line:**

1. Display the modifier in the Advanced Pricing - Define Modifier window.

2. Select the modifier line to be copied, and click the New icon in the toolbar to create a new blank line beneath the original line.

3. Choose Edit > Duplicate > Record Above to duplicate the original line. Alternately, select the SHIFT+F6 keys.

4. Once the line is duplicated, you can modify or save it.

5. Save your work.

**Using Modifiers in the HTML User Interface**

Oracle Advanced Pricing provides an HTML-based user interface (UI) that features guided steps, user-friendly pages, and shortcut links for setting up and maintaining modifiers, price lists, and qualifiers.
You can use the HTML UI to complete many of the pricing tasks that you previously completed using the Oracle Forms-based UI, such as:

- Searching for modifier lists and modifier lines.

- Creating modifier lists for the following modifier types only: Deal, Discount List, Promotion, or Surcharge List.

  **Note:** You must use the Oracle Forms-based UI to create a Freight and Special Charge list.

- Creating the following modifier line types:

  **Note:** You must use the Oracle Forms-based UI to create all other modifier line types.

  - Discount
  - Surcharge
  - Price Break Header
  - Promotional Goods

- Updating a modifier.

Oracle Advanced Pricing provides the Oracle Forms-based interface for features and tasks currently unavailable in the HTML format, such as creating qualifier groups.

**Note:** Pricing security can affect the View and Maintain features associated with the Update and Details icons in the HTML UI. For more information, see *Oracle Advanced Pricing Implementation Guide*, Pricing Security.

**Pricing Security (HTML Interface)**

Pricing security settings affect the Update and Details icons for price lists and modifiers in the HTML UI in the following ways:

**When Pricing Security is Off**

- For a modifier or price list, if the PTE and source system are the same as those set in the user's profile options, QP: Pricing Transaction Entity and QP: Source System Code, then the Update icon will be enabled and the Details icon will be disabled.

- For a modifier or price list, if the PTE and source system are different from those set in the user's profile options, QP: Pricing Transaction Entity and QP: Source System Code, the Update icon will be disabled and the Details icon will be enabled.
• When the source systems are different (and the PTE is the same as in the QP: Pricing Transaction Entity profile option), you can view only the price lists and modifiers for the PTE specified in the profile option.

When Pricing Security is On

• For a modifier or price list with Maintain and View privileges, if the PTE and source system are the same as those in the user’s profile options, QP: Pricing Transaction Entity and QP: Source System Code, then the Update icon will be enabled and the Details icon will be disabled.

• For a modifier or price list with Maintain and View privileges, if the PTE and source systems are different from those in the user’s profile options, QP: Pricing Transaction Entity and QP: Source System Code, then the Update icon will be disabled and the Details icon will be enabled. This condition occurs when the same PTE is defined for both the user’s profile option, QP: Pricing Transaction Entity, and the modifier or price list, but the source systems are different. The behavior is the same in the forms-based UI.

• If the modifier or price list has View-privileges only, the Update icon will be disabled and the Details icon will be enabled, regardless of the PTE and source system for which the modifier or price list belongs.

Creating a Modifier List (HTML Interface)

A modifier list contains general information that applies to all modifier lines created for the list. You can use modifier lists and lines to adjust net prices either up or down through modifier actions such as discounting, adding surcharges, charging for shipping, or adjusting price based on promotional pricing.

In the HTML UI, you can create the following modifier list types.

• Deal

• Discount List

• Promotion

• Surcharge List

  Note: You must use the Oracle Forms-based UI to create a Freight and Special Charge list.

For each modifier list type, you can create modifier lines that define the price adjustment or benefit to be applied to the pricing requests. To view which modifier line types are supported for each modifier list, see Creating Modifier Lines (HTML Interface), page 3-71.
Creating a modifier list and modifier lines involves the following steps:

1. Enter general modifier list information.

2. Create qualifiers that define eligibility rules for the modifier list. For example, the customer must be a Gold class customer to receive the adjustments and benefits for the modifier list.

3. Review and then save the modifier list.

4. Add modifier lines to the modifier list to define the type and amount of price adjustment or benefit offered.

5. Make the modifier list active by navigating to the General Information page and clicking the Active check box.

**Modifier List Concepts:**

**Currency**

The pricing engine applies modifiers to sales orders of the same currency. If a specific currency is selected, such as U.S. dollars (USD), then the modifier list can only be used with a price list with a matching base currency or to currency (for a multi-currency price list).

**Optional Currency**

Select Optional Currency if currency is not used as a criteria to select modifiers for the order (this selection leaves the Currency field in the modifier list blank). Selecting optional currency can provide the following advantages to your business:

- Enables your business to reduce the number of modifiers required to support sales orders in all currencies for which you do business. For example, Optional Currency could be selected for modifiers that are set up with the application method of Percent, since these modifiers could be applied to any sales order regardless of the currency (since no currency conversion is required).

- Reduces the cost of setup and maintenance of modifiers.

- Reduces the cost of data storage.

**Note:** Although Optional Currency is applicable to all modifier types and application methods, it may not be appropriate for all types of modifiers since no currency conversion is done with such modifiers. You must determine if it suits your business requirements and in what situations.

**Pricing for Global Use and Operating Unit**

The Pricing For Global Use box identifies if this modifier list and lines are available to all operating units or a specific operating unit.
• If selected, then the modifier list and lines are available for all operating units.

• If cleared, then the Operating Unit field appears:
  • If multi-org access is not enabled, the operating unit value is provided by default from profile MO: Operating Unit. This operating unit field cannot be updated by users.
  • If multi-org access is enabled, the operating unit value is provided by default from profile MO: Default Operating Unit. Users can override this default and select an operating unit that they have access to as defined by MO: Security Profile.

The pricing engine will only consider this modifier if the order has the same operating unit.

The Pricing For Global Use check box appears only after you run the Security Control concurrent program to turn on security. To confirm the security status for your installation, view the profile QP: Security Control to see if security is on or off. Once security is on, all newly created modifier lists will have the global box selected as a default. For more information on pricing security, see the Oracle Advanced Pricing Implementation Guide.

By Request Only
If the By Request Only check box is selected, the customer must specifically request to have the modifier benefit applied (for example, by providing a special discount number), otherwise it will not be applied. This check box is only available for modifier list types of Deal and Promotion.

Note: If the pricing engine selects multiple modifiers to apply to an order line, the modifiers for By request only receive a higher preference than other modifiers.

To create a modifier list:
1. Navigate to the Modifier Lists page.
2. Select the type of modifier to be created:
   - Deal
   - Discount List
   - Promotion
   - Surcharge List

3. Click Go to display the Create [Modifier Type] General Information page.
Note: The page name and details may vary slightly depending on the modifier list type being created.

The Type field displays the modifier list type you are creating. The Pricing Transaction Entity and Source System values appear by default from the profiles QP: Pricing Transaction Entity and QP: Source System Code.

4. Enter a Name for the modifier list. You can use an alphabetic or alphanumeric combination to identify the modifier, for example, Promo Modifier or Mod1234.

   Note: The modifier Name should be unique across PTEs, otherwise an error occurs. For example, if a modifier named Corporate is created in the Order Management PTE, an error message displays if you create a Corporate modifier in the Purchasing PTE.

5. Enter a modifier list Number. This can be an alpha-numeric combination.

6. Enter a Version Number.

7. Enter a Description for the modifier list.
8. Perform one of the following actions:
   • Select a Currency. If a currency is selected such as US dollars (USD), the sales order must match the modifier currency to determine pricing for the order. For more information, see Currency, page 3-65.
   • Optionally, select Optional Currency to leave the Currency field in the modifier list blank. This option can be selected when currency is not used as a criteria to select modifiers for the order. For more information, see Optional Currency, page 3-65.

9. Enter a Start Date and an End Date.

10. Enter an Order Date From and an Order Date To range.

11. Enter a Requested Shipped Date From date and a Requested Shipped Date To date.

12. The Pricing For Global Use box identifies if this modifier list and lines are available to all operating units or a specific operating unit. For more information, see Pricing For Global Use, page 3-65.

13. For modifier types of Deal and Promotion, the By request only check box displays. If selected, the customer must specifically request that the modifier benefit be applied. For example, the customer must provide a special discount number or the benefit will not be applied. If the pricing engine selects multiple modifiers to apply to an order line, the modifiers for By request only receive a higher preference than other modifiers.

   For modifier types of Promotion and Deal, in the Parent Promotions Detail region, a parent-child relationship appears for reporting purposes. A Deal modifier list must be associated with a Parent Promotion by providing the promotion name and version. Since this association is for reporting purposes, information that you define on the promotion is independent of and does not affect the information on the Deal modifier. The Promotion must already exist before you can select it.

14. Click Next to display the Qualifiers page where you can define eligibility rules for the modifier list. See Creating Qualifiers (HTML Interface), page 5-4.

   **Warning:** When a qualifier is attached to a price list or modifier header, the effective dates of that QUALIFIER determine the effective dates for the price list or modifier list NOT the effective dates defined in the price list or modifier list window. For example, suppose you create a price list with an effective start date of 23-NOV-2005 and no end date; then you create a qualifier at the header level with effective dates of 10-NOV-2005 and 12-NOV-2005 for customer Computer Service and Rentals. However, after
12-NOV-2005, the price list will not be valid for Computer Service and Rentals or any other customer and the price list becomes expired.

**Qualifiers page**

15. Complete your entries, then choose one of the following:

- Click Next to review your entries before saving your work. If changes are required, click the Back button and update the information.

- Click Finish to save your work. A Confirmation page confirms that the modifier list has been created, and asks if you want to add modifier lines.

**Important**: All modifier (and price lists) created in HTML are created as inactive lists. You must select the Active field (which only appears after the list is created) from the Update General Information page to make the modifier list active.

**Related Topics**

Creating Modifier Lines (HTML Interface), page 3-71

Creating a Discount Modifier Line (HTML), page 3-75
Creating Modifier Lines (HTML Interface)

Once you create the modifier list, you can add modifier lines that define the type of price adjustments and benefits that the pricing engine applies to pricing requests. The following table shows the type of modifier line types you can create for a selected modifier list type:

<table>
<thead>
<tr>
<th>For the following Modifier List Types..</th>
<th>You can create these Modifier Line Types</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deal</td>
<td>Discount, Price Break, Promotional Goods, or Surcharge</td>
</tr>
<tr>
<td>Discount List</td>
<td>Discount, Price Break, or Surcharge</td>
</tr>
<tr>
<td>Promotion List</td>
<td>Discount, Price Break, Promotional Goods, or Surcharge</td>
</tr>
<tr>
<td>Surcharge List</td>
<td>Price Break, Surcharge</td>
</tr>
</tbody>
</table>

**Note:** Pricing security can affect the View and Maintain features associated with the Update and Details icons in the HTML user interface.

To create modifier lines:

1. Navigate to the Create Line page to complete your entries.

2. Complete your entries:
   - Modifier Type: The modifier line type you can select depends on the modifier list type selected:
     - Discount: Creates a negative price adjustment.
     - Promotional Goods: Adds a new item to the order line with a price adjustment or benefit when the customer orders a particular item on the same order.
• Price Break: Applies a variable discount or surcharge price adjustment to a pricing request based meeting the condition of a break type. You can use both point and range type breaks.

• Surcharge: Creates a positive price adjustment. For example, a 10 percent handling charge is applied to a customer order.

  The modifier Line Number defaults and can be updated. Each modifier line number must be unique within the modifier list (the line number cannot be duplicated).

• End Date: If you do not end an End Date then the modifier does not expire.

Related Topics

  Creating a Discount Modifier Line (HTML), page 3-75
  Creating a Promotional Goods Modifier Line (HTML), page 3-83
  Creating a Price Break Modifier Line, page 3-78
  Creating a Surcharge, page 3-87

Defining Controls for Modifier Lines (HTML Interface)

  In the Controls page, you define pricing controls that govern how the modifier line should be applied.
To define controls for a modifier line (HTML Interface):

1. Select a Modifier Level at which the modifier line should be applied:
   - Line: Applies only to a specific order line.
   - Group of Lines: Applies to groups of lines in the order.
     When Group of Lines is selected as the modifier level, then the Volume Type, Product Attribute, and Product Attribute Value fields become mandatory fields. This condition is true regardless of the modifier type selected, such as (Discount, Surcharge, PBH, and so on).
   - Order: Applies to an entire order. If Order is selected, then all products on the order will receive the benefit or price adjustment.
     For example, a volume-based discount modifier applied at the line level will consider only volume on the qualifying line. A volume-based discount modifier applied at the group of lines level will process the volume across all qualifying lines in the product hierarchy.

2. Select from other pricing controls:
   - Pricing Phase: Defines the point in the order process when the pricing engine applies the modifier adjustment. See the Oracle Advanced Pricing Implementation Guide for more information on pricing phases.
   - Bucket: Pricing buckets enable you to control how discounts and other benefits are applied using cascading price adjustments. They can be used to determine
the net selling price across all pricing phases.

**Important:** You must select a Bucket value to display the Net Amount Calculation field in the Product page.

When the pricing engine calculates price adjustments, it:
- Calculates percent type modifiers using the previous bucket's subtotal
- Sums all bucket modifier values to create a bucket subtotal

If the Bucket field is left blank, the modifier line is assigned to a Null bucket. Modifiers assigned to a Null bucket are applied last and always adjust from the list price. In addition, Order level modifiers must be in the Null bucket. For more information, see *Oracle Advanced Pricing Implementation Guide*.

- **Incompatibility Group:** You can assign a modifier line to one of the following incompatibility groups:
  - **Exclusive:** If one of the modifiers is Exclusive, then only the Exclusive modifier is applied.
  - **Group 1 incompatibility**
  - **Group 2 incompatibility**
  - **Group 3 incompatibility**

Incompatibility occurs when the pricing engine finds more than one modifier line to return but can apply only one. The pricing engine evaluates eligible modifier lines from each incompatibility group, and then resolves any incompatibility between modifier lines by using either precedence or best price. Only one modifier within the same incompatibility group will be applied for each phase. For more information, see the *Oracle Advanced Pricing Implementation Guide*.

- **Apply automatically:** Select this option so the pricing engine automatically applies the modifier line. Certain modifiers must be applied automatically and in these cases, you cannot change the value.

- **By Request Only:** On the modifier line, the By Request Only check box is read-only, based on the value selected for the modifier list. This field is visible only for modifier list types of Promotion or Deal.

- **Allow Benefit Override:** Enables the modifier-adjusted price to be manually overridden. If not selected, then the modifier-adjusted price cannot be overridden. For range break price break lines, do not select the Allow Benefit
Override check box.

**Note:** The Allow Benefit Override box displays only for modifier types that support overrides.

---

**Creating a Discount Modifier Line (HTML Interface)**

You can create a discount modifier line to create a negative price adjustment. For example, to give a 10 percent discount.

**To create a discount modifier line:**

1. Navigate to the Create Line page. For more information, see Creating Modifier Lines (HTML Interface), page 3-71.

2. Select Discount as the Modifier Type.
   
   The modifier Line Number defaults and can be updated. Each modifier line number must be unique within the modifier list (the line number cannot be duplicated).

3. Click Continue to display the Create Discount Line: Controls page. In this page, you can define controls for the modifier line. For more information on setting up and using controls, see Defining Controls, page 3-72.

4. After you have set up the controls, click Next to display the Create Discount Line: Product and Benefit page.
Create Discount Line: Product and Benefit page

5. Enter information about the product and product volume.

   **Note:** The Product and its related fields will not display if you selected Modifier Level = Order in the Controls page. This means that all products on the order will receive the pricing adjustment you define.

   - **Product:** Select the product that is eligible for the discount. The Product Description defaults based on the product selected.

   - **Volume Method:** Select a Volume Method to define specific volume requirements.

     If you select a Volume Method, then the following fields display:

     - **Value From/To:** For the selected Volume Method, enter the Value From/To (where applicable). For example, if you selected Is Between, then you can enter a range in the Value From and Value To fields.

     - **Based On:** Select a value to define how the buy volume is evaluated before the benefit is given:
• Item Quantity: Creates an adjustment based on the number of items that the customer orders.

• Item Amount: This could be a monetary value.

6. In the Pricing Attributes region, define the attributes for the selected product:
   • Attribute: Select a pricing attribute(s) that further define how you want to price the product such as by color or size. The Context value defaults and is display only.

   • Excluded Products: You can exclude certain products so that the pricing adjustments from the modifier line will not be applied to those products. For example, suppose you set up a Discount modifier line for the Item Category of shoes, but you wanted to exclude designer shoes from the price adjustment. Therefore, in the Excluded Products region, you would select designer shoes to be excluded from the price adjustment.

   **Note:** The Excluded Products region does not appear if Item Number is selected as the Product or if the Product field is left blank.

**Benefit region**

• Value: Enter a Value, then select an Adjustment Method. For example, if you selected Percent as the adjustment method, enter 10 as the Value to give a 10 percent adjustment.

• Formula: Optionally, select a Formula.

   **Note:** Both the Value and Formula fields are not required, but at least one of these fields must be entered. Formulas are available for modifier lines types of Discount and Surcharge.

• Adjustment Method: Select an Adjustment Method that defines how the pricing engine applies this modifier. For more information, see Adjustment Method, page 3-4.

7. Click Next to display the Qualifiers page where you can define eligibility rules for the modifier line.

8. Complete your entries, and click Next to proceed to the review page, or click Finish to skip the review page and save the line.

   A Confirmation message confirms if the modifier line is successfully created.
Creating a Price Break Modifier Line (HTML Interface)

You can use a price break modifier to apply a variable discount or surcharge price adjustment to a pricing request based on the conditions of the break type. You can use both point and range type breaks:

- **Point**: The pricing engine charges each unit of volume at the price of the break within which the total falls.

- **Range**: The pricing engine charges each unit of volume at the price of the break within which it falls.

The following table provides an example of a price break sequence:

<table>
<thead>
<tr>
<th>Product Attribute</th>
<th>Value From</th>
<th>Value To</th>
<th>Value (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item A</td>
<td>0</td>
<td>100</td>
<td>5</td>
</tr>
<tr>
<td>Item A</td>
<td>100</td>
<td>200</td>
<td>10</td>
</tr>
<tr>
<td>Item A</td>
<td>200</td>
<td>Null</td>
<td>15</td>
</tr>
</tbody>
</table>

Suppose a customer is eligible for the preceding price break, and places an order for a quantity of 150 of Item A. The pricing engine calculates the discount differently depending on the type of price break selected:

- **Point**: If the total quantity of Item A is 150, the discount is against 150 at 10 percent.

- **Range**: If the total quantity of Item A is 150, the discount is against 100 at 5 percent and 50 at 10 percent

**Continuous Price Breaks**
Price Break Feature | Example of Price Break Setup
---|---
All newly-created price breaks are created as *continuous* price breaks. These are price break lines without gaps between subsequent price break ranges. | 0-100
| 100-200
| 200-300

**Example:** The first break (0-100) means greater than 0 but less than or equal to 100. A quantity of 100 is eligible for the first price break range (0-100), but a quantity of 100.1 would be eligible for the second price break range (100-200).

**Value From** of first break range starts with 0. | 0-100
(greater than 0 to less than or equal to 100)

**Value From** of the current price break (other than the first break range) matches the **Value To** of the previous break. | • 100-200
• 200-300

**Important:** If you copy a price break from a pre-R12 release (for example, by copying a price list or modifier list with price breaks or copying a price break line--actions you can complete in the Forms-based UI), then the price breaks are converted automatically to the continuous format. This conversion changes the price break setup and processing; therefore, you must review the converted price breaks to ensure they continue to achieve your desired pricing results. The following table describes the continuous price break features:

**To create a price break line:**
1. Navigate to the Create Line page. For more information, see Creating Modifier Lines (HTML Interface), page 3-71.
2. Select Price Break as the Modifier Type.
   The modifier Line Number defaults and can be updated. Each modifier line number must be unique within the modifier list (the line number cannot be duplicated).
3. Click Continue to display the Create Price Break Line: Controls page. In this page, you can define controls for the modifier line. For more information on setting up and using controls, see Defining Controls, page 3-72.
4. After you have set up the controls, click Next to display the Products page.
5. Enter information about the product and product volume that the customer must buy to get the benefit.
   - **Product**: Select the product that is eligible for the price break. The Product Description defaults based on the product selected.
     
     **Note**: If All Items is selected for Product Level, then the Product Description field defaults to *All* meaning all products.

   - **UOM (unit of measure)**: The UOM value defaults if an item is selected.

   - **Precedence**: Defaults based on the product level selected. You can overtype this value.

6. In the Pricing Attributes region, select the attribute information:
   - **Attribute**: Select the pricing attributes that further define how you want to price the product such as by color or size. The Context value defaults and is display only.

   - **Excluded Products**: The Excluded Products region does not appear if Item Number is selected as the Product Level or if the Product Level field is left
You can exclude certain products so that the pricing adjustments from
the modifier line will not be applied to those products.

Product Level and Product: Select the product level and product to be excluded
from the Item Category or All Items selected in the Product Level field.

For example, suppose you set up a Discount modifier line for the Item Category
of shoes but you want to exclude designer shoes from the price adjustment.
Therefore, in the Excluded Products region, you would select designer shoes to
be excluded from the price adjustment.

7. In the Price Break Benefits region, define the price break benefits for the modifier
line:

• Adjustment Type: Select an Adjustment Type such as Discount or Surcharge.

• Volume Based on: Select a Volume Based on value to define how the buy
volume is evaluated before the benefit is given:
  • Item Quantity: Creates a price break based on the number of items that the
customer orders.
  • Item Amount: This could be a monetary value. (Item Amount must be
selected to use the Net Amount Calculation feature.)
  • Accumulate Line Quantity: Creates an accumulated range price break that
accumulates across orders.

• Volume Method: Select either Point or Range. For more information, see Using
Point and Range Price Breaks, page 3-78.

• Accumulation Attribute: Select an Accumulation Attribute that defines the
value to be accumulated. This option can only be selected for Range price
breaks. For more information, see Using Accumulated Range Breaks, page 3-48.

  Note: This field displays only if Accumulate Line Quantity is
selected in the Volume Based on field.

8. Optionally, select Net Amount Calculation to calculate the selling price based on
the bucketed Item Amount volume. For more information, see Using Net Amount
with Price Breaks, page 3-44.

To use Net Amount Calculation, the following fields must also be selected.

• On Controls page:
  • Bucket
- Modifier Level: Line or Group of Lines (Group of Lines must be selected to use the For matching products option from the Net Amount Calculation field.)
- Apply automatically box

- On Products page: Volume Based on is Item Amount.

9. After you have set up the products, click Next to see the Benefits page.

**Create Price Break Line: Benefits**

10. Define the following values for each price break:

- **Value From/To:** Define the price break range. For example, to define a break for the first 10 items ordered, create a range from 0-10. To do this, enter 0 in Value From and 10 in Value To.

  **Note:** If you leave the Value To field blank, a value of 9999999.. (15 digits long) defaults in the database, but does not display in the Value To field.

- **Adjustment Value:** Defines the value of the adjustment. For example, if you enter 10 in the Adjustment Value field and select Percent as the Adjustment Method, then you create a 10 percent adjustment.

- **Adjustment Method:** Defines how the price is to be adjusted. For more information, see Adjustment Method, page 3-4.
• Formula: Optionally, select a Formula if you are using a formula to calculate the benefit.

11. Click Next to see the Qualifiers page, where you can define eligibility rules for the modifier line.

12. Complete your entries, and click Next to proceed to the review page, or click Finish to skip the review page and save the line.

A Confirmation message confirms if the modifier line is successfully created.

**Caution:** After you save can the price break lines, they cannot be removed. However, they can still be updated.

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### Creating a Promotional Goods Modifier Line (HTML Interface)

When the customer orders one or more specified items on the same order, you can create a Promotional Goods modifier line to add a new item to an order and provide a price adjustment or benefit for the item. The item does not need to be originally on the order. Even if the item is on the order, the pricing engine creates a new line for the item.

**Note:** Recurring other item discounts are not supported.

#### To create a promotional goods modifier line:

1. Navigate to the Create Line page, and select Promotional Goods as the Modifier Type.

2. The modifier Line Number defaults and can be updated. Each modifier line number must be unique within the modifier list (the line number cannot be duplicated).

3. Select a Start and End Date range when the modifier line is effective. You should specify a range that coincides with the period of time that the benefit is offered. If no End Date is entered, then the modifier line does not expire.

4. Click Continue to display the Create Promotional Goods Line: Controls page. In this page, you can define controls for the modifier line. For more information on setting up and using controls, see Defining Controls, page 3-72.

5. After you have set up the controls, click Next to display the Required Products page.
6. Define the required *buy* product (or category) that the customer must order to get the benefit. For example: you must buy a toothbrush to get a free bottle of mouthwash.

- **Product**: Select the product. The Product Description defaults based on the product selected.

  **Note**: If All Items is selected for Product Level, then the Product Description field defaults to All meaning all products.

- **Precedence**: Defaults based on the product level selected. You can overtype this value.

- **Volume Method**: Select a Volume Method to define specific volume requirements.

  If you selected a Volume Method, the following fields display:
  - **Value From/To**: For the selected Volume Method, enter the Value From/To (where applicable). For example, if you selected Is Between, then you can enter a range in the Value From and Value To fields.
• Based On: Select a value to define how the buy volume is evaluated before the benefit is given:
  • Item Quantity: Creates an adjustment based on the number of items that the customer orders.
  • Item Amount: This could be a monetary value.

• Net Amount Calculation: Define Net Amount Calculation (optional step). You can use net amount calculation to calculate the selling price based on the bucketed Item Amount volume. For more information, see Using Net Amount with Price Breaks, page 3-44.

  **Note:** To use Net Amount Calculation, the following fields must also be selected.
  • In Controls page:
    1. Bucket
    2. Modifier Level: Line or Group of Lines (You must select Group of Lines to select "For matching products" from the Net Amount Calculation field.)
    3. Apply automatically box
  • In Products page: Based On is Item Amount

7. In the Pricing Attributes region, select pricing attributes that further define how you want to price the product such as by color or size. The Context value defaults and is display only.

8. In the Excluded Products region, select the product level and product to be excluded from the Item Category or All Items selected in the Product Level field. You can exclude certain products so that the pricing adjustments from the modifier line will not be applied to those products.

   For example, suppose you set up a Discount modifier line for the Item Category of shoes but you wanted to exclude designer shoes from the price adjustment. Therefore, in the Excluded Products region, you would select designer shoes to be excluded from the price adjustment.

   **Note:** The Excluded Products region does not appear if Item Number is selected as the Product Level or if the Product Level field is left blank.
9. After you have set up the products, click Next to display the Benefits page.

**Create Promotional Goods Line: Benefits page**

10. Define the product the customers get after they purchase the buy product defined in the Required Products page. For example, if they buy a toothbrush, the toothpaste is automatically added to the order line at a 10 percent discount.

   - **Product**: Select a Product. The Product Description defaults based on the product selected.
   - **UOM**: Enter a UOM (unit of measure) such as each (Ea). The unit of measure is used with the Quantity field to determine how the benefit is applied.
   - **Price List**: For the selected product, select a Price List. The list price will then default based on the price list selected.
   - **Adjustment Method**: Select an Adjustment Method that defines how the pricing engine applies this modifier. For more information, see Adjustment Method, page 3-4.
   - **Value**: Enter the Value for the selected Adjustment Method. For example, if you selected Percent as the adjustment method, enter 10 as the Value to give a 10 percent adjustment.

11. Optionally, click Add Another Row to add additional benefit lines, or click Remove to remove a selected line. However, once the benefit line is created and saved, you cannot remove this benefit line or update the product.

12. Click Next to display the Qualifiers page where you can define eligibility rules for
the modifier line.

If you are using a promotional modifier as a qualifier for another modifier, see Using a Promotional Modifier as a Qualifier for Another Modifier, page 3-41.

13. Complete your entries and click Next to proceed to the review page, or click Finish to skip the review page and save the line. A Confirmation message confirms if the modifier line is successfully created.

Notes:

• Changing the quantity of the free promotional good added to the order line: To prevent a user from changing the quantity of the free promotional good added to the order line (for example, changing the quantity of the promotional good from 1 to 2), select the Pricing Phase 30 (All Lines adjustment) when you create the promotional modifier.

• Deleting and reapplying a Promotional Goods modifier line: If you apply a modifier line of type Promotional Goods to an order, then delete the modifier line, you cannot reapply the deleted Promotional Goods modifier line.

Related Topics

Creating Modifier Lines (HTML Interface), page 3-71
Creating Qualifiers (HTML Interface), page 5-4

Creating a Surcharge Modifier Line (HTML Interface)

You can use a Surcharge modifier line to add a positive price adjustment. For example, to apply a 10 percent special charge to a customer's order.

1. Navigate to the Create Line page and select Surcharge as the Modifier Type.

   The modifier Line Number defaults and can be updated. Each modifier line number must be unique within the modifier list (the line number cannot be duplicated).

2. Select a Start and End Date range when the modifier line is effective. You should specify a range that coincides with the period of time that the benefit is offered. If no End Date is entered, then the modifier line does not expire.

3. Click Continue to display the Controls page. In this page, you can define controls for the modifier line. For more information on setting up and using controls, see Defining Controls, page 3-72.

4. After you have set up the controls, click Next to display the Create Surcharge Line: Product and Benefit page.
5. Select the product(s) that will receive the surcharge:

**Note**: The Product and its related fields will not display if you selected Modifier Level = Order in the Controls page. This means that all products on the order will receive the pricing adjustment you define.

- **Product**: Select a Product. The Product Description defaults based on the product selected.
  
  **Note**: If All Items is selected for Product Level, then the Product Description field defaults to All meaning all products.

- **Unit of measure (UOM)**: The UOM defaults if an item is selected.

- **Precedence**: Defaults based on the product level selected. You can overtype this value.

- **Volume Method**: Select a Volume Method to define specific volume
requirements.

If you selected a Volume Method, then the following fields display:

- **Value From/To**: For the selected Volume Method, enter the Value From/To (where applicable). For example, if you selected Is Between, then you can enter a range in the Value From and Value To fields.

- **Based On**: Select a value to define how the buy volume is evaluated before the benefit is given:
  - **Item Quantity**: Creates a price break based on the number of items that the customer orders.
  - **Item Amount**: This could be a monetary value. (Item Amount must be selected to use the Net Amount Calculation feature.)

6. In the Pricing Attributes region, select the pricing attributes that further define how you want to price the product such as by color or size. The Context value defaults and is display only.

7. In the Excluded Products region, select the product level and product to be excluded from the Item Category or All Items selected in the Product Level field. You can exclude certain products so that the pricing adjustments from the modifier line will not be applied to those products.

   For example, suppose you set up a Discount modifier line for the Item Category of shoes but you want to exclude designer shoes from the price adjustment. Therefore, in the Excluded Products region, you would select designer shoes to be excluded from the price adjustment.

   **Note**: The Excluded Products region does not appear if Item Number is selected as the Product or if the Product field is left blank.

8. Optionally, click Add Another Row to add additional benefit lines, or click Remove to remove a selected line. However, once the benefit line is created and saved, you cannot remove this benefit line or update the product.

9. In the Benefit region, select the following values:

   - **Value**: Enter a Value, then select an Adjustment Method that defines how the pricing engine applies this modifier. For example, if you selected Percent as the adjustment method, enter 10 as the Value to give a 10 percent adjustment. For more information, see Adjustment Method, page 3-4.

   - **Formula**: Optionally, select a Formula.
Note: Both the Value and Formula fields are not required, but at least one of these fields must be entered. Formulas are available for modifier lines types of Discount and Surcharge.

10. Click Next to display the Qualifiers page where you can define eligibility rules for the modifier line. For more information, on setting up qualifiers, see Creating Qualifiers (HTML Interface), page 5-4.

11. Complete your entries, and click Next to proceed to the review page, or click Finish to skip the review page and save the line.

A Confirmation message confirms if the modifier line is successfully created.

Related Topics
Creating Modifier Lines (HTML Interface), page 3-71

Searching for Modifier Lists (HTML Interface)
In the Modifier Lists Search page, you can use searches to quickly retrieve information about modifiers. This helps you find information essential to your business such as:

- All modifier lists in USD currency.
- Specific modifier lines.
- All active Promotion modifier lists.
- All modifier lists for Customer A.
- All discount modifier lists.
- All promotions that will end on May 31 (must be an exact date match only).

Note: Alternately, you can do searches for modifier lists from the Oracle Advanced Pricing Home page.

Once the search results are returned, you can view a summary of modifier lists, view general information about the modifier list such as Name, Number, Type, Start/End Dates, and Active status, or select a specific modifier list to view additional details.

In addition to viewing the modifier lists, you can choose to update, and create a new modifier list.
Note: You must be assigned Maintain privileges in pricing security to update or create a new modifier. The Details icon is enabled if you have view or update privileges assigned through pricing security.

To search for modifier lists:

1. Navigate to the Modifier Lists Search page.

   Modifier Lists Search page

   [Image]

2. Select a search category from the Search list, then enter additional criteria next to the Search list to narrow your search results. Select from the following search categories:

   - Status: Search by Active or non-Active modifier lists.
     - Active: Finds all Active modifier lists.
     - Inactive: Finds Inactive modifier lists.

   - Currency: Search by Currency. Select a specific currency such as USD (US dollars) to find all modifier lists set up in USD.

   - List Name: Search by the modifier list name. Enter a specific name or enter the percent sign (%) to list all modifier lists.

   - Dates: Search by modifier list Dates. These start and end dates must match exactly to the dates in the modifier list setup.

   - Line Number: Search by a modifier line number.

   - Type: Search by a specific modifier list type such as Deal, Discount List,
Promotion, or Surcharge List.

- List Number: Search by modifier list number. Enter a List Number to find a specific modifier list.

For example, to find a modifier list by its name, select Name from the Search list, then enter the specific name of the modifier list such as Summer Discount Modifier.

3. Click Go to display the following search results in a table:

- Name: The modifier list Name.
- Number: The modifier list Number.
- Type: The modifier list Type.
- Start/End Date: The start and end date for the modifier list.
- Active: Indicates if the modifier is Active or Inactive.

Optionally, click Update to update the modifier list, or click Details to view additional details about the modifier list.

Note: When pricing security is turned off, either the Details or Update icon displays depending on the profile QP: Source System. If the modifier list is created in a different source system within the same PTE, you can only view the list. You can only update the modifier list that matches your PTE and Source System.

Related Topics

Oracle Advanced Pricing Home page (HTML Interface), page 2-39
Creating a Modifier List (HTML Interface), page 3-64
Updating a Modifier (HTML Interface), page 3-92

Updating a Modifier (HTML Interface)

You can update a modifier to change information such as its effective start and end dates then save your changes. All fields can be updated except for the List Type, Pricing Transaction Entity (if there are modifier lines), Source System (if there are modifier lines), Name, and Number.

Note: Pricing security can affect the View and Maintain features
associated with the Update and Details icons in the HTML user interface. For more information, see Pricing Security (HTML Interface), page 3-63.

**To update a modifier:**

1. Navigate to the Update [Modifier Type]: General Information page.
   
   **Note:** The actual page name depends on the type of modifier being updated.

2. Update the fields that require changes:
   
   - Version Number
   - Requested Ship date
   - Start/End Date
   - Order Date From/To
   - Requested Ship Date From/To
3. Select or clear the By Request Only check box (if applicable).

4. Select or clear the Active box:
   • To make a modifier active, select Active.
   • To make a modifier inactive, clear Active.

   When a modifier list is first created, it is Inactive. The pricing engine evaluates only Active modifiers (when the Active box is selected). When a modifier is no longer required, change the status of the modifier to Inactive so only Active modifiers are evaluated.

5. Click Apply to save the changes.

   A Confirmation pages displays to advise you if the changes were updated successfully.

**Related Topics**

Creating a Modifier List (HTML Interface), page 3-64
Creating Modifier Lines (HTML Interface), page 3-71
Updating a Qualifier (HTML Interface), page 5-8

**Updating a Modifier Line (HTML Interface)**

You can update an existing modifier line to change information such as controls, products and benefits, and qualifiers. You can add additional qualifiers, excluded items, and additional buy and get products.

However, you cannot update the following:

• The primary buy product for the modifier line cannot be removed or changed.

• Once a modifier line is saved, you cannot delete additional buy and get items.

The following fields cannot be updated: List Type, Pricing Transaction Entity/Source System, Name, Number, Product Level, Product, Modifier Level, and Line Number.

**Note:** Pricing security can affect the View and Maintain features associated with the Update and Details icons in the HTML user interface. For more information, see Oracle Advanced Pricing
**To update a modifier line:**

1. Navigate to the Update [Modifier Type]: Modifier Lines page.

2. To find modifier lines for the selected modifier, select a Search category and enter additional criteria for the selected category:
   - Line Number: Enter a modifier line number.
   - Type: Select a modifier Type to search by: Discount, Price Break, Promotional Goods, and Surcharge.

3. Click Go to display the search results.

4. Click Update to display the Update Line page.

**Update Line page—Controls tab**

5. Select the Controls tab to update controls that define how the modifier line is applied such as the Start/End Dates, Pricing Phase, Bucket, and Incompatibility Levels. See Defining Controls for Modifier Lines (HTML Interface), page 3-72.

6. Select the Products tab to update information related to the selected product such as UOM and Precedence. You cannot update the Product Level or Product in the update mode.
Note: A Products tab and Benefits tab display when you are updating a price break line. For other line types, a combined Product And Benefit tab displays instead.

**Products tab**

7. In the Pricing Attributes region (if applicable), you can update, add, or remove pricing attributes related to the product.

8. In the Price Break Benefits region (if applicable), you can update the Adjustment Type, Volume Based on, Volume Method, and related fields.

9. Select the Benefits tab to update the benefit information for the modifier line such as Value From/To, Adjustment Value, Adjustment Method, and Formula. For example, you could change the Adjustment Value from 10 to 15 for the Adjustment Method of Percent.
10. Select the Qualifiers tab to update qualifiers and qualifier groups currently associated with the modifier line. You can update the qualifier information, add new qualifiers by clicking Create Qualifier, or append qualifier groups by clicking Append Group.
11. After you have completed all your updates, click Apply to save your changes.

**Related Topics**

Creating Modifier Lines (HTML Interface), page 3-71

Updating a Qualifier (HTML Interface), page 5-8

Appending a Qualifier Group (HTML Interface), page 5-8

Deleting a Qualifier (HTML Interface), page 5-8

**Redeeming Accruals**

You can mark accrued price adjustments as redeemed and record redemption transaction information. In addition, you can cancel coupons recorded as redeemed in error.

**To redeem accruals:**

1. Navigate to the Redeem Accruals window.

**Note:** You cannot create an accrual record in this window.
2. Do a query to retrieve the accruals. For example, query by Customer name to find all unredeemed accruals for that customer. The window only displays accrual records that the pricing engine created.

3. Select the accrual record.

4. Do the following steps for each accrual that you want to redeem:
   
   **Note:** You cannot mark an accrual record as partially redeemed. For example, a customer purchases a computer and accrues 100 air miles. You cannot mark 60 air miles redeemed at one time and 40 air miles redeemed later.

5. Select the Redeemed box.

6. Enter the Transaction Reference number for the system that redeemed the accrual.

7. Enter the Payment System that issued the payment for the accrual.

8. Enter the Redeemed Date (the default is the current date).
   Alternately, to mark a redeemed accrual record as unredeemed, clear Redeemed. Verify that the Transaction Reference, Payment System, and Redeemed Date fields are blank.

9. Save your work.
Changing Modifier Incompatibility

When you create modifier lines, you can assign a phase and an incompatibility group to each modifier line. Multiple incompatibility groups can be assigned to each pricing phase.

Pricing business rules allow the pricing engine to apply only one modifier for each incompatibility level and phase combination; any incompatibilities must be resolved.

You can review and change incompatibilities in the Incompatibility Groups window. For each incompatibility group within a specific phase, you can view the modifier lines assigned to one incompatibility group or reassign them to another group.

**Note:** If you are unable to access or update this window, you may not have the appropriate access privileges. Ask your Pricing Administrator.

Incompatibility between modifiers can be resolved using either Precedence or Best Price:

- **Precedence:** During the phase List Line Base Price, if the pricing engine selects more than one eligible modifier list line in the desired unit of measure, it resolves the incompatibility by picking the modifier list line with the highest precedence; for example, 1 has higher precedence than 2.

  In the pricing phase, List Line Base Price, regardless of the value of the Incompatibility Code set at the User level, the pricing engine selects the list price based on Precedence only.

  **Note:** Use the Event Phases window to set the Incompatibility Resolve Code for a phase.

- **Best Price:** For the phases, List Line Adjustment, All Line Adjustments, and Header Level Adjustments, if the pricing engine selects more than one eligible modifier, it resolves the incompatibility using best price processing.

  Best price processing instructs the pricing engine to select the modifier that offers the lowest price to the customer. For non-monetary modifiers, the pricing engine uses the estimated general ledger value of the modifier as the value of the modifier.

  **Note:** For Freight/Special Charges, if an Incompatibility Group is not selected for the modifier line, the pricing engine will apply BEST_PRICE regardless of the Incompatibility Resolve Code set for the event phase. In these cases, the best price is the highercharge, not the lowest.

During precedence processing if two or more modifiers tie based on precedence
processing, then the engine resolves using best price processing WITHOUT going below the established precedence.

The following table shows an example of the pricing engine using precedence to resolve incompatibilities. The Engine Applies column indicates whether the pricing engine selects the modifier.

<table>
<thead>
<tr>
<th>Modifier</th>
<th>Phase</th>
<th>Incompatibility Level</th>
<th>Precedence</th>
<th>Engine Applies</th>
</tr>
</thead>
<tbody>
<tr>
<td>10% Discount</td>
<td>30</td>
<td>1</td>
<td>260</td>
<td>No</td>
</tr>
<tr>
<td>$100 Promotion</td>
<td>30</td>
<td>1</td>
<td>240</td>
<td>Yes</td>
</tr>
<tr>
<td>Free Promotional Good</td>
<td>30</td>
<td>2</td>
<td>260</td>
<td>Yes</td>
</tr>
<tr>
<td>$50 Lumpsum</td>
<td>30</td>
<td>3</td>
<td>200</td>
<td>Yes</td>
</tr>
<tr>
<td>3% Discount</td>
<td>30</td>
<td>3</td>
<td>240</td>
<td>No</td>
</tr>
<tr>
<td>$25 Deal</td>
<td>40</td>
<td>1</td>
<td>260</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**Note:** Refer to the phase event mapping discussion to learn how to set phase incompatibility resolution.

**Freight and Special Charges Modifier and Incompatibility Processing**

Incompatibility processing considers all the modifier types such as Freight and Special Charges and evaluates them as a single entity. Once the incompatibility processing is complete, only one modifier remains which may or may not be the Freight and Special Charge modifier type depending on the incompatibility setup.

**Note:** For Freight/Special Charges: If an Incompatibility Group is not selected for the modifier line, then the pricing engine will use Best Price incompatibility processing instead of Precedence. The type of engine processing can be defined in the Incompatibility Resolve Code field in the Event Phases window.

**Exclusive Modifiers and Incompatibility Processing**

You can create one exclusive modifier in each pricing phase. When the pricing engine encounters an exclusive modifier, it suspends incompatibility pricing for the phase and applies only the exclusive modifier. However, during exclusive and/or incompatibility
processing, an order level modifier will *not* be compared to a Line level or Group of Lines level modifier.

**To change modifier incompatibility:**
1. Navigate to the Incompatibility Groups window.

*Incompatibility Groups window*

2. Click the Search icon to display the Find Incompatibility Groups window (if you are in a blank Incompatibility Groups window). Select your search criteria to find modifier lines associated with a particular phase or those assigned to a particular Incompatibility Group:
   - Phase Sequence
   - Phase Name
   - Incompatibility Group

   *Note:* If you search by phase without specifying an Incompatibility Group, the search returns all modifier lines for this phase, even those not assigned with an incompatibility group.

3. Click Find to view the search results in the Incompatibility Groups window.

4. To change the assigned incompatible group for a modifier:
• Select a different incompatible group from the Incompatible Group column.

• Alternatively, select the modifier and click Modifiers to display the modifier details in the Advanced Pricing - Define Modifier window. In the Modifiers Summary tab, select a different Incompatibility Group.

5. Save your work.

Archiving and Purging Modifiers

You can archive pricing entities such as modifiers and modifier lines by copying pricing data from the pricing application tables to archive tables for long-term data storage. Pricing data that is archived into the permanent pricing archive tables is deleted from the pricing application tables.

By archiving and purging records, the number of pricing records that need to be queried or processed by the pricing engine is reduced, potentially resulting in improved performance.

When the archived data is no longer required or does not need to be retained for legal retention purposes, then you can use the purge feature to purge the data from the archive tables.

Related Topics

Archiving Pricing Entities, page 8-2
Purging Pricing Entities, page 8-8

Using the Pricing Organizer

Use the Pricing Organizer for creating and saving queries (searches) so you can manage and track your modifiers more efficiently.

You can save frequently-used queries and re-run them without having to re-enter the query criteria. The query can be saved as either a Personal or Public query: a Personal query is not shared with other users while a Public query is shared with other users. When saving a query, select the Public check box to save it as a public query in the Public Folder; otherwise it is saved as a personal query in the Personal Folder.

Once you have saved your queries, you can rename an existing query, move queries between Public and Personal folders, or delete a query that is no longer required.

• If Pricing Security is ON, a user with View Only access privilege can view modifier information if it displays in the search results. Maintain privilege is required to make any changes.
• A public query can be renamed, moved from Public to Personal folder, or deleted only if the value of the profile option QP: Administer Public Queries is set to Y (Yes).

To create a modifier query:
1. Do a query in the Find Modifiers window to display the search results.
2. Right-click the Search Results folder in the left pane to display the query menu.
3. Choose Save to display the User Defined Queries window.
4. Enter a Name for the query.
5. Select Public to save the query as a Public query that can be shared with other users. Otherwise, it is saved as a Personal query.
6. Click OK to save the query.

To open a queried modifier (from the Pricing Organizer):
You can select a record from either the Headers or Lines tabs and click Open Modifier to view additional details about the modifier or modifier line.

Note: If you select Restrict Lines and click Open Modifier, only those lines that meet the query criteria on the Find Modifiers window are displayed. They display in the Modifiers Summary tab of the Advanced Pricing - Define Modifier window.

To rename a saved modifier query:
1. Find the saved query to be renamed in either the Personal Folders or Public Folders.
2. Right-click the query name to display the menu, then choose Rename Query to display the User Defined Queries window.
3. Enter the new name and click OK.

To move a saved query between the Personal or Public folder:
1. Find the saved query to be moved in either the Personal Folders or Public Folders.
2. Right-click the query name to display the menu, then choose Rename Query to display the User Defined Queries window.
3. Select or clear the Public box and click OK. The selected query has now moved over.

**To delete a modifier query:**
1. Select the query to be deleted in either the Personal Folders or Public Folders.
2. Right-click the query name, then select Delete to display the Decision window.
3. In the Decision window, click Yes to delete or No to return to the Pricing Organizer window.
4. Save your work.

**Finding Modifiers (Pricing Organizer)**

In the Find Modifiers window, you can create queries to find specific modifier and modifier line information essential to your business such as:

- All the active automatic promotions for customer A for a given source system.

- All the active promotions for customers within the Western region for the month of May.

- All discounts for item A that customer B is qualified for.

- All promotions that will end by May 31st for a given customer

- All modifiers that use price list A as a qualifier.

- All modifiers for my product category that customer C is eligible for if they ask for the promotion.

You can enter your query criteria in one tab or across multiple tabs to reduce your search results. After you select the query criteria, click Find to retrieve the search results. The modifier(s) that match all the specified search criteria display in the Pricing Organizer window:

- **Header tab:** Displays a summary of the modifiers’ header information.

- **Lines tab:** Displays a summary of modifier line details provided at least one query criteria has been entered in the Lines, Additional Lines, Products, Pricing Attributes, or Qualifiers tab.

If you query for modifier lines using the Pricing Organizer with date range as query input values, then the Pricing Organizer displays results as follows:

- When you provide the starting date range in the Effective From field but not the ending date range for this field, then the results display all the modifiers having
start date as greater than the specified date excluding null start dates modifiers.

- When you provide the ending date range in the Effective From field but not the starting date range for this field, then the results display all the modifiers having start date as less than the specified date including null start dates modifiers.

- When you provide the starting date range in the Effective To field but not the ending date range for this field, then the results display all the modifiers having end date as greater than the specified date including null end date modifiers.

- When you provide the ending date range in the Effective To field but not the starting date range for this field, then the results display all the modifiers having end date as less than the specified date excluding null dates.

- When you specify all the dates in from and to date ranges, then the results display all the modifiers that fall within the specified range excluding null dates.

Select a modifier header or line detail from the Headers or Lines tab to view the modifier details. You can open a specific modifier from the Pricing Organizer window.

1. From the Find Modifiers window, enter at least one query criteria then click Find to run the query.

   **Note:** Alternatively, to run a saved query, just double-click the query name in the Personal or Public folder in the Pricing Organizer window.

**Lines tab**

You cannot query the following:

- additional buy items for promotional goods or other item discounts
- get items for promotional goods or other item discounts
- price break lines details

**Additional Lines Criteria tab**

You can select query criteria if Coupon Issue, Price Break Header, or Discount is selected as the Modifier Type in the Lines tab or if a modifier type is not selected in the Lines tab. Otherwise, the fields are grayed you cannot make any selections.

**Product Attributes tab**

- Product Attributes: Select one of the following:
  - Not Specified: If this option is selected, the remaining fields on the window are greyed out and the query ignores whether a modifier line has product
attributes or not. This is the defaulted value and additional query criteria is needed for the query to execute.

- Products: This enables you to query the specified fields on the window.

- No Products: If this option is selected, the remaining fields on the window are greyed out. The query returns modifier lines that do not have any product attributes defined.

If you select Products in the Product Attributes field, you can also query by Exclude Items.

- Product Attribute Value: Can be entered only after a Product Attribute has been selected.

- Exclude Items region: Enter one or more Exclude Items. The query retrieves modifiers that have that item defined as an Exclude Item. If more than one exclude product is selected, then modifiers with at least one of the Exclude Items defined are retrieved.

  **Note:** When querying by an item, the query results will return modifier lines that specify the item number and not include modifier lines for item category.

**Pricing Attributes tab**

- Pricing Attributes: Select one of the following:
  
  - Not Specified: If this option is selected, the remaining fields on the window are greyed out and the query ignores whether a modifier line has Pricing Attributes or not. This is the defaulted value and additional query criteria is needed to run the query.

  - Pricing Attributes: This option enables the query fields on the window. Enables you to query by one or more combinations of Pricing Context/Attributes. For example, you could query by Volume (Pricing Context) and Total Item Quantity (Pricing Attribute). If no values are entered, the query returns only those modifiers with at least one product attribute.

  - No Pricing Attributes: If this option is selected, the remaining fields on the form are greyed out. The query will return modifier lines that do not have any pricing attributes defined.

Select Pricing Attributes in the Pricing Attributes field to query by pricing context. The Pricing Attribute field is enabled if a Pricing Context is selected. The Pricing Attribute Value is enabled only after a Pricing Attribute has been
selected. You can specify up to 3 pricing attributes with a combination of OR/AND operators.

- Operator: Select an operator value such as = or BETWEEN. The Value To field is grayed out if the Operator value is =. If the operator value is left blank or is BETWEEN, the query evaluates the values in the Value From and Value To fields to determine if there is an exact match.

Qualifiers tab
- Qualifiers: Select one of the following options from the Qualifiers tab:
  - Not Specified: If this option is selected, the remaining fields on the window are greyed out and the query ignores whether a modifier line has a qualifier attribute or not. This is the defaulted value and additional query criteria is needed to run the query.
  - Qualifiers: This option enables you to query the fields on the window:

<table>
<thead>
<tr>
<th>Qualifier Field Name</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qualifier Context</td>
<td>Customer</td>
</tr>
<tr>
<td>Qualifier Attribute</td>
<td>Customer Name</td>
</tr>
<tr>
<td>Operator</td>
<td>= (exact match)</td>
</tr>
<tr>
<td>Value</td>
<td>World of Business</td>
</tr>
</tbody>
</table>

- No Qualifiers: If this option is selected, the remaining fields on the window are greyed out. The query retrieves modifier lines that do not have any qualifier attributes defined.

- Qualifier Attribute: The Qualifier Attribute field is enabled if a Qualifier Context has been selected. The Value is enabled only after a qualifier attribute has been selected. Otherwise, the fields are grayed out and you cannot specify any qualifier values.

- Operator: Select one of the following operator values: =, BETWEEN, or NOT=. If you select the = or NOT= operator, the Value To field is grayed out. For an exact match choose =. For a range of values, select BETWEEN. If you want to filter out values for a given range select NOT=. If the operator is left blank or BETWEEN, the query evaluates the values in the Value From and Value To fields to determine if there is an exact match.
• Exact Effective Date Match: Select the Exact Effective Date Match box to retrieve modifiers with the dates specified in Effective From/To.

• Applies To Party Hierarchy: This field is only enabled if you select an Oracle TCA (Trading Community Architecture) based Party in the Qualifier Attribute field and Party Hierarchy Enabled flag is selected for the attribute in the attribute management setup windows. Values for this field are:
  • Null (default value): Retrieves modifiers that meet the other selected qualifier criteria, regardless of the value of Applies To Party Hierarchy on the qualifier.
  • Yes: Retrieves modifiers that meet the other selected qualifier criteria and where Applies To Party Hierarchy is selected on the qualifier.
  • No: Retrieves modifiers that meet the other selected qualifier criteria and where Applies To Party Hierarchy is not selected on the qualifier.

• OR/AND: You can specify up to 3 qualifiers by selecting the OR/AND operators.

Examples of using AND/OR operators to query Pricing Qualifiers
You can select up to three qualifiers by specifying the OR/AND operators:

• Q1=Customer Name
• Q2= Order Type
• Q3 = Ship To

<table>
<thead>
<tr>
<th>Conditions</th>
<th>Modifier 1 - Cust Name, Order Type, &amp; Ship To</th>
<th>Modifier 2 - Customer Name</th>
<th>Modifier 3 - Order Type</th>
<th>Modifier 4 - Cust Name and Ship To</th>
</tr>
</thead>
<tbody>
<tr>
<td>OR/OR</td>
<td>Yes (Customer Name/Order Type/Ship To)</td>
<td>Yes (Customer Name)</td>
<td>Yes (Order Type)</td>
<td>Yes (Customer Name/Ship To)</td>
</tr>
<tr>
<td>AND/AND</td>
<td>Yes (Customer Name and Order Type and Ship To)</td>
<td>No (not Customer Name and Order Type and Ship To)</td>
<td>No (not Customer Name and Order Type and Ship To)</td>
<td>No (not Customer Name and Order Type and Ship To)</td>
</tr>
</tbody>
</table>
## Conditions Modifier 1 - Cust Name, Order Type, & Ship To

<table>
<thead>
<tr>
<th>OR/AND</th>
<th>Modifier 1 - Cust Name, Order Type, &amp; Ship To</th>
<th>Modifier 2 - Customer Name</th>
<th>Modifier 3 - Order Type</th>
<th>Modifier 4 - Cust Name and Ship To</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes (Customer Name/Order Type and Ship To)</td>
<td>Yes (Customer Name)</td>
<td>No (Not Order Type and Ship To)</td>
<td>Yes (Customer Name)</td>
<td></td>
</tr>
<tr>
<td>Yes (Customer Name and Order Type/Ship To)</td>
<td>No (not Customer Name and Order Type)</td>
<td>No (not Customer Name and Order Type)</td>
<td>Yes (Ship To)</td>
<td></td>
</tr>
<tr>
<td>Yes (Order Type/Ship To)</td>
<td>No (No Q1)</td>
<td>Yes (Order Type)</td>
<td>Yes (Ship To)</td>
<td></td>
</tr>
</tbody>
</table>

## Related Topics

Using the Pricing Organizer, page 3-103

## Overview of Promotional Limits

Oracle Advanced Pricing enables you to set limits for benefits that a customer can receive for a promotion, deal, or other modifier. By limiting the amount of a benefit that can be received, you can keep promotional spending within budget and prevent promotion budget overruns.

**Note:** If you cannot access the Promotional Limits window or make updates, you may not have the appropriate access privilege. To make any changes or updates to the windows, you must have Maintain privileges. Contact your Pricing Administrator.

For example, promotional limits could be used to provide a 10 percent discount on the first 500 units of an item sold, or a 10 percent discount for an item until the promotional limit is reached; for example, once the promotion reaches $100,000. In addition to setting limits on promotional spending, you can also monitor current and cumulative promotional spending in real time, order by order.

You can set limits for a specific monetary value, such as the first $500, or by a specific category, such as a customer. Oracle Advanced Pricing enables you to set limits in terms of accrual units, discount cost, gross revenue, item quantity, and usage by customer, by promotion, by promotion and customer. Within a promotion, deal, or
modifier, you can also set eligibility for limits by customer, product, or other entity:

- Customer: Define a limit by customer, a group of customers, or at any level in your customer hierarchy.

- Product: Define a limit for a product or group of products in your product hierarchy.

If multiple organizations exist for your corporation, you can set a different limit for each sales organization, group of organizations in your company hierarchy, or give the same limit for all. When entering a limit, you can select if you want to consider to set this limit:

- By organization

- Across all organizations

- For a specific organization.

You can define a limit across the current transaction or across all transactions to which a promotion or modifier has been applied.

**Enforcing Limits**

Oracle Advanced Pricing enables you to set up an enforcement policy to manage transactions if the promotional limits are exceeded. When the benefit amount for a transaction or transaction lines exceed the set limit or available limit balance, the default handling method resolves the situation.

For example, if a customer close to their promotional limit places a new order that exceeds their limit amount, under a soft limit the customer gets the full promotion benefit applied to the order. A status message is sent to the calling application (such as Order Management) that the limit has been exceeded.

The default limit enforcement is set up by the System Administrator in the QP: Limit Exceed Action profile option. You can accept the default or optionally, select an alternative handling method. The following limit handling methods are available:

- **Hard - Adjust Benefit Amount:** Any partial benefit available will be given up to the limit. A promotion based on Usage (number of times it is given) is considered to be a hard limit.

- **Soft - Full Benefit Amount:** The full benefit of the promotion is given and a message is sent to the calling application to advise that the limit has been exceeded. If a limit is exceeded, then the order header and lines need to be placed on a promotional limit hold until appropriate business processes allow progression of the entire sales order. These processes may involve adjusting the promotional limits or repricing the order.

In addition to setting hard and soft limits you can also make the following adjustments when the limit is exceeded:
• Adjust the limit up or down while the enforcement is operating.
• Deactivate the promotion or increase the remaining available limit.

Related Topics
Creating Limits, page 3-112
Viewing Limit Balances and Transaction Details, page 3-119
Updating an Existing Limit Balance, page 3-121
Adjusting the Limit Amount, page 3-123

Creating Limits
Oracle Advanced Pricing enables you to create monetary or usage limits that a customer can receive for a promotion, deal, or other modifier. You can create limits at the:
• Modifier header level for a promotion, deal, or modifier list.
• Modifier line level: Limits can be applied to line modifiers and applied to a line, group of lines, or order.
• Both Modifier header and line levels. However, line limits cannot be created if the Modifier Type for the modifier line is Other Item Discount, Promotional Goods, Coupon Issue, Item Upgrade, or Term Substitution.

You can define header and line level limits using accrual units, discount cost, gross revenue, item quantity and usage (by customer, promotion, or by promotion and customer). The limit can be defined by a specific value or a limit for each element that receives a promotion; for example, a limit of $100 for each customer. The following examples illustrate different ways limits can be applied:

Customers
You can define limits for all individual customers, group of customers, or specifically named customers; for example:
• No more than $100 of benefit to any one customer on any order from promotion Y.
• Customer XYZ is limited to $1,000 cumulative benefit from promotion X.
• All VIP customers are limited to $2,000 cumulative benefit.

Individual stock-keeping units (SKUs) or groups of SKUs
You can define limits for individual SKUs or groups of SKUs that are being promoted; for example:
• Limit aggregate expense for promotion X to $50,000 for item 1234.
• Limit VIP customers to $2,000 cumulative benefit.

**Individual or aggregated transactions**
You can define limits that apply to individual transactions or aggregated transactions; for example:

• Limit customers so they cannot exceed $50 for any order.

• Limit customers’ use of promotion X for either $400 cumulative discount or placing an order 3 times.

• Limit the total expense that customers may receive from a fall promotion to $5,000.

When setting up a limit, you must select a basis that defines the unit being monitored for limit checking. Available limit bases are accrual units, charge amount, cumulative discount amount, gross revenue, item quantity, and usage.

For example, if accrual units were used as the basis for monitoring units such as air miles, the limit would monitor the number of air miles accrued.

**Note:** If the effective end date for a modifier has been reached, you can still attach limits. However, the modifier and associated limit will not be applied if the limit date is expired.

If you plan to set up promotional limits for the modifier, confirm using the following table whether you can apply promotional limits to the desired modifier line type:

<table>
<thead>
<tr>
<th>Modifier Line Type</th>
<th>Can Promotional Limits be applied?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coupon Issue</td>
<td>No</td>
</tr>
<tr>
<td>Discount</td>
<td>Yes</td>
</tr>
<tr>
<td>Item Upgrade</td>
<td>No</td>
</tr>
<tr>
<td>Other Item Discount</td>
<td>No</td>
</tr>
<tr>
<td>Price Break Header</td>
<td>Yes</td>
</tr>
<tr>
<td>Promotional Goods</td>
<td>No</td>
</tr>
<tr>
<td>Surcharge</td>
<td>Yes</td>
</tr>
<tr>
<td>Term Substitution</td>
<td>No</td>
</tr>
</tbody>
</table>
• To enter a limit for the modifier, the Automatic check box for the modifier line must be selected, and the Override check box must be deselected.

• *Limits not copied to new modifier:* If copying a modifier, existing limits at either the line or header level, are not copied from the original modifier to the new modifier. The promotional limits must be created again for the new modifier.

• If no Product UOM was defined for the modifier line, line limits with basis of *Item Quantity* will not get created. If no Benefit UOM was defined for a modifier line, line limits with basis as *Accrual Units* will not get created. If no Benefit or Product UOM is defined for a modifier line, neither Item Quantity or Accrual Units displays in the Basis list of values (LOV) and line limits cannot be created for that line.

• Currently limits are not processed for modifiers out of phase. To resolve this, you can include all the events, such as LINE, ORDER, BOOK, SHIP, or BATCH, in all the phases in which you are setting up automatic modifiers.

**Prerequisites**

☐ To use limits, Oracle Advanced Pricing must be installed and the System Administrator must set the following profile options:

• QP: Promotional Limits Installed: Set to Y (Yes) to use limits.

• QP: Limit Exceed Action: Determines the default handling action if a pricing request exceeds the promotional limit. This value appears as the initial default value in the When Exceeded field (Define Limits window).
  
  • Soft - Full Benefit Amount
  
  • Hard - Adjust Benefit Amount

• OM: Promotion Limit Violation Action: Determines the hold action Order Management will take when encountering a initial promotional hold returned by the pricing engine. Set this profile option to place holds (or not place holds) on an order or order line.

**To create limits:**

1. Click List Limits to enter a limit at the modifier header level, or Line Limits to enter
a limit at the modifier line level. The Automatic box for the modifier list or modifier line must be selected otherwise the List Limits button or Line Limits button may be grayed out.

**Define Limits window**

2. Complete your entries in the Define Limits window:

- **Num:** A unique limit number that defaults automatically to identify the limit transaction.

- **Basis:** Select the Basis for the limit. The basis defines the type of limit that is applied and how the consumption is measured. For example, if the basis is Accrual Units, the limit is calculated by the number of units accrued such as 4,000 air miles. Select from the following available bases:
  
  - **Accrual Units:** For example, each customer accrues 100 air miles for each 10 currency units spent up to a limit of 5,000 air miles per customer.
  
  - **Discount Cost:** For example, when the cost of the promotion has exceeded $50,000, the promotion ends.
  
  - **Gross Revenue:** For example, each customer receives the promotion for the first $250 that they order from the website.
  
  - **Item Quantity:** For example, a customer receives $10 off a case of 12 one-gallon cans of orange juice for the first 1,000 cases.
• Usage: Usage can be based by customer, promotion, or both customer and promotion:

• Customer: For example, each customer cannot get a promotion more than 5 times.

  **Note:** You cannot create limits if the modifier type is set to Other Item, Discount, Promotional Goods, Coupon Issue, Item Upgrade, or Term Substitution.

• Promotion: For example, promotion is available on the first 25 orders placed.

• Promotion and Customer: For example, promotion is available to the first 25 different customers who place an order.

  When a pricing request is processed, the pricing engine checks each request against the limit to see if it exceeds the limit and applies the amount of the benefit against the limit.

• Enforced: Select how you want the limits enforced:

  • Select Across the Current Transaction if you want the pricing engine to maintain a consumption record for each order that consumes the limit.

  • Select Across All Transactions if you want the pricing engine to maintain one consumption record for all orders that consume the limit.

• Amount: Enter the amount of the limit. You can increase or decrease an existing limit; however, you cannot decrease it lower than the amount by which the limit has been consumed. For example, if two orders each for $100 have consumed the limit, you cannot lower the limit below $200.

• Unit: Defaults to a unit of measure that corresponds to the Basis selected: for example, a currency unit such as USD for Gross currency.

• By Organization: To filter limits by sales organization, select . If enabled, the organization for the transaction and modifier must match before the limit can be applied. This enables you to restrict limits to transactions for your organization.

  **Note:** Even if the transaction is ineligible to receive the limit, it may be eligible to receive the modifier.

• Constraint: Select a constraint to restrict the limit to a product or qualifier
attribute:

- **Product Attribute**: Set limits for a specific product(s).

- **Qualifier Attribute**: Set limits for a qualifier such as a customer, modifier list, or order.

You can select additional criteria from the Constraint, Context, and Attribute fields to restrict eligibility for limits by certain products or qualifiers. For example, the following setup can be used to define eligibility by customer name:

<table>
<thead>
<tr>
<th>Constraint</th>
<th>Context</th>
<th>Attribute</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qualifier Attribute</td>
<td>Customer</td>
<td>Customer name</td>
</tr>
</tbody>
</table>

- Select Constraint 1 which can be either a product or qualifier attribute.

- Select a Context for the product or qualifier constraint.

- Select an Attribute for the Context. For example, if the Context is Customer, you can select Customer name as the Attribute to restrict the limit by customer name.

- You can define additional product or qualifier attributes in the Constraint 2, Context 2, and Attribute 2 fields.

  **Note**: If you select Constraint 2, Context 2, and Attribute 2 or additional criteria, an *and* operator is introduced which means that all criteria must be met before the limits are applied.

- **When Exceeded**: Determines the handling action if a pricing request exceeds the promotional limit. The initial value automatically defaults from the profile option QP: Limit Exceed Action that is set up by the System Administrator. Optionally, if you can select a different handling action:

  - **Hard - Adjust Benefit Amount**: Adjusts the order benefit amount so that the order meets but does not exceed the promotional limit. For example, if a customer close to their promotional limit places a new order that exceeds the limit amount, the customer receives the benefit only until the amount is reached.
• **Soft - Full Benefit Amount:**

Soft limits provide a way to monitor your promotions while continuously giving the benefit. When a soft limit is exceeded, pricing will still apply the benefit (on subsequent orders) even if the total limit has been exceeded. Since pricing returns a status message that the limit has been exceeded, you must decide what further action should be taken: increase the limit, end date or inactivate the modifier, add qualifiers, or cancel the order.

For example, if a customer close to their promotional limit places a new order that exceeds their limit amount, under a soft limit the customer gets the full promotion benefit applied to the order. A status message is sent to the calling application (such as Order Management) that the limit has been exceeded.

• **Hold?:** Select one of the following hold actions:

• Select Hold? to have a status message sent to the calling application when the limit is exceeded.

  If **Soft - Full Benefit Amount** is selected, then the Hold? check box is selected automatically and cannot be updated.

• Deselect Hold? so that the pricing engine does not place a promotional hold.

• **Other Attributes:** Optionally, click Other Attributes to define additional criteria. If Balances exist for a limit, the Other Attribute button is grayed out and you cannot add other attributes.

  For example, if you have selected customer and customer name and want the limit applied to a particular customer, select the customer name from the Value field.

  **Important:** To qualify for a limit, all the qualifier conditions must be met. Otherwise, the limit will not be applied.

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**Related Topics**

Overview of Promotional Limits, page 3-110

Viewing Limit Balances and Transaction Details, page 3-119

Updating an Existing Limit Balance, page 3-121

Adjusting the Limit Amount, page 3-123
Viewing Limit Balances and Transaction Details

Oracle Advanced Pricing enables you to view balances including the amounts available and consumed (used) for a selected limit or across transaction limits. For a selected balance, you can view the transactions that have consumed the balance. The available balance is calculated using the following formula:

Available balance = Limit Amount - sum of (Consumed Amounts from saved Transactions)

Manual versus Automatic Updating of Limit Balances

For most transactions, limit balances are updated automatically when orders are re-priced or when the limit amount is changed. However, some balances must be manually updated to reflect the new balances: for example, for returned, cancelled, and deleted orders or when a manual transaction is added to adjust limit balances. To update the limit balances manually, you must click Update balances to view the updated balance.

As transactions are processed, cumulative promotional spending is subtracted from the available limit balance. The pricing engine updates the available balance for transactions that complete successfully such as a booked order line or transactions in progress; for example, a sales order line that is entered but not saved or booked.

However, if a transaction in progress was rolled back or exited abnormally from a calling application (for example, Order Management), the balance is still updated and therefore the available limit balance may not reflect the true balance. When this occurs, you must manually update the balance to reflect the true balance.

Once the order or order line is saved and booked, then the available limit balance is reduced by the amount of the completed transaction(s).

To view a limit balance:
1. Navigate to the Define Limits window.
The limits and their balances display in the Balances region. If the limit is arranged by category such as sales organizations, product attributes, or qualifier attributes, one limit balance displays for each category.

**Note:** A limit and sub-limits only appear if transactions have posted against them.

2. The Available field displays the amount of the limit or sub-limit remaining. If the limit is set up by category, then the following Organization (Org) fields display:
   - Org Context: Displays the sales organization for the sub-limit balance.
   - Org Attribute: Displays the product attributes/qualifier attributes for the sub-limit balance.
   - Org Value: Displays the product attributes/qualifier attributes for the sub-limit balance.
   - Org Meaning

**To view limit transaction details:**
1. Navigate to the Define Limits window.
2. In the Balances section, select the balance whose transaction details you want to view.

3. Click Transactions to view transaction details in the Define Transactions window:
   - Date Request: Display the date the transaction occurred.
   - Price Req Code: Displays the pricing code automatically for an Automatic transaction. You can enter a pricing code manually for a Manual transaction.
   - Manual: Enabled if a manual transaction has been added. You can update, delete, or add a manual transaction.
   - Amount: Displays the amount of the limit consumed.
   - Request Type: Displays the name of the calling application such as Order Management.
   - Reason: Displays a reason (if applicable) for the transaction. You can enter a manual reason which is used especially in manual adjustments.

- The Define Transactions window displays only if there are transactions applied against the limit. Transactions display after you save a sales order.

- In the Define Transactions window, you can choose to adjust the limit balance by manually adding new transactions or updating existing manual transactions. A limit transaction created by the pricing engine cannot be updated or deleted. Only manual transactions can be added, update and deleted.

**Related Topics**

Overview of Promotional Limits, page 3-110
Creating Limits, page 3-112
Updating an Existing Limit Balance, page 3-121
Adjusting the Limit Amount, page 3-123

**Updating an Existing Limit Balance**

Oracle Advanced Pricing provides a running available balance so you know the amount consumed (used) and available for a selected limit. Balances for limits are updated
automatically when orders are re-priced or when the limit amount is changed. In certain cases such as returned, cancelled, and deleted orders, the limit balances are not updated automatically and the balance must be manually updated using the Update balances button. If a manual transaction is added to adjust limit balances, you must click Update balance to view the new available limit balance.

**To update an existing limit balance:**

1. Navigate to the Define Limits window.

![Define Limits window](image)

2. Verify that the balances match the sum of the transactions. Click Update balance or run the concurrent process *QP: Update Limit Balance*.

3. Click Transactions to display the Transactions window. Confirm that the transactions are correctly applied to the balance.

4. To change the limit balance, enter a transaction in the Transactions window. Enter a positive quantity in the Amount field to lower the available balance or use a negative quantity to raise the available balance.

5. Recalculate the balances in the Define Limits window by choosing the Update balance button or by running the concurrent process *QP: Update Limit Balance*. 
Adjusting the Limit Amount

You can increase or decrease an already existing limit for a promotion, deal, or modifier and have the adjustment reflected in the available balance. However, you cannot decrease it lower than the amount by which orders have consumed it. For example, if two orders, each for $100 have consumed the limit, you cannot lower the limit below $200.

Note: A limit (header or line level) that has been created by a different source system code cannot be updated or deleted by a user who has logged in using a different source system. For example, if a limit was created for a modifier by a Trade Management user, the same limit can only get updated or deleted by a Trade Management user. A user logged in Advance Pricing can view limits for the modifier but cannot edit the existing limits.

If the promotion, deal, or modifier is inactive because the limit was previously exceeded, the promotion, deal, or modifier will be re-activated once the limit is increased.

To adjust the limit amount:
1. Navigate to the Define Limits window.
2. Enter the new Amount for the limit. If decreasing the limit, you cannot decrease it lower than the amount by which orders have consumed it.

**Related Topics**

Overview of Promotional Limits, page 3-110  
Creating Limits, page 3-112  
Viewing Limit Balances and Transaction Details, page 3-119  
Updating an Existing Limit Balance, page 3-121
This chapter covers the following topics:

• Overview of Formulas
• Creating a Pricing Formula
• Finding Formula Factor Lines
• Updating Formula Prices

Overview of Formulas

Formulas consist of mathematical expressions that the pricing engine evaluates to calculate the list prices of items and discounts applied to them. Formulas can be linked to a price list line or modifier line. You can use formulas to:

• Create a price from a computation as an alternative to entering prices in a price list.

• Calculate a price adjustment. For example, you can instruct the pricing engine to calculate a discount by attaching a formula to a discount line.

• Set up and maintain formulas based on component types.

When you attach a formula to a price list line, you typically do not enter a price for that line because the pricing engine uses the formula to calculate the final list price of the product or service. One exception is a formula that has a list price as Formula Type—for this type, you must enter the list price (base price) for the formula to use in its calculations.

Note: You can attach a formula that has a List Price component to price list lines and to modifier lines. For more information, see Oracle Advanced Pricing User’s Guide, Price Lists and Modifiers chapters.

You can choose one of following methods to determine how a formula calculates the list price:
• Dynamic calculation: The list price resulting from the formula calculation is not calculated or stored anywhere until the sales order is entered with that price list line item. When the sales order is entered, the pricing engine evaluates the formula and displays the final list price on the order.

• Static calculation: If the formula is attached to a price list line for static calculation of the final list price, you can run a concurrent program at any time to calculate the final list price using the formula up front (not wait until order entry time) and also store it in the price list.

Seeded Formulas
Oracle Advanced Pricing provides seeded formulas that you can use when setting up freight charges. For more information, see the Oracle Advanced Pricing Implementation Guide.

Creating a Pricing Formula
You can set up and update formulas and formula lines in the Advanced Pricing - Pricing Formulas window. A formula is a valid mathematical expression that you can use to determine the list prices of items and the discounts applied to those items. The formula lines provide details about each part of the formula.

Note: The concurrent program Build Formula Package should be run if you create or change a formula expression.

A formula can contain any of the following:

• Parentheses: for example, (and)

• Mathematical operators: for example, +, -, /, and *

• Built-in functions: for example, NVL, SQRT, and MOD

• Operands: Operands are step numbers about which you provide more detail. You can use as many step numbers as you need, up to the limit of the field. You can repeat a step number in a formula, for example, 1+2*2.

Note: An operand is not a numeric constant. If you want to use a numeric constant in a formula, you must create a step number in the formula expression and then assign the numeric constant to the step number in a formula line.

For example, the valid formula \((1+2*\text{SQRT}(3)) / 4\) contains:
• Operands: 1, 2, 3, and 4
• Mathematical operators: +, *, and /
• Built-in function: SQRT
• Parentheses: to group the operands and operators

For each preceding step number, you need to create four formula lines since the formula has four step numbers.

Oracle Advanced Pricing uses the formula line and evaluates it to obtain the value of the operand and calculates a formula. It does not use the face value of the step number.

You assign one of the following types to each formula line:

• Function: The function GET_CUSTOM_PRICE retrieves a price from an external system and uses it in the formula calculation. You create the program logic to map to the external data source by developing PL/SQL program packages. The function GET_CUSTOM_PRICE returns a numeric value. For detailed information on setting up GET_CUSTOM_PRICE, see the Oracle Advanced Pricing Implementation Guide.

  Note: Advanced Pricing formulas supports all the functions supported by PL/SQL. For more information on PL/SQL functions, see the Oracle SQL reference guide.

• List Price: The price of the item in a specific price list to which you have attached a formula.

• Factor List: Enables you to define pricing conditions that you can link to multiple pricing attributes or a range of these attributes. The pricing engine evaluates the formula, and then chooses one of these factors, depending into which range the actual pricing attribute of the item falls.

  For example, a step in the formula may have different factors defined for different ranges of glass thickness: a glass with thickness between 0.1 and 0.3 mm has a factor of 3, and a glass with thickness between 0.4 and 0.8 mm has a factor of 5. The pricing engine determines which factor qualifies when it evaluates an order and applies this factor in the formula calculation.

  You can also relate multiple factor conditions. For example, if the base pricing attribute for glass thickness is between 0.1 and 0.3 mm AND the length of the glass is between 0.5 and 2 m, apply the factor of 3 OR if the base pricing attribute for glass thickness is between 0.4 and 0.8 mm AND the length of the glass is between 0.5 and 2 m, apply the factor of 5.

• Modifier Value: Uses the value entered in the Value field of the modifier line or price break line.
• Numeric Constant: A numeric value.

• Price List Line: The price of the item in a specific line of a specific price list.

• Pricing Attribute: The absolute value of a pricing attribute (such as thickness or height) of an item.

Pricing attributes are characteristics of products and services that you can specify when the characteristics help to determine the price of a product or service. Distance, age of a related product, customer class, product family group, and level of service are examples of pricing attributes. You can specify one or a combination of pricing attributes and assign them to a product or service. At order entry time, the pricing engine evaluates the attributes you have specified during formula setup to calculate the price.

You can define as many attributes as you need to meet your pricing business needs. For example, you may use the formula 1*2 to calculate the price of a glass item. Step 1 is a pricing attribute for thickness and step 2 is the list price to calculate the price of a glass item; if 100 is the base price of the glass item and 0.3 is the value of the thickness attribute of the glass, then the pricing engine evaluates the formula as 0.3*100, which is 30.

**WARNING: Null Values in Formulas**
During formula calculation, if a step results in a null value, the formula fails. For example, consider the formula 1*2, where step 2 is of type Pricing Attribute, pricing attribute context is Physical Attribute, pricing attribute is Volume, and the user must supply the volume at order entry time.

Since the user cannot provide a volume, use the NVL expression in the formula to refer to a step number that evaluates to a non-null value; for example, changing the formula to 1* NVL(2,3). In the formula line for step number 3, use a non-null value such as the numeric constant of 8. If the user does not provide a value for volume, the pricing engine uses 8 in the formula calculation.

If the expression does not use NVL in the expression, and the step number evaluates to NULL, the entire expression evaluates to NULL, the formula calculation fails, and the calling application processes the failure.

**To create a pricing formula:**
1. Navigate to the Advanced Pricing - Pricing Formulas window.
2. Enter a Name and Description for the formula.

3. Enter the Effective Dates range.

4. Enter a Formula expression. A formula consists of step numbers (such as 1, 2, 3) used in an arithmetic equation such as 1*2.

A step number such as 1 in the formula expression corresponds to the formula line with the same step number in the Formula Lines region.

The Seeded box identifies if the selected formula is seeded.

5. Every time a new formula expression is created, the concurrent program Build Formula Package should be run to generate the formula package.

From the Tools menu, select Build Formula Package to run the program. Alternately, you can also run the Build Formula Package concurrent program. A Dialog box displays a message if the formula package generation was successful.

6. Save your work.

In the Formula Lines region, you create formula lines and assign a Step number that can be used in the Formula expression. Complete the following steps for each formula line to be created.

7. Select one of the following Formula Types:
• Function: The Component field displays GET_CUSTOM_PRICE. You must write the function in this PL/SQL package and it must return a number. For more information, see Oracle Advanced Pricing Implementation Guide.

• List Price: The price of the item in a specific price list to which you have attached a formula.

• Factor List: Select an existing factor list in Component field. Alternately, to create a new factor list, type a new name in the Component field, and press the Enter key. When you complete your entries for the formula line, click Factors to create the factor criteria in the Factors window.

• Modifier Value: A formula that has a Modifier Value as a component cannot be attached to a price list line.

• Numeric Constant: Enter the numeric constant in Component.

• Price List Line: A formula that has List Price as a component and is attached to a price list line gets the list price from the Value entered in a price list line.

• Pricing Attribute: Select the Pricing Attribute Context and Pricing Attribute.

8. Enter the Step number for the formula expression. Step numbers cannot be repeated in the Formula Lines region even though they can be repeated in the Formula expression.
   The Seeded box is selected for seeded formula lines.
   The Reqd Flag check box is currently not used by the pricing engine unless you are using custom code for tracking formula line information. If you are using custom code for this purpose, then select the Reqd Flag check box.

9. Save your work.

To define factor list details:
1. If the Formula Type is Factor List, click Factors in the Advanced Pricing - Pricing Formulas window to display the Factors window.
2. In the Base Pricing Attributes region, complete steps 2-9 for each base pricing attribute factor. For information on searching for formula factor lines, see Finding Formula Factor Lines, page 4-9.

3. Select a value for Base Pricing Attribute Context.

   If you have multiple entries, you must use the same base pricing attribute context in this region (to create an OR condition); the pricing engine chooses one of the entries. Use the Associate Pricing Attributes region to associate additional contexts with the base context (to create an AND condition where both attributes must be present to qualify).

   **Note:** In the Base Pricing Attribute region, it is possible to enter duplicate values for any attribute such as entering the same Item Number of AS54888.

   If matching base pricing attributes exist, then their ranking order determines the adjustment factor selected. For example, if base pricing attributes PA 1 and PA 2 match, then the pricing engine selects the PA 1 adjustment factor because it is defined first.

4. Select a value for Base Pricing Attribute.

5. Select a comparison Operator and enter a Value From and a Value To:
• If you select the operator BETWEEN, you must enter a Value From. If you do not enter a value for Value To, the default is unlimited.

• If you select the operator =, you must enter Value From and you cannot enter Value To. Enter Value To only when the Operator is BETWEEN.

6. Enter the Adjustment Factor. An adjustment factor enables you to adjust the price based on the options selected. For example, if you are selling cars, you could use adjustment factors to adjust the price based on the car options the customer chooses:

   • If the car options are Standard, then the price is multiplied by 1 (factor=1).
   • If the car options are Business, then the price is multiplied by 1.5 (factor=1.5).
   • If the car options are Deluxe, then the price is multiplied by 2 (factor=2).

   If the cars you are selling are second hand, you probably want to adjust the price further based on the age of the car. For example:

   • If the car is between 0.0 and 1.0 years old, the price is multiplied by 1.
   • If the car is between 1.1 and 3.0 years old, the price is multiplied by 0.8.
   • If the car is older than 3.0 years, the price is multiplied by 0.6.

7. Enter a Start Date and an End Date range for this attribute in this factor list.

   **Note:** The effectiveness of this pricing attribute in this factor list also applies in all other formulas that use this factor list.

8. Complete the following steps for each associated pricing attribute:

   1. In the Associate Pricing Attributes region, select an Associated Pricing Attribute Context and Associated Pricing Attribute to associate with the base pricing attribute context and base pricing attribute values (to create an AND condition).

   2. Select a comparison Operator and enter the Value From and Value To:

      • If you select the operator BETWEEN, you must enter a value for Value From. If you do not enter a value for Value To, the default is unlimited.

      • If you select =, you must enter Value From and you cannot enter Value To.

9. Save your work.
Finding Formula Factor Lines

A factor list can consist of hundreds of factor lines and associated base pricing attributes. If your business requirements require you to change the values of certain pricing attributes, it is time consuming to scroll through the entire factor list to find a required record. Instead, use the Find Formula Factor Lines window to selectively retrieve the records you want.

You can narrow your search by selecting search criteria that defines the factor line you want to retrieve. You can query by Pricing Context, Pricing Attribute, Query Operator, and Pricing Attribute Value.

The query returns all those factors in the factor list that have either a base or an associated pricing attribute that meets the query criteria. The results are sorted by the Pricing Attribute Value From of the Base Pricing Attribute of the factor lines that are returned by the query.

**To find formula factor lines:**
1. Navigate to the Find Formula Factor Lines window.
2. Enter the Factor Pricing Attribute Context for the query, such as Item.
3. Enter the Factor Pricing Attribute, such as or Item Category or Customer Item.
4. Enter the Query Operator, such as = or Between. The = operator returns an exact match while the Between operator returns a range of values. If the Pricing Context on the Query Find window is Item and the Pricing Attribute is either Item Number
or Item Category, then the Query Operator is restricted to the value =.

5. Enter a Pricing Attribute Value From High/Low to define the range of values you want queried; for example, to restrict a query to a range of item numbers from 23456 to 45674. However, if the = operator is selected, you can only enter a value for Pricing Attribute Value From Low.

6. Click Find to return the query results.

7. Alternately, to start a new query, click Clear to clear the current query criteria and enter your query criteria.

8. Click New to create a new Base Pricing Attribute.

**Updating Formula Prices**

Use this process to use static formulas to set list prices. When you attach a formula to a price list line, you can select from the following calculation methods:

- Dynamic calculation: When you enter an order, the pricing engine uses the formula to calculate the list price.

- Static calculation: Before order entry, you run a concurrent process that calculates the list price.

**To update formula prices for static calculation:**

1. Navigate to the Update Formula Prices window.
2. To calculate formula-based prices:
   - For price list lines whose formulas have been added or changed from when they
     were last updated by this concurrent program, select New and Modified Lines Only of Price Lists.
   - For all price list lines, clear New and Modified Lines Only of Price Lists.

3. To consider price list lines that have:
   - Any formula, select Update All Pricing Formulas for Price Lists.
   - A certain formula, select Update Individual Pricing Formula for Price Lists, and select the specific pricing formula.
     The process applies this choice after it selects the price list lines according to the criteria for Step 2.

4. Click Submit to display the Request ID.
This chapter covers the following topics:

- Overview of Qualifiers
- Creating Qualifiers (HTML Interface)
- Updating a Qualifier (HTML Interface)
- Deleting a Qualifier (HTML Interface)
- Appending a Qualifier Group (HTML Interface)
- Creating a Qualifier Group
- Using Qualifier Grouping Numbers
- Using Qualifier Grouping Numbers Across Qualifier Groups
- Finding a Qualifier Group
- Modifying or Deleting Qualifier Groups
- Qualifier Group Effect when Merging Customers in Oracle Receivables

Overview of Qualifiers

Oracle Advanced Pricing lets you define qualifiers to determine eligibility rules governing who can receive a particular price, discount, promotion, or benefit. Qualifiers and qualifier groups can then be used with Oracle price lists and modifiers.

You can set up qualifier context and attributes to suit your own business needs to determine eligibility for benefits or price. Oracle provides predefined (seeded) qualifier contexts and attributes, and the values for these predefined attributes are sourced from the Oracle Application database (whenever applicable). The following table displays several predefined qualifier structures that you can use to determine benefit eligibility.
### Qualifier Contexts

<table>
<thead>
<tr>
<th>Qualifier Context</th>
<th>Qualifier Attributes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer</td>
<td>Customer Name, Bill To, Sales Channel</td>
</tr>
<tr>
<td>Order</td>
<td>Order Type, Shipment Date, Line Type</td>
</tr>
<tr>
<td>Terms</td>
<td>Payment Term, Freight Terms, Shipping Method</td>
</tr>
<tr>
<td>Volume</td>
<td>Order Amount, Line Volume</td>
</tr>
</tbody>
</table>

Note: Order Amount as a qualifier refers to the sum of the list prices on all active order lines. It is not the same as Order Total in Oracle Order Management, which can include the effect of modifiers. Order amount also excludes lines for recurring charges. Order lines that have a charge periodicity associated (such as Monthly, Yearly) are recurring charges.

See the *Oracle Advanced Pricing Implementation Guide* for more information on seeded attributes.

### Qualifier Terms

Some of the main qualifier terms are described as follows:

- **Qualifier Contexts**: Qualifier contexts consist of flattened hierarchies where similar qualifying attributes can be grouped into logical categories.

- **Qualifiers**: Qualifiers consist of specific attribute conditions that assist the pricing engine to derive the eligibility for a benefit or price.

- **Qualifier Value**: A qualifier value is a value you choose to associate with a qualifier attribute.

- **Qualifier Grouping Numbers**: A qualifier consists of qualifier lines that define eligibility for a particular price, discount, promotion, or benefit. Qualifier grouping numbers are assigned to qualifier lines to create AND and OR conditions that define how the pricing engine should evaluate the qualifier lines.

  Note: In the HTML user interface, Common and Unique qualifiers are used to create grouping conditions instead of grouping numbers. For more information, see Creating Qualifiers (HTML Interface), page 5-4.
Using Qualifiers

Qualifiers and qualifier groups can be associated with Oracle price lists and modifiers at the following levels:

- Price list: Price list header.
- Modifier: Modifier list and modifier line.

Various methods can be used to associate qualifiers with price lists or modifiers:

- Create qualifiers, and then attach individual qualifiers within the Price List or Modifiers window.
- Create qualifier groups using the Qualifier Groups window and then attach the qualifier group to the price list, modifier list, or modifier list line.
- Combine methods 1 and 2.

Once an entity has qualified for a particular benefit, Oracle Advanced Pricing attributes can further refine which benefits can be given.

You can create, modify, query, and delete qualifier groups.

You can set up hierarchies using qualifier contexts and attributes. Flattened format is required as qualifiers do not store any relationships among the hierarchies. The following table illustrates a hierarchy with three different levels of qualifier attributes.

This hierarchy can be stored by creating a context such as Geography. Under this context, you would define three attributes, such as State, Territory, and Customers.

<table>
<thead>
<tr>
<th>Qualifier Attribute</th>
<th>Qualifier Attribute Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>State</td>
<td>CA, MN, WA, NY, FL</td>
</tr>
<tr>
<td>Territory</td>
<td>East, West, South, North</td>
</tr>
<tr>
<td>Customers</td>
<td>All customers, subset of customers by purchase volume</td>
</tr>
</tbody>
</table>

To enable the user to select and enter correct values for the three attributes, you would have to define specific validation sets for each attribute, using value set definitions to provide the correct source. Since hierarchical relationships are not stored, you need to define the sourcing information. This is required because when the pricing engine must determine if a customer can receive a particular benefit, the engine needs to know the information at all the levels of hierarchy.

In this hierarchy, if the qualifying conditions established were that Territory must be
West and State must be California, then the pricing engine would need to know both the Territory and the State of the customer in order to determine eligibility. If the qualifying conditions established were that Territory must be West or State must be California, then the pricing engine would need to know only the Territory or the State of the customer in order to determine eligibility.

**Duplicate Qualifiers**
You cannot create duplicate qualifiers at the same level (either header or line level) with the same qualifier grouping number, context, attribute, comparison operator, and values. An error message appears if you try to enter duplicate qualifiers in the modifier, price list, or qualifier setup windows.

**Related Topics**
For more information on creating qualifiers or attaching a qualifier group to price lists (for Forms-based UI), see *Oracle Advanced Pricing User’s Guide*, Price Lists, page 2-2.

For more information on creating qualifiers or attaching a qualifier group to modifiers and modifier lines (for Forms-based UI), see *Oracle Advanced Pricing User’s Guide*, Modifiers, page 3-18.

For more information on Value Sets, see *Oracle Applications Flexfields User’s Guide*, Planning and Defining Values and Value Sets.

**Creating Qualifiers (HTML Interface)**
A qualifier consists of one or more conditions that define eligibility for a particular price, discount, promotion, or benefit. You can create qualifiers and assign qualifier groups to modifiers lists, modifier lines, and price lists. You can create different qualifying conditions depending on how you set up your qualifiers. The different qualifying rules are outlined as follows:

**Qualifier Conditions**
A qualifier condition defines an eligibility rule, for example, the customer name must be Vision Operations. You can set up one or more conditions for a single qualifier. Multiple conditions within the same qualifier are joined to each other by AND:

- Condition 1: Customer Name must be *Vision Corporation* AND
- Condition 2: Order Type must be *Standard* AND
- Condition 3: Credit Type must be *Good*

If ALL the qualifier conditions are met, then the qualifier evaluates as true, and the modifier or price list can be applied.

**Unique Qualifiers**
Each separate qualifier created for a modifier or price list is called a *unique* qualifier. Unique qualifiers are evaluated by an OR condition; for example, either Qualifier 1 OR Qualifier 2 can qualify before the price list or modifier is applied.
Each unique qualifier may consist of one or more conditions. The conditions for each unique qualifier are still joined by AND and must evaluate as true before the modifier or price list is applied:

- Qualifier 1
  - Customer = Vision Operations
  
  AND (Within Qualifier 1, these conditions are ANDed together.)
  
  - Customer Class = Gold Standard
  
  OR

- Qualifier 2: Customer Region = Western

**Common Qualifier**

A Common Qualifier is used to create a mandatory condition across all qualifiers. A common qualifier consists of conditions that are joined by AND to all qualifiers in a table. When created, it displays on the qualifier table as a Common Qualifier.

*Note:* In the Forms-based interface, Grouping Numbers are used to create AND/OR conditions. A grouping number of -1 is used to create the Common qualifier conditions. For more information on Forms-based qualifier grouping numbers, see Using Qualifiers, page 5-12.

Select the Common Qualifier box to make the qualifier a common qualifier. The search engine processes the common qualifier conditions first, and only processes other unique qualifiers if the pricing request qualifies for the common qualifier conditions.

For example, suppose you wanted to give a 10 percent discount with the following qualifying conditions.

- Qualifier 1: Customer is Preferred status.
- Qualifier 2: Customers must order more than $150 from your web site.

So far, the customer can receive the discount if their status is Preferred OR if they order more than $150 from your web site. However, suppose you wanted to make a mandatory condition that the customer must pay by Credit Card.

To do this, you must set up a Common Qualifier where the payment method = Credit Card to make it a mandatory condition across all qualifiers. This means that either Qualifier 1 OR Qualifier 2 could qualify but regardless, the payment method must be Credit Card.

**To create a qualifier:**

1. Click Create Qualifier to display the Qualifiers: Create Qualifier page. In the Create
Qualifiers page, you can create a qualifier and append an existing qualifier group.

**Note:** The page name may vary depending on the modifier type or price list associated with the qualifier.

### Qualifiers: Create Qualifier page

![Image of Qualifiers: Create Qualifier page](image)

2. Complete your entries:

- This is a common qualifier: Optionally, select this check box to define the qualifier as a common qualifier. The conditions defined for a common qualifier will apply in addition to all unique qualifiers.

  **Note:** When creating a new qualifier, if a common qualifier has been created, the conditions of the common qualifier are displayed as read only.

- Attribute: Defines a qualifying condition such as the Customer Class (attribute) must be *Platinum*. You can create one or more conditions for each qualifier. Each condition within a qualifier are linked by AND conditions which means that each condition must be met before the qualifying conditions are satisfied.

  - If the qualifier attribute is invalid, then the pricing engine will not apply the price list or modifier.
  
  - Do not select the seeded attribute for List Line @ Number (MODLIST/QUALIFIER_ATTRIBUTE2) internally for this
• Value From/Value To: If you define a Value From/To range using negative numbers, enter the range from lowest to highest value. For example, to define a Volume Order Amount between -99999 to -1, enter the Value From = -99999 and the Value To = -1.

• Applies To Party Hierarchy: This check box is enabled only for attributes that are based on Oracle TCA (Trading Community Architecture) Parties and Party Hierarchy Enabled flag has been selected for this attribute on attribute management setups. See the Oracle Advanced Pricing Implementation Guide for more details.

Hierarchies consist of tiered relationships where one party is ranked above another; for example, a corporate hierarchy where different companies are related as parent, subsidiary, headquarters, division and so on. If Applies To Party is selected, then the modifier adjustment or price list (depending on what the qualifier is set up for) would be available to the parent party specified in the Attribute Value field and its subsidiaries. This saves you time from creating multiple qualifiers, one for each subsidiary or division.

• Start/End Dates: If a qualifier has effective dates, then the pricing entity (such as a modifier) will be applied if the conditions of the qualifier are met within the specified dates. Once the qualifier expires, the pricing engine will not evaluate that price list or modifier list. The alternative is to delete the qualifier from the list.

*Warning:* When a qualifier is attached to a price list or modifier header, the effective dates of the qualifier determine the effective dates for the price list or modifier list *not* the effective dates defined in the price list or modifier list window. For example, suppose you create a price list with an effective start date of 23-NOV-2005 and no end date. Then you create a qualifier at the header level with effective dates of 10-NOV-2005 and 12-NOV-2005 for customer Computer Service and Rentals. However, after 12-NOV-2005, the price list will not be valid for Computer Service and Rentals or *any other customer* and the price list expires.

 Optionally, click Add Another Row to add another qualifier condition, or Create Qualifier to add a Unique Qualifier.
Related Topics

Appending a Qualifier Group (HTML Interface), page 5-8
Updating a Qualifier (HTML Interface), page 5-8
Deleting a Qualifier (HTML Interface), page 5-8

Updating a Qualifier (HTML Interface)

You can update a unique qualifier or common qualifier by adding, updating or deleting qualifier conditions. You can update the qualifier from the Create page or the Update mode of the modifiers or price lists.

Note: If you delete a qualifier during an update flow (for example when updating a modifier), you need to click Apply to save the changes.

Related Topics

Creating Qualifiers (HTML Interface), page 5-4

Deleting a Qualifier (HTML Interface)

You can delete unique or common qualifier conditions from the qualifiers table by clicking Delete at the qualifier condition level. Alternately, you can delete all the conditions of a qualifier by clicking Delete at the qualifier level.

Related Topics

Creating Qualifiers (HTML Interface), page 5-4
Updating a Qualifier (HTML Interface), page 5-8

Appending a Qualifier Group (HTML Interface)

Qualifier groups consist of multiple qualifiers that can be associated with either price lists or modifiers. Qualifier groups can be appended to one or more price lists and modifiers. You can search by Group Name to find an existing Qualifier Group and append it to an existing qualifier.

Note: You can append but not create qualifier groups using the HTML interface. For information about creating qualifier groups, see Creating a Qualifier Group, page 5-9.
To append a qualifier group:

1. Navigate to the Qualifiers: Append Group page. In this page, you can attach existing Qualifier Group(s).

2. Select the Group Name(s) to be added, then click Apply to append the qualifier group to the modifier or price list.

Related Topics

Creating a Qualifier Group, page 5-9

Creating a Qualifier Group

In the Qualifier Group window, you can create a new qualifier group consisting of associated qualifiers. An example of a qualifier group could be:

- Customer must be in territory WEST
- Order Amount is between $2,000 and $5,000
- Order Quantity must be greater than 10,000

The Qualifier Group can use seeded qualifiers (source attributes) such as Customer Name and Order Amount or your own qualifier attributes. These qualifiers could come
from one or more qualifier contexts.

**Note:** You can create qualifier groups in the Forms-based user interface only.

**Example of Qualifier Group**
Customer must be in territory WEST and Order Amount must be between $2,000 and $5,000 or Order Type must be Standard.

Create a qualifier group, for example, West1. The following table demonstrates field values to define the qualifier group West1.

<table>
<thead>
<tr>
<th>Grouping Number</th>
<th>Context</th>
<th>Attribute</th>
<th>Operator</th>
<th>Value From</th>
<th>Value To</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Geography</td>
<td>Territory</td>
<td>=</td>
<td>West</td>
<td>Null</td>
</tr>
<tr>
<td>1</td>
<td>Volume</td>
<td>Order Amount</td>
<td>Between</td>
<td>2,000</td>
<td>5,000</td>
</tr>
<tr>
<td>2</td>
<td>Order</td>
<td>Order Type</td>
<td>=</td>
<td>Standard</td>
<td>Null</td>
</tr>
</tbody>
</table>

**To create a qualifier group:**
1. Navigate to the Qualifier Group window.
2. Enter the qualifier group Name and a Description.

3. In the Qualifiers tab, enter a Grouping Number:
   - Enter the same number value, such as 1, for more than one qualifier within a group to create an AND condition between qualifiers.
   - Enter a different numeric value for qualifiers in the Grouping No. field to create an OR condition between qualifiers.

You must enter the exact values for Start Date and End date for each qualifier with a qualifier group when simulating an AND condition. If different dates are entered in either field, then the pricing engine will ignore the entire qualifier grouping. For more information on conditions set up with grouping numbers, see Using Qualifier Grouping Numbers, page 5-12.

4. Select a qualifier Context.

5. Select a qualifying Attribute for the selected context.

6. In the Operator field select a value (=, BETWEEN, NOT =)

7. Enter values in the Value From and Value To fields. You can select values based on the value set definition of the qualifier attribute chosen.

   Some qualifiers use large value sets, for example, those based on all customers. To
reduce the number of items that appear in the Value From and Value To fields, you can enter search criteria in the field, and click the list of values indicator.

**Note:** If you do not enter search criteria and click the list of values indicator, a warning advises you that you have not entered search criteria and that the search may take a long time. To view a reduced list of values, click No, enter search criteria, and click the list of values indicator. To view the entire list of values display, click Yes. If you do not want to see the list of values, click Cancel. Set the profile option QP: Valueset Lookup Filter to avoid this message.

8. The Value From Meaning field displays additional details about the qualifier when you query a qualifier after saving it. For example, if the context is CUSTOMER and the attribute is Ship To, Value From displays the customer name and Value From Meaning displays the site use location for the customer. If the context/attribute combination has no additional details, Value From and Value From Meaning are identical.

9. In the Start Date field, enter an optional date that the qualifier becomes active.

10. In the End Date field, enter an optional date that the qualifier becomes inactive.

**Warning:** When a qualifier is attached to a price list or modifier header, the effective dates of the qualifier determine the effective dates for the price list or modifier list not the effective dates defined in the price list or modifier list window. For example, suppose you create a price list with an effective start date of 23-NOV-2005 and no end date. Then you create a qualifier at the header level with effective dates of 10-NOV-2005 and 12-NOV-2005 for customer Computer Service and Rentals. However, after 12-NOV-2005, the price list will not be valid for Computer Service and Rentals or any other customer.

11. Save your work.

**Using Qualifier Grouping Numbers**

A qualifier consists of qualifier lines that define eligibility for a particular price, discount, promotion, or benefit. You can assign qualifier grouping numbers to qualifier lines to create AND and OR conditions that define how the pricing engine should evaluate the qualifier lines. For example, if the customer is Vision Corporation AND they pay by credit card and then apply the 10 percent Discount modifier.

You must use qualifier grouping numbers correctly because they indicate to the pricing
engine how to evaluate the qualifiers:

- Qualifiers with the same grouping number are evaluated as a Boolean AND condition (an entity must meet all of the conditions to qualify).

- Qualifiers with different grouping numbers are evaluated as a Boolean OR condition (an entity must meet one of the conditions to qualify).

- If -1 is used as a qualifier grouping number, the qualifier is ANDED to each qualifier group so that you do not have to manually add it to each qualifier group.

  **Note:** Qualifier grouping numbers are not used in the HTML user interface (UI). Instead, you use common or unique qualifiers to create grouping conditions.

### AND Conditions

An AND condition means that all qualifier lines with the same Qualifier Grouping Number must evaluate as true before the pricing engine can select the associated modifier.

In the following example, both Line A and Line B, which have the same Qualifier Grouping Number, must be true to satisfy the AND condition. So, for example, if the customer is not Vision Operations but the credit rating is Excellent, then the modifier cannot be selected (assuming these are the only qualifiers for the modifier). The modifier will only be selected if the customer is Vision Operations (qualifier line A) AND the credit rating is Excellent (qualifier line B).

<table>
<thead>
<tr>
<th>Qualifier Grouping Number</th>
<th>Qualifier Line</th>
<th>Qualifier Context and Attribute Values</th>
<th>Condition Created</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Line A</td>
<td>Customer: Vision Operations</td>
<td>AND</td>
</tr>
<tr>
<td>1</td>
<td>Line B</td>
<td>Credit Rating: Excellent</td>
<td>AND</td>
</tr>
</tbody>
</table>

The next table shows a setup where a 10 percent discount on each order is offered only if a Preferred customer spends more than $150:
OR Conditions

An OR condition is created by assigning a different qualifier grouping number (such as 1 and 2) to successive qualifier lines. The OR condition provides more flexibility because only one of the qualifier groups needs to be eligible to be selected. In the following example, if either the customer is Vision Operations (qualifier line A) OR if the credit rating is Excellent (qualifier line B), then the modifier is eligible for selection. If both are true, then the modifier is also selected:

<table>
<thead>
<tr>
<th>Qualifier Grouping Number</th>
<th>Qualifier Line</th>
<th>Qualifier Context and Attribute Values</th>
<th>Condition Created</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Line A</td>
<td>Customer: Vision Operations</td>
<td>OR</td>
</tr>
<tr>
<td>2</td>
<td>Line B</td>
<td>Credit Rating: Excellent</td>
<td>OR</td>
</tr>
</tbody>
</table>

In the following example, a 10 percent discount is given on each order placed by a preferred customer OR each order in which a customer spends more than $150:

<table>
<thead>
<tr>
<th>Qualifier Group</th>
<th>Qualifier Attribute</th>
<th>Operator</th>
<th>Value From</th>
<th>Value To</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Customer Class</td>
<td>=</td>
<td>Preferred</td>
<td>Null</td>
</tr>
<tr>
<td>2</td>
<td>Order Amount</td>
<td>Between</td>
<td>150</td>
<td>99999999</td>
</tr>
</tbody>
</table>
An AND condition is created for Lines A and B because they are both assigned the same qualifier grouping number (1). Qualifier lines assigned the same grouping number must both be evaluated as true statements before they can be selected.

An OR condition is created between qualifier lines with different grouping numbers. If either Line A/B (both must be evaluated together) OR Line C OR Line D evaluate as true, then the pricing engine can select the modifier.

### Using - 1 as a Qualifier Grouping Number

Typically, positive integers are used for qualifier grouping numbers such as 1, 2, or 3. However, if -1 is used as a qualifier grouping number, the qualifier is ANDed to each qualifier group saving you time from manually adding the AND qualifier.

**Note:** In the HTML UI, the Common qualifier is used to create a common qualifier condition instead of the -1 grouping number.

For example, to offer a discount in which a qualifier is mandatory for all qualifying conditions, the mandatory qualifier would be assigned the -1 qualifier group. The search engine processes -1 qualifying conditions first and only processes other qualifier groups if the pricing request qualifies for the -1 qualifier grouping number conditions.

For example, suppose you wanted to give a 10 percent discount on an order provided the:

- Customer is a Preferred customer.
- Customer (any customer) orders from a US web site and spends more than $150.

However, to be eligible for the discount the customer must use a Visa credit card to pay. In the following example, the credit card type of Visa is assigned the -1 Qualifier Grouping Number to make it a mandatory qualifier before the modifier can be selected.

### Related Topics

Creating Qualifiers (HTML Interface), page 5-4
Using Qualifier Grouping Numbers Across Qualifier Groups

When qualifiers are assigned to a qualifier group, all the qualifiers in the qualifier group are attached to the modifier or price list. Before you attach multiple qualifier groups, you must indicate how the process should coordinate the grouping numbers. You select one of the following grouping number options:

- **Retain Grouping Numbers Across Qualifier Groups**: The grouping numbers of each attached qualifier remain as they appear in the qualifier group. In this case, the collection of attached qualifiers does not mirror the AND and OR combinations within each of the original qualifier groups.

- **Generate Unique Grouping Numbers Across Qualifier Groups**: The process maintains the AND and OR combinations within each of the original qualifier groups and then creates OR conditions between the groups. The process attaches the first qualifier group with grouping numbers as is, then finds the highest grouping number used, increases it by one, and increases all of the grouping numbers of the second group by this number. The process attaches subsequent groups in the same manner, using the highest grouping number used by the previously attached group.

- **Both**: If you attach qualifiers using one option and then re-access the window and attach additional qualifiers using the other option, the second round qualifiers attach differently depending on the option. If the second round option is Retain Grouping Numbers Across Qualifier Groups, the process attaches those qualifiers among the already existing qualifiers. If the second round option is Generate Unique Grouping Numbers Across Qualifier Groups, the process begins attaching groups using grouping numbers incremented from the highest existing grouping number.

The following tables show examples of how the process sets the grouping numbers when you use each option. These tables present the qualifiers grouped by each qualifier group:

<table>
<thead>
<tr>
<th>Qualifier</th>
<th>Qualifier Group</th>
<th>Qualifier Grouping Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1</td>
<td>G1</td>
<td>1</td>
</tr>
<tr>
<td>Q2</td>
<td>G1</td>
<td>2</td>
</tr>
<tr>
<td>Q3</td>
<td>G1</td>
<td>2</td>
</tr>
<tr>
<td>Q4</td>
<td>G1</td>
<td>3</td>
</tr>
</tbody>
</table>
The grouping numbers within group G1, for example, create the qualification that the entity qualifies if it meets condition Q1 OR (condition Q2 AND condition Q3) OR condition Q4.

The following table shows the attached qualifiers when you select the Retain Grouping Numbers Across Qualifier Groups option. This table presents the qualifiers grouped by each qualifier grouping number to highlight that the option does not retain the original qualifier group relationships:

<table>
<thead>
<tr>
<th>Qualifier</th>
<th>Qualifier Group</th>
<th>Qualifier Grouping Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q5</td>
<td>G2</td>
<td>1</td>
</tr>
<tr>
<td>Q6</td>
<td>G2</td>
<td>1</td>
</tr>
<tr>
<td>Q7</td>
<td>G2</td>
<td>1</td>
</tr>
<tr>
<td>Q8</td>
<td>G3</td>
<td>1</td>
</tr>
<tr>
<td>Q9</td>
<td>G3</td>
<td>2</td>
</tr>
<tr>
<td>Q10</td>
<td>G3</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Qualifier Group</th>
<th>Qualifier</th>
<th>Qualifier Grouping Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>G1</td>
<td>Q1</td>
<td>1</td>
</tr>
<tr>
<td>G2</td>
<td>Q5</td>
<td>1</td>
</tr>
<tr>
<td>G2</td>
<td>Q6</td>
<td>1</td>
</tr>
<tr>
<td>G2</td>
<td>Q7</td>
<td>1</td>
</tr>
<tr>
<td>G3</td>
<td>Q8</td>
<td>1</td>
</tr>
<tr>
<td>Null</td>
<td>Null</td>
<td>Null</td>
</tr>
<tr>
<td>G1</td>
<td>Q2</td>
<td>2</td>
</tr>
<tr>
<td>G1</td>
<td>Q3</td>
<td>2</td>
</tr>
<tr>
<td>G3</td>
<td>Q9</td>
<td>2</td>
</tr>
</tbody>
</table>
The following table shows the attached qualifiers when you select the Retain Grouping Numbers Across Qualifier Groups option. This table presents the qualifiers grouped by each qualifier group to highlight that this option does retain the original qualifier group relationships:

<table>
<thead>
<tr>
<th>Qualifier Group</th>
<th>Qualifier</th>
<th>Qualifier Grouping Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Null</td>
<td>Null</td>
<td>Null</td>
</tr>
<tr>
<td>G1</td>
<td>Q4</td>
<td>3</td>
</tr>
<tr>
<td>G3</td>
<td>Q10</td>
<td>3</td>
</tr>
</tbody>
</table>

---

**Related Topics**

- Cross Order Volume Load, page 11-6
- Cross Order Volume Report, page 11-7

**Finding a Qualifier Group**

The Find Qualifiers window lets you find a specific qualifier group or define new qualifier groups.

To **query for a qualifier group:**

1. Navigate to the Find Qualifiers window.
2. Select the name of the qualifier group that you want to find.

3. Click Find to display the search results in the Qualifier Group window.

Modifying or Deleting Qualifier Groups

In the Qualifier window, you can update or delete a qualifier group or an associated qualifier.

1. Navigate to the Qualifiers window.

2. Locate the Qualifier Group to modify or delete.

3. Modify or delete the record.

   **Note:** You must first delete all associated qualifiers within a group before you can delete the qualifier group.

4. Click Save.

Qualifier Group Effect when Merging Customers in Oracle Receivables

When you merge customers in Oracle Receivables, you can merge:

- The information from one customer (the From customer) with the information from
another customer (the To customer).

- The information from one or more customer sites of that customer (the From sites) with the site information from the other customer (the To sites).

If the From customer is referenced in any qualifiers (the qualifier context is Customer), the Oracle Receivables merge process executes an Oracle Advanced Pricing process to update the following qualifier information:

- If you merge customer: The process changes the customer name on the qualifier from the From customer to the To customer.

- If you merge sites: The process changes the site from the From customer to the To customer for qualifiers with the following attributes:
  - Bill To
  - Site Use
  - Ship To

Verify these changes in the Value From and Value To fields of the following windows:

- Qualifier Group form, Qualifiers tab
- Advanced Pricing - Price Lists window, Qualifiers tab
- Qualifiers - Header Level Qualifiers window (from Advanced Pricing - Define Modifier window), Qualifiers tab
- Qualifiers - Line Level Qualifiers form (from Advanced Pricing - Define Modifier window), Qualifiers region
Multicurrency Conversion Lists

This chapter covers the following topics:

- Overview of Multicurrency Conversion Lists
- Creating a Multicurrency Conversion List
- Example of Multicurrency Price List Usage
- Updating the Multicurrency Conversion List

Overview of Multicurrency Conversion Lists

If you have global customers or do pricing in different currencies, the multicurrency feature enables you to maintain a single price list for multiple currencies.

You can set up and maintain multiple currency conversion rates for a base currency by creating a single multicurrency list. You can then attach the multicurrency list to multiple price lists or agreements. Price list maintenance is reduced because only one currency conversion definition can be attached to multiple base currency price lists, and when base prices change, you need to update only the prices on the base price list.

You can also specify currency-specific markup/markdown equations that are applied as a formula, percent, or fixed amount to mark up the currencies.

When a pricing request is made, the pricing engine converts the price on the base price list to the ordering currency and returns the new price in the ordering currency (including any markup values).

**Note:** To set up the multicurrency feature, your System Administrator or designate must complete the following steps:

- Set the QP: Multi-Currency Installed profile option to Yes, and run the `Update Price Lists with Multi-Currency Conversion Criteria` concurrent program. Run the concurrent program only once. For more information, see Update Price Lists with Multicurrency

- Install and license Advanced Pricing.
- Ensure that you have Maintain privileges so that you can make any necessary updates. If you cannot access or update the multicurrency or related windows, you may not have the appropriate access privileges. Consult your Pricing Administrator.

Summary of Multicurrency Changes to Price Lists and Agreements

When the price lists and agreements are converted to multicurrency usage, windows and fields are updated with new multicurrency fields and some existing procedures may change.

The following section summarizes the changes that occur when the multicurrency feature is implemented:

Pricing Engine Changes

The pricing engine matches the order currency to the currencies attached to the price list at the time of selection. The engine then applies the conversion type, markup, and rounding to the price.

Changes to Price Lists Window

- New Multi-Currency Conversion field: A new field called Multi-Currency Conversion is added to the Advanced Pricing - Price Lists window where you can select a multicurrency list that has the same base currency as the selected price list.

- Round To procedure: The Round To field in the price list header is grayed out and can no longer be changed directly in the Advanced Pricing - Price Lists window. Instead, you must change the Round To value in the Multi-Currency Conversion window and update the Round To in the price list header.

Agreements

- New Multi-Currency Conversion field: A new field called Multi-Currency Conversion is added to the Pricing tab in the Agreements window where you can select a multicurrency list that has the same base currency as the selected price list.

- Round To procedure changed: The Round To field in the Pricing Tab is grayed out and can no longer be changed directly. Instead, you must change the Round To value in the Multi-Currency Conversion window and update the Round To in the Pricing Tab. You can update the multicurrency list only for Agreement Price Lists, not for Standard Price Lists.
• Once you have successfully run the concurrent program, all existing price list and agreement windows are converted to multicurrency price lists. Users should not return to non-multicurrency price lists. Changing the profile back to No may cause undesired results if conversion criteria have been used. Oracle does not support changing the setting back to No.

• You cannot use the general ledger types as a conversion type if multicurrency is installed or if Oracle General Ledger is not installed.

Rounding and Markup Factors
You can define markup criteria for each currency definition by specifying either a fixed value or one derived from a formula. Specific currency rounding can also be defined for the converted selling price.

You must make any changes to the base currency in the Multi-Currency Conversion window and not in the price list window.

You cannot update the Base Round To value if the QP: Price Rounding profile option is set to Enforce Currency Precision.

Rounding Behavior During Currency Conversion Calculation
The following examples show you how rounding is calculated during currency conversion calculations.

If the Conversion Rounding Factor and the Round To values in the Multi-Currency Lists window are entered for a currency conversion, the conversion rounding factor is applied first, followed by the Round To factor.

This is applicable for every item (except for the service item) in every pricing event.

Example 1
Price List Setup
• List Price for Item A = 60.12345

• Base Currency Code = USD

Multicurrency Conversion List Attached to the Price List
• To Currency Code = CAD

• Conversion Type = FIXED

• Conversion Rate = 2.0
• Conversion Rounding Factor = -2
• Round To = -3

**Example 2**
In Service Pricing, the service item is rounded using the Round To, not the conversion rounding factor.

**Price List Setup**
• Base Currency = USD
• List Price for Item B = 60.12345

**Multicurrency Conversion List Attached to the Price List**
• To Currency Code = CAD
• Conversion Type = FIXED
• Conversion Rate = 2.0
• Conversion Rounding Factor = -2
• Round To = -3

**Sales Order Setup for a Service Item B**
• Order Currency = CAD
• Converted Price before rounding = 60.12345*2 = 120.24690
• Price after applying the Round To (final rounded price) = 120.247
• Price that appears on the Sales Order = 120.2470 (after applying -4 currency precision for CAD)

**Example 3**
QP: Selling Price Rounding Options = Individual

The QP: Selling Price Rounding Options profile option affects only the rounding factor. If the profile is set to Individual, then the rounding factor is applied. If it is set to No, the rounding factor is not applied. The QP: Round Unit Selling Price profile option does not affect the Conversion Rounding Factor. The Conversion Rounding Factor is always applied to the list price.

**Price List Setup**
• Base Currency = USD
• List Price for Item A = 60.12345

**Multicurrency Conversion List Attached to the Price List**
• To Currency Code = CAD
- Conversion Type = FIXED
- Conversion Rate = 2.0
- Conversion Rounding Factor = -3
- Round To = -2

**Sales Order Setup for a Non-Service Item A**
- Order Currency = CAD

- Converted Price before rounding = 60.12345*2 = 120.24690
- Price after applying conversion rounding = 120.247
- Price after applying the Round To (final rounded price) = 120.25
- Price that appears on the Sales Order = 120.2500 (after applying -4 currency precision for CAD)

**Sales Order Setup for a Non-Service Item A**
- Order Currency = CAD

- Converted Price before rounding = 60.12345*2 = 120.24690

**Example 4**
QP: Selling Price Rounding Options = N (No)

**Price List Setup**
- Base Currency = USD
- List Price for Item A = 60.12345

**Multicurrency Conversion List Attached to the Price List**
- To Currency Code = CAD
- Conversion Type = FIXED
- Conversion Rate = 2.0
- Conversion Rounding Factor = -3
- Round To = -2

**Sales Order Setup for a Non-Service Item A**
- Order Currency = CAD

- Converted Price before rounding = 60.12345*2 = 120.24690
• Price after applying the Conversion Rounding Factor = 120.247

• Price appears on the Sales Order = 120.2470 (after applying -4 currency precision for CAD)

Using a Formula with Component Type as Price List Lines

1. Navigate to the Advanced Pricing - Define Modifier window.

2. Query or create desired modifier for a discount.

3. Select a Formula. If selecting a formula with a component type as Price List Line, the base currency of the price list must be the same as the modifier currency.

4. Save the modifier record.

Creating a Multicurrency Conversion List

A multicurrency conversion list stores a list of currencies and conversion criteria that enables transactions to be converted from a base currency to other currencies. The conversion list is attached to a price list or agreement that uses the conversion criteria to convert the base list prices to the foreign currency amount. Multiple conversion methods can be in effect at a time for a currency. For example, if converting USD (US dollars) to FRF (French francs), you could have a fixed conversion type for March and a formula conversion type for April. If more than one multicurrency conversion list is set up for the same base currency, then you must assign each conversion list a unique name.

Using Conversion Types

Conversion types determine how the conversion rate is calculated. Some of these seeded conversion types are available only if Oracle General Ledger is installed; however, you can still link to other non-Oracle stored conversion rate information by using the formula functionality. The following seeded conversion types are available:

• Fixed: Enter a fixed value that is used as the conversion rate. For example, if you enter a value of 1.5, the list price from the base price list is multiplied by 1.5 to get the converted amount.

• Formula: Attach a pricing formula, and the value returned from the formula is the conversion rate. You cannot use as a conversion formula with a component type of PLL (Price List Line) because the line may have a different base currency than the price list to which this currency conversion criteria is attached.

• Transaction: Users of the calling applications (such as Oracle Order Management) enter the conversion rate. In these cases, the rate entered is converted from transaction currency (for example, from the price list currency) to functional
currency (such as the sales order). For other conversion types, such as Fixed, the rates entered in the multicurrency window is from base currency to transaction currency.

The following conversion types are available only if Oracle Financials (General Ledger) is installed:

- General Ledger sourced (Corporate, Spot, EMU Fixed, User Defined): Gets the conversion rate between the base currency and currency to from Oracle General Ledger. These conversion types are available only if Oracle Financials (General Ledger) is installed.

**To create a multicurrency list:**

1. Navigate to the Multi-Currency Conversion List window.

   **Multi-Currency Conversion window**

2. Complete your entries in the Multi-Currency Conversion window. All the fields in the Multi-Currency Conversion List are applicable to the base currency:
   - Base Currency Code: Enter the base currency code for the currency that the price list is set up in. For example, if the price list has a base currency of US dollars, enter the code for US dollars such as USD.
   - Name/Description: Enter a name to identify the multicurrency list and a description.
• Base Round To: Enter a value that rounds the selling prices to the decimal place that is entered. For example, if you entered a Base Round To value of -2, a price calculated as $9874.343 is rounded to $9874.34.

  Note: If the QP: Price Rounding profile option is set to enforce currency precision, then you cannot update the Base Round To value in the Multi-Currency Conversion List. To make a change, you must first change the profile setting to Enforce Rounding Factor or NULL. Then change the Base Round To value. Finally, you can change the profile setting back if desired.

• Base Markup Operator: Optionally, select Percent (%) or Amount as the Base Markup Operator that can be applied against the base currency. This Operator determines how the system applies the Base Markup Value.

• Base Markup Value: Enter a numeric value. This value is applied as either a percent or amount, depending on the value defined in the Base Markup Operator field.

• Base Markup Formula: Enter a formula. The value returned by this formula is applied as a markup to the base currency. When entered, the Base Markup Value can be used within the Base Markup Formula [component type as modifier value (MV)].

3. In the Conversion Criteria Detail region, specify the criteria in the following fields to convert the base currency to the currency selected in the Currency To field:

<table>
<thead>
<tr>
<th>Field</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>To Currency Code</td>
<td>Enter the currency code for a currency that a price list can be converted to using the conversion criteria setup. For example, to convert a base currency in US dollars to Canadian currency (CAD), you enter CAD as the Currency To.</td>
</tr>
<tr>
<td>Start Date</td>
<td>Start of the currency conversion.</td>
</tr>
<tr>
<td>End Date</td>
<td>End date of the currency conversion.</td>
</tr>
<tr>
<td>Field</td>
<td>Meaning</td>
</tr>
<tr>
<td>--------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Conversion Type</td>
<td>Select one of the following conversion types:</td>
</tr>
<tr>
<td></td>
<td>• Fixed: Enter a fixed number that is used as a fixed conversion rate.</td>
</tr>
<tr>
<td></td>
<td>• Formula: For this type, the value returned by the formula becomes the conversion rate.</td>
</tr>
<tr>
<td></td>
<td>• Transaction: Uses the conversion rate or conversion type from the Order Management Sales Order. The following conversion types are available only if Oracle Ledger is installed: Corporate, Spot, EMU Fixed, and User Defined.</td>
</tr>
<tr>
<td>Fixed Value</td>
<td>Enter a numeric conversion value if Fixed was selected in the Conversion Type field.</td>
</tr>
<tr>
<td>Formula</td>
<td>Select a pricing formula name if you selected Formula in the Conversion Type field. The value returned by the formula is the conversion rate. A formula with a component type as PLL (price list line) is not allowed in a conversion formula because the PLL line may have a different base currency than the price list to which this currency conversion criteria is attached. A formula with a component type as MV (modifier value) is also not allowed.</td>
</tr>
<tr>
<td>Conversion Date Type</td>
<td>Select a conversion date type if the value in the Conversion Type field is not Fixed, Formula, or Transaction. There are two conversion date types:</td>
</tr>
<tr>
<td></td>
<td>• Pricing Effectivity Date: Uses pricing effectivity date passed by the sales order</td>
</tr>
<tr>
<td></td>
<td>• Fixed: Uses Conversion Date setup for this currency.</td>
</tr>
<tr>
<td>Conversion Date</td>
<td>Enter a date if the Conversion Date type is Fixed. This date is used to retrieve the daily conversion rate from GL (Oracle General Ledger).</td>
</tr>
<tr>
<td>Attribute Type</td>
<td>Product Attributes, Pricing Attributes, and Qualifier Attributes are valid values for this field. This specifies the type of attribute to be set up for a currency conversion. This is an optional field.</td>
</tr>
<tr>
<td>Field</td>
<td>Meaning</td>
</tr>
<tr>
<td>-----------------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Attribute Context</td>
<td>This is a mandatory field if you entered an attribute type. Enter the Attribute Context for the selected attribute type. For example, if the Attribute Type value is Product Attribute, then its context can be ITEM.</td>
</tr>
<tr>
<td>Attribute Code</td>
<td>This field depends on the value that you entered in the Attribute Context field. For example, if the Attribute Context field value is ITEM, the Attribute Code field contains its attributes like Item Number. This is a mandatory field when the Attribute Context is entered.</td>
</tr>
<tr>
<td>Attribute Value</td>
<td>This field gives the values of the attribute code entered. For example, if the Attribute Code field value is Item Number, the Attribute Value field displays all the items. This is a mandatory field when you enter the Attribute Code value.</td>
</tr>
<tr>
<td>Attribute Meaning</td>
<td>This field displays the description of the Attribute Value field. This is a display-only field.</td>
</tr>
<tr>
<td>Precedence</td>
<td>Enter a numeric value if more than one conversion has the same Currency To, Start Date, and End Date but has different attribute values. See the Precedence example following the table. The pricing engine uses the precedence value to determine selection priority. If more than one of the attributes passed from OM Sales Order matches with the attribute setup for currency conversions, then the one with the lowest precedence value is selected by the pricing engine for conversion.</td>
</tr>
<tr>
<td>Markup Operator</td>
<td>Select either Percent (%) or Amount. This operator is applied to either Markup Value or Markup Formula, whichever is entered.</td>
</tr>
<tr>
<td>Markup Value</td>
<td>This is a numeric constant value that can also be used in the Markup Formula.</td>
</tr>
<tr>
<td>Markup Formula</td>
<td>Select a formula. You cannot use a formula with Component Type PLL (Price List Line) as a conversion formula because the PLL line may have a different base currency than the price list to which this currency conversion criterion is attached.</td>
</tr>
<tr>
<td><strong>Note:</strong> You can enter both a Markup Value and Markup Formula, provided that the Markup Value is used within the Markup Formula. In this case, the final value is the value returned after computing the Markup Formula.</td>
<td></td>
</tr>
</tbody>
</table>
Multicurrency Conversion Lists

### Field Meaning

**Conversion Rounding Factor**
Enter a numeric conversion rounding factor that rounds the list price after the conversion and markup is applied. This rounding factor could be different for the same Currency To value.

**Round To**
Enter a numeric Round To value that rounds the selling price after the modifiers are applied. This value is always the same for a Currency To.

**Note:** If values for both Conversion Rounding Factor and a Round To are entered for a currency conversion, the Conversion Rounding Factor is applied first followed by the Rounding Factor. This will be applicable for every item (except for the service item) in every pricing event.

### Precedence Example
When two conversion types with different attribute codes are passed from an Order Management sales order, for example:

- Country = India and
- Item Cat. = CD Pack,

then the pricing engine selects the attribute with the highest precedence. Therefore, 1 is selected before 2 and so on. In this case, the attribute Country = India is selected by the pricing engine because its precedence value (1) is greater than the precedence value of Item Cat. = CD Pack (which is 2).

<table>
<thead>
<tr>
<th>To Currency Code</th>
<th>Conversion Type</th>
<th>Attribute Code</th>
<th>Attribute Value</th>
<th>Start Date</th>
<th>End Date</th>
<th>Precedence</th>
</tr>
</thead>
<tbody>
<tr>
<td>FRF</td>
<td>Fixed</td>
<td>Country</td>
<td>USA</td>
<td>3/1/01</td>
<td>3/31/01</td>
<td>4</td>
</tr>
<tr>
<td>FRF</td>
<td>Fixed</td>
<td>Country</td>
<td>India</td>
<td>3/1/01</td>
<td>3/31/01</td>
<td>1</td>
</tr>
<tr>
<td>FRF</td>
<td>Fixed</td>
<td>Item Cat</td>
<td>CD Pack</td>
<td>3/1/01</td>
<td>3/31/01</td>
<td>2</td>
</tr>
<tr>
<td>FRF</td>
<td>Fixed</td>
<td>-</td>
<td>-</td>
<td>3/1/01</td>
<td>3/31/01</td>
<td>3</td>
</tr>
</tbody>
</table>

**To attach the multicurrency conversion list to a price list:**

Once you have created a multicurrency conversion list in the Multi-Currency Conversion window, you can attach it to a price list or agreement. You can select the
Multi-Currency Conversion List from the Currency Conversion Criteria field in the price list or agreement.

**Note:** When you first set up multicurrency, a default multicurrency list without conversion criteria is automatically generated by the system and attached to price lists and agreements. You can replace the default list by selecting an alternate multicurrency conversion list.

1. Navigate to the Advanced Pricing - Price Lists window.

![Advanced Pricing - Price Lists: Multicurrency Enabled](image)

2. Select the multicurrency list from the Multi-Currency Conversion field.
   
The field displays all currency conversion lists where conversion criteria \textit{base currency} = currency of the price list.
   
   When multicurrency is enabled, the Round To field in the price list is grayed out; you can update it only in the Multi-Currency Conversion window.

3. Save your work.

**To attach the multicurrency conversion list to an agreement:**

1. Navigate to the Pricing Agreements window.
2. Enter Agreement Type: Standard or Agreement.
   - For standard agreements, you must select a price list. The base currency, rounding factor, and multicurrency conversion attached to that price list default to the window.
   - For agreement price lists, in the Pricing tab, select a multicurrency conversion. For Agreement price lists, you can select lists where the base currency of the multicurrency conversion list is the same as the base currency of the agreement. When multicurrency is enabled, the Rounding Factor field in the agreement is grayed out; you can update it only in the attached multicurrency conversion.

3. Save your work.

To attach a multicurrency price list as a qualifier for a modifier:
A modifier has a single currency. You must create currency-specific modifiers. Modifiers can be created in different currencies. The modifier is selected and applied when the modifier currency is the same as price list's Base or To Currency.
1. Navigate to the Advanced Pricing - Define Modifier window.
2. Do a search or create a modifier and its respective currency; for example, a modifier
in CAN (Canadian dollars).

3. Click the List or Line Qualifiers button to display the qualifiers window.

4. Enter Modifier List in the Qualifier Context field.

5. Enter Price List in the Qualifier Attribute field.

6. Select a Price List that has Base Currency or To Currency defined with the same currency as in the modifier header.

7. Save your work.

**To use Promotional Good type of modifier line:**

For a Promotional Good (PRG) type of modifier line, in the Get Product list for the list line, you must select the price list whose currency is the same as the modifier currency.

If you create a promotion with a Get Item, you must ensure that the base currency for the modifier (promotion) price list is the same as the base currency for the Get Item price list (header). Otherwise, the pricing engine will not select or apply the Get Item.

1. Navigate to the Advanced Pricing - Define Modifier window.

2. Query or create desired modifier for the promotional good that uses the foreign currency (for example, French Francs).

3. In the Modifier Summary window, select a line with the Modifier Type of Promotional Goods.

4. Click Define Details to display the Define Modifier Details window.

5. In the Get region where you specify the Get Item details, select the required information about the Get Item.

6. In the Get Price field, select a price list from the Benefit Price field where the Base Currency = FRF has been defined.

7. Save the modifier record

**Example of Multicurrency Price List Usage**

The following example shows how a multicurrency conversion list calculates a price in U.S. dollars when an item is ordered in Canadian Dollars (CAD). The following multi-conversion list and base price list setups are used in the conversion scenarios:
**Multicurrency Conversion List Setup**

<table>
<thead>
<tr>
<th>Header Level Field Name</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name of multicurrency list</td>
<td>Test Multicurrency Conversion List</td>
</tr>
<tr>
<td>Currency (base currency)</td>
<td>USD</td>
</tr>
<tr>
<td>Base Round To</td>
<td>-2</td>
</tr>
<tr>
<td>Base Markup Value</td>
<td>%</td>
</tr>
<tr>
<td>Base Markup Value</td>
<td>10</td>
</tr>
<tr>
<td>Base Markup Formula</td>
<td><em>My Base Markup Formula</em> with expression 1/2 (Step 1 divided by Step 2) where:</td>
</tr>
<tr>
<td></td>
<td>• Step 1 is of type List Price</td>
</tr>
<tr>
<td></td>
<td>• Step 2 is of type Modifier Value</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Line Level Field Name</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>To-currency</td>
<td>CAD</td>
</tr>
<tr>
<td>Conversion Type</td>
<td>FORMULA</td>
</tr>
<tr>
<td>Formula (conversion)</td>
<td><em>My Conversion Formula</em> with expression 1*2 where:</td>
</tr>
<tr>
<td></td>
<td>• Step 1 is of type Numeric Constant and value 25</td>
</tr>
<tr>
<td></td>
<td>• Step 2 is of type List Price</td>
</tr>
<tr>
<td>Markup Operator</td>
<td>AMT</td>
</tr>
<tr>
<td>Markup Value</td>
<td>50.12345</td>
</tr>
<tr>
<td>Conversion Rounding Factor</td>
<td>-3</td>
</tr>
<tr>
<td>Round To</td>
<td>-2</td>
</tr>
</tbody>
</table>

The following table describes the setup for the base price list that is used in this example:
### Base Price List Setup

<table>
<thead>
<tr>
<th>Field Name</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Base PL</td>
</tr>
<tr>
<td>Currency</td>
<td>USD</td>
</tr>
<tr>
<td>Item</td>
<td>Item A</td>
</tr>
<tr>
<td>List Price</td>
<td>20</td>
</tr>
</tbody>
</table>
| Dynamic Formula | *My Base Price List Line Formula* with expression 1*2 where:  
  - Step 1 is of type List Price  
  - Step 2 is of type Numeric Constant with a value of 30 |

### Scenario 1

If 1 unit of Item A is ordered in the currency Canadian Dollars (CAD), then the price is determined in the following way:

1. Price of Item A from base price list Base PL is calculated using the dynamic formula 1 * 2, where step 1 is List Price and step 2 is Numeric Constant. The list price on the base price list line for Item A is 20 and numeric constant is 30. So the list price now is 20 * 30 = 600.

2. Because the Item A is ordered in CAD (which is not the base currency USD), the Base Markup Value, Base Markup Operator, Base Markup Formula, and Base Round To are not used in this calculation. Instead, the information at the conversion line level is used:
   - The conversion type is FORMULA.
   - The formula that is used is *My Conversion Formula* with expression 1*2, where step 1 is of type Numeric Constant and value 25 and step 2 is of type List Price.

   The List Price that is used is the result of step 1, which is 600.

   So the new list price now is 25 * 600 = 15,000.

3. Because a markup formula *My Conversion Markup Formula* exists with expression 1/2 + 3, where:
• Step 1 is of type List Price.

• Step 2 is numeric constant 5,000.

• Step 3 is of type Modifier Value.

The markup is calculated as
\[ \frac{15,000}{5,000} + 50.12345 \]
\[ = 3 + 50.12345 \]
\[ = 53.12345 \]

Note that the List Price is taken from Step 2 and that the Modifier Value is the Markup Value on the conversion line. The final markup value is 53.12345, and the markup operator is AMT.

So the new list price now is \( 15,000 + 53.12345 = 15053.12345 \).

4. If Item A is a non service item, then the conversion rounding factor - 3 is applied to the result of step 3, that is, after the markup, if any, has been applied to the post-conversion list price of step 2.

   **Note**: This step is skipped for service items. So the new list price now is 15053.123.

So the new list price now is 15053.123.

5. The conversion line Round To is applied to the result of step 4. This Round To is applicable to the list price, as well as to the net price but its application is subject to the value of the profile option QP: Selling Price Rounding Options.

   • If the profile option value is No, then the list price 15053.123, any adjustments, and the selling price are not rounded.

   • If the profile option value is Individual, then the list price, any adjustments, and the selling price are each individually rounded to two places after the decimal because the Round To on the conversion list is - 2.

   So the new list price would be 15053.123 and is rounded to 15053.12.

Comments

• Markup operator can apply to the Markup Value as well as to the Markup Formula. This is true for both Base Markup and Conversion Markup.

• Markup Value and Markup Formula can both be present in the same list. In that case, the Markup Formula is used; the Markup Value may be used as the value for any Modifier Value type of Formula Line in the Markup Formula.
• Modifiers is selected and applied only if either the currency on the modifier is null or the currency on the modifier matches the ordering currency.

• If a Conversion Formula has a List Price formula component, the List Price from the Base Price List (after dynamic formula calculation on the base price list if applicable) is used for this formula component.

• If a Markup Formula (at the conversion line level) has a List Price formula component, then the List Price after performing conversion is used for this formula component.

• Conversion Rounding Factor is applied on the marked up value of list price. For example, apply conversion rounding to the marked up conversion list price.

• Round To value on the conversion line is used to perform rounding of final list price, adjustments, and selling price subject to the QP: Selling Price Rounding Options.

Scenario 2
If 1 unit of Item A is ordered in the base currency USD, then the price is determined in the following way:

1. Price of Item A from base price list is calculated using the dynamic formula 1 * 2 where step 1 is of type List Price and step 2 is of type Numeric Constant. The list price on the base price list line for Item A is 20 and numeric constant is 30.

   So the list price now is 20 * 30 = 600.

2. Because the Item A is ordered in the base currency USD, only the Base Markup Value, Base Markup Operator, Base Markup Formula and Base Round To are used in this calculation. Setup values at the conversion line level are not used.

   Because there is a base markup formula My Base Markup Formula with expression 1/2 (step 1 divided by step 2), where step 1 is of type List Price and step 2 is of type Modifier Value, the base markup is calculated as 600 / 10 = 60 (where list price is taken from step 1) and step 2 is the Base Markup Value. Because the Base Markup Operator is %, the new list price now is 600 + 60% of 600 = 600 + 360 = 960.

3. The Base Round To -2 is applied to the result of step 2. This Round To is applicable to the list price and the net price, and how it is applied is determined by the profile option QP: Selling Price Rounding Options:

   • If the profile option value is No, then the list price 960, any adjustments, and the selling price are not rounded.

   • If the profile option value is Individual, then the list price, any adjustments, and the selling price are each individually rounded to two places after the decimal. So in this case, the new list price is 960.00.
Updating the Multicurrency Conversion List

If you want to change or update conversion criteria such as increasing the conversion fixed rate from 2.2 to 2.3, you can make your changes in the Multi-Currency Conversion window. You can update information at both the header and line levels.

- **Header Level changes**: Be cautious when updating header level information such as Markup because you will lose historical information.

- **Line Level changes**: Be cautious when updating line level information in the Conversion Criteria Detail region to avoid loss of historical information. To prevent unexpected conversion behavior and loss of historical data, enter an end date for the detail line and enter a new line with the desired changes including a new start date before updating any setup information.

**To update the multicurrency conversion list:**

1. Navigate to the Multi-Currency Conversion window.

2. Complete the required changes in the Multi-Currency Conversion List or the Conversion Criteria Detail regions (header and line levels) using the suggested best practice.
   
   If you are changing Conversion Criteria Details, and you want to prevent unexpected conversion behavior and loss of historical data, enter an end date for the detail line, and enter a new line with the desired changes and a new start date.

3. Save your changes.
   
   All saved changes to a multicurrency conversion list are immediately available to all price lists and pricing agreements to which the list is attached.
This chapter covers the following topics:

- Overview of Creating Agreements
- Creating Agreements
- Revising an Existing Agreement
- Finding Agreements
- Deleting Agreements

**Overview of Creating Agreements**

Oracle Advanced Pricing enables you to establish agreements that you negotiate with your customers to define the prices, payment terms, and freight terms. You can:

- Define your agreements using customer part numbers and inventory item numbers.
- Make revisions to the original terms and maintain these changes and their reasons under separate revision numbers.
- Define new prices or attach an already existing price list to the agreement.
- Assign optional price breaks by quantity. Price lists are exclusive by agreement.
- Set effectivity dates for agreement terms.
- Set payment terms including invoice rule and accounting rule.
- Set freight terms including the freight carrier.
- Apply agreement terms to sales orders by reference agreements.
• If you are using the multicurrency feature with agreements, see Attaching the Multi-Currency Conversion List to a Price List or Pricing Agreement, page 6-11.

• You can view or update a price list on an agreement only in your pricing transaction entity. The profile QP: Pricing Transaction Entity must match the pricing transaction entity of the price list attached to the agreement.

• You can view or update a price list on an agreement only in your source system. The profile QP: Source System Code must match the source system of the price list attached to the agreement. Otherwise, the price list on the agreement is view-only.

Types of Agreements

There are two types of agreements:

• Standard Price List: Used, for example, to have one price list for all customers but to default special terms on to a sales order for a specific customer.

• Agreement Price List: Used to offer a negotiated price for an item to a customer.

The following table compares the two agreement management methods:

<table>
<thead>
<tr>
<th>Standard Price Lists</th>
<th>Agreement Price Lists</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agreement lines not allowed.</td>
<td>Agreement lines required.</td>
</tr>
<tr>
<td>Associated with standard price list (type PRL).</td>
<td>Associated with agreement price list (type AGR).</td>
</tr>
<tr>
<td>Maintain and view price list lines through the Price List window.</td>
<td>Maintain and view price list lines through the Agreement window.</td>
</tr>
<tr>
<td>Use each standard price list with multiple standard agreements and price orders associated or not associated with an agreement.</td>
<td>Use each agreement price list with multiple pricing agreements. Not usable to price orders not associated with an agreement.</td>
</tr>
<tr>
<td>Cannot revise price list lines using agreement window.</td>
<td>Can revise price list lines using agreement window.</td>
</tr>
<tr>
<td>Standard Price Lists</td>
<td>Agreement Price Lists</td>
</tr>
<tr>
<td>----------------------</td>
<td>-----------------------</td>
</tr>
<tr>
<td>Agreement number not automatically created as a qualifier for the associated price list.</td>
<td>Agreement number automatically created as a qualifier for the associated price list. You can specify the pricing agreement on an order.</td>
</tr>
</tbody>
</table>

**Customer Merge in Oracle Receivables**

When you merge customers in Oracle Receivables, you can merge:

- The information from one customer (the From customer) with the information from another customer (the To customer).
- The information from one or more customer sites of that customer (the From sites) with the site information from the other customer (the To sites).

If the From customer is party to agreements, the Oracle Receivables merge process runs an Oracle Advanced Pricing process to update the following agreements information:

- If you merge customer: The process changes the customer name on the agreement from the From customer to the To customer. Verify this change in the Pricing Agreements window, Agreement tab, Customer, and Cust Number fields.
- If you merge sites: The process changes the invoice address from the From customer site to the To customer site. Verify this change in the Pricing Agreements window, Payment tab region, Invoice To, and Address fields.

**Creating Agreements**

Use this process to create pricing agreements.

*Note:* In Order Management, the Agreement field does not appear by default on the order header. You must click the Folder icon to display it.

**Security Privileges and Agreements**

Pricing Security privileges affect pricing agreements by inheriting the security rules associated with any price lists. You can select a price list to associate with an agreement at setup if your privileges authorize view access to the price list. You cannot change the price list or change its relationship to an agreement if you do not have Maintain access to the price list.

If you have access issues, consult your Pricing Administrator.
To create a pricing agreement:

1. Navigate to the Pricing Agreements window.

2. Enter an agreement name to identify the agreement.

3. In the Agreement Number field, enter a value if one has been assigned to the agreement.
   The Revision Number field defaults to 1. However, this number may change as new revisions are created (for example, from 1 to 2). The Revision Date defaults to the current system date.

4. Complete the Customer name and Cust Number fields.

5. In the Agreement Type field, select a value such as Standard Terms and Conditions.

6. Select a contact name.

7. Enter the effective date range for the agreement. If you do not enter an end date, the agreement will remain active for an indefinite period. However, if you are creating revisions, you must end the current agreement.

8. In the Sales Person field, enter a name.
9. Enter the customer’s purchase order number.

10. Enter a signature date for the purchase order.

   The Agreement Source field (view-only) displays the source of an agreement.

**In the Pricing tab**

11. Select the Pricing tab.

   **Pricing Agreements window: Pricing tab**

   ![Pricing Agreements window](image)

   **12. Select a value in the Price List Type field:**

   - Select Standard Price List to associate an existing price list with the agreement.
   - Select Agreement Price List to associate an existing agreement price list to an agreement.

   **13. Select a value in the Price List field:**

   - For Standard Price Lists, select Standard Price List. The Currency, Rounding Factor, Description, and Comments fields default from the standard price list selected. You cannot change these values in the Pricing Agreements window.
   - For Agreement Price Lists: You can create a new price list name or select an existing Pricing Agreement price list.
Agreement price lists are maintained only in the Pricing Agreements window. Unlike Standard Price Lists, you can adjust Agreement Price Lists.

Complete the following steps if creating an Agreement Price List:

If you choose an existing Agreement Price List, the Currency, Rounding Factor, Description, Freight Carrier, Freight Terms, and Comments fields default from the price list. However, if you change the values for any of these fields, the information is changed for all pricing agreements using this price list.

14. Select a currency.

15. Enter a round to value.

16. Enter a price list description.

Complete the following steps for both Standard and Agreement price lists:

17. Enter a default freight carrier.

18. Enter default freight terms.

19. Enter any comments.

In the Payment tab

20. Select the Payment tab.
21. Select the payment terms:
   - When you enter a sales order in Oracle Order Management, and the agreement uses a standard price list, the payment terms default from that price list. You can override the price list terms on the agreement.
   - When you enter a sales order in Oracle Order Management, and the agreement uses an agreement price list, the payment terms default from those that you enter in this field.

22. Enter the bill-to name in the Invoice To field.

23. Enter a bill-to address in the Address field.

24. Enter the bill-to contact in the Invoice Contact field.

25. In the Rules region, select a default accounting rule.

26. Select the invoicing rule:
   - Accounting and invoicing rules are set up in Oracle Receivables.
• In the Override Flag region, the override check boxes for the Accounting and Invoicing Rules are for information only.

To create agreement lines:

For Standard Price Lists: The agreement line details default from the Standard Price List entered in the Price List field in the Pricing tab. You cannot change these fields or enter additional lines from the agreement lines. You must make changes and additional price list lines on the price list from the Price List Setup window.

For Agreement Price Lists: If you attached an existing Agreement Price List, the agreement lines default from that price list. You can change the agreement line details, and add additional agreement lines. Any changes or additions that you make are reflected on the other agreements to which this price list is attached.

In the lowest region of the window, enter a product value. If there is a customer item associated, the customer item number defaults to the Customer Item field. Customer Item is a pricing attribute.

• Do not change the defaulted values for customer item, address, and address category in this window. Make changes to these where the customer item relationship is maintained. Create the accounting and invoicing rules in Oracle Receivables.

• When you have created a customer item relationship with an internal inventory item and you enter the inventory item product value, the customer item, address, and address category defaults.

1. Enter a unit of measure (UOM).

2. Select Primary UOM if this price list line UOM is the primary pricing UOM for the item. The pricing engine uses the primary pricing unit of measure and the Oracle Inventory UOM conversion information to price an order whose UOM does not have a price list line. For example, a price list has two price list lines for item A1111, one with UOM EA, the primary UOM, and one for boxes. When the pricing engine receives an order in UOM CS, it accesses the UOM conversion tables to convert CS to EA.

3. Select Price List Line in Line Type field.

4. Select Unit Price in the Application Method field.

5. Enter a base price in the Value field.

6. Enter the effectivity dates in the Start Date and End Date fields. Enter dates within
the effectivity dates of the agreement.

7. Complete the Comments and Revision number fields.
   
   **Note:** To create list of reasons, see *Oracle Advanced Pricing Implementation Guide*, Lookups.

8. Enter a revision date.

9. Save your work.
   
   **Note:** You cannot enter an item category in the Product Value field.

**To define pricing attributes:**

1. Click Pricing Attributes in the Pricing Agreements window to display the Pricing Attributes window.

   ![Pricing Attributes window](image)

   The Product Context, Product Attribute, and Product Value default from the Agreement Line that you are entering.

2. Complete the Pricing Context, Pricing Attribute, and Value From/To fields.

3. Save your work.
Note: The pricing attributes are joined as AND conditions because they apply to one price list line.

To create price breaks:
1. Click Price Breaks to display the Price Breaks window.
   
   Note: The Price Breaks button is enabled when you select the following values:
   - Price Break Header in the Line Type field
   - Point or Range in the Price Break Type field

   **Price Breaks window**

2. Complete the remaining steps for each price break that you define for the agreement line:

3. The Pricing Context field value defaults to Volume, and the Pricing Attribute field value defaults to Item Quantity. Optionally, select a different Pricing Attribute.

4. Complete the Value From and Value To fields. Price ranges for breaks must start with 0 with no gaps between breaks. If you leave the Value To field of the price break blank, a value of 999999... (15 digits) automatically defaults. This value is hidden from the end-user and does not appear in the Value To field.
5. Enter a Price:
   - For inventory items and item categories, enter the base list price of the item.
   - For service items: If the Application Method is Unit Price, enter the base list price of the item. If Application Method is Percent Price, enter a percent of another item’s price.

6. Select an Application Method (the default value is Unit Price). For more information, see Application Method, page 3-4.
   - Unit Price: For inventory items and item categories.
   - Percent Price: For service items. You will only see Percent Price as an Application Method if the price list line is a service item.
   - Block Price: Using block pricing, you can apply a lumpsum price rather than a per unit price to a price list line. Block pricing also allows pricing setups that price by recurring values within blocks. For information on setting up price breaks with Block Price, see: Defining Price Breaks with Block Pricing (for application method Block Price), page 2-21.

   **Note:** Block Price can only be selected if the line type is Price Break Header (PBH) and Block Price is selected as the Application Method for the agreement line.

7. Optionally, enter a recurring value for a block price. For example, if the value in the Recurring Value field is 100, then the range is priced for every 100 items within the block.

   **Note:** The Recurring Value field is enabled when the following values are selected:
   - Break type is Range.
   - The application method of Block Price is selected for both the agreement line and price break line.

8. Save your work.

**Related Topics**

Defining Price Breaks for a Price List Line, page 2-18
To create a price break modifier line, page 3-43
Revising an Existing Agreement

If you must make minor changes to an existing agreement, such as changing the payment terms, you can simply change the agreement terms and save the changes. Doing so updates the existing agreement with your new changes.

However, if significant changes are required, and you want to keep a record of previous agreements, you can create a new revision. This does not overwrite the existing agreement but creates a new version of the original agreement. This is useful if you want to track and manage multiple versions of the same agreement.

You must determine when changes warrant a new agreement version, and then manually create a new revision and revision number. For tracking purposes, a logical revision numbering system, such as numbering the revisions 2, 3, 4 and so on, will help you better manage your agreements.

Once you create the new agreement revision, you can update the agreement header information.

**Note:** You must end the current revision before creating a new revision. An agreement can have multiple revisions but the effective dates cannot overlap. Only one revision can be effective for a given range of effective dates.

To revise an existing agreement:

1. Find the original agreement that you want to revise.

   **Note:** The original agreement must have an effective end date entered and saved before you can create a new revision. The end date can be past, current, or future; however, the date ranges for any revisions cannot overlap. Only one revision can be in effect for a given range of effective dates.

2. Click Create Revision to display the Create Revision window.
The Agreement Name defaults from the original agreement. Although you cannot change the agreement name, you can change the revision number. The Revision Date value defaults to the current date.

3. In the Revision Number field, identify the version of the agreement you are creating. This helps you track and manage different revisions of the agreement.

4. Enter the effective start and end dates for the agreement. Date ranges cannot overlap, and only one revision can be in effect for a given range of effective dates.

5. In the Revision Reason field, select a reason that describes why you are revising the agreement.

6. Click Create to display the new agreement in the Pricing Agreements window. The new revision number displays in the Revision field.

Note: Revisions to the agreement header do not revise the pricing lines for the agreement. A change to the price list lines affects all agreements to which the price lines are attached.

Finding Agreements

Use the Find Agreements windows to find agreements or agreement revisions by one or more of the following criteria: Agreement Name, Agreement Number/Revision, Invoice To, Price List, Customer, Cust Number, Agreement Type, Contact, Invoice Contact, or Sales Person.
To find agreements:
1. Navigate to the Find Agreements window.

2. Enter your search criteria.

3. When you have completed your entries, click Find to display the search results.

   Note: To create a new agreement, click the New button.

Deleting Agreements

You can delete pricing agreements if they have not been used in any previous order transactions. Once sales order lines are attached to an agreement, you cannot delete the agreement. If you attempt to delete an agreement with sales order lines attached, a warning note notifies you that you cannot delete the agreement.

To delete agreements:
1. Navigate to the Pricing Agreements window.

2. Find the pricing agreement to delete.

3. From the Edit menu, click Delete to delete the pricing agreement.
Archiving and Purging Pricing Entities

This chapter covers the following topics:

- Overview of Archiving and Purging Pricing Entities
- Archiving Pricing Entities
- Purging Pricing Entities

Overview of Archiving and Purging Pricing Entities

Archiving pricing data enables you to copy pricing data from the pricing application tables to archive tables for long-term data storage.

You can archive price list and modifier lines. The archiving process permanently removes the lines from the related price list or modifier list into the archive tables for storage.

When the archived data is no longer required (and does not need to be retained for legal requirements), then you can use the purge feature to purge the data from the archive tables.

You can archive and purge price list lines and modifier list lines for the following price list and modifier list types:

- Agreement Price List
- Standard Price List
- Deal
- Discount List
- Freight and Special Charge List
- Promotion
• Surcharge List

Archiving and purging records reduces the number of pricing records that the pricing engine queries, potentially improving processing performance.

Related Topics
Archiving Pricing Entities, page 8-2
Purging Pricing Entities, page 8-8

Archiving Pricing Entities

Archiving your pricing data enables you to store pricing setups that are no longer active or infrequently used. You can use the Archive Pricing Entities window to archive modifier lines and price list lines. Doing so permanently removes the line information from the associated price list or modifier list.

Note: Only the lines of a pricing entity can be archived. Price list and modifier list header information is copied to archive tables but is never deleted from the pricing application tables.

Archiving copies data from the application tables to archive tables for long-term data storage. Once the pricing data is copied to the archive tables, it is deleted from the application tables. When the archived data is no longer required, you can use the Purge feature to remove the data from the archive tables. Archiving and purging records reduces the number of pricing records that the pricing engine must query or process, which potentially results in improved performance.

The following scenarios describe where archiving data can be useful:

• Easier to delete pricing records created in error: if pricing records are created in error, you can delete these records.

• Archive infrequently used pricing records: As pricing setup records accumulate, the performance of the query windows and pricing engine may decrease. Archiving inactive or infrequently used pricing setups reduces the number of pricing records that the pricing engine queries or processes and potentially improves pricing engine performance.

Note: You can review the selected records before archiving them. Once the data is archived, it cannot be retrieved back to the pricing application tables. If you archive in error, you must recreate the data for the original header. You can view the archived data using Pricing database views based on archive tables. A user interface is not available to view records of archived data.
• Archive to retain historical pricing records: For various legal or statutory reasons, you may be required to keep pricing records for up to 10 years. If you are currently using the Inactive box for each price list and modifier to identify expired lists, consider archiving your records instead. If you do not archive your data, as the number of pricing records (both active and inactive) increase in the database, performance could decrease for accessing pricing setups.

  Note: You can archive and purge from the pricing source system (QP) and available source systems. The archiving and purging windows are available through the Oracle Pricing Manager responsibility. However, if pricing Security is ON, you must be assigned Maintain Privileges to the pricing entities before you can archive and purge them.

• Purge archived records: Archived pricing data can be purged from the archive tables. You must archive data before you can purge it.

Archiving Considerations
Once the pricing data is archived, it cannot be restored or retrieved to the pricing application tables. Therefore, before archiving data, it is important to consider the following archiving guidelines:

• Price list headers and modifier list headers will not be deleted from pricing applications tables. However, a copy of price list headers and modifier list headers will be maintained in archive tables for each archive request.

• If archiving encounters problems or cannot be completed, a message is logged in the concurrent program log with information about the problem.

• If the All Lines check box in the Archive Pricing Entities window is selected, then you cannot select specific product information, and all the lines in the list will be archived.

You can use the Archive Pricing Entities window to define your archiving criteria, such as specifying which price list lines that you want to archive. You can specify a range of product attribute values for Item Number and Item Category.

After you have made your selections, click View Selected Records to view the records to be archived. You can either proceed with the archiving or cancel the request.

Archiving Entities Reviewed
The following table lists pricing entities and related archiving notes. Not all pricing entities can be archived; consult this table for special instructions:
<table>
<thead>
<tr>
<th>Pricing Entity To Be Archived</th>
<th>Archiving Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agreement</td>
<td>You cannot view the data before archiving.</td>
</tr>
<tr>
<td>Excluded items</td>
<td>Modifier has no effect on excluded items; therefore, if the modifier line is archived, there is no impact.</td>
</tr>
<tr>
<td>Line accumulations</td>
<td>For modifiers, accumulated values are stored in the calling application, not in the modifier setup. User discretion is required when archiving setup of modifier lines containing range breaks.</td>
</tr>
<tr>
<td>Modifier lines</td>
<td>When archiving modifier lines, if you leave the Product Context blank in the archive criteria, all the lines for the selected modifier that do not have a product defined are archived (if the line has been end-dated and falls within the Start/End Date Active range of the request).</td>
</tr>
<tr>
<td>Validations</td>
<td>Any conditions that cannot be handled are logged in the concurrent program log.</td>
</tr>
<tr>
<td>Coupons and related lines</td>
<td>A coupon line and the attached benefit line are not archived. If the archive criteria selected either of the coupon and benefit lines, both lines are not archived. To archive, you must delete the coupon line, and then delete the benefit line.</td>
</tr>
<tr>
<td>Price breaks</td>
<td>You can archive price breaks. (Set up is maintained in the archive table).</td>
</tr>
<tr>
<td>Price list lines (if the line has been used in a formula: Formula Type=Price List Line)</td>
<td>You cannot archive these lines; doing so would cause data integrity issues.</td>
</tr>
</tbody>
</table>
### Archiving and Purging Pricing Entities

<table>
<thead>
<tr>
<th>Pricing Entity To Be Archived</th>
<th>Archiving Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Modifiers with limits</td>
<td>You cannot archive modifiers with limits at the header level. Modifier lines with limits attached to them are also not archived. If the archive criteria selects multiple lines, and a few lines with limits are attached, only the lines without limits are archived. For lines having limits, a message is logged in the concurrent program log to indicate that the line was not archived because of limits.</td>
</tr>
<tr>
<td>Accrual redemption</td>
<td>No impact.</td>
</tr>
<tr>
<td>Responsibility</td>
<td>Archiving and purging is available through the Oracle Pricing Manager responsibility.</td>
</tr>
</tbody>
</table>

**Note:** Pricing entity security cannot be assigned to the archive and purge features. However, if Pricing Security is on, you must have Maintain access to an entity to archive or purge it.

**To archive pricing entities:**

1. Navigate to the Archive Pricing Entities window.
2. In the Archive Name field, enter a name that uniquely identifies the entity to be archived.

3. In the Entity Type field, select the type to be archived; in the adjacent field, select the source system (such as Pricing) associated with the entity type.

4. In the Entity field, select the entity to be archived, such as the price list or modifier list name. If pricing security is ON, you cannot view or select view-only price lists and modifier lists.

   **Note:** Modifier lists with header limits are restricted from being archived when the archive request is submitted. In addition, the following pricing entities are not archived nor do they appear if you click View Selected Records before submitting the archive:
   - Lines with limits
   - Coupon/benefit lines
   - Formula lines
5. In the Lines To Archive region, select one of the following:

   Note: If you do not select product criteria in the Lines To Archive region, then all the end-dated lines falling within the date range that do not have product specified in the price list or modifier list are archived.

   • To archive all lines for the selected entity, you must first clear the Active check box on the list header. Once the list is inactive, you can select All Lines. If All Lines is selected, then the remaining fields in the Line To Archive region are grayed out because all of the lines are archived.

   Note: The All Lines check box appears if the value of the Entity Type field is Agreement Price List because you cannot inactivate an Agreement Price List.

   • To select specific archiving criteria, complete the remaining steps:

   Note: For entity types of Standard Price List or Agreement Price List, your criteria should include Product Context, Product Attribute, Product Attribute Value From, and End Date Active (provided the All Lines check box is not selected).

6. A value for the Product Context of Item field automatically defaults; however, you can clear the field if you do not want to enter any product information.

7. Select a value in the Product Attribute field.

8. Select the Product Attribute Value From and Product Attribute Value To to specify a range of product attribute values for Item Number and Item Category. For all other product attributes, you cannot specify ranges. You must select the exact product attribute value.

9. Select a date range in the Start Date Active and End Date Active field to include modifier or price list lines that are active only within this date range. If you enter a Start Date Active and End Date Active, only lines equal to or less than the Start Date Active and End Date Active are archived. This is useful, for example, to archive lines for a specific date range, for example, from June to September.

10. If you do not enter an active start date, the range is from infinity to the value that you enter in the End Date Active field.

   Note: You must enter a date in the End Date Active field (unless
11. Select Created By to archive records created by a particular system user.

12. Select Creation Date to archive records that were created on a particular system date.

13. After selecting the archive criteria, click View Selected Records to display the Price list or Modifier list window in query mode and review the records that meet the selected archive criteria.

14. Click Submit to archive the records. The archive is saved using the name specified in the Archive Name field.

Related Topics
Overview of Archiving and Purging Pricing Entities, page 8-1
Purging Pricing Entities, page 8-8

Purging Pricing Entities

Purging pricing entities enables you to permanently delete archived pricing data. The data must be archived first to prevent the accidental purging of important data from the pricing tables.

Once the data is purged, you cannot retrieve it. Therefore, it is important to ensure that the data to be purged is not required for legal or statutory retention.

To purge pricing entities:
1. Navigate to the QP Purge Entity window.
2. In the Source System field, select the system associated with the pricing data to be purged.

3. Select one of the following combination methods to purge the archives, then complete the fields for the selected combination:
   - Archive Name, Entity Type, Entity: Purges a named archive.
   - Entity Type, Entity: Purges all archives of a selected entity type and entity name.
   - Archive Start, End Date: Removes all archives falling within the specified range of system archive dates. Also purges all the archives of a specified system archive date using only the End Date Archive value.

4. Click Submit to purge the data.

Related Topics

Overview of Archiving and Purging Pricing Entities, page 8-1
Archiving Pricing Entities, page 8-2
This chapter covers the following topics:

- Overview of the Pricing Engine Request Viewer
- Viewing Information in the Pricing Engine Request Viewer

Overview of the Pricing Engine Request Viewer

The Pricing Engine Request Viewer window captures the pricing call from any calling application, such as Oracle Order Management, and displays the inputs and outputs of the pricing call. This information can help you to diagnose which price list lines were selected or rejected by the pricing engine and to determine why certain prices and adjustments were or were not applied.

Only the latest pricing request appears; however, historical data is not maintained because the Pricing Engine Request Viewer window updates the display information each time that the pricing engine captures a new transaction. Previous pricing requests are saved in the pricing tables.

The Pricing Engine Request Viewer window is available from the main Advanced Pricing menu (Pricing Manager responsibility) or in Oracle Order Management using the following navigation path: Sales Orders > Tools > Pricing Engine Request Viewer.

Process for the Pricing Engine Request Viewer

The following outlines the activities when a pricing call is made:

1. The calling application makes a call to build qualifiers and builds the contexts through mapping.

2. The calling application calls the pricing engine with the attributes generated by attribute mapping.

3. The pricing engine processes the request, and then searches for and evaluates eligible price list and modifier lines.
4. If the profile option QP Debug is set to Request Viewer On, then the pricing engine inserts records into the permanent pricing debug tables and generates a unique request ID, storing the information from the calling application.

5. You can then view the pricing request information by querying the request in the Pricing Engine Request Viewer from the Order Management Sales Order Pad or through the Pricing Manager responsibility menu.

**Setting Up the User Profile Options**

- QP: Debug: Set the value of this profile option to Request Viewer On when you want the Request Viewer to capture pricing request details into the pricing debug tables and debug log information into the debug log table. The debug log text file is also created. The default value is Request Viewer Off.

   The setting is active for the transactions for the user who set this profile option - other users’ transactions are not affected.

   **Note:** Setting the profile QP: Debug slows the performance of the Pricing Engine Request Viewer. The concurrent request Purge Pricing Engine Requests purges the pricing engine requests. You should run this program on a regular basis to purge the historical data from the pricing debug tables. Periodically purging the historical data improves the performance of the Pricing Engine Request Viewer window.

- QP: Set Request Name: The profile option QP: Set Request Name is used in conjunction with the QP: Debug profile option. Set QP: Set Request Name to Yes if you want the value in the Request Name field prefixed to the OrderID. For more information on setting up profile options, see *Oracle Advanced Pricing Implementation Manual*, Profile Options.

**Related Topics**

Viewing Information in the Pricing Engine Request Viewer, page 9-2

**Viewing Information in the Pricing Engine Request Viewer**

The Pricing Engine Request Viewer window displays detailed information about the price list lines and modifier lines that the pricing engine applied or rejected. In the Pricing Engine Request Viewer window, you can view the following information:

- Pricing attributes, qualifiers, and product attributes passed to the pricing engine along with the other data generated by the pricing engine.
• Modifier lines that the pricing engine applied or rejected for benefit adjustments along with the details of the modifier line. View price request line of the calling application.

• Relationships between order lines for promotional modifiers, price breaks, and service lines.

• Formula step values generated by the pricing engine used in formula calculation.

• Controls passed by the calling application to the pricing engine, such as Event, Rounding, Search and Calculate Flag, and GSA.

• View and query fields in the Pricing Debug Log.

You can view the debug log in the Pricing Engine Request Viewer window, and query the record within the debug log to display the lines directly. The results are the 10 previous lines and the remaining lines of the debug file.

You can delete a request by selecting (N) Edit > Delete.

The transaction details appear in one or more of the following regions in the Pricing Engine Request Viewer window.

**Pricing Engine Requests region**

This region displays information about the pricing requests and information about controls sent by the calling application to help you locate the problem.

For Request Type ONT only, the order number associated with the request appears.

**Note:** Depending on the version of Oracle Advanced Pricing, the order and line numbers for orders created in prior releases may not appear in the Pricing Engine Request Viewer window. However, you can view order and line numbers created in subsequent releases.

**Pricing Engine Request Lines region**

This region shows information about the lines being priced, including line number, unit price, and adjusted unit price. You can view information related to service and serviceable lines in this region.

**Note:** For lines of type LINE, the Line No. field displays the appropriate line number from the Order Entry page. For lines of type ORDER, the order number associated with that request appears. For requests of type PRICE, the line number for the request lines of type LINE does not appear.

The Request Id + Line Index column maintains the master-detail relationship between the lines and line details. This block is used to change operand value, select/de-select
modifiers, change manual modifiers, and change buckets.

**Pricing Engine Request Line Details region**

This region displays information about processed price list lines and modifiers lines selected or rejected by the pricing engine. The Priced box indicates which lines were finally selected for pricing by the pricing engine. The Applied check box indicates which lines were considered in calculating the selling price.

This region also displays the information for item upgrades, coupon issue, term substitution, freight and special charges, and relationships between price breaks.

**Pricing Debug window**

Click View Debug Log to view the debug log in the Pricing Engine Request Viewer window. You can then query a record within the debug log to display the lines directly. The results display the ten previous lines and the remaining lines of the debug file.

**Attributes window**

Click the Attributes button to display all attributes for a selected line or line detail. The region displays information about the pricing attributes that the attribute mapping function passed to the pricing engine. The pricing engine uses these attributes to qualify a line or an order for price and adjustments:

- Click Attributes from the Request Lines region to display the attributes passed to the pricing engine.
- Click Attributes from the Request Line Details region to display the attributes related to the selected price list lines/modifier line.

**Pricing Debug Related Lines window**

Click Related Lines from the Pricing Engine Request Viewer window to display the Pricing Debug Related Lines window. The cursor must be in the Engine Request Lines Details region. You can view the relationship between the Buy and Get items for Other Item Discounts and Promotional Goods.

**Formula Step Values window**

When your cursor is in the Pricing Engine Request Lines Detail region, click Step Values in the Pricing Engine Request Viewer window to display the Formula Step Values window.

**Related Topics**

Overview of the Pricing Engine Request Viewer, page 9-1
This chapter covers the following topics:

- Overview of Price Books
- Creating Price Books
- Viewing Price Books
- Creating Delta Price Books

Overview of Price Books

The price book feature enables you to generate and publish documents called *price books* that list products and their prices for a specific customer. You can generate a *full* price book that lists all orderable products and their prices, or a *delta* price book that shows only those items whose prices changed since the last full price book was published, as well as any prices for items that were added or deleted. You can publish a price book either immediately or schedule a future publishing date. You can use the price book feature to:

- Generate a hard copy or electronic copy of a price book to view and publish price lists for planning purposes or price management. For example, sales representatives may want to have a copy of pricing available for the customers on whom they call.

- View and publish list and net prices (the actual unit selling price and any freight charges) for all the items purchased from a vendor or sold to a customer.

From the Create Price Book page (HTML user interface), you can publish a price book that lists items and their list and net prices (applicable modifiers, price breaks, or formulas for items, are reflected in the net price). You can publish the price book in formats such as EXCEL, PDF, and RTF. You can send the price book by e-mail, print on a designated printer, or publish it as an XML Message in the OAG Standard (Sync Catalog 003). You can also view the formatted document by selecting View Document.
Creating Price Books

You can publish a price book for a specific customer that lists products (items) and their related list and net prices. You can create a full price book that lists all orderable products and their prices, or a delta price book that lists items and prices that have changed since the last full price book was published. You can generate a price book either immediately or schedule a future publishing date.

The price book can cross multiple price lists to derive the list price for a customer and can include any associated multicurrency price lists and formula pricing. For an item, you will see the price list used to derive the list price. Any automatic line level discounts, surcharges, price breaks, or freight and special charge modifiers appear below the list price line. If pricing buckets have been defined for any modifiers, the modifiers appear in the order of the pricing buckets, with the null bucket modifiers appearing last. Although freight and special charges do not affect the unit selling price in Advanced Pricing, these charges do affect the Net Price in the price book.

Other applicable pricing entities used to derive prices for the price book include qualifiers and pricing attributes. Qualifier and pricing attributes help to determine which list prices and modifiers get applied in the price book. For example, if a pricing attribute is used in a formula on a price list line, then that pricing attribute needs to be supplied to derive the list price.

You can enter current, past, or future effective pricing dates for the price book; however, if you have not created effective date ranges to record product price changes in the price lists, then only the current price is reflected. When creating the price book, you can specify internal items, and the price book will display the customer item number (where available), making it easy for the customer to identify their items.

After you click Apply to publish the price book, a concurrent program automatically generates and publishes the price book. You can review the status of your concurrent requests in the Requests window.

Publishing Formats

You can publish the price book in various formats such as EXCEL, PDF, and RTF and select various publishing options to generate the price book:

- Send Email
- Send to Printer
- Send XML Message
• View Document: View the stored formatted price book from the Reports page, and view details for a specific price book line.

Using Electronic Messaging to Request and Publish a Price Book
Alternatively, an external user (such as a buyer) can request the price book from a seller by using the XML electronic message GET_CATALOG_002. In the GET_CATALOG_002 message, the price book requester must define the selection criteria for generating the price book. The frequency for publishing the price book can be for a given period or other terms as negotiated between the seller and buyer in their Trading Partner Agreement.

Note: The Get_Catalog_002 XML message can only be initiated by external users.

When the price book request is received, the price book supplier (such as the seller) can publish a price book using the XML message called SYNC_CATALOG_003. For more information, see Oracle Advanced Pricing Implementation Guide, Price Books.

Price Book Profile Options
The price book feature uses the following profile options to define the default settings:

• QP: E-mail From Address: This profile option defines the from e-mail address for any e-mails that are sent from the price book feature.

• QP: External Default Pricing Perspective: This profile option sets the default pricing perspective for all external users.

• QP: Inbound XML Messaging Responsibility: This profile option defines the responsibility to be used for inbound XML messages.

• QP: Internal Default Pricing Perspective: This profile option sets the default pricing perspective for all internal users.

• QP: Pricing Perspective Request Type: This profile option defines the mapping between a Pricing Perspective (calling application) and the Request Type that it uses.

For more information on setting up and using the profile options, see Oracle Advanced Pricing Implementation Guide, Profile Options.

To create a price book:
1. Navigate to the Create Price Book page and select the generation and publishing criteria for the price book:
Create Price Book page

Note: The available list of values may vary depending on whether you are an internal or external user. For example, for internal users, the Customer field displays all parties; however, external users can view only:

- The customer who is logged in.

- A party related to the logged in customer (defined by a Party Relationship).

For example, if Nicole Burg, who is a customer and works for Business World, logs in as an external user, then both Nicole Burg and Business World appear in the list of values for the Customer field but not any other unrelated party.

An external user can query, create, or publish only price books specific to the logged in customer, related customer, or parent customer, but not for any other customer.

2. Complete your entries in the Create Price Book page:

- Price Book Name: Enter a unique price book name for each customer for which
the price book is generated. The combination of price book name, customer and price book type (full or delta) must be unique.

• Operating Unit: For internal users, the Operating Unit value is defaulted based on the Multi-Org Access Control (MOAC) setup.

  **Note:** This field is visible only to internal users. An internal user can select an operating unit value (if available) other than the default value.

• Pricing Perspective: The prices generated in the price book are based on the pricing perspective. The pricing perspective mimics the calling application to simulate prices coming from an order, service contract, or purchase order. An internal user can override the default value of the pricing perspective; however, external users cannot view or change the pricing perspective.

  If Purchasing is selected as the pricing perspective, only purchasable products appear in the price book. However, an external user cannot have a pricing perspective of Purchasing, and cannot create, query or publish a price book with Purchasing pricing perspective.

  • Oracle Advanced Pricing is not considered a Pricing Perspective because it is not a calling application such as Order Management or Purchasing.

  • Oracle Purchasing and Oracle Complex Maintenance Repair and Overhaul products must be licensed for the installation for these applications to be available in the list of values for Pricing Perspective.

The following profile options define the default Pricing Perspective values for all external and internal users:

• QP: Internal Default Pricing Perspective: This profile option sets the default pricing perspective for all internal users.

• QP: External Default Pricing Perspective: This profile option sets the default pricing perspective for all external users.

You can override the default value of the pricing perspective; however, external users cannot change or view the pricing perspective.

• Product Criteria: This is a mandatory field and the valid values are Item, Item Category, Price List, or All Items. Depending on the value selected, an additional field appears where you can select a specific item number, item
category or price list name.

- All Items: Select the All Items option to publish all items for the price book. If All Items is selected, then the price book displays all items and unit of measure (UOM) combinations. Each item can appear multiple times but with different UOM. The following UOM are considered:
  - Primary UOM of the item.
  - UOM in other UOM classes (provided those UOM are present in a price list).
  - UOM in the same UOM class as the item’s primary UOM code.

- Item: Select the Item option, and then specify an item number to publish the prices for a selected item such as AS54888. If you select the Item option, then the price book displays all item/UOM combinations for the selected item.

- Item Category: Select an item category, such as computer modems or laser printers, to publish the prices for that specific item category. If Item Category is selected, then all items/UOM combinations within category will appear in the price book. If the item category belongs in a hierarchical catalog (category set), then all items/UOM combinations in the subcategories will appear.

- Price List/Price List Name: This option generates the price book for all item and uom combinations for items on the selected price list. Prices for the items are derived from the price list where possible (if the appropriate pricing attributes are specified in the additional criteria) but, if not, will be derived from other price lists.

In the Price List Name field, you can select from price lists belonging to the selected operating unit and all global price lists.

Note: The list of values for price lists will be restricted to price lists with a Source System Code belonging to the pricing transaction entity of the pricing perspective.

3. Complete your entries in the Price Calculation Criteria region:

- Currency: Select the currency that the price book is to be published in. You can select from all valid currencies; however, if a price list has been specified in the product criteria or based on fields, then the following conditions apply:
  - For non-multicurrency price lists, the Currency field is set to the price list’s
currency; you cannot change it

• For multicurrency price lists, you can select only from those currencies for which the multicurrency price list has conversions. The price book is published in the selected currency.

• Set the following multicurrency profile options to enable the pricing book to work from the calling application you define: QP: Multi Currency Usage and QP: Multi-Currency Installed.

• Pricing Effective Date: Define the effective date of the prices that you want published. Current, past, or future effective pricing dates are supported.

  Important: If you have not maintained a record of price changes (by entering effective dates for products in price lists), then only the current product price is published, regardless of the price specified in the Pricing Effective Date field.

• Quantity: Enter the assumed quantity per item when prices are published in the price book (default is 1). The quantity per item is applied regardless of the Product Criteria selected such as All Items, Item, Item Category, or Price List. For example, if All Items is selected and the Quantity is 1, then the price is based on 1 of each item.

  If your pricing setup includes price breaks or other volume-based pricing, you may want to enter a higher quantity per item to see pricing results based on that quantity ordered.

• Customer: Select the name of the customer for whom you are publishing the price book. This is a mandatory field. However, you can enter the Customer Number field before entering the Customer. Because a customer number can belong to only one customer, the customer associated with the customer number displays as the default value in the Customer field.

• Customer Number: A customer can have multiple customer numbers (accounts), for example, to identify separate corporate entities within a company such as a sales office, a division, or a department. Select a customer number to publish the price book for a unique selected entity. If you do not select a customer number, then the price book is published for the selected customer.

  If the selected customer has only one account, then that customer/account number is defaulted for the Customer Number field and cannot be changed. If a customer has more than one account, then no defaulting is done for the Customer Number field. You can choose to leave the Customer Number field blank.
Note: The Customer and Customer Number fields are not displayed when the Pricing Perspective is Purchasing.

- Pricing Basis: Select a value to derive list prices from a specific price list, sales agreement, or agreement. If a price is not found from the specified entity, then the pricing engine evaluates other price lists to get a price. Depending on the value selected for this field, an additional field is displayed where you can select a specific price list, sales agreement, or pricing agreement. The price list specified for product criteria becomes the price list on which prices will be based on as well. You cannot select the values sales agreement and agreement from the Pricing Basis field when the Pricing Perspective is Purchasing. The list of values for the Sales Agreements and Agreements fields is restricted to global agreements and sales agreements and the agreements and sales agreements specific to the current Customer.

Note: The Pricing Basis value defaults as Price List (read-only) if the Price List option is selected in the Product Criteria field. The price list specified for the product criteria becomes the price list for which prices are based on as well.

4. In the Additional Criteria region, you can enter additional pricing criteria such as pricing and qualifier attributes that can be used to generate the price book. Attributes such as Customer, Product, Price list, Agreement, and Sales Agreement that are already defined as main criteria in the create price book steps cannot be entered as additional criteria.

5. Complete your entries in the Publishing Options region:
   - Send Email: Specifies the e-mail addresses to which the price book will be sent. You can enter multiple e-mail addresses, separated by commas.

   Note: The QP: Price Book - E-mail From Address profile option defines the default e-mail address of the person sending the price book.

   - Send to Printer: Enter the name of the printer where the price book is to be printed. If no printer is specified, the default printer defined in the XDO configuration file is used.

   - Send XML Message: Select this option to send the price book as a SYNC_CATALOG_003 XML message to the customer specified in the Customer Site field. The Sync Catalog 003 message corresponds to the price
book in the XML format.
If you select this option, then the Customer Site field is displayed and a value
must be selected from the list of values.

**Note:** The Send XML Message publishing option is not
available when the Pricing Perspective is Purchasing.

- Template: Select the template format to be used for generating the price book. If
you select a template and document type and generate the price book, the
formatted document is stored automatically. You can then click View
Document on the Search or Details page to view the generated document

- Price Book Details: Publishes items/item categories and their list and net
prices. Provides additional details about pricing attributes, price breaks,
charges, discounts, and surcharges.

- Price Book Errors: Provides a report about any pricing errors generated by
the pricing engine related to the price book. If errors occurred, you can
correct them before regenerating the price book. Typical errors can include:
  - Missing pricing attribute needed for a formula calculation.
  - Duplicate price lists lines due to precedence.
  - Item and UOM not found on a price list.

  **Note:** If there is no price for an item, then the list price is
  blank.

- Price Book Summary: Publishes items/item categories and their list and net
prices.

- Document Type: Select the document type for the price book, such as EXCEL,
PDF, or RTF.

- Publish: Select one of the following options:

  **Note:** The Template and Document Type must be specified if
  you select the Send E-mail or Send to Printer publishing
  options.

  - Immediate: Publishes the book immediately.
• Schedule: Enter the specific date and time for the price book to be published automatically.

6. After completing your entries, click Apply to generate and publish the price book. A concurrent program automatically generates and publishes the price book. You can review your concurrent requests to track the status of your price book request. Alternatively, you can view the price book (or its current status) by searching for the price book on the price book Search page. From the search results, view the request status by clicking View Request Status.

To republish an existing price book:
1. To publish an existing price book, do a search to display the price books in the Reports page, then click Name to display the price book details.

2. Click the Publishing Options tab, select the publishing options, then click Publish Price Book. The price book is republished, not regenerated, and overrides existing formatted documents or templates.

Related Topics
Overview of Price Books, page 10-1
Viewing Price Books, page 10-10
Creating Delta Price Books, page 10-14

Viewing Price Books
In the Search page, do a search to find information about published full or delta price books, and view the published price book. From the search results, you can:
• View general information about each price book.
• Identify if errors occurred when the price book was published.
• View information about the current status of the price book request.
• View detailed information about a specific price book by clicking the price book Name.
• Create a delta price book from an existing full price book by clicking the Create Delta icon.
• Delete an existing full or delta price book.
Note: The following conditions apply to the search process:

- You can use partial search strings, such as A%, in the search field, but you cannot use blank queries or search only using the % sign.

- External users can view only the logged in customer and related parties in the Customer field. The Pricing Perspective and Operating Unit search fields are not visible to external users.

- If the pricing perspective of Purchasing is selected in the main search criteria then a) the Customer field is not available in the additional criteria and b) the list of values for the List Name criteria contains only price lists but not pricing agreements or sales agreements.

- If a search is performed with the criteria Pricing Perspective = Purchasing, then the Customer column is not displayed. Price books with Purchasing as the pricing perspective will display null for the Customer column in the Search results.

To view price books:

1. Navigate to the Search page and search to find the price books.

The search results display additional information about the price books (selected fields listed). You can sort the Price Book Name, Customer, and Pricing Effective Date columns by clicking the column title.
• Name: Displays the price book name.
  • The link on the price book name is disabled when the price book is being generated or published (for example, if the concurrent request is in progress).
  • The delta price book is assigned the same name as the parent full price book; however, the Type field identifies it as either a full or delta price book.

• Pricing Effective Date: Displays the effective date of the prices listed in the price book (not necessarily the date that the price book was generated). For example, if you published a price book on September 9, 2007, with the pricing effective date of December 13, 2006, then the Effective Date appears as 13-Dec-2006.

• Pricing Errors: Identifies if errors occurred when the price book was generated or published. If errors occurred, you can correct them before regenerating or republishing the price book. Typical errors can include:
  • Missing pricing attribute needed for a formula calculation.
  • Duplicate price lists lines due to precedence.
  • Item and UOM not found on a price list.

  Note: If there is no price for an item, then the list price is blank.

• View Request Status: Click a request status icon to display additional information about the concurrent request and diagnostic information about the status (such as request date, successful or failed request).

• View Document: View the existing price book (if published as .pdf, .rtf, or .xls) by clicking the document name. If you select a template and document type and publish the price book, the formatted document is stored automatically. You can click the View Document link on the Search page or Details page to view that document.

• Create Delta: Click Create Delta to publish a delta price book that lists only those products whose products and prices have changed since the selected full price book was last published.

To view details about a specific price book:
1. From the price book search results, click the price book name to display the Price
Book Details window.

**Note:** If the pricing perspective is Purchasing, then the Customer and Customer Number fields are not displayed in the header region of the Price Book Details page.

### Price Book Details page

<table>
<thead>
<tr>
<th>Price Book: TC_367</th>
<th>Publish Price Book</th>
<th>Create Delta</th>
</tr>
</thead>
<tbody>
<tr>
<td>Currency = US Dollar</td>
<td>Pricing Effective Date: 10-04-2006</td>
<td>Item Quantity: 5</td>
</tr>
<tr>
<td>Customer: A. C. Networks</td>
<td>Item Number: 5</td>
<td>Product Criteria: Item Number AS34999</td>
</tr>
<tr>
<td>Operating Unit: 1443</td>
<td></td>
<td>View Document:</td>
</tr>
<tr>
<td>Vision Operations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Order Management</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Price Book Lines tab

You can view the following information in the Price Book Details page:

- **Price Book Lines tab**

You can search for a specific item in the price book by entering a value in the product field. The search results will be returned in a table and you can click on the View Hierarchy icon to see the pricing details of the item such as related modifiers, price breaks, and other details. Customer item number and customer item descriptions are available if cross-references exist between the inventory item number and customer item number. (Select to display these columns when setting up personalization options for the price book.)

In the Price Book Lines tab, the products in the price book appear grouped by item categories. An item and UOM combination has a unique price but will be repeated in all the item categories to which the item belongs.
Note: If an internal item is mapped to more than one customer item for a customer, then no value will display for the Customer Item Number and Customer Item Description fields in the Price Book Lines tab.

- Publishing Options tab
  Select publishing options to republish the price book. For information on publishing options, see Creating a Price Book, page 10-2.

- Additional Pricing Criteria tab
  Displays any qualifiers or pricing attributes entered as pricing calculation criteria.

  Note: You can define additional criteria information such as pricing attributes or qualifier inputs in the Additional Criteria region when you create a price book. For example, if a price is calculated using a formula and a pricing attribute is used in the formula calculation, then you can define the pricing attribute in this region.

To delete a price book:
From the price book search results, select the price book to be deleted, and then click Delete. When a full price book is deleted, its related delta price book is also deleted. You cannot delete a full or delta price book whose concurrent request is in progress (such as create or publish).

Related Topics
Creating Price Books, page 10-2
Creating Delta Price Books, page 10-14

Creating Delta Price Books

A full price book lists products (items) and their related list and net prices. However, you can generate a delta price book to view only the products and prices that have changed since you published a specific full price book. The delta price book lists:

- Products whose prices have changed since the last full price book was published.

- Eligible products added or deleted since the last full book was published.
The pricing engine evaluates the following dates to determine if changes occurred since the full price book was generated:

- **New Pricing Effective Date**: The date that the delta price book is to be generated. This can be a current or future date.

- **Pricing Effective Date**: The date when the *full* price book was generated.

When you generate the delta price book, only the *changed items* are published.

For example, if Item AS54888 was $5 when the original full price book was generated (Pricing Effective Date = June 12, 2006) but the item is now $7 (New Pricing Effective Date = current date), then this item and its new price would be published in the delta price book.

- When you delete a full price book, its delta is also deleted.

- You cannot change the delta price book name because it defaults from the full price book name.

- The Price Book Type identifies if the price book is Delta or Full.

**To create a delta price book:**

1. Navigate to the Create Delta Price Book page.
Create Delta Price Book Page

2. Select the price calculation criteria:

New Pricing Effective Date: Enter the new pricing effective date for the delta price book. The delta price book compares the prices and products on the new pricing effective date to those published in the full price book based on the pricing effective date. Only the prices and products that have changed are published in the delta price book.

3. Select the publishing options. All other input criteria are identical to those available in the corresponding full price book.

Related Topics

Creating Price Books, page 10-2
Reports and Concurrent Programs

This chapter covers the following topics:

- Overview of Reports and Concurrent Programs
- Accrual Details Report
- Attribute Mapping Rules Error Report
- Build Attribute Mapping Rules Program
- Build Formula Package Program
- Cross Order Volume Load
- Cross Order Volume Report
- Modifier Details Report
- Price Lists Report
- Pricing Formulas Report
- Purge Pricing Engine Requests Program
- QP: Bulk Import of Price List Program
- QP: Maintains the Denormalized Data in QP Qualifiers
- QP: Pattern Upgrade
- QP: Performance Control
- QP: Security Control with Views Conversion
- Qualifier Grouping report
- Update Price Lists with Multicurrency Conversion Criteria
- Update Promotional Limit Balances program
Overview of Reports and Concurrent Programs

Oracle Advanced Pricing provides reports and concurrent programs that enable you to administer, manage, and review your pricing operations and data to:

- Determine what pricing information has been established (for example, active price lists, formulas and qualifiers).

- Communicate pricing information internally and externally (for example, publishing price lists to internal and external users).

- Take action based on order or pricing activity (for example, issuing a credit memo based on reported accruals).

  **Note:** When Pricing Security is ON, security privileges determine which pricing entities you can view from the list of values. View or Maintain privileges determine the actions that you can do in various windows.

Accrual Details Report

The Accrual Details report enables you to run a report to view modifiers that have been set up for accruals or those with associated Coupon Issue information. Using this report, you can quickly see which coupons have been issued and the coupon numbers generated for a modifier.

**Report Submission**

In the Submit Request window, Name field, select Accrual Details.

**Report Parameters**
Accrual Details Report

- Modifier Name From/To: Select a range of modifier names to narrow the report to the names that fall between the specified range. For example, if you specified modifier names A to F, modifier names G and H will not be included in the report.

- Start/End Date Active: Select the start and end date range of the modifiers to be included in the report.

- Qualifier Context: Select a qualifier context to narrow the report to only those modifiers with the selected qualifier context.

- Qualifier Attribute Value From/To: Select specific qualifier attribute to further define the selected qualifier context.

Attribute Mapping Rules Error Report

This program provides status and error messages to advise you about the following:

- Invalid attribute mapping rules.

- Warnings if the program completes with Attribute Mapping errors.
  - Success: Program completes without Attribute Mapping errors.
  - Warning: Program completes with one or more Attribute Mapping errors.
  - Error: Program cannot complete due to some exception/runtime error.

The report displays an entry in the file log for every attribute mapping rule that is invalid. The entry includes details, such as the context, attribute, pricing type, request type, attribute mapping rule, and error message produced by the invalid mapping.
You can run the report for a single Request Type, such as Order Management (ONT) or all request types. The number of errors appears on the log after the report is run.

Report Submission

In the Submit Request window, Name field, select Attribute Mapping Rules Error Report.

Report Parameters

**Attribute Mapping Rules Error Report Parameters**

![Attribute Mapping Rules Error Report Parameters](image)

Request Type: Select a single Request Type or leave it blank to run report for all request types.

**Build Attribute Mapping Rules Program**

This program generates entries into the BUILD_CONTEXTS application program interface (API). You pre-generate entries into this API so that the pricing engine evaluates only the qualifier and pricing attributes used in the price lists, modifiers, and formulas that are relevant to each call rather than all of the attribute mapping rules.

*Note:* The Build Attribute Mapping Rules program sources the attributes that are used only in the active pricing setup if the profile value QP: Build Attributes Mapping Options is set to Yes. If the profile value QP: Build Attributes Mapping Options is set to No, this program sources the attributes that are used in both the active and inactive setup. The default value of the profile QP: Build Attributes Mapping Options is No; you can update it only at the site level.

**Recovery Process**

If the process fails:

- The QP_BUILD_SOURCING_PVT package becomes invalid.
- All subsequent pricing calls fail.

To recover,
1. Check the concurrent program log to view any errors. If needed, log in to SQL/PLUS and check the errors associated with compiling the QP_BUILD_SOURCING_PVT body. Problems may include:
   - You reference an API in an attribute mapping rule and the API is invalid or does not exist.
   - You have a typographical error in an attribute mapping rule that refers to an API or global structure.

2. Fix the attribute mapping rule in the Attribute Mapping window.

3. Rerun this concurrent process.

**Report Submission**

Run this program after you:

- Make a change to the mapping rule for a specific qualifier attribute. For example, run this process after you map the Geography context to a qualifier attribute.

- First use a qualifier in either a modifier or a price list. For example, run this process after the first time that you use Customer Class as a qualifier for a price list or modifier.

In the Submit Request window, Name field, select Build Attribute Mapping Rules.

Run the process during a time when most users are not logged on to the system. You may encounter a record locking problem if this process runs at the same time that the pricing engine is processing calls.

**Report Parameters**

None

**Build Formula Package Program**

To generate the formula package, you should run the Build Formula Package concurrent program every time that you set up a new formula expression. Every time a new formula expression is created or updated, a Warning dialog box displays a message to run the Build Formula Package concurrent program.

This concurrent program builds the Formula Package containing statements that use bind variables for evaluating the formula value. This generated package is called from the main engine formula package at run time to calculate the formula value.

**Note:** If the Formula expression already exists in the current generated formula package, the Warning box does not appear.
Report Submission

In the Submit Request window, Name field, select Build Formula Package.

Report Parameters

None

Cross Order Volume Load

Cross order volume amount totals are based on the list price (not selling price) of the order lines. Run the Cross Order Volume Load program to populate the cross order volume tables. Then you can run the Cross Order Volume report to view the information from the cross order volume tables. The Cross Order Volume Load program uses the following criteria when computing cross order volume attributes:

- Accumulates orders for items in the Cross Order Item Amount/Quantity Summary that have modifiers set up with cross order volume attributes, such as Period 1 Amount, Period 1 Item Quantity, Period 1 Item Amount. Similarly, the pricing engine gives total Cross Order summaries only if a cross order qualifier has been used in a modifier. To ensure that all item totals are accumulated and loaded into the cross order tables, run the Cross Order Volume Load concurrent request after setting up any modifiers using either:
  - a cross order amount qualifier that has not been used previously or
  - a cross order item amount/quantity pricing attribute for an item that has not been used previously

- Has a total based on list price (not selling price).

- Considers orders and order lines only in Booked status.

- Includes recurring charges. (Order lines that have a charge periodicity attribute associated such as Monthly, Yearly are recurring charges.)

- Does not support across items in an item category.

  **Note:** Cross order item amount and cross order item quantity only accumulates order line totals per item, not for order lines across items in an item category.

Example of Cross Order Volume Period Processing

The cross order volume profile options define which order lines to include in the cross order volumes. For example, consider the following cross order volume period setups:

- Profile option QP: Cross Order Volume Period: 30
• Profile option QP: Cross Order Volume Period 2: 60

• Profile option QP: Cross Order Volume Period 3: 90

If you set the profile options as described, then run the Cross Order Volume Load program with an effective date of December 31, 2005, the pricing engine considers orders lines with request dates from the following periods:

• Cross order period 1: Order lines with a request date between 1-December and 31-December-2005

• Cross order period 2: Order lines with a request date between 1-November and 31-December-2005

• Cross order period 3: Order lines with a request date between 2-October and 31-December-2005

Report Submission

In the Submit Request window, Name field, select Cross Order Volume Load.

Report Parameters

Cross Order Volume Report Parameters

Operating Unit: Enter either a single operating unit or leave this field blank for all operating units.

Effective Date: Provide the load effective date; otherwise, the program uses the current date.

Cross Order Volume Report

Run the Cross Order Volume report to view the information from the cross order volume tables. The report displays the total order amount, total item amounts, and total item quantities for each customer and period. The report displays the cross order quantity values (for example, Period 1 Item Quantity) rounded to the nearest whole unit. Cross order amount values (for example, Period 1 Amount and; Period 1 Item Amount) are rounded to two decimal places.
**Note:** The Cross Order Volume report displays only totals for the operating units to which the responsibility has access. If you have implemented Multi-Org Access Control, data reported is for the list of operating units as restricted by MO: Security Profile.

**Report Submission**

In the Submit Request window, Name field, select Cross Order Volume Report.

**Report Parameters**

None

**Related Topics**

Cross Order Volume Load, page 11-6

**Modifier Details Report**

This report displays modifier information.

**Report Submission**

In the Submit Request window, Name field, select Modifier Details.

**Report Parameters**
Modifier Details Report Parameters

- Modifier Number From/To: Enter the range of modifier numbers for which you want the report generated.

- Modifier Name From/To: Enter the range of modifier names.

- Modifier Version From/To: Enter the range of modifier versions.

- Start Date Active/End Date Active: Enter the range of dates for the active modifiers.

- Active Modifier Only: Select Yes to display only active modifier lists and No to display all modifier lists.

- Active Modifier Lines Only: Select Yes to display only active modifier lines or No to display all modifier lines.

- Item Name: Select item name criteria to display modifiers for the item names that you specify.

- Item Category: Select item category criteria to display modifiers for the item categories listed.

- Customer Name: Select customer name criteria to display modifiers associated with the specified customer names.
• Customer Class: Select customer class criteria to display modifiers assigned to the specified customer classes.

• Price List: Select the price list criteria to display modifiers associated with the specified price list.

   **Note:** If pricing security is enabled, the report includes only modifiers for which you have View or Maintain access privileges.

### Price Lists Report

This report displays the following price list information:

• Report by price list name.

• Options to print report for active and inactive price lists based on effectivity date. If multicurrency is enabled, the report prints other currency setup if the price list is multicurrency enabled.

• Display all other header information. If price list is multicurrency enabled, report includes header information from the associated multicurrency conversion list.

• Qualifiers attached to price list.

• Secondary price lists attached to price list.

• Detail of list lines attached to price list.

• Detail of item (for example, inventory item, service item).

• Pricing attributes for item.

• Price breaks for item.

• Price formulas attached to price list line.

### Report Submission

In the Submit Request window, Name field, select Price Lists.

### Report Parameters
Price List Report Parameters

- Price List From/Price List To: Enter a price list or a range of price lists.
- Start Date Active/End Date Active: Enter a date or a range of dates.
- Active Flag: Select Yes to display active price lists only, or select No to display all price lists. The default value is Yes.
- To Currency Code: Select one Currency To multi-currency conversion list setup information or None.
  
  If the multi-currency feature is enabled for a price lists, the names of the attached Currency Conversion Criteria, Base Markup Operator, Base Markup Value, and Base Markup Formula are returned.

  **Note:** If pricing security is enabled, only price lists for which you have View or Maintain access privileges are included in the report.

Pricing Formulas Report

This report displays pricing formulas and their details, including factor lists.

Report Submission

In the Submit Request window, Name field, select Pricing Formulas.

Report Parameters
Pricing Formulas Report Parameters

- Formula From/To: Enter an individual formula or range of formulas.
- Price List From/To: Enter an individual price list or a range of price lists.
- Start Date Active/End Date Active: Enter an individual date or a range of dates.

Purge Pricing Engine Requests Program

This program purges all pricing engine requests or selected requests. Run this program on a regular basis to purge the historical data from the pricing debug tables. This improves the performance of the Pricing Engine Request Viewer window.

Report Submission

In the Submit Request window, Name field, select Purge Pricing Engine Requests.

Report Parameters

Purge Pricing Engine Requests Parameters

This program has two input parameters:
- Keep Last (N) Days of Requests: The pricing engine purges requests older than the number of days entered. For example, enter 30 to keep requests created in the last 30 days. Requests older than 30 days are purged.
• Request Name: Enter a Request Name to delete the pricing engine requests that fully or partially match the name that you enter.

Recovery
None

QP: Bulk Import of Price List Program

The Pricing Data Bulk Loader API is implemented as the concurrent program QP: Bulk Import of Price List. Using the concurrent program, you define the pricing data to be imported (bulk loaded), then run the concurrent program to import the price list data from interface tables into the Oracle Advanced Pricing tables. To improve processing efficiency, you can schedule the concurrent program to run at optimal times, such as when no active users are on the system.

The QP: Bulk Import of Price List program enables you to complete the following tasks:

• Do bulk validations and bulk loading.

• Provide all validation error messages in the same run for records that were not uploaded rather than returning errors one after another.

• Provide the ability to multi-thread the interface loader similar to Order Import with the ability to multi-thread within the same price list.

You can set the profile option QP: Batch size for Bulk Upload (QP_BATCH_SIZE_FOR_BULKUPLOAD) to restrict the number of records that are read to the PL/SQL tables. This helps to improve the bulk import performance. The default value for the profile is 1,000, but you can change this value to suit your hardware configuration. For more information, see the Advanced Pricing Implementation Guide, Profile Options.

Scenarios for Using the QP: Bulk Import of Price List Program

Your business practices may require that you upload price list data on a regular basis, such as in the following scenarios:

• When a new price list must be created by uploading a price change file.

• When new products lines are created, new offerings to new channels, acquisitions of product lines or companies, new product rollout, and when new price lists are created.

• When you are implementing a new sales territory, to bulk load existing price lists or to upload pricing from regions that may have their pricing on spreadsheets.

Processes performed by the QP: Bulk Import of Price List Program

The QP: Bulk Import of Price List program completes the following processes:

• Creates and updates price list headers, lines, pricing attributes, qualifiers, and
breaks using the interface tables.

- Deletes price list lines, pricing attributes, qualifiers, and breaks using the interface tables.

- (Optionally) Uses the Process Parent parameter in the concurrent program to load list lines even if the pricing attribute validation fails. If the Option is NO, and a pricing attribute fails, both parent and child lines are not uploaded.

- Stores the interface program ID in the main pricing tables so that you know which batch ID updated the records. This program updates only the IDs that are derived from Value To ID conversions back to the interface tables. If a record generates errors, the record remains in the interface tables where you can view the IDs.

- Marks a record as being processed so that multiple processes do not pick up the same record.

- Automatically deletes the successfully uploaded rows from the interface tables.

- Processes a specific set rather than the entire eligible data.

**Note:** For more information on populating the interface tables for bulk loader, see Oracle Advanced Pricing Implementation Guide.

### Considerations for Running the QP: Bulk Import of Price List Program

Review the following considerations before running the QP: Bulk Import of Price List program:

- Source System/Pricing Transaction Entity (PTE): The concurrent program retrieves records only when the source system code and the PTE code match with the same profile values or null.

- Price lists that are attached to the following entities are not retrieved for bulk loader processing:
  - Sales Agreements (list source code of BSO)
  - Service Contracts (list source code of OKS)
  - Pricing Agreements (list type code of AGR)

- Importance of Log and Output file: The request output contains the following information:
  - Number of records processed
• Number of successful records

• Error messages (if applicable)

The concurrent request log file provides the processing details. The log file also lists debug messages if Debug On parameter was set to Yes. If you enter an entity name that is not unique for the eligible records, none are selected for processing.

• Child lines, parents, and grandparent records must be populated to insert, update, and delete records: To insert, update, or delete records, ensure that the corresponding parent and grandparent records (if applicable) are also in the interface table so they are eligible for retrieval by the concurrent program.

• Errors before resubmit: For records with errors in the interface tables, set the request_id and process status flag columns to NULL so that these records are selected in the next run. When the Entity Name is specified as a Report parameter, you do not need to reset these values.

• Data for error messages in a QP interface table: The table QP_INTERFACE_ERRORS is populated with the processing error messages that are then written to the output file of the concurrent request. Occasionally, you must purge this table of this data.

Report Submission

In the Submit Request window, Name field, select QP: Bulk Import of Price List.

Report Parameters

**QP: Bulk Import of Price List Parameters**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entity</td>
<td>PRL (price list)</td>
</tr>
<tr>
<td>Entity Name</td>
<td></td>
</tr>
<tr>
<td>Process ID</td>
<td></td>
</tr>
<tr>
<td>Process Type</td>
<td></td>
</tr>
<tr>
<td>Process Parent</td>
<td>Yes</td>
</tr>
<tr>
<td>No of Threads</td>
<td>1</td>
</tr>
<tr>
<td>Turn Debug On</td>
<td>No</td>
</tr>
<tr>
<td>Enable Duplicate Line Check</td>
<td>Yes</td>
</tr>
</tbody>
</table>

• Entity: Indicates which pricing entity is to be processed. The default value is PRL (price list).
• Entity Name: This is an optional parameter. Enter the name of the price list to be processed. If this field is left blank, the system processes all entities of the selected entity type that are available for processing in the interface tables.

If you enter a price list name, that price list is considered for import even if it failed in a previous import and regardless of the other flags (for example, even if PROCESS_STATUS_FLAG not equal to P, or PROCESS_FLAG not equal to Y or REQUEST_ID not equal to NULL in the QP_INTERFACE_LIST_HEADER record).

• Process ID: This value corresponds to the process_id in the interface tables. The Process ID groups data in the interface table. You can select criteria to specify which records to process.

If this field is left blank, all available records for processing are considered subject to the restrictions entered in the Entity Name field.

• Process Type: This field corresponds to the process type that is listed in the interface tables such as XML. If specified, the bulk loader processes only the records with PROCESS_TYPE column matching the value entered here.

• Process Parent: Select Yes (the default) or No to determine if the loader should process a price list line when validation for a child pricing attribute fails. Valid values are Yes (the default) and No.

• No of Threads: Enter a number that indicates the total number of child processes or threads to achieve multithreading for list lines and their child records. The default value is 1.

Multithreading occurs when the child concurrent processes are initiated after a user submits the Process Parent request. The parent process first processes the list header records and then the qualifiers records before spawning child processes. The child processes upload price list lines and attributes.

**Note:** Multithreading can impact the length of processing time that is required; therefore, you should not exceed the number of Central Processing Units (CPUs) that are available when running the program. Ideally, you should schedule this process for a slow processing period or when few users are on the system.

• Turn Debug On: Select Yes or No (default):
  • Select No to improve loading performance; however error messages are not sent to the Debug log.
  • Select Yes to have all error messages sent to the Debug Log.

The Debug On parameter controls only the log files. However, error messages, number of records processed, and other related information is written to the
output file, regardless of the value set for Debug On.

- Enable Duplicate Line Check: The bulk loader can upload thousands of lines into the pricing (QP) lines table. If Enable Duplicate Line is set to Yes, then the QP: Bulk Import of Price List checks for duplicates lines and displays an error message if duplicate lines are found. If it is set to No, then the duplicate check is not done. The default value is Yes.

**QP: Maintains the Denormalized Data in QP Qualifiers**

This program populates the denormalized column data in the pricing tables and fixes data corruption specific to the denormalized columns that occur from a patch application or other set-up issues. You can run this program on a periodic basis or if the pricing engine performance decreases.

This program calculates and populates modifier statistics that the pricing engine search optimizer uses to find modifiers by the most direct method. For each modifier at the list and line level, the process calculates information related to its:

- Qualifiers: Indicates if the list or line has qualifiers.
- Directness: Indicates how specific (selective) or non-specific (non-selective) its qualifiers are. More specific qualifiers are more direct.
- Fastest search path: The qualifiers in each modifier list and line that are the most direct become primary qualifiers; the remainder become secondary qualifiers. The pricing engine search optimizer searches the primary qualifiers first.

This program automatically runs after you add or change each modifier and recalculates some statistics for that modifier. In addition, you should run the program periodically to recalculate all of the statistics for all the modifiers.

**Note:** The Request log for an automatic run is not saved and cannot be viewed in My Requests if the QP: Maintains the Denormalized Data in QP Qualifiers program runs successfully. The log file is saved; you can view the file only when an exception occurs.

**Report Submission**

In the Submit Request window, Name field, select QP: Maintains the Denormalized Data in QP Qualifiers.

Run the program during a time when most users are not logged on to the system. You may encounter a record locking problem if this program runs at the same time that the pricing engine is processing calls.

**Report Parameters**
QP: Maintains the Denormalized Data in QP Qualifiers parameters

- List Header ID (Low/High): Enter the range of values for the modifier lists. The two parameters can be the same value but neither can be null.

- Update Type: Select the update type such as All, Denormalized Columns, Factor Pricing Attributes, List Header Phases, Pricing Phases, or Qualification Indicator.

Recovery
None

QP: Pattern Upgrade

Use this program to upgrade the existing pricing setup to patterns. You must run this concurrent program with empty criteria to upgrade all the existing setup to pattern and to avoid any discrepancies during pattern creation.

**Note:** It is not advisable to change between pattern and non-pattern search algorithm frequently as pattern creation will not happen properly. This would lead to non-desired results of pattern search.

Report Submission
In the Submit Request window, Name field, select QP: Pattern Upgrade.

Report Parameters
None

QP: Performance Control

Use this program to update the qp_pricing_attributes table data for the factor lists which were created or updated with the profile value QP: Performance Control set to Yes.

**Note:** Ensure that you run this program before using the updated factor
list to update the pricing attribute values. The application does not evaluate the formula correctly when you use it to evaluate the price of price lists or modifiers prior to running this program.

Report Submission
In the Submit Request window, Name field, select QP: Performance Control.

Report Parameters

QP: Performance Control Parameters

- Starting List Header ID: Starting list header identifier of the factor list to be updated.
- Ending List Header ID: Ending list header identifier of the factor list to be updated.
- Performance Type: Factor.

QP: Security Control with Views Conversion
This program enables you to turn on pricing security for your entire installation. Before setting to the program to ON, ensure that you have completed the pricing security setup steps outlined in the Oracle Advanced Pricing Implementation Manual.

Note: QP: Security Control (read-only): This profile option displays the current setting of the security option for your entire installation (either on or off). You cannot directly update this profile option value - only the concurrent program QP: Security Control with Views Conversion can turn pricing security on or off.

Report Submission
In the Submit Request window, Name field, select QP: Security Control with Views Conversion.

Report Parameters
Security Control: Select ON or OFF.
• OFF (default): Once security is turned ON, it should not be turned OFF.

• ON: To turn security ON for your installation. If you are upgrading or freshly installing the security feature for the first time, ensure that you have completed the setup and implementation steps described in Oracle Advanced Pricing Implementation Manual, Pricing Security.

Qualifier Grouping report

This report shows details for qualifier groups including grouping conditions and effective dates within the group.

Report Submission

In the Submit Request window, Name field, select Qualifier Grouping.

Report Parameters

Qualifier Grouping report parameters

- Qualifier Context: Enter a qualifier context.
- Qualifier Attribute Value From and Qualifier Attribute Value To: Enter an individual qualifier attribute value or a range of qualifier attribute values.
- Start Date Active and End Date Active: Enter a date or a range of dates.

Update Price Lists with Multicurrency Conversion Criteria

This concurrent program enables you to maintain and use price lists in different currencies. Complete the following prerequisites before running this program:

1. Set the profile option QP: Multi-Currency-Installed to Yes (Y). The valid values for the profile are Yes (Y) or No (N). The default value is No.

2. Run the concurrent program Update Price Lists with Multi-Currency Conversion
Criteria only once.

Running this program does the following:

- Adds a new Multi-currency Conversion field to the Advanced Pricing - Price Lists and Pricing Agreements windows. This field displays the name of the multicurrency list currently attached to the price list but you can select other multicurrency lists from this field; however, you can select only one at a time.

- Generates a default multicurrency conversion list based on the Base Currency, Currency-To, and Rounding Factor values from existing price lists. This default multicurrency conversion list does not have other currencies or conversion criteria, only the base currency from the base price list. You must add currencies to the newly created multicurrency lists or create new multicurrency conversion lists if you want to include different currencies. You can then attach the multicurrency conversion list to the respective price list.

The following example shows the setup for five price lists before conversion and the multicurrency list that is created after the conversion:

<table>
<thead>
<tr>
<th>Currency</th>
<th>Rounding</th>
</tr>
</thead>
<tbody>
<tr>
<td>USD</td>
<td>-2</td>
</tr>
<tr>
<td>USD</td>
<td>-2</td>
</tr>
<tr>
<td>USD</td>
<td>-3</td>
</tr>
<tr>
<td>FRF</td>
<td>-1</td>
</tr>
<tr>
<td>CAD</td>
<td>NULL</td>
</tr>
</tbody>
</table>

The concurrent program creates four currency conversion criteria based on the price list currency and rounding factor of the price lists.

<table>
<thead>
<tr>
<th>Currency</th>
<th>Currency-To</th>
<th>Rounding</th>
</tr>
</thead>
<tbody>
<tr>
<td>USD</td>
<td>USD</td>
<td>-2</td>
</tr>
<tr>
<td>USD</td>
<td>USD</td>
<td>-3</td>
</tr>
<tr>
<td>FRF</td>
<td>FRF</td>
<td>-1</td>
</tr>
</tbody>
</table>
Attach the multicurrency conversion list to the respective price list. You can then attach the multicurrency conversion list to the respective price list. You must add new currencies to the existing multicurrency lists or create new multicurrency lists with the currencies required for conversion.

**Note:** Attaching a multicurrency list to the respective price list is a mandatory step - without it the pricing engine cannot use the current price lists as multicurrency price lists. After you run the concurrent program, you can create additional multicurrency lists or add existing currencies to the created multicurrency lists.

**Report Submission**

In the Submit Request window, Name field, select Update Price Lists with Multi-Currency Conversion Criteria.

**Report Parameters**

*Update Price Lists with Multicurrency Conversion Criteria*

Do you want to enable Multi-Currency price lists?: Select Yes to enable multicurrency price lists.

**Note:** The program must be run initially only once to activate the multicurrency feature; otherwise, data corruption may result. After you have successfully run the concurrent program, all existing price list or agreement windows will be converted to multicurrency price lists. You should not return to non multicurrency price lists. Changing the profile.
back to N (no) may cause undesired results if conversion criteria have been used. Oracle does not support changing the setting back to No.

Recovery

None. Once you have successfully run the concurrent program, do not return to non-multicurrency price lists. All existing price list windows are converted to multicurrency price lists. Changing the profile option QP: Multi-Currency Installed back to N (no) may cause undesired results if conversion criteria have been used.

Update Promotional Limit Balances program

Use the Update Promotional Limit Balances program to update promotional limit balances for selected modifier lines.

Report Submission

In the Submit Request window, Name field, select Update Promotional Limit Balances.

Report Parameters

**Update Promotional Limit Balances**

- Modifier Number: To update limits for a selected modifier, enter the modifier number.
- Modifier Line Number: To update limits for a selected modifier line, enter the modifier line number.
- Limit Number: Enter a limit number.
- Limit balance Identifier: Enter the limit balance identifier.

Related Topics

Updating an Existing Limit Balance, page 3-121
This appendix describes the following formula scenarios.

Scenario 1

Splinters Glass Company manufactures windshields for cars and trucks. It sells both to wholesale customers and to retail customers.

To its retail customers, Splinters prices windshields based on the dimension of the sheet of glass according to the formula $3 \text{ currency units} \times \text{Width} \times \text{Height} \times \text{Thickness Factor}$.

The following table shows the thickness factors:

<table>
<thead>
<tr>
<th>Glass Thickness</th>
<th>Thickness Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 5 mm</td>
<td>10%</td>
</tr>
<tr>
<td>5 mm - 10 mm</td>
<td>15%</td>
</tr>
<tr>
<td>&gt; 10 mm</td>
<td>20%</td>
</tr>
</tbody>
</table>

Splinters sets up Oracle Pricing to use formula and factor-based pricing.

**Step 1 - Define attributes:**

1. In the attribute manager feature, define three new pricing attributes - width, height, and thickness - using the context of pricing attributes. For more information on attribute management and creating attributes, see *Oracle Advanced Pricing Implementation Manual*.

2. Save your work and close the window.
Step 2 - Create a pricing formula:

1. Create a formula header.
   - Formula Name: Glass Pricing Formula and Formula = 1 * 2 * 3 * 4

2. Create a formula line.
   - Formula Type: Numeric Constant
     - Component: 3
     - Step Number: 1

3. Create a second formula line.
   - Formula Type: Pricing Attributes
     - Pricing Attribute Context: Pricing Attributes
     - Pricing Attribute: Width
     - Step Number: 2

4. Create a third formula line.
   - Formula Type: Pricing Attributes
     - Pricing Attribute Context: Pricing Attributes
     - Pricing Attribute: Height
     - Step Number: 3

5. Create a fourth formula line.
   - Formula Type: Factor List
     - Component: Thickness Factor
     - Step Number: 4

6. Click Factors.

7. In the Base Pricing Attributes region, create a row.
   - Base Pricing Attribute: Thickness
• Comparison Operator: Between
• Value From: 0
• Value To: 5
• Adjustment Factor: 0.10

8. Create a second row in the Base Pricing Attributes region.
• Base Pricing attribute: Thickness
• Comparison Operator: Between
• Value From: 5
• Value To: 10
• Adjustment Factor: 0.15

9. Create a third row in the Base Pricing Attributes region.
• Base Pricing Attribute: Thickness
• Comparison Operator: Between
• Value From: 10
• Adjustment Factor: 0.20

10. Save your work and close the window.

Step 3 - Create a price list for retail customers, create a list line, and attach the formula:
1. Create a price list.
   • Name: Retail
   • Select the Qualifiers tabbed region.

2. Add a qualifier.
   • Context: Customer
   • Attribute: Customer Class
   • Value: Retail
3. Create a new list line.
   - Item: Windshield
   - Dynamic Formula: Glass Pricing Formula
   - UOM: Each
   - Method: Amount
   - Line Type: Price List Line

4. Save your work and close the window.

Scenario 2

For its retail customers, Splinters charges for its windshield warranty protection plan at 10 percent of the cost of the replacement windshield. The formula is 10 percent * price of the Windshield item on the Replacement price list). Splinters sets up Oracle Pricing to use formula-based pricing.

Step 1 - Create a new pricing formula:
1. Create a formula header.
   - Formula Name: Warranty Pricing Formula
   - Formula: 1*2

2. Create a formula line.
   - Formula Type: Numeric Constant
   - Component: 0.10
   - Step Number: 1

3. Create a second formula line.
   - Formula Type: Price List Line
   - Component: Windshield line of Replacement price list
   - Step Number: 2

4. Save your work and close the window.
attach the formula:

1. Create a price list.
   - Name: Warranties

2. In the Qualifiers region, add a qualifier.
   - Context: Customer
   - Attribute: Customer Class
   - Value: Retail

3. Create a list line.
   - Item: Protection Plan
   - UOM: Each
   - Dynamic Formula: Warranty Pricing Formula
   - Method: Amount
   - Line Type: PLL

4. Save your work and close the window.
This appendix covers the following topics:

- Modifier Scenarios
- Discount
- Surcharge
- Price Break
- Other Item Discount
- Promotional Goods
- Coupon Issue
- Item Upgrade
- Terms Substitution
- Freight and Special Charges
- New Price

**Modifier Scenarios**

The following scenarios illustrate how to meet business needs by creating modifiers. The scenarios are organized by the following modifier concepts:

- Discount
- Surcharge
- Price break
- Other item discount
- Promotional goods
• Coupon issue
• Item upgrade
• Terms substitution
• Freight and special charges
• New price

Discount

Scenario 1

If the customer is a preferred customer or customer spends more than 150 currency units, they receive 10 percent off the order.

1. Create a modifier.
   • Modifier Type: Discount
   • Modifier Level: Order
   • Application Method: Percent
   • Value: 10

2. In the Line Qualifiers window, create two line qualifiers.
   • Grouping Number: 1
   • Qualifier Context: Volume
   • Qualifier Attribute: Order Amount
   • Operator: Between
   • Value From: 150
   • Grouping Number: 2
     Qualifier Context: Customer
     • Qualifier Attribute: Customer Class
     • Operator: =
     • Value From: Preferred
Scenario 2

For any 10 compact discs purchased by April 2000, the customer receives two currency units off.

1. Create a modifier.
   - Modifier Type: Discount
   - Modifier Level: Line
   - End Date: 30 April 2000
   - Product Attribute: Item Category
   - Product Attribute Value: CD
   - Volume Type: Item Quantity
   - Break Type: Recurring
   - Value From: 10
   - Application Method: Lumpsum
   - Value: 2

Scenario 3

For every eight currency units spent on cat food, the customer accrues five shopper points.

1. Create a modifier.
   - Modifier Type: Discount
   - Modifier Level: Line
   - Product Attribute: Item Category
   - Product Attribute Value: Cat Food
   - Volume Type: Item Amount
   - Break Type: Recurring
   - Value From: 8
   - Select Accrue
Scenario 4

Customers mentioning the Summer Special Promotion (an Ask For promotion) get $5 off of any tennis racket except the FastFireIII model.

1. Create a modifier.

**In Modifiers Summary tab**
- Modifier No: SUMMER SPECIAL
- Modifier Level: Line
- Modifier Type: Discount
- Automatic box: Selected
- Product Attribute: Item Category
- Product Attribute Value: Tennis Rackets

**In Discounts/Charges tab**
- Application Method: Amount
- Value: 5

**In Advanced tab**
- Ask for box: Select. Instructs the pricing engine to apply this modifier only if the customer asks for it.
- Click Exclude. In the Exclude Items window, create an excluded item:
  - Product Attribute: Item
  - Product Value: FastFire III
  - Exclude box: Select

Scenario 5

Customers who buy two bottles of shampoo receive one currency unit off of the third bottle of shampoo.

1. Create a modifier.
• Modifier Type: Discount
• Modifier Level: Line
• Product Attribute: Item
• Product Attribute Value: Shampoo
• Volume Type: Item Quantity
• Break Type: Recurring
• UOM: Each
• Value From: 3
• Application Method: Lumpsum
• Value: 1

Surcharge

Scenario 1

Customers in the National Accounts territory who spends less than 1000 currency units per order receives a 2 percent surcharge.

1. Create a modifier.
   • Modifier Type: Surcharge
   • Modifier Level: Order
   • Application Method: Percent
   • Value: 10

2. In the Line Qualifiers window, create two line qualifiers for the modifier.
   • Grouping Number: 1
   • Qualifier Context: Volume
   • Qualifier Attribute: Order Amount
   • Operator: Between
Scenario 2

Any customer placing a rush order (delivery required within two days) for replacement motors receives a $50 surcharge.

1. Create a modifier.
   - Modifier Type: Surcharge
   - Modifier Level: Line
   - Product Attribute: Item Category
   - Product Attribute Value: Motors, Spare
   - Application Method: Amount
   - Value: 50

2. In the Line Qualifiers window, create a qualifier for the modifier. You have created qualifier attribute Days to Requested Delivery and created the appropriate sourcing rules for this attribute.
   - Grouping Number: 1
   - Qualifier Context: Order
   - Qualifier Attribute: Days to Requested Delivery
   - Operator: Between
   - Value To: 2
Price Break

Scenario 1

All employees in Company ABC’s mobile phone plan receive per minute discounts based on minutes used, as follows:

<table>
<thead>
<tr>
<th>Minutes</th>
<th>Discount Per Minute ($USD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-120</td>
<td>0.05</td>
</tr>
<tr>
<td>120-240</td>
<td>0.10</td>
</tr>
<tr>
<td>240-420</td>
<td>0.12</td>
</tr>
<tr>
<td>&gt; 420</td>
<td>0.15</td>
</tr>
</tbody>
</table>

A customer who uses 150 minutes receives the following discounts:

- $0.05 per minute discount on 120 minutes
- $0.10 per minute discount on 30 minutes

1. Create a modifier.
   - Modifier Type: Price Break Header
   - Modifier Level: Line
   - Product Attribute: Item
   - Product Attribute Value: Minutes
   - Volume Type: Item Quantity
   - Break Type: Range
   - Adjustment Type: Discount
   - Qualifier Attribute: Customer Name

2. In the Line Qualifiers window, create a qualifier for the price break modifier.
   - Grouping Number: 1
• Qualifier Context: Customer

• Operator: =

• Value From: ABC

3. In the Price Break Lines region, enter the break lines.

<table>
<thead>
<tr>
<th>Value From</th>
<th>Value To</th>
<th>Application Method</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>120</td>
<td>Amount</td>
<td>.05</td>
</tr>
<tr>
<td>120</td>
<td>240</td>
<td>Amount</td>
<td>.10</td>
</tr>
<tr>
<td>240</td>
<td>420</td>
<td>Amount</td>
<td>.12</td>
</tr>
<tr>
<td>420</td>
<td>--</td>
<td>Amount</td>
<td>.15</td>
</tr>
</tbody>
</table>

Scenario 2

Customers who buy cases of TY brand products across an order receive a percent rebate per case as follows:

<table>
<thead>
<tr>
<th>Cases</th>
<th>Rebate per case (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 500</td>
<td>2</td>
</tr>
<tr>
<td>500 - 1,000</td>
<td>3</td>
</tr>
<tr>
<td>&gt; 1,000</td>
<td>5</td>
</tr>
</tbody>
</table>

1. Create a modifier.
   • Modifier Type: Price Break Header
   • Modifier Level: Group of Lines
   • Product Attribute: Item Number
   • Product Attribute Value: TY
   • Volume Type: Item Quantity
- Break Type: Point
- UOM: Case
- Adjustment Type: Discount
- Select Accrue

2. In the Price Break Lines window, enter the break lines:

<table>
<thead>
<tr>
<th>Value From</th>
<th>Value To</th>
<th>Application Method</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>500</td>
<td>Percent</td>
<td>2</td>
</tr>
<tr>
<td>500</td>
<td>1,000</td>
<td>Percent</td>
<td>3</td>
</tr>
<tr>
<td>1,000</td>
<td>--</td>
<td>Percent</td>
<td>5</td>
</tr>
</tbody>
</table>

**Other Item Discount**

**Scenario 1**

Customers who buy more than three meters of fabric across an order receive 10 percent off thermal curtain linings and 5 percent off drapery services.

1. Create a modifier.
   - Modifier Type: Other Item Discount
   - Modifier Level: Group of Lines
   - Product Attribute: Item Category
   - Product Attribute Value: Fabric
   - Volume Type: Item Quantity
   - Break Type: Point
   - UOM: Meter
   - Value From: 3

2. In the modifier details, enter the get products.
• Product Attribute: Item
• Product Value: Thermal Linings
• Application Method: Percent
• Value: 10

• Product Attribute: Item
• Product Value: Drapery Services
• Application Method: Percent
• Value: 5

Scenario 2

Customers who buy six chairs and a coffee table or six chairs and two standard lamps, will get $400 off a dining table assuming the dining table is on the order as well.

1. Create a modifier.
   • Modifier Type: Other Item Discount
   • Modifier Level: Line
   • Product Attribute: Item
   • Product Attribute Value: Dining Chair
   • Volume Type: Item Quantity
   • Break Type: Point
   • UOM: Each
   • Value From: 6

2. In the modifier details, enter the related product.
   • Group No: 1
   • Product Attribute: Item
   • Product Value: Coffee Table
   • UOM: Each
Product Attribute: Item
Group No: 2
Product Value: Standard Lamp
Pricing Attribute: Item Quantity
Operator: Between
Value From: 2
UOM: Each

3. In the modifier details, enter the get product.
   Product Attribute: Item
   Product Value: Dining Table
   Application Method: Amount
   Value: 400

Promotional Goods

Scenario 1

Customers who buy one bottle of shampoo receive a free bottle of conditioner.

1. Create a modifier.
   Modifier Type: Promotional Goods
   Modifier Level: Line
   Product Attribute: Item
   Product Attribute Value: Shampoo
   Volume Type: Item Quantity
   Break Type: Recurring
   UOM: Each
   Value From: 1
2. In the modifier details, enter the get product.
   - Product Attribute: Item
   - Product Value: Conditioner
   - Get Quantity: 1
   - Get Price: <price list line for conditioner>
   - Get UOM: Each
   - Application Method: Percent
   - Value: 100

**Scenario 2**

Customers who buy two bottles of shampoo receive 10 percent off the purchase of a third bottle of shampoo.

1. Create a modifier.
   - Modifier Type: Promotional Goods
   - Modifier Level: Line
   - Product Attribute: Item
   - Product Attribute Value: Shampoo
   - Volume Type: Item Quantity
   - Break Type: Recurring
   - UOM: Each
   - Value From: 2

2. In the modifier details, enter the get product.
   - Product Attribute: Item
   - Product Value: Shampoo
   - Get Quantity: 1
   - Get Price: <price list line for shampoo>
Scenario 3

A customer who spends $45 to $100 on an order line receives a free cosmetic bag.

1. Create a modifier line.
   - Modifier Level: Line
   - Modifier Type: Promotional Goods
   - In the Line Qualifiers window, create a qualifier.
     - Grouping Number: -1
     - Qualifier Context: Volume
     - Qualifier Attribute: Line Volume
     - Operator: Between
     - Value From: 45
     - Value To: 100

2. In the Modifier Summary region, select the product that the customer must order to get the free cosmetic bag.
   - Click Define Details to display the Products tab. In the Get region, define the item that the customer gets when the Buy item is ordered.
     - Get Product Attribute: Item
     - Get Product Value: Cosmetic Bag
     - Get Quantity: 1
     - Get Price: <price list line for cosmetic bag>
     - Get UOM: Each
     - Application Method: Percent
• Value: 100

**Coupon Issue**

**Scenario 1**

Customers who buy any products in the Chubo brand receive 10 percent off any item in the Chubo brand on their next order.

1. Create a modifier list. In the Main tab:
   • Type: Promotion
   • Number: Coupon15
   • Select Active
   • Name: Coupon15
   • Clear Automatic

2. Create a modifier line for the discount.
   In the Modifiers Summary tab.
   • Modifier Level: Line
   • Modifier Type: Discount
   • Product Attribute: Item Category
   • Product Attribute Value: Chubo
   • In the Discounts/Charges tab
   • Application Method: Percent
   • Value: 10

3. Create a second modifier line for the coupon issue and assign it for the modifier line created in step 2.
   • Modifier Type: Coupon Issue
   • Modifier Level: Line
   • Product Attribute: Item Category
• Product Attribute Value: Chubo

• Coupon Modifier: <discount modifier from previous step>

**Scenario 2**

Customers ordering from the website receive a coupon for 10 percent off a future order.

1. Create a modifier line (for Modifier List Type: Promotion).
   • Modifier Level: Order
   • Modifier Type: Discount
   • Application Method: Percent
   • Value: 10

2. Create a second modifier line for the coupon issue and assign it to the modifier line created in step 1.
   • Modifier Level: Order
   • Modifier Type: Coupon Issue
   • Coupon Modifier: <modifier from step 1>

3. In the Line Qualifiers window, create a qualifier for the Coupon Issue modifier line from step 2. You have created the qualifier attribute Website Domain and created the appropriate sourcing rules for it.
   • Grouping Number: 1
   • Qualifier Context: Customer
   • Qualifier Attribute: Website Domain
   • Operator: =
   • Value From: co.uk

**Scenario 3**

With any order, receive a coupon for two free bags of coffee on a future order.

1. Create a modifier line.
   • Modifier Type: Promotional Goods
• Modifier Level: Group of Lines, All Items

2. In the modifier details, enter the get product.
   • Product Attribute: Item
   • Product Value: Coffee
   • Get Quantity: 2
   • Get Price: <price list line for bag of coffee>
   • Get UOM: Bag
   • Application Method: Percent
   • Value: 100

3. Create a second modifier line for the coupon issue and assign it to the modifier from step 1.
   • Modifier Type: Coupon Issue
   • Modifier Level: Order
   • Coupon Modifier: <modifier from step 1>

Item Upgrade

Scenario 1

Customers who order a standard video recorder before end of April 2000 receive a deluxe video recorder for the same price.

1. Create a modifier list.
   • Type: Promotion or Deal
   • Date Type: Requested Ship Date
   • End Date: April 31, 2000

2. Assign a modifier line to the modifier list in Step 1. You have defined the item relationship between the standard video recorder and deluxe video recorder.
   • Modifier Type: Item Upgrade
• Modifier Level: Line
• Product Attribute: Item
• Product Attribute Value: Video Recorder Standard
• Upgrade Item: Video Recorder Deluxe

Scenario 2

Customers who buy a shirt receive the shirt and a tie for the shirt price.

1. Create a modifier. You have defined the item relationship between the shirt and the marketing bill shirt and tie pack.
   • Modifier Type: Item Upgrade
   • Modifier Level: Line
   • Product Attribute: Item
   • Product Attribute Value: Shirt
   • Upgrade Item: Marketing item shirt and tie pack

Terms Substitution

Scenario 1

Customers who spend more than 1000 currency units on a sofa pay nothing for shipping.

1. Create a modifier:
   • Modifier Type: Terms Substitution
   • Modifier Level: Line
   • Product Attribute: Item Category
   • Product Attribute Value: Sofa
   • Volume Type: Item Amount
   • Break Type: Point
   • UOM: Each
Scenario 2

Customers who buy more than 100 currency units of one item on an order receive terms of 2% 30/NET 60.

1. Create a modifier.
   - Modifier Type: Terms Substitution
   - Modifier Level: Line
   - Terms Attribute: Payment Terms
   - Terms Value: 2% 30/NET 60

2. In the Line Qualifiers window, create a qualifier.
   - Grouping Number: 1
   - Qualifier Context: Volume
   - Qualifier Attribute: Order Amount
   - Operator: Between
   - Value From: 100

Freight and Special Charges

Scenario 1

For all low priority shipments, calculate shipping charges by order line total weight as follows:

- 0 - 500 kg: 2.50 currency units
- 501 - 1,000 kg: 3.50 currency units
- > 1,000 kg: 5.00 currency units

Profile Option QP: Line Weight UOM Code is kg.
1. Create a modifier.
   • Modifier Type: Freight Charge
   • Modifier Level: Line
   • Application Method: Lumpsum
   • Value: 2.50

2. In the Line Qualifiers window, create a qualifier for the modifier from step 1.
   • Grouping Number: 1
   • Qualifier Context: Order
   • Qualifier Attribute: Shipment Priority
   • Operator: =
   • Value From: Low
   • Grouping Number: 1
   • Qualifier Context: Volume
   • Qualifier Attribute: Line Weight
   • Operator: =
   • Value From: 0
   • Value To: 500

3. Create a second modifier.
   • Modifier Type: Freight Charge
   • Modifier Level: Line
   • Application Method: Lumpsum
   • Value: 3.50

4. In the Line Qualifiers window, create a qualifier for the second modifier from step 3.
   • Grouping Number: 1
• Qualifier Context: Order

• Qualifier Attribute: Shipment Priority

• Operator: =

• Value From: Low

• Grouping Number: 1

• Qualifier Context: Volume

• Qualifier Attribute: Line Weight

• Operator: =

• Value From: 501

• Value To: 1,000

5. Create a third modifier.

• Modifier Type: Freight Charge

• Modifier Level: Line

• Application Method: Lumpsum

• Value: 3.50

6. In the Line Qualifiers window, create a qualifier for the third modifier from step 5.

• Grouping Number: 1

• Qualifier Context: Order

• Qualifier Attribute: Shipment Priority

• Operator: =

• Value From: Low

• Grouping Number: 1

• Qualifier Context: Volume

• Qualifier Attribute: Line Weight
• Operator: =
• Value From: 1,001

Scenario 2

Calculate freight handling charge as a 10 percent markup of actual handling cost.

1. Create a formula.
   • Formula Name: Handling Cost
   • Formula: 1 * 2

2. Create a formula line.
   • Formula Line Type: Pricing Attribute
   • Pricing Attribute Context: Pricing Attribute
   • Pricing Attribute: Handling Cost Amount
   • Step: 1
   • Formula Line Type: Constant
   • Component: 1.1
   • Step: 2

3. Create a modifier.
   • Modifier Type: Freight Charge
   • Modifier Level: Line
   • Application Method: Lumpsum
   • Formula: <reference formula Handling Cost from step 1>

4. In the Line Qualifiers window, create a qualifier for the third modifier from step 2.
   • Grouping Number: 1
   • Qualifier Context: Order
   • Qualifier Attribute: Freight Cost Type
• Operator: =
• Value From: Handling

New Price

Scenario 1

The following table states the scenario for this new price modifier example. Following the table, the text analyzes the scenario:

<table>
<thead>
<tr>
<th>Incompat. Level</th>
<th>Precedence</th>
<th>Bucket</th>
<th>Operator</th>
<th>Value</th>
<th>Engine Selects</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>10</td>
<td>1</td>
<td>NEWPRICE</td>
<td>30</td>
<td>No</td>
</tr>
<tr>
<td>1</td>
<td>10</td>
<td>1</td>
<td>NEWPRICE</td>
<td>25</td>
<td>Yes</td>
</tr>
<tr>
<td>1</td>
<td>10</td>
<td>1</td>
<td>NEWPRICE</td>
<td>40</td>
<td>No</td>
</tr>
</tbody>
</table>

Within the same incompatibility group, when all of the lines have the same precedence, the pricing engine performs best price processing. The final selling price is in line 2, 25 currency units. In this scenario, the bucket is not important to the result.

Scenario 2

The following table states the scenario for this new price modifier example. Following the table, the text analyzes the scenario:

<table>
<thead>
<tr>
<th>Incompat. Level</th>
<th>Precedence</th>
<th>Bucket</th>
<th>Operator</th>
<th>Value</th>
<th>Engine Selects</th>
<th>Adjusted Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>10</td>
<td>1</td>
<td>NEWPRICE</td>
<td>30</td>
<td>Yes</td>
<td>-970</td>
</tr>
<tr>
<td>2</td>
<td>10</td>
<td>1</td>
<td>NEWPRICE</td>
<td>25</td>
<td>Yes</td>
<td>-975</td>
</tr>
<tr>
<td>3</td>
<td>10</td>
<td>1</td>
<td>NEWPRICE</td>
<td>40</td>
<td>Yes</td>
<td>-960</td>
</tr>
</tbody>
</table>

With different incompatibility levels, the pricing engine evaluates the lines according to buckets. Because all of the lines are in the same bucket, the pricing engine calculates the
adjusted amount from the list price. It calculates the selling price as follows:

- List Price - Sum of the Adjusted Amounts

\[ 1,000 - (970 + 975 + 960) = 1,000 - 2095 = -1,905 \]

**Scenario 3**

The following table states the scenario for this new price modifier example. Following the table, the text analyzes the scenario:

<table>
<thead>
<tr>
<th>Incompatibility Level</th>
<th>Precedence</th>
<th>Bucket</th>
<th>Operator</th>
<th>Value</th>
<th>Engine Selects?</th>
<th>Adjusted Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>10</td>
<td>1</td>
<td>NEWPRICE</td>
<td>30</td>
<td>Yes</td>
<td>-970 (Base price: 1,000)</td>
</tr>
<tr>
<td>2</td>
<td>10</td>
<td>2</td>
<td>NEWPRICE</td>
<td>25</td>
<td>Yes</td>
<td>-5 (Base price: 30)</td>
</tr>
<tr>
<td>3</td>
<td>10</td>
<td>3</td>
<td>NEWPRICE</td>
<td>40</td>
<td>Yes</td>
<td>15 (Base price: 25)</td>
</tr>
</tbody>
</table>

With different incompatibility levels, the pricing engine evaluates the lines according to buckets. Because each line is in a different bucket, the pricing engine calculates the adjusted amount from the base price of the previous bucket (list price is in bucket 0). It calculates the selling price as follows:

List Price - Sum of the Adjusted Amounts

\[ 1,000 - (970 + 5 - 15) = 1,000 - 960 = 40 \]

As the pricing engine evaluates the eligible list lines, it resolves incompatibilities in all phases. You can set up your modifiers such that the pricing engine determines most of the list line eligibility at the search stage. Then, the pricing engine calculates the final selling price bucket by bucket.
Refer to the following sources for further information about windows and applications:

- *Oracle Order Management User’s Guide*
- *Oracle Application User’s Guide*

The Window Names and Navigation Paths table lists the navigation path for each window or HTML page. Here are the conventions and short names used in the table:

- **HTML user interface (UI) and Self Service Web Application (SSWA):** Identifies a navigation path in the HTML user interface.
- **[]:** Square brackets indicate a button name or a link that you must click to display the window or HTML page.
- **[T]:** Square brackets around the letter T indicate that you must click a tab.

<table>
<thead>
<tr>
<th>Window Name</th>
<th>Navigation Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>Add Items to Price List</td>
<td>Price Lists &gt; Add Items to Price List</td>
</tr>
<tr>
<td>Adjust Price List</td>
<td>Price Lists &gt; Adjust Price List</td>
</tr>
<tr>
<td>Advanced Pricing - Define Modifier</td>
<td>Modifiers &gt; Modifier Setup</td>
</tr>
<tr>
<td>Advanced Pricing - Define Modifier</td>
<td>Modifiers &gt; Modifier Incompatibility Setup &gt;</td>
</tr>
<tr>
<td></td>
<td>[Modifiers]</td>
</tr>
<tr>
<td>Window Name</td>
<td>Navigation Path</td>
</tr>
<tr>
<td>-------------------------------------</td>
<td>----------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Advanced Pricing: Home Page</td>
<td>SSWA &gt; Oracle Pricing User responsibility &gt; Home</td>
</tr>
<tr>
<td>Advanced Pricing - Price Lists</td>
<td>Price Lists &gt; Price List Setup</td>
</tr>
<tr>
<td>Advanced Pricing - Pricing Formulas</td>
<td>Pricing Formulas &gt; Formulas Setup</td>
</tr>
<tr>
<td>Advanced Search</td>
<td>SSWA &gt; Oracle Pricing User &gt; Price List Maintenance &gt; [Advanced Search]</td>
</tr>
<tr>
<td></td>
<td>Alternate: SSWA &gt; Oracle Pricing Administrator &gt; Price List Maintenance &gt; [Advanced Search]</td>
</tr>
<tr>
<td></td>
<td>Alternate:</td>
</tr>
<tr>
<td>Archive Pricing Entities</td>
<td>Archive Purge Pricing Entities &gt; Archive Entity</td>
</tr>
<tr>
<td>Assign Attributes</td>
<td>Setup &gt; Attribute Management &gt; Attribute Linking and Mapping &gt; [Assign Attributes]</td>
</tr>
<tr>
<td>Attribute Mapping</td>
<td>Setup &gt; Attribute Linking and Mapping &gt; [Link Attributes] &gt; Link Attributes window &gt; [Attribute Mapping]</td>
</tr>
<tr>
<td>Bulk Change</td>
<td>SSWA &gt; Oracle Pricing User &gt; Price List Maintenance &gt; [Advanced Search] &gt; [Search] &gt; From Advanced Search page &gt; [Bulk Change]</td>
</tr>
<tr>
<td></td>
<td>Alternate: SSWA &gt; Oracle Pricing User or Oracle Pricing Administrator &gt; Price List Maintenance &gt; (Do Search) &gt; [Bulk Change]</td>
</tr>
<tr>
<td>Bulk Create Privileges</td>
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</tr>
<tr>
<td>Bulk Update Entity Usage</td>
<td>SSWA &gt; Oracle Pricing Administrator Responsibility &gt; Security &gt; Entity Usage &gt; [Bulk Update Entity Usage]</td>
</tr>
<tr>
<td>Window Name</td>
<td>Navigation Path</td>
</tr>
<tr>
<td>-------------------------------------------</td>
<td>---------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Context Setup</td>
<td>Setup &gt; Attribute Mapping &gt; Context and Attributes</td>
</tr>
<tr>
<td>Copy Modifiers</td>
<td>Modifiers &gt; Copy Modifiers</td>
</tr>
<tr>
<td></td>
<td>[Create Delta]</td>
</tr>
<tr>
<td></td>
<td><strong>Alternate:</strong> SSWA &gt; Oracle Pricing User &gt; Advanced Pricing [Home] &gt; Reports [T] &gt;</td>
</tr>
<tr>
<td></td>
<td>Search (do search) &gt; [Name] &gt; [Create Delta]</td>
</tr>
<tr>
<td>Copy Price List</td>
<td>Price Lists &gt; Copy Price List</td>
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<tr>
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<td>SSWA &gt; Oracle Pricing Administrator Responsibility &gt; Security &gt; Entity Sets &gt;</td>
</tr>
<tr>
<td></td>
<td>[Create Entity Set]</td>
</tr>
<tr>
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<td>SSWA &gt; Oracle Pricing User responsibility &gt; Home page &gt; Shortcuts &gt; Create (Modifier Type) List &gt; (Create modifier) &gt; Next &gt; Update Discount List: Modifier Lines &gt; [Create Line]</td>
</tr>
<tr>
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<td>SSWA &gt; Oracle Pricing User &gt; Advanced Pricing [Home] &gt; Reports [T] &gt; [Create Price Book]</td>
</tr>
<tr>
<td></td>
<td><strong>Alternate:</strong> SSWA &gt; Oracle Pricing User responsibility &gt; Home &gt; Oracle Advanced Pricing: Home page [Lists tab] &gt; Create List</td>
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</tr>
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<td></td>
<td><strong>Alternate:</strong> SSWA &gt; Oracle Pricing User responsibility &gt; Home &gt; Oracle Advanced Pricing; Home page [Lists tab] &gt; Create List &gt; Create Price List: General Information page [Next]</td>
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<tr>
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<td>Pricing Engine Request Viewer &gt; [View Debug Log]</td>
</tr>
<tr>
<td>Define Limits</td>
<td>Modifiers &gt; Modifier Setup &gt; Define Modifier (W) &gt; [List Limits] &gt;</td>
</tr>
<tr>
<td>Define Modifier</td>
<td>Modifiers &gt; Modifier Setup</td>
</tr>
<tr>
<td>Define Modifier - Define GSA price</td>
<td>Price Lists &gt; GSA Pricing Setup</td>
</tr>
<tr>
<td>Define Modifier Details</td>
<td>Modifiers &gt; Modifier Setup &gt; [Define Details*]</td>
</tr>
<tr>
<td>Descriptive Flexfield Segments</td>
<td>Setup &gt; FlexFields</td>
</tr>
<tr>
<td>Detail Change (HTML UI)</td>
<td>SSWA &gt; Oracle Pricing User &gt; Price List Maintenance &gt; [Advanced Search] &gt; From Advanced Search page &gt; [Detail Change]</td>
</tr>
<tr>
<td></td>
<td><strong>Alternate:</strong> SSWA &gt; Oracle Pricing User or Oracle Pricing Administrator &gt; Price List Maintenance &gt; (Do Search) &gt;[Detail Change]</td>
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<tr>
<td>Entity Set Details (HTML UI)</td>
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</tr>
<tr>
<td>Entity Sets</td>
<td>SSWA &gt; Oracle Pricing Administrator Responsibility &gt; Security &gt; Entity Sets</td>
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<tr>
<td>Entity Usage</td>
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</tr>
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<td>Find Modifiers</td>
<td>Pricing Organizer</td>
</tr>
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<td>View Concurrent Requests</td>
</tr>
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<td></td>
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</tr>
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<td>Incompatibility Groups</td>
<td>Modifiers &gt; Modifier Incompatibility Setup</td>
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<tr>
<td>Link Attributes</td>
<td>Setup &gt; Attribute Linking and Mapping &gt; [Link Attributes]</td>
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<td>Log file: request id</td>
<td>View Concurrent Requests &gt; [Find] &gt; [View Log...]</td>
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<td>Modifier Lists</td>
<td>SSWA &gt; Oracle Pricing User &gt; Home &gt; Lists [T], Administrator Responsibility &gt; Modifier Lists</td>
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<tr>
<td>Window Name</td>
<td>Navigation Path</td>
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<td>Modifier Organizer</td>
<td>Pricing Organizer</td>
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<tr>
<td>More Pricing Attributes</td>
<td>Modifiers &gt; Modifier Setup &gt; [Pricing Attributes]</td>
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<td>Multi-Currency Conversion List</td>
<td>Price Lists &gt; Multi-Currency Conversion Setup</td>
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<td>Personal Profile Values</td>
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<td>Price Breaks</td>
<td>Pricing Agreements &gt; Price Breaks</td>
</tr>
<tr>
<td></td>
<td><strong>Alternate:</strong> Modifiers &gt; Modifier Setup &gt; [Define Details*] &gt; Price Breaks</td>
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<td></td>
<td><strong>Alternate:</strong> Price Lists &gt; Price List Setup &gt; [Price Breaks]</td>
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<td>Price List Maintenance (HTML UI)</td>
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<td><strong>Alternate:</strong> Oracle Pricing User &gt; Price List &gt; Maintenance</td>
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<tr>
<td>Window Name</td>
<td>Navigation Path</td>
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<tr>
<td>-----------------------------------</td>
<td>---------------------------------------------------------------------------------</td>
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<tr>
<td>Pricing Agreements</td>
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</tr>
<tr>
<td>Pricing Attributes</td>
<td>Pricing Agreements &gt; [Pricing Attributes]</td>
</tr>
<tr>
<td></td>
<td><strong>Alternate:</strong> Price Lists &gt; Price List Setup &gt; [Pricing Attributes]</td>
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<td>Pricing Engine Request Viewer</td>
<td>Pricing Engine Request Viewer</td>
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<tr>
<td>Pricing Formulas</td>
<td>Pricing Formulas &gt; Formulas Setup</td>
</tr>
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<td>Pricing Organizer</td>
<td>Pricing Organizer</td>
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<tr>
<td>Pricing Transaction Entity-Attribute Linking</td>
<td>Setup &gt; Attribute Management &gt; Attribute Linking and Mapping</td>
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<td>Privileges</td>
<td>SSWA &gt; Oracle Pricing Administrator Responsibility &gt; Security &gt; Privileges</td>
</tr>
<tr>
<td>Privileges Summary</td>
<td>SSWA &gt; Oracle Pricing Administrator Responsibility &gt; Security &gt; Privileges &gt; [Bulk Create Privileges] &gt; Complete Bulk Create Privileges Step 1 to 3 &gt; [Submit]</td>
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<tr>
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</tr>
<tr>
<td>QUALIFIER - Header Level Qualifiers</td>
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</tr>
<tr>
<td>QUALIFIER - Line Level Qualifiers</td>
<td>Modifiers &gt; Modifier Setup &gt; [Line Qualifiers] &gt; [Cancel]</td>
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<td>Qualifier Group</td>
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<tr>
<td>Qualifier Groups - Line</td>
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<tr>
<td>-----------------------------------</td>
<td>-------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Qualifiers (HTML UI)</td>
<td>SSWA &gt; Oracle Pricing User responsibility &gt; Find or create Modifier/Price List &gt; List Qualifiers &gt; Qualifiers page [Append Group]</td>
</tr>
<tr>
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</tr>
<tr>
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</tr>
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</tr>
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</tr>
<tr>
<td>Request Detail</td>
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<tr>
<td>Request Diagnostics</td>
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<tr>
<td>Requests</td>
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</tr>
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</tr>
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<td>Window Name</td>
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<td>---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
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</tr>
<tr>
<td><strong>Alternate:</strong> SSWA &gt; Oracle Pricing User responsibility &gt; Home page (Recently Created Modifier Lists) &gt; [Update] &gt; Modifier Lines (from Navigation bar) &gt; [Update]</td>
<td></td>
</tr>
<tr>
<td>Update (Modifier Type): Modifier Lines (HTML UI)</td>
<td>SSWA &gt; Oracle Pricing User responsibility &gt; Lists &gt; Modifier Lists &gt; Modifier Lists Search page (complete search for modifier) &gt; [Update] &gt; Modifier Lines (from Navigation bar)</td>
</tr>
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<td><strong>Alternate:</strong> SSWA &gt; Oracle Pricing User responsibility &gt; Home page (Recently Created Modifier Lists) &gt; [Update] &gt; Modifier Lines (from Navigation bar)</td>
<td></td>
</tr>
<tr>
<td>Update (Modifier Type): General Information (HTML UI)</td>
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</tr>
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<td></td>
</tr>
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