

R12.x Oracle Advanced Pricing Fundamentals

Volume I • Student Guide

D60255GC10

Edition 1.0

April 2010

D66328

ORACLE®

Copyright ©2007, 2010, Oracle. All rights reserved.

Disclaimer

This document contains proprietary information and is protected by copyright and other intellectual property laws. You may copy and print this document solely for your own use in an Oracle training course. The document may not be modified or altered in any way. Except where your use constitutes "fair use" under copyright law, you may not use, share, download, upload, copy, print, display, perform, reproduce, publish, license, post, transmit, or distribute this document in whole or in part without the express authorization of Oracle.

The information contained in this document is subject to change without notice. If you find any problems in the document, please report them in writing to: Oracle University, 500 Oracle Parkway, Redwood Shores, California 94065 USA. This document is not warranted to be error-free.

Restricted Rights Notice

If this documentation is delivered to the United States Government or anyone using the documentation on behalf of the United States Government, the following notice is applicable:

U.S. GOVERNMENT RIGHTS

The U.S. Government's rights to use, modify, reproduce, release, perform, display, or disclose these training materials are restricted by the terms of the applicable Oracle license agreement and/or the applicable U.S. Government contract.

Trademark Notice

Oracle is a registered trademark of Oracle Corporation and/or its affiliates. Other names may be trademarks of their respective owners.

Author

Srilakshmi Tridandam

Technical Contributors and Reviewers

Barney Barnacle, James Devine

This book was published using: Oracle Tutor

Table of Contents

Overview of Advanced Pricing	1-1
Overview of Oracle Advanced Pricing.....	1-3
Objectives.....	1-4
Overview of Oracle Advanced Pricing.....	1-5
Benefits of Oracle Advanced Pricing.....	1-11
Oracle Advanced Pricing Related Products.....	1-12
Overview of Oracle Advanced Pricing in the Order to Cash Process.....	1-13
Pricing in Order Fulfillment.....	1-14
TCA Party Hierarchy.....	1-15
Single Pricing Engine – Multiple Uses of Pricing Data.....	1-16
Pricing Engine Overview.....	1-17
Overview of the Pricing Engine.....	1-19
Pricing Engine.....	1-20
Pricing Engine Process.....	1-21
The Oracle Advanced Pricing Process.....	1-23
Oracle Advanced Pricing Features.....	1-24
Price Lists.....	1-25
Qualifiers.....	1-26
Qualifier Groups.....	1-27
Modifiers.....	1-28
Accruals.....	1-30
Formulas.....	1-31
Price Books.....	1-33
Contexts.....	1-34
Pricing Attributes.....	1-35
Attribute Management.....	1-36
Responsibility Levels.....	1-37
Oracle Pricing Administrator.....	1-38
Oracle Pricing Manager.....	1-39
Oracle Pricing User.....	1-40
Oracle Advanced Pricing HTML User Interface (UI).....	1-41
Pricing Home Page (HTML UI).....	1-42
Modifier Setup (HTML UI).....	1-43
Shortcut Region (HTML Home page).....	1-45
Quiz.....	1-46
Summary.....	1-50
Generic Implementation Setup	2-1
Generic Implementation Setup.....	2-3
Objectives.....	2-4
Overview of Main Pricing Implementation Steps.....	2-5
Perform System Administration Steps.....	2-6
Set Profile Options.....	2-7
Set Multicurrency Profile Options.....	2-8
Verify or Create Pricing Transaction Entity.....	2-9
Create Qualifier Contexts and Qualifier Attributes.....	2-10
Create Pricing Contexts, Pricing Attributes, and Product Attributes.....	2-11
Perform Attribute Management.....	2-12
Define Unit of Measure.....	2-13
Define Unit of Measure Conversions.....	2-14
Create Item Relationships.....	2-15
Define Pricing Lookups.....	2-16
Enable Currencies.....	2-17

Create Events and Phases	2-18
Verify Pricing Parameter Settings	2-20
Set up Pricing Security	2-21
Related Setup Steps	2-22
Define Item Information	2-23
Define Item Category Sets and Item Categories	2-24
Set Up Inventory Organization	2-26
Define Oracle Order Management Lookups	2-27
Define Shipping Lookups	2-28
Set Up Customer Class and Profile Class	2-29
Define Customers and Customer Sites	2-30
Define Transaction Types	2-31
Define Freight Terms	2-32
Define Freight Cost Type	2-33
Define Payment Terms	2-34
Oracle Advanced Pricing Concepts	2-35
Pricing Rules	2-36
Pricing Actions	2-37
Pricing Controls	2-38
Pricing Extensibility	2-39
Attribute Mapping	2-40
APIs	2-41
Basic Flow of Pricing	2-42
Methodology Steps	2-43
Analyzing Pricing Needs	2-44
Developing Pricing Solutions	2-47
Single or Multiple Currency Price Lists	2-48
Customer and Product Hierarchies	2-50
Customer Hierarchy	2-52
Trading Community Architecture (TCA) Attributes	2-54
Item Categories and Category Sets	2-55
Pricing Attributes	2-56
Structuring Your Pricing Rules and Actions	2-58
Establishing Pricing Controls	2-59
Defining Unit of Measure	2-61
Defining Unit of Measure Conversions	2-62
Adjusting UOM Setups for Oracle Advanced Pricing	2-63
Primary UOM Versus Pricing UOM	2-64
Multiple Organizations and Pricing Actions	2-66
Using Qualifiers with Multiple Organizations	2-67
Pricing Security, MOAC, and Operating Units	2-68
QP: Item Validation Organization	2-69
Cross Order Volume Loader	2-70
Testing Your Pricing Solutions	2-72
Selected Oracle Advanced Pricing Lookups	2-73
Agreement Type	2-74
Arithmetic Operator	2-75
Comparison Operator	2-77
Currency Precision Type	2-78
Effective Date Types	2-79
Incompatibility Groups	2-80
Incompatibility Resolution Code	2-81
List Line Type Code	2-82
List Type Code	2-85
Modifier Level Code	2-87
Price Break Type Code	2-88
Price Formula Line Type Code	2-89

Pricing Events.....	2-91
Pricing Group Sequence	2-92
Related Modifier Group Type	2-93
Request Type	2-94
Source System	2-96
Profile Options.....	2-97
Order Management Profile Options for Oracle Advanced Pricing.....	2-98
Oracle Advanced Pricing Profile Options	2-99
Quiz	2-104
Summary.....	2-108
Price Lists.....	3-1
Price Lists	3-3
Objectives	3-4
Overview of Price Lists	3-6
Price List Information.....	3-8
Multicurrency Conversion Lists	3-11
Creating Price Lists	3-12
Create List: General Information.....	3-16
Secondary Price List.....	3-18
Secondary Price List Region: Precedence	3-19
QP: Qualify Secondary Price Lists	3-21
Create List: List Qualifier.....	3-22
Create List: Review	3-24
Adding Price List Lines (HTML UI).....	3-26
Price List Lines	3-27
Default UOM for Price Lists	3-29
List Line Information.....	3-30
Price List Line Values	3-32
Overview of Price Breaks.....	3-34
Types of Price Breaks.....	3-35
Price Break Example	3-36
Block Pricing.....	3-38
Usage Proration of Price Breaks	3-39
Dynamic Formula Field for Price Breaks	3-43
Usage Modification - Proration Dependencies and Interactions.....	3-44
Price List Maintenance Feature	3-45
Overview of Multicurrency Conversion Lists	3-46
Multicurrency Conversion Lists	3-48
Attributes	3-51
Markup and Conversion Formulas	3-52
Implementation Decisions for Creating Multicurrency Conversion Lists	3-53
Combining Price Lists	3-55
Rounding	3-57
Rounding Behavior During Currency Conversion Calculations: Non-Service Items.....	3-58
Rounding Behavior During Currency Conversion Calculations: Service Items.....	3-59
QP: Selling Price Rounding Options = Individual.....	3-60
QP: Selling Price Rounding Options = N (No).....	3-61
Profile: QP Multi-Currency Installed	3-62
Using Conversion Types	3-64
Creating a Multicurrency Conversion List	3-65
Example of Using Precedence in a Multicurrency Conversion List.....	3-67
Attaching Multicurrency Conversion Lists to Price Lists and Agreements.....	3-68
How Multicurrency Changes Price Lists and Agreements	3-70
Upgrading from Single Currency to Multicurrency Price Lists.....	3-72
Using Multicurrency Price Lists with Other Oracle Products	3-73
Maintaining Price Lists.....	3-74

Copying Price Lists	3-75
Copying Price List Lines	3-76
Adding Inventory Items to Price Lists	3-77
Adding Items to Price Lists	3-78
Updating Prices Manually for Price List Lines.....	3-80
Adjusting Price Lists	3-81
OM: Allow Negative Pricing.....	3-84
Querying Price List Lines.....	3-85
Deleting Price List Information.....	3-86
Bulk Uploading of Price Lists	3-87
Bulk Loader for Price List Concurrent Program.....	3-88
Setting up Bulk Loader for Price List Step 1: Loading Data	3-89
Setting up Bulk Loader for Price List Step 2: Pre-Processing Steps	3-91
Setting up Bulk Loader for Price List Step 3: Importing Data	3-92
Bulk Loader Processing	3-93
Bulk Loader: Profile Options.....	3-94
Overview of Agreements.....	3-96
Creating Agreements	3-99
Types of Agreements.....	3-101
Standard Price List.....	3-102
Agreement Price List.....	3-103
Merging Customers	3-104
Creating Agreements.....	3-105
Creating Agreement Lines for Standard Price Lists	3-107
Creating Agreement Lines for Agreement Price Lists.....	3-108
Creating Agreement Lines.....	3-109
Defining Pricing Attributes.....	3-111
Defining Price Breaks for Agreements.....	3-112
Revising Existing Agreements	3-113
Deleting Agreements	3-116
Overview of General Services Administration (GSA) Pricing.....	3-117
What is GSA?.....	3-118
Creating GSA Price Lists	3-119
Creating GSA List Qualifiers	3-121
Sales Agreements	3-123
Quiz	3-125
Summary.....	3-129
Formulas.....	4-1
Formulas	4-3
Objectives	4-4
Overview of Formulas	4-5
Pricing Formula Example.....	4-6
Creating Pricing Formulas.....	4-8
Creating Pricing Formula Lines.....	4-9
Pricing Formulas	4-11
Formula Line Types.....	4-12
Formula Type: Function	4-15
Formula Type: List Price	4-16
Formula Type: Factor List.....	4-17
Formula Type: Factor List Example.....	4-19
Finding Formula Factor Lines	4-20
Formula Type: Modifier Value.....	4-21
Formula Type: Numeric Constant	4-22
Formula Type: Price List Line.....	4-23
Formula Type: Pricing Attribute	4-24
Advanced Pricing-Pricing Formulas window.....	4-25

Build Formula Package	4-26
Get_Custom_Price API	4-27
GET_CUSTOM_PRICE Example	4-28
Customizing GET_CUSTOM_PRICE	4-30
Using GET_CUSTOM_PRICE	4-31
GET_CUSTOM_PRICE Parameters	4-32
Implementing Get Custom Price	4-33
Linking Formulas To Modifier or Price List Lines	4-35
Types of Formula Processing	4-37
Static Formula Processing	4-38
Dynamic Formula Processing	4-39
Null Values in Formulas	4-40
Null Values Example	4-41
Formula Step Values Window	4-43
Using the Formula Step Values Window	4-45
Updating Formula Prices Window	4-47
Predefined Freight and Special Charge Formulas	4-49
Setting up Formula Profile Options	4-51
Formula Scenario 1	4-53
Formula Scenario 2	4-57
Quiz	4-60
Summary	4-64
Qualifiers and Qualifier Groups	5-1
Qualifiers and Qualifier Groups	5-3
Objectives	5-4
Overview of Qualifiers	5-6
Creating Qualifiers for Price Lists or Modifiers	5-8
Creating List Qualifiers in Creation Flow (HTML UI)	5-9
Creating Line Qualifiers in Creation Flow (HTML UI)	5-10
Typical Qualifier Setup (HTML UI)	5-11
Qualifier Terminology	5-12
Example of Qualifier Hierarchy	5-13
Qualifiers (HTML UI)	5-14
Unique Qualifiers (HTML UI)	5-15
Common Qualifiers (HTML UI)	5-16
Applies To Party Hierarchy check box	5-17
Creating Qualifier Groups	5-18
Forms UI: Qualifier Grouping Number	5-19
Appending Qualifier Groups	5-21
Qualifier Grouping Number (Forms UI)	5-22
Selected Qualifier Groups	5-23
Appending Qualifier Groups (Forms UI)	5-24
Retaining Grouping Numbers Across Qualifier Groups	5-25
Generating Unique Grouping Numbers Across Qualifier Groups	5-26
Quiz	5-27
Summary	5-31
Modifiers	6-1
Modifiers and Pricing Controls	6-3
Objectives	6-4
Overview of Modifiers	6-6
Modifiers in Business Scenario Process	6-7
Pricing Concept: Modifiers	6-8
Examples of Modifier Use	6-9
Example of Surcharge Modifier	6-10
Modifier Components	6-11
Modifier Setup	6-12

Modifier Setup (HTML UI).....	6-13
Create Modifier List Flow (HTML UI).....	6-14
Types of Modifier Lists.....	6-15
Create List: General Information.....	6-16
Currency.....	6-17
Using ANY Currency.....	6-18
Advantages of Using ANY Currency Modifier.....	6-20
Create List: List Qualifier.....	6-21
List Qualifier: Effective Dates.....	6-23
Create List: Review.....	6-24
Adding Modifier Lines.....	6-25
Modifier List and Line Type Relationships.....	6-26
Create Modifier Line Flow (HTML UI).....	6-28
Modifier Line Types.....	6-30
Discount Modifier.....	6-32
Surcharge Modifier.....	6-33
Freight and Special Charge List Modifier.....	6-34
Promotional Goods Modifier.....	6-36
Term Substitution Modifier.....	6-37
Item Upgrade Modifier.....	6-38
Implementation Considerations: Item Upgrade Modifier.....	6-39
Other Item Discount Modifier.....	6-40
Coupon Issue Modifier.....	6-41
Price Breaks Modifier.....	6-42
Price Break Modifiers: Point Breaks.....	6-43
Price Break Modifiers: Range Breaks.....	6-44
Price Breaks: Net Amount Calculation.....	6-45
Price Breaks: Net Amount Example.....	6-46
Accumulated Range Breaks.....	6-48
Modifier Line: Start/End Dates.....	6-51
Pricing Controls.....	6-53
Controls: Implementation Considerations.....	6-54
How Pricing Engine Processes Pricing Controls.....	6-55
Controls: Modifier Level.....	6-56
Controls: Pricing Phase.....	6-57
Pricing Phases.....	6-58
Pricing Events.....	6-60
Seeded Phases Example.....	6-61
Phase and Event Implementation Decision.....	6-62
Event Phases.....	6-63
Event Phases: Line Event.....	6-64
Event Phases: Order Event.....	6-65
Event Phases: Book and Ship Events.....	6-66
Event Phases: Batch Event.....	6-67
Controls: Buckets.....	6-68
Buckets: Implementation Considerations.....	6-70
Null Buckets.....	6-72
Buckets For Manual Modifiers.....	6-73
Cascading Modifier: Single Bucket.....	6-74
Cascading Modifier: Multiple Buckets.....	6-75
Controls: Incompatibility.....	6-76
Controls: Incompatibility Groups Implementation Decisions.....	6-77
Controls: Determining Incompatibility Groups.....	6-78
Cascading Modifier Example – Incompatibility Levels.....	6-79
Controls: Resolving Modifier Incompatibility.....	6-80
Best Price.....	6-81
Exclusivity: Implementation Considerations.....	6-83

Exclusivity	6-84
Create Product	6-85
Define Product	6-86
Product: Excluded Products.....	6-87
Precedence Value	6-88
Precedence Number	6-89
Define Benefit	6-90
Modifier Adjustment Methods	6-91
Modifier Implementation Considerations: Accruals.....	6-92
Overview of Promotional Limits.....	6-94
Types of Limits (Limit Basis).....	6-95
Other Attributes	6-99
Actions to Control Exceeded Limits.....	6-100
Hard Limit	6-101
Soft Limit.....	6-102
Limits: Viewing Transactions.....	6-103
Limits: Exceptions.....	6-104
Pricing Organizer.....	6-105
Quiz	6-106
Summary.....	6-110
Price Books.....	7-1
Price Books.....	7-3
Objectives.....	7-4
Overview of Price Books.....	7-5
Types of Price Books.....	7-8
Price Book Example 1	7-9
Price Book Example 2	7-10
Price Book Example 3	7-11
Benefits of Price Books	7-12
Price Book Implementation	7-13
Implementation Steps: Setting Key Profile Options.....	7-14
Implementation Steps: Setting Key Profile Options.....	7-16
Implementation Steps: Verifying Pricing Parameters.....	7-17
Implementation Steps: Setting Up the Default Printer.....	7-19
Implementation Steps: Setting up Oracle XML Publisher.....	7-20
Implementation Steps: Setting up XML Gateway Message Map.....	7-21
GET_CATALOG_002 XML Message.....	7-22
SYNC_CATALOG_003 XML message	7-23
Price Book Public APIs	7-24
Create Price Book API	7-25
Get Price Book API.....	7-26
Creating a Price Book.....	7-27
Creating a Price Book: Defining General Price Book Criteria.....	7-28
Creating a Price Book: Defining Price Calculation Criteria.....	7-29
Creating a Price Book: Selecting Price Book Publishing Options.....	7-30
Price Book Publishing Templates.....	7-31
Price Book Publishing: Document Types.....	7-32
Generating and Publishing Price Books	7-33
Viewing Price Book Details Online	7-34
Creating a Delta Price Book	7-36
Maintaining Price Books	7-37
Republishing Price Books.....	7-38
Viewing Errors	7-39
Quiz	7-40
Summary.....	7-43
Attribute Management.....	8-1

Attribute Management	8-3
Objectives	8-4
What Is Attribute Management?	8-5
Attribute Management Features	8-6
Process Flow for Creating Contexts and Attributes	8-7
Common Terms	8-8
What Is a Context?	8-10
Understanding Contexts	8-11
Contexts	8-12
Qualifier Contexts	8-14
Qualifier Context Examples	8-15
Product Contexts	8-16
Attributes for Contexts	8-17
How Can Attributes Control Pricing Actions?	8-18
Attributes in Advanced Pricing	8-19
Creating Attributes for Contexts	8-20
Attribute Selection: Pricing Engine Processing	8-21
Pricing Attributes	8-22
Restoring Context and Attribute Defaults	8-25
Pricing Attributes and Flexfields	8-27
Stages in Attribute Creation	8-28
Linking Attributes to a Pricing Transaction Entity	8-29
Selecting Attribute Options	8-31
Attribute Levels	8-33
Attribute Levels	8-35
LOV Enabled: Pricing windows	8-36
Disabling an Attribute from a PTE	8-37
Attribute Mapping Methods	8-38
When Attribute Mapping Method is Selected	8-40
Setting Up a New Mapping Rule for a Qualifier or Pricing Attribute	8-42
Build Attribute Mapping Rules Program	8-43
Build Attribute Mapping Rules Program Checklist	8-45
Overview of Pricing Transaction Entity (PTE)	8-47
Seeded PTEs	8-49
Role of PTEs in Attribute Management	8-50
Components of a Pricing Transaction Entity	8-51
Source Systems	8-53
Seeded Source Systems	8-54
Functional Areas for Source System Region	8-55
Request Types	8-56
Request Type and PTE Parameters	8-57
Creating a New Pricing Transaction Entity	8-58
Defining Pricing Transaction Entity Associations	8-60
QP: Source System Code	8-61
QP: Source System Code Example	8-65
Quiz	8-66
Summary	8-70
Pricing Security	9-1
Pricing Security	9-3
Objectives	9-4
Overview of Pricing Security	9-5
Oracle Pricing Administrator	9-7
Levels of Pricing Security	9-8
Functional Security	9-10
PTE + Source System Code level Security	9-11
Setting up Pricing Security	9-12

Step 1: Mapping Security Requirements	9-13
Step 2: Assigning Existing Pricing Entities to Operating Units (Entity Usage)	9-14
Step 3: Creating Privileges for Existing Pricing Entities	9-15
Step 4: Setting Security Profile Options to Define Defaulting Security Rules	9-16
Security Implementation Steps – Before Turning Security On	9-17
Step 5: Turning Security On	9-19
Step 6: Confirm Security Settings	9-20
Security for Operating Units	9-21
Entity Usage	9-22
Owned by Operating Unit	9-23
Global Usage	9-24
Creating Privileges	9-25
Privileges: Grantee Types/Grantees	9-26
Privileges: Access Level	9-29
Privileges	9-30
Changing the Access Privileges	9-31
Entity Sets	9-32
After the Security Upgrade: Impact of Changes	9-33
Overview of Pricing Security with Multi-Organization Access Control	9-34
Overview of Pricing Security with Multi-Organization Access Control (MOAC)	9-35
Benefits of Using Multi-Org Access Control for Pricing Security	9-36
Prerequisites for Enabling Multi-Org Access Control	9-37
Setting Up Multi-Org Access Control for Pricing Security	9-38
Multi-Org Process: Creating a Price List or Modifier	9-39
Controlling Access by Pricing Security	9-40
Multi-Org Access Control for Pricing Security: Pricing Security Administrator	9-41
Example of Controlling Operating Unit Access by Pricing Security	9-42
Multi-Org Access Control for Pricing Security Implementation Considerations	9-44
Multi-Org Access Control: Global Usage	9-46
Multi-Org Access Control: Secondary Price Lists	9-47
Multi-Org Access Control: Benefit Price List for Promotional Goods	9-48
Multi-Org Access Control for Pricing Security: Cross-Order Volume Report	9-49
Multi-Org Access Control for Pricing Security: Implementation Considerations	9-50
Copying Price Lists and Modifiers	9-51
Multi-Org Access Control for Pricing Security Process: Integrations	9-52
Quiz	9-53
Summary	9-57
Diagnostics and Troubleshooting	10-1
Diagnostics and Troubleshooting	10-3
Objectives	10-4
Overview of the Pricing Engine Request Viewer	10-5
Setting Profile Options for the Pricing Engine Request Viewer	10-7
Pricing Engine Request Viewer	10-8
Using the Pricing Engine Request Viewer	10-9
Pricing Engine Request Viewer Window	10-10
Debug Log window	10-11
Diagnostics Concurrent Programs	10-12
Diagnostics: Performance Analysis Concurrent Program	10-13
Diagnostics: List Line Details Concurrent Program	10-14
Pricing Engine Messages and Diagnosis	10-15
Oracle Advanced Pricing Diagnostics and Troubleshooting White Paper	10-16
Quiz	10-17
Summary	10-21
R12.x Oracle Advanced Pricing Fundamentals - Summary	11-1
R12.x Oracle Advanced Pricing Fundamentals Summary	11-3
Overview	11-4

Objectives11-5