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Pricing Services

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Preface

About This Document

This document will help you understand various pricing services offered by the Oracle Revenue Management and Billing (ORMB) application.

Intended Audience

This document is intended for the following audience:

- End-Users

Organization of the Document

The information in this document is organized into the following sections:

Section No.	Section Name	Description
Section 1	Overview	Provides an overview of the pricing services of the Oracle Revenue Management and Billing application.
Section 2	Pricing Services	Provides detailed description of various pricing services of the Oracle Revenue Management and Billing application.
Section 3	Configuration	Provides steps for configuring pricing services in Oracle Revenue Management and Billing application.

Related Documents

You can refer to the following documents for more information:

Document	Description
<i>Oracle Revenue Management and Billing Banking User Guide</i>	Lists and describes various banking features in Oracle Revenue Management and Billing. It also describes all screens related to these features and explains how to perform various tasks in the application.

Conventions

The following conventions are used across the document:

Convention	Meaning
boldface	Boldface indicates graphical user interface elements associated with an action, or terms defined in the text.
<i>italic</i>	Italic indicates a document or book title.
Monospace	Monospace indicates information that an end-user needs to enter in the application.

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1. Overview

This section provides an overview of the pricing services of Oracle Revenue Management and Billing (ORMB) application.

1.1 Pricing Services Overview

Oracle Revenue Management and Billing allows you to define prices for various banking products or services offered in retail banking to the person, such as checking, traditional savings, Money Market Savings (MMS), certificate of deposit (CD) and Individual Retirement Account (IRA) including variations of standard products such as, minor savings. These prices are either standard prices defined in the price lists or override prices that are specific to a person or an account.

Note: A price list allows you to define standard prices for a group of price items. In other words, a price list is a rate card for price items or services which are offered to the accounts or persons. Two types of price lists are **Standard** and **Promotional**.

ORMB pricing services interface with multiple systems of banks to provide the pricing, which includes:

- **Person on Board or Quotation System** - Inquire the quotations for price offers on various products for a new or existing Person at the time of account opening, based on Person eligibility. ORMB Pricing Engine should return different offers eligible for the Person and the pricing details for the offers; based on the approved quotations, Quotation system will return the approved rates for the account. ORMB Pricing Engine will store the applicable pricing for the Person or account.
- **Person or Account (Rate) Inquiry System** - Inquire for Person/account rate pricing. ORMB should return the effective pricing for a Person or an account based on various Persons or account attributes such as, Account Balance, Age, gender, Nationality, and state.
- **Fees Pricing Inquiry System** - Inquire for pricing a transaction. For this, request comes from the Core Banking System or Person Fee Inquiry System such as, ATM withdrawal, ORMB returns the calculated fees based on transaction (POS –On us /Off us), Person (First n free transactions), and account attributes.
- **Disclosure Systems** - Inquire Pricing Services for various standard and promotional pricing, which includes:
 - Marketing Disclosure
 - Offer Fulfillment
 - Promotional Price

Pricing Services returns the base product pricing and the account pricing to the disclosure systems.

- **Price Optimizer** - Inquire for all the existing effective pricing and asks ORMB to accept the pricing updates from it.

2. Pricing Services

ORMB provides the following pricing services:

- GetEffectivePricing Service
- GetPricing Service
- GetAllAssignedPriceLists Service
- AssignPriceList Service
- AssignPrice Service
- PriceAccount Pricing Service
- GetAccountRate Pricing Service

2.1 GetEffectivePricing Service

GetEffectivePricing Service provides the effective pricing for every price item priced on the account or person or price list. For this, person needs to input their account details in the ORMB user interface and the service will return the effective pricing for the account based on the pricing eligibility parameters such as, person or account or product attributes.

2.1.1 Prerequisite

To setup the GetEffectivePricing service, you need to do the following:

- Algorithm of Algorithm type **C1_PRASN** to be attached at division level with division algorithm entity as Price Assignment Search.
- If pricing of a global person is to be searched the algorithm should be present at the Feature Configuration **C1_PRASNORDR**.

2.1.2 Input Parameters for GetEffectivePricing Service

Input parameters for the GetEffectivePricing service are defined in the following table:

Input Parameter	Comments	Mandatory (M)/ Optional(O)/ Conditional (C)
Price List ID	Should be provided if the effective pricing for the price list is requested.	C
Effective Date	Used to search effective pricing for the price list which is effective from a particular date onwards.	O
Person ID	Used to search effective pricing for the price list which is assigned to a particular Person. It is required if the pricing for the person is requested.	C
Person Identifier Type	Required if Person ID is not provided.	C

Input Parameter	Comments	Mandatory (M)/ Optional(O)/ Conditional (C)
Person Identifier	Required if Person Identifier Type is provided.	C
Account ID	Used to search effective pricing for the price list which is assigned to the particular account. It should be provided if effective pricing for an account is requested.	C
Account Identifier Type	Required if Account ID is not provided.	C
Account Identifier	Required if Account Identifier Type is provided.	C
Division	Required if Account Identifier Type is provided.	C
Price Item	Used to specify the price item.	O
Price Item Description	Used to specify the price item description.	O
Price Assignment Type	Used to specify the type of price assignment.	O
Price Assignment Level	Used to specify the level of price assignment.	O
Parent Person Name	Used to specify the name of parent person.	O
Price Parameters	Used to specify the pricing parameters.	O
Price Parameter Code	Used to specify the pricing parameter code.	O
Price Parameter Value	Used to specify the value of pricing parameter.	O
Price Assignment Status	Used to specify the status of price assignment.	O
Show Default Pricing	Used to specify the default price list.	O

2.1.3 Process for GetEffectivePricing Service

You can perform the search to get the effective pricing based on the pricing parameters. Once a price list is defined, you can assign it to accounts to indicate the prices that will be charged for the price items or services offered to the accounts. You can assign multiple price lists to an account along with the priority or order in which the pricing should be considered.

For finding the effective pricing that would be offered to a person or prospect, when price list will be assigned, consider the following scenarios:

- If the parameters are passed as an input in the GetEffectivePricing service request ,they will be assigned with highest priority.
- If account details are passed, such as Account ID, Account Identifier Type, Account Identifier, and Division, the account will be used to derive the account parameters if not provided in the request.
- If person details are passed, such as Person ID, Person Identifier Type, and Person Identifier, the person will be used to derive the person parameter if not provided in the request.
- On the basis of Effective Date, system will search for the effective Pricing. Effective Date will be treated as both, effective pricing date and date based on which the new or old person decision will be taken.

All the price assignments matching the pricing parameters in the request which are applicable for all customers and prospects will be searched and returned along with the eligibility criteria and tier details. Status of the response is 'SUCCESS'.

2.1.4 Output Parameters for GetEffectivePricing Service

Output parameters for the Get Effective Pricing service are defined in the following table:

Output Parameter	Comments
Price Assignments	Displays the list of price assignments.
Price Assignment ID	Displays the Price Assignment ID.
Variance Parameter	Displays the variance parameter.
Price Assign Price List ID	Displays the Price List ID if the price item is assigned to a price list.
Price List Description	Displays the description of price list.
Parent Person	Displays the parent person name of the price item pricing if it is derived from person hierarchy.
Pricing Currency	Displays the pricing currency.
Rate Schedule Description	Displays the description of rate schedule of the pricing.
Rate Schedule Code	Displays the code of the rate schedule used in pricing.
Price Item	Displays the price item of pricing.
Price Item Description	Displays the description of the price item used in pricing.
Price Item Type	Displays the type of price item used in pricing.
Price Item Available For	Displays the price item available for of the price item used in pricing.
Price Assignment Type	Displays the type of price assignment of the pricing.
Price Assignment Level	Displays the level of price assignment of the pricing whether for person agreed or account agreed or parent person agreed.

Output Parameter	Comments
Start Date	Displays the start date of the pricing.
End Date	Displays the end date of the pricing.
Parameters	Displays the list of parameters.
Parameter Code	Displays the parameter code of the parameter used in the price item pricing.
Parameter Value	Displays the parameter value of the parameter used in price item pricing.
Parameter String	Displays the parameter string as code equals to the value for each parameter of price item pricing.
Pricing Frequency	Displays pricing frequency of the price item pricing.
Price Assign Level Sequence	Displays the price Assignment level Sequence of the price item pricing.
Parent Level	Displays parent Level of the price item pricing if it is derived from customer hierarchy.
Parent Price list Level	Displays parent price list Level of the price list if the price item pricing is from a price list.
Price List Assignment Start Date	Displays price list assignment start date of the price list if the price item pricing is from a price list.
Price Assign Level Sequence	Displays price assignment level sequence of the price item pricing.
Parameter String	Displays parameter string as code equals to the value for each input parameter.

2.2 GetPricing Service

GetPricing Service provides the actual pricing or rate for every price assignments on the account or person or price list. This can be invoked to simulate and check a price for different sets of person or account attributes.

2.2.1 Prerequisite

None.

2.3 Input Parameters for GetPricing Service

Input parameters for the GetPricing service are defined in the following table:

Input Parameter	Comments	Mandatory (M)/ Optional(O)/ Conditional (C)
Start Date	Used to search pricing for the price list which is effective from a particular date onwards.	M
End Date	Used to search pricing for the price list till when the pricing is assigned to the price list.	O
View Type	Used to indicate whether you want to view summary or tiering details of price components. The valid values are: <ul style="list-style-type: none"> • Detail — Used when you want to view both contributing and non contributing price components. • Summary- Used when you want to view only the contributing price components. <div style="border: 1px solid black; padding: 2px; margin-top: 5px;">Note: Default value is DT.</div>	O
Person ID	Used to calculate pricing for the price list which is assigned to a particular person. It should be provided if Account ID is not defined.	C
Person Identifier Type	Required if existing person opening a new account.	C
Person Identifier	Required if existing person is opening a new account.	C
Account ID	Used to calculate the pricing for the price list which is assigned to a particular account. It should be provided if Person ID is not defined.	C
Account Identifier Type	Required if Person ID is not defined.	C
Account Identifier	Required if Person ID is not defined.	C
Division	Required if Account Identifier Type and Account Identifier are defined.	C
Pricing Parameters	Used to define the parameters for price item.	O

Input Parameter	Comments	Mandatory (M)/ Optional(O)/ Conditional (C)
Pricing Parameter Code	Required if corresponding Pricing Parameter Value is provided.	C
Pricing Parameter Code	Required if corresponding Pricing Parameter Value is provided.	C
Price Assignment ID	Required if Price Parameter Code and Pricing Parameters are not provided.	C
Price Item Code	Required if request is for price simulation.	C
Pricing Parameters	Required if existing person is opening a new account otherwise ignored.	C
Pricing Parameter Code	Required if pricing parameter is provided.	O
Pricing Parameter Value	Required if corresponding Price Parameter Value is provided.	O
SQUs	Used to calculate rate.	O
SQL Code	Required if UOM or TOU code is not provided	C
SQU Value	Used to specify the service quantity value	O
TOU Code	Required if SQL code and UOM code is not provided	C
UOM code	Required if SQL code and TOU code is not provided	C

2.3.1 Process for GetPricing Service

You can perform the search to get the price of a price item by providing eligible pricing parameters in the request.

GetPricing service invokes rate to simulate the pricing without persisting the pricing. This service can be invoked from various sources such as, for account pricing simulation, to know what rate will be available to a person or account if some of the account or person attributes change or simulate the fee calculation for an account based on certain parameters.

As an example, consider the following usecase (Default standard pricing and promotional pricing):

Bank offers a product Money Market Savings with Money Market Savings rate based on parameters region and state, standard rates applicable from 01/10/2016 for the product are as follows:

Rate	Region	State
2%	NA	CA
2.5%	NA	NY
2.25%	NA	All

- 90 day promotion that gives 2x usual rate on all Rewards MMS balances are available only to new Persons and only when Person brings a minimum new balance of \$25,000 between 01/10/2016 to 01/11/2016.
- 90 day promo(across national footprint) that offers double rate on Platinum Honors, 1.5x rate on Platinum, 1.25x rate on Gold available between 01/10/2016 to 01/11/2016.
- Post 90 days, rate reverts to normal Rewards MMS rates.

Now, consider the following ORMB setup for the above usecase:

- Price Lists Description:
 - Price List with ID PL1 –Standard MMS – Effective Start Date 01/10/2016 Effective End Date: 01/11/2016.
Availability Start Date Availability End Date
 - On Product MMS should be configured as Default Price List.

Price Assignment (PA)ID	Price Item	Parameter1	Region	State	Rate
PA1	Interest Rate	MMS	NA	CA	2%
PA2	Interest Rate	MMS	NA	NY	2.5%
PA3	Interest Rate	MMS	NA		2.25%

- Price List with ID PL2- Promo MMS for New Persons – Effective Start Date 01/10/2016 Effective End Date = NULL; Availability Start Date 01/10/2016 Availability End Date 01/11/2016 Validity Period 90 days

Price Assignment (PA) ID	Price Item	Parameter1	Region	State	Rate
PA4	Interest Rate	MMS	NA	CA	4%
PA5	Interest Rate	MMS	NA	NY	5%
PA6	Interest Rate	MMS	NA		4.5%

- Price List with ID3 – Promo for Existing Persons- Availability Start Date 01/10/2016 Availability End Date 01/11/2016; Effective Start Date = 01/10/2016 Validity Period 90 days

Price Assignment (PA) ID	Price Item	Parameter1=Product	Parameter2 = Region	Parameter3 = State	Rate	Price Eligibility Criteria
PA7	Interest Rate	MMS	NA	CA	4	If CustStatus = PlatinumHon
					3	If CustStatus = Platinum
					2.5	If CustStatus = Glod
PA8	Interest Rate	MMS	NA	NY	5	If CustStatus = PlatinumHon
					3.75	If CustStatus = Platinum
					3.125	If CustStatus = Glod
PA9	Interest Rate	MMS	NA		4.5	If CustStatus = PlatinumHon
					3.375	If CustStatus = Platinum
					2.8125	If CustStatus = Glod

- Price List Eligibility Rules
 - Rule 1:
 1. Rule Date - Start Date: 01/10/2016 End Date: 01/11/2016
 2. Rule Criteria – ‘Product’ = ‘MMS’
 3. Rule Output - Price List ID1
 - Rule 2:
 1. Start Date: 01/10/2016 Rule End Date: 01/11/2016
 2. Rule Criteria – ‘Product’ = ‘MMS’ and Person status ‘New’ and balance >=25000
 3. Rule Output - Price List ID2
 - Rule 3:
 1. Start Date: 01/10/2016 Rule End Date: 01/11/2016
 2. Rule Criteria – ‘Product’ = ‘MMS’ and Person status in ‘Gold’ ,‘Platinum’,‘ PlatinumHon’
 3. Rule Output - Price List ID3
- Product: MMS ---- mapped to Account type
- Price Item Interest Rate with three parameters – Product – Source Product, Region –Source Person, State-Source-Person.

2.3.2 Output Parameters for GetPricing Service

Output parameters for the Get Pricing service are defined in the following table:

Output Parameter	Comments
Rate	Displays the final rate.
Price Components	Displays the price components which are eligible.
Price Component ID	Displays the price component ID where eligibility criteria is satisfied.
Price Component Description	Displays the eligibility and the tiering details of the price component.
Eligibility Criteria	Displays details about pricing eligibility rules.
Eligibility Condition Sequence	Displays sequence number of the eligibility condition.
LHS	Displays left hand side value of the parameter.
Operator	Displays operator used for evaluating the condition.
RHS	Displays right hand side value of the parameter.
Condition Status	Displays the value of condition status. Valid values are: <ul style="list-style-type: none"> • True • False • Insufficient
Tiering Criteria	Describes the tiering criteria.
Tiering Criteria SQ	Displays service quantity value for the tiering criteria
Tiering Sequence	Displays sequence number of the tier.
Tiering Start Value	Displays the start date of the tiering criteria.
Tiering End Value	Displays End date of tiering criteria.
Tiering Price Item	Displays the price item code.
Tiering Parameters	Displays price item parameters, if defined.
Parameter Code	Displays value of price item parameter code.
Parameter Value	Displays value of price item parameter.

2.4 GetAllAssignedPriceLists Pricing Service

GetAllAssignedPriceLists Service lists all the price lists that are assigned to the account or Person. You will not find any information if the person or account does not have any price lists assigned to it.

2.4.1 Prerequisite

None.

2.4.2 Input Parameters for GetAllAssignedPriceLists Service

Input parameters for the GetAllAssignedPriceLists service are defined in the following table:

Input Parameter	Comments	Mandatory
Historic Flag	<p>Used to indicate the values of historic flag. Valid values are:</p> <ul style="list-style-type: none"> • Yes • No <p>If Yes is selected, it searches all the historic price list assignments where Start Date and End date will be ignored or else searches all price lists which are effective from Start date or in some future date.</p> <p>Note : Default value is No.</p>	O
Status	<p>Used to indicate the value of status. Valid values are:</p> <ul style="list-style-type: none"> • Active • Inactive • Proposed • Rejected <p>Note: Default value is Active.</p>	O
Start Date	Used to specify the start date of the price list assignment. It searches all the price list assignments where price list assignment End Date is later than or equal to the Start Date or price list assignment End Date is NULL.	M
End Date	Used to specify the start date of the price list assignment. It is required to search all the price list assignments where price list assignment Start Date is earlier than or equal to the End Date.	O
Person ID	Used to specify the person ID. It is required if account ID is not provided.	C
Person Identifier Type	Required if Person ID is not provided.	C
Person Identifier	Required if Person ID is not provided.	C
Account ID	Searches the price lists assigned to an account.	C
Account Identifier Type	Required if Account ID is not provided.	C
Account Identifier	Required if Account ID is not provided.	C
Division	Required if Account Identifier Type and Account Identifier are provided.	C

2.4.3 Process for GetAllAssignedPriceLists Pricing Service

You can perform the search to get all assigned price lists for the account by providing the eligible pricing parameters in the request. This service lists all the price list assignments with the given status such as Active, Inactive, Proposed or Rejected. If status is not provided, then service will return all the price list assignments with the “Active” status or all the historic price list assignments (with given status, by default being ‘Active’) for a Person or account mentioned in the request.

Note: Historic price list assignment lists the price list assignments which have expired and are no longer effective.

2.4.4 Output Parameters for GetAllAssignedPriceLists Pricing Service

Output parameters for the GetAllAssignedPriceLists service are defined in the following table:

Output Parameter	Comments
Price List Assignments	Lists all the assigned price lists.
Price List Assignment ID	Displays Price List Assignment ID for the account or Person.
Price List ID	Displays Price List ID of the price list associated with the Price List Assignment ID.
Priority	Displays sequence number of each assigned price list.
Assignment Start Date	Displays the date from when price list is assigned to either person or account.
Assignment End Date	Displays the Date till when price list is assigned to either person or account.
Price List Inheritance	Indicates whether the account can inherit price item pricing from the price list hierarchy.
Status	Displays Status of the assigned price list as given in the input.
Account ID	Displays the Account ID on which the price lists are assigned.
Person ID	Displays the Person ID on which the price lists are assigned.

2.5 AssignPriceList Service

AssignPriceList Service assigns the price lists to the account. Once a price list is defined, you can assign it to accounts to indicate the prices that will be charged for the price items or services offered to the accounts. You can assign multiple price lists to an account along with the priority or order in which the pricing should be considered. You can also define whether the account can inherit the price item pricing from the price list hierarchy.

2.5.1 Prerequisite

None.

2.5.2 Input Parameters for AssignPriceList Service

Input parameters for the Assign Price List Pricing service are defined in the following table:

Input Parameter	Comments	Mandatory
Start Date	Used to define the start date for the price list assignment.	M
End Date	Used to define the end date for the price list assignment.	O
Price List Assignment ID	Used to specify the price list assignment ID. It is required to update only the existing price list assignment.	C
Price List	Used to specify the price list. It is required to add new price list assignment.	C
Priority	Used to indicate the priority for the price list assignment.	O
Priority Indicator	Used to indicate the value of priority indicator. Valid values are: <ul style="list-style-type: none"> • Lowest • Highest 	O
Price Inheritance	Used to indicate the value of price inheritance. Valid value are: <ul style="list-style-type: none"> • Yes • No <div style="border: 1px solid black; padding: 2px; margin-top: 5px;">Note: Default value is No.</div>	O
Person ID	Used to assign the price list. It is required when account ID is not provided.	C
Person Identifier Type	Required if Person ID is not provided.	C
Person Identifier	Required if Person ID is not provided.	C
Account ID	Used to specify the account ID for assigning price list to the particular account. It is required when Person ID is not provided.	C
Account Identifier Type	Required if Person ID is not provided.	C
Account Identifier	Required if Person ID is not provided.	C
Division	Required if Account ID is not provided.	C
Calculate Assignment End Date	Used to specify the end date required to calculate assignment. <div style="border: 1px solid black; padding: 2px; margin-top: 5px;">Note: Default Value is No.</div>	M

Input Parameter	Comments	Mandatory
Characteristics	Used to define the Characteristics.	O
Char Effective Start Date	Used to specify the effective start date for characteristics. It is required when characteristics value is provided.	C
Char Type	Used to specify the type of characteristics. It is required when characteristics value is provided	C
Char Value	Used to specify the value of characteristics. It is required when characteristics value is provided	C
End Date Calculation Switch	Used to specify the flag to calculate end date. Valid values are: <ul style="list-style-type: none"> • Yes • No <div data-bbox="565 783 1175 829" style="border: 1px solid black; padding: 2px;">Note: Default value is No.</div>	O
Status	Used to specify the status of assignment. Valid values are: <ul style="list-style-type: none"> • Active • Inactive • Proposed • Reject <div data-bbox="565 1121 1175 1167" style="border: 1px solid black; padding: 2px;">Note: Default value is Active.</div>	O

2.5.3 Process for AssignPriceList Service

You can assign price list to the account by providing eligible parameters in the AssignPriceList Service.

Note: If Price List ID, start date, priority and Account ID is provided as input, then that price list will be assigned to the given account.

2.5.4 Output Parameters for AssignPriceList Service

Output parameters for the AssignPriceList service are defined in the following table:

Output Parameter	Comments
Price List Assignment ID	Displays Price List Assignment ID for the account or Person.
Price List ID	Displays the Price List ID for the account or Person.
Priority	Displays sequence number of each assigned price list.
Assignment Start Date	Displays the date from when price list is assigned to either person or account.
Assignment End Date	Displays the Date till when price list is assigned to either person or account.
Account ID	Displays the Account ID if price lists is assigned to account.
Person ID	Displays the Person ID if price lists is assigned to person.
Approval Transaction ID	Displays if the price list assignment goes for approval.

2.6 PriceAccount Service

PriceAccount Service allows you to calculate the final rate applicable to the account from an effective date. This service can be invoked only for a certain price item. The service will also persist this final rate along with the effective dates and the contributing factors.

2.6.1 Prerequisite

None.

2.6.2 Input Parameters for PriceAccount Service

Input parameters for the PriceAccount service are defined in the following table:

Input Parameter	Comments	Mandatory
Account ID	Used to calculate the final rate applicable for account.	M
Price Item Code	Used to invoke the rates that are only for the price assignments in the effective pricing.	O
Price Parameters	Used to define the parameters for price item.	O
Price Parameter Code	Used to specify the code of price parameter. It is required if corresponding pricing parameter value is provided.	C
Price Parameter Value	Used to specify the value of price parameter. It is required if corresponding pricing parameter value is provided.	C

Input Parameter	Comments	Mandatory
Effective Date	Used to specify date for effective pricing search.	M
View Type	Used to indicate whether you want to view summary or tiering details of price components. The valid values are: <ul style="list-style-type: none"> • Detail- Used when you want to view both contributing and non contributing price components. • Summary- Used when you want to view only the contributing price components. <div style="border: 1px solid black; padding: 2px; margin-top: 5px;">Note: Default value is DT.</div>	O
Account Identifier Type	Required if account ID is not provided.	C
Account Identifier	Required if account identifier type is provided.	C
Division	Required if account identifier type and account identifier are provided.	C

2.6.3 Process for PriceAccount Service

You can calculate the final rate for the account by providing the eligible parameters in the Price Account Pricing Service. The calculation of the rate is considered as the final rate and is persisted as price with the effective date for the account.

Now, consider the following example:

Service requests to assign price List PromoPL1 to Account with Account ID 112211 (In CA, NA) from 15/01/2015 on 15/12/2014

Price List PromoPL1 is available from 01/12/2014 to 31/12/2014. And has validity period of 90 days and Effective Start Date 01/01/2015 and Effective End Date 01/04/2015

Price assignments on PromoPL1 are as follows:

Price Assignment ID (PA)	Price Item ID	Price Item Parameters	Rate Schedule	Pricing Frequency	Owner ID	Effective Start Date	Effective End date
PA1	Interest Rate	MMS,CA,NA	Flat Rate-2		112211	01/01/2015	31/01/2015
PA2	Interest Rate	MMS,CA,NA	Flat Rate-2.5		112211	01/02/2015	28/02/2015
PA3	Interest Rate	MMS,CA,NA	Flat Rate-3		112211	01/03/2015	

Price Assignment ID (PA)	Price Item ID	Price Item Parameters	Rate Schedule	Pricing Frequency	Owner ID	Effective Start Date	Effective End date
PA4	Interest Rate	MMS, ,	Flat Rate – 1		112211	01/01/2015	
PA5	Reward Points	MMS,CA,NA	Flat Rate – 0.5%		112211	01/01/2015	

When the Assign Price List service is called with start date of 15/01/2015 on 15/12/2014 ORMB will assign the price List to the account 112211 with following dates:

- Price List assignment Start date = 15/01/2015 (since Start date > Effective Start Date)
- Price List assignment End Date is calculated = 01/04/2015 (= Effective End Date as PL Assignment Start Date + 90 is later than Effective End Date)

As Price List assignment Start date > the request date for price List assignment, Price Account service will not be invoked with the price List assignment but will be invoked at a later stage.

Following entries will be done for Repricing to the Account Review Table:

Account	Price Item	Effective Date
112211	Interest Rate	15/01/2015
112211	Interest Rate	01/02/2015
112211	Interest Rate	01/03/2015
112211	Interest Rate	02/04/2015

Note: If the account or person attributes are changed, the system allows you to recalculate and persist the interest rate for rate type price items. This process is known as Repricing.

Thus pricing will be invoked for the Interest Rate on the Price List assignment date and Price List assignment End Date +1 and also for the Interest Rate product on the Price assignment End Date +1

Expected results in the output:

Account ID	Price Assignment ID	Price Assignment Level	Price Item	Price Item Params	Price List	Price	Effective From Datetime	Effective End Date	FK Ref to Eligibilities/Criteria
112211	PA1	Account Price List	Interest Rate	MMS, CA,NA	Promo PL1	2	15/01/2015		
112211	PA2	Account Price List	Interest Rate	MMS, CA,NA	Promo PL1	2.5	01/02/2015		

Account ID	Price Assignment ID	Price Assignment Level	Price Item	Price Item Params	Price List	Price	Effective From Datetime	Effective End Date	FK Ref to Eligibilities/Criteria
112211	PA3	Account Price List	Interest Rate	MMS, CA, NA	Promo PL1	3	01/03/2015		
112211							02/04/2015		

2.6.4 Output Parameters for PriceAccount Service

Output parameters for the PriceAccount service are defined in the following table:

Output Parameter	Comments
Rate	Displays the value of the rate component which is defined as final rate.
Price Components	Displays the price components.
Price Component ID	Displays the price component ID.
Price Component Description	Displays the description about the eligibility and tiering details.
Eligibility Criteria	Used to specify the eligibility rule.
Eligibility Condition Sequence	Displays sequence number of the eligibility condition.
LHS	Displays left hand side parameter value.
Operator	Displays operator used to evaluate the condition.
RHS	Displays right hand side parameter value.
Condition Status	Displays the value of condition status. Valid values are: <ul style="list-style-type: none"> • True • False • Insufficient
Tiering Criteria	Displays the details about the tiering criteria.
Tiering Criteria SQ	Service quantity value for the tiering criteria.
Tiering Sequence	Displays sequence number of the tier.
Tiering Start Value	Displays start date of the tiering criteria.
Tiering End Value	Displays end date of tiering criteria.
Tiering Price Item	Displays the tiering price item code.

Output Parameter	Comments
Tiering Parameters	Displays the tiering parameters if price assignment parameter flag is enabled in feature configuration.
Tiering Parameter Code	Displays the tiering parameter code.
Tiering Parameter Value	Displays the tiering parameter value.

2.7 AssignPrice Service

AssignPrice Service allows you to assign price for a price item to a price list, account or customer. Service can also be used to save the overridden or negotiated rate for the price list either at the customer level or at the account level.

Note: When you override a price item pricing, you create prices that are specific to an account (which is referred to as account agreed pricing).

2.7.1 Prerequisite

None.

2.7.2 Input Parameters for AssignPrice Service

Input parameters for the AssignPrice service are defined in the following table:

Input Parameter	Comments	Mandatory
Start Date	Used to specify the start date of the price assignment.	M
End Date	Used to specify the end date of the price assignment.	O
Person ID	Used to specify the Person ID.	C
Person Identifier Type	Required if Person ID is not provided.	C
Person Identifier	Required if Person ID is not provided.	C
Account ID	Used to specify the Account ID.	C
Account Identifier Type	Required if Account ID is not provided.	C
Account Identifier	Required if Account ID is not provided.	C
Division	Required if Account Identifier Type and Account Identifier are provided.	C
Price Assignment ID	Required if editing the price assignment.	C
Override Pricing	If Y then Person Agreed or Account Agreed pricing is done depending upon Account / Person details been passed.	C

Input Parameter	Comments	Mandatory
Price Item	Required for new Price Assignment.	C
Price Item Params	Required for specifying Price Item Parameter Code	C
Product Parameter Code	Price Item Parameter Code	C
Product Parameter Value	Price Item Parameter Value	C
Rate Schedule	Used to specify the rate schedule.	M
Pricing Currency	Used to specify the currency of price assignment.	M
Price Assignment Frequency	Used to specify the price assignment frequency.	O
Price Components	Used to specify the details of price component.	M
Rate Component ID	Used to specify the Rate component map id.	
Rate	Used to specify the rate to be applied for price component.	M
Rate Description	Used to specify the price component description.	M
Tiering Criteria	Used to specify the details of tiering criteria.	C
Tiering Criteria SQ	Used to specify the tiering criteria service quantity identifier.	M
Tiering Sequence	Used to specify the tiering sequence number.	M
Tiering From Value	Used to specify the tiering from value.	M
Tiering To Value	Used to specify the tiering from value.	M
Tiering Price Item	Used to specify the tiering price item.	M
Tiering Parameters	Used to specify the tiering price item parameters.	C
Parameter Code	Used to specify the parameter code.	C
Parameter Value	Used to specify the parameter value.	C
Eligibility Criteria	Used to specify the eligibility rule.	C
Eligibility Condition Sequence	Used to specify the eligibility sequence number.	C
LHS	Used to specify the left hand side parameter to be evaluated.	C
Operator	Used to specify the operator.	C
RHS	Used to specify the right hand side parameter or value.	C
Condition Status	Used to specify the condition status as True, False or Insufficient.	C

Input Parameter	Comments	Mandatory
Characteristics	Used to specify the price assignment characteristics.	O
Char Effective Start Date	Used to specify the characteristic effective start date.	M
Char Type	Used to specify the type of characteristic.	M
Char Value	Used to specify the value of characteristic.	M
Action Flag	Used to specify the value as ADD or READ.	M

2.7.3 Process for AssignPrice Service

You can assign price to the price list by providing eligible parameters in the AssignPrice Service. This service will create a new or overridden price assignment at the Person or Account level as requested.

Now, consider the following example:

Consider the Gold Person XYZ with Person ID 111111, from state CA in region NA accepts the price list PL3 with the 90 days validity and opens a new MMS account with Account ID ACCTMMSXYZ.

System requests the Pricing Service to create a new price list assignment for Account ACCTMMSXYZ from 15/01/2015 on 15/01/2015, and to override the pricing for account ACCTMMSXYZ to 2.75 from 15/05/2015

- On 15/01/2015, System will request Assign Price List request to the pricing service:
 - After invoking Assign Price List request, there will be entries to – Pricing Request Response Logs with date 15/01/2015
 - Pricing service will assign, promotional Price List to the account and the default price list pricing will be automatically available to the account
 - Entries in the price list assignment table are as follows:

Price List Priority	Price List ID	Price List description	PL Assign Start Date	PL Assign End Date
100	PL3	PromoPrice List for Existing Persons	15/01/2015	14/04/2015

- After invoking PriceAssign service on 15/05/2015 the entries to the price assignment table will be as follows:

Price Assignment ID	Price Item ID	Price Item Parameters	Rate Schedule	Pricing Frequency	Owner ID	Effective Start Date	Effective End date
PA10	Interest Rate	MMS,CA,NA	Flat Rate		Acct ACCTMMSXYZ	15/05/2015	

Price Assignment ID	Price Com ID	Price
PA10	10	2.75

2.7.4 Output from AssignPrice Pricing Service

Pricing Service will return back response status as 'SUCCESS' along with the Price Assignment ID or 'FAILURE' along with error code and description.

2.8 GetAccountRate Service

GetAccountRate Service calculates and provides you the account rate or rates along with the details of calculations and pricing. Systems will inquire pricing service to provide the interest rate for the product. Interest rates will be configured in ORMB using price item of type 'Rates'. Typically Rates will be calculated as base rates defined with a margin set as basis points. The margin on top of the base rate can vary based on various parameters such as Person attributes, such as Reward Level, Geography, Sub-Geography, and Cohort.

2.8.1 Prerequisite

None.

2.8.2 Input Parameters for GetAccountRate Service

Input parameters for the GetAccountRate service are defined in the following table:

Input Parameter	Comments	Mandatory
Price Assignment ID	Used to search the account rate for selected price assignment.	O
Price Item	Used to search the account rate for selected price item.	O
Effective Date	Used to specify the date from when the price assignment is effective. Note: Default value is Current System date.	O
Account ID	Used to search the price list assigned to an account.	M
Account Identifier Type	Required if Account ID is not provided.	C
Account Identifier	Required if Account ID is not provided.	C
Division	Required if Account Identifier Type and Account Identifier are provided.	C

Input Parameter	Comments	Mandatory
View Type	<p>Used to indicate whether you want to view summary or tiering details of price components. The valid values are:</p> <ul style="list-style-type: none"> • Detail — Used when you want to view both contributing and non contributing price components. • Summary- Used when you want to view only the contributing price components. <p>Note: Default value is DT.</p>	O

2.8.3 Process for GetAccountRate Service

You can perform the search to get the account rate or rates by providing the eligible parameters in the request. You can search the latest version of the persisted pricing by Price Account service based on the effective date for the account. In other words, service will search the pricing for the price Items of type 'Rate' persisted with latest Effective start date where Effective Start Date is earlier than the Price Search date and Effective End Date for the Pricing is NULL or later than search date. The latest version of the pricing is defined based on 'Date of Creation'.

2.8.4 Output Parameters for GetAccountRate Service

Output parameters for the GetAccountRate service are defined in the following table:

Output Parameter	Comments
Price Assignment ID	Displays Price Assignment ID for the account or Person.
Price Item	Displays Price Item for the price assignment.
Account ID	Displays Account ID if the pricing is searched for the account.
Division	Displays the division.
Account Identifier Type	Displays Account Identifier Type if provided in request.
Account Identifier	Displays Account Identifier if provided in request.
Effective Date	Displays Effective Date if provided in request or System date.
View Type	Displays the selected value.
Rate	Displays the final rate.
Price Assignment ID	Displays price assignment ID assigned to account.
Price Item code	Displays the price item for the selected price assignment ID.
Price Item Description	Displays the price item description for selected Price Assignment ID.

Output Parameter	Comments
Ignore Transaction	Displays the value as Y or N.
Do Not Aggregate SW	Displays the value as Y or N.
Transaction Schedule	Displays the transaction schedule for selected Price Assignment ID
Rating Criteria	Displays the rating criteria for selected Price Assignment id
Rate Schedule Code	Displays the Rate Schedule Code for selected Price Assignment ID
Rate Schedule Description	Displays the rate schedule description.
Pricing Currency	Displays the pricing currency for selected Price Assignment ID.
Pricing Status	Displays the pricing status for selected Price Assignment ID
Pricing Frequency	Displays the pricing frequency for selected Price Assignment ID.
Print Zero	Displays the value as Y or N.
Apply To	Displays the Apply To for selected Price Assignment ID.
Effective Start Date	Displays the date from when price assignment is effective to either person or account.
Effective End date	Displays the date till when price assignment is effective to either person or account.
Pricing Assignment Type	Displays the type of pricing assignment.
Variance	Displays the variance for selected price assignment ID if price assignment parameter flag is not enabled in feature configuration.
Applied Rate	Displays the applied rate.
Price Assign Parameter	Displays the price assign parameter for selected price assignment ID if price assignment parameter flag is enabled in feature configuration.
Price parameter Code	Displays the price parameter code for selected price assignment ID.
Price parameter Value	Displays the price parameter value for selected price assignment ID.
Rate Schedule Details	Displays rate schedule details.
Rate Component Map Id	Displays rate component map ID for the rate schedule.
Rate Sequence	Displays rate sequence for the rate schedule.
Tier Type	Displays tier type for the rate schedule.
Price Components	Displays the eligible price components.

Output Parameter	Comments
Price Comp Sequence number	Displays the price components sequence for eligible price components.
Price Component ID	Displays the price component ID for eligible price component.
Price Comp Description	Displays the price components description for eligible price component.
Value Amount	Displays the value amount for eligible price component.
Contributing Factor	Displays contributing factor value as Y or N.
Price Component Display	Displays the flag if price component should display or not.
Eligibility Criteria	Provides details about pricing eligibility rules.
Eligibility Condition Sequence	Displays sequence number of the eligibility condition.
LHS Parameter code	Displays the left hand side parameter.
Operator	Used to evaluate the condition.
RHS value Type Flag	Displays right hand side flag value parameter or value.
RHS Param code	Displays right hand side parameter.
RHS Param value	Displays right hand side parameter value.
Is True	Displays the true condition.
Is False	Displays the false condition.
Is insufficient	Displays the insufficient condition.
Tiering Criteria	Describes the tiering criteria.
Tiering Criteria Code	Displays service quantity value for the tiering criteria.
Tiering lower limit	Displays the lower limit of the tiering criteria.
Tiering upper limit	Displays upper limit of tiering criteria.
Tiering Price Item	Displays the tiering price item code.
Tiering Variance	Displays the tiering variance if price assignment parameter flag is not enabled in feature config.
Tiering Parameters	Displays the tiering parameters if price assignment parameter flag is enabled in feature config.
Tiering Parameter Code	Displays the tiering parameter code.
Tiering Parameter Value	Displays the tiering parameter value.

2.9 AccountUsage Service

AccountUsage is an inbound web service to upload the effective dated usage amount and counter related information in the system. This information can then be used while defining pricing eligibility criteria in the system.

2.9.1 Prerequisite

To setup the AccountUsage service, you need to do the following:

- Balance (BAL_FLG) and Counter (CNR_FLG) Loop up need to be configured in the application.

2.9.2 Input Parameters for AccountUsage Service

Input parameters for the AccountUsage service are defined in the following table:

Input Parameter	Comments	Mandatory
Balance Counter ID	Used to search the balance counter ID of the account.	M
Account ID	Used to search the particular account.	M
Usage Type	Used to indicate the value of usage type. Valid values are: <ul style="list-style-type: none"> • Usage counter • Usage amount 	M
Usage Criteria	Used to indicate the usage criteria.	M
Effective Date Time	Used to specify the effective date and time for account usage.	M
Usage	Used to specify the value of usage.	M
Currency	Used to specify the currency. It is required during add and update request. It is required when usage type is usage amount.	C
Business Object Code	Used to specify the business object code.	M
Status	Used to specify the status.	O
Business Object Data Area	Used to specify the extra information.	O
Status Reason	Used to specify the status reason.	O
Status Date time	Used to specify the status date and time.	O
Eligible for Archive	Used to indicate the ILM Archive Switch value. Valid values are: Yes No	O
ILM Date	Used to specify the ILM Date.	O

2.9.3 Process for AccountUsage Service

You can perform the search to get the account usage by providing the eligible parameters in the request.

2.9.4 Output Parameters for AccountUsage Service

Output parameters for the AccountUsage service are defined in the following table:

Output Parameter	Comments
Balance Counter ID	Displays the value of balance counter ID.
Account ID	Displays the value account ID
Usage Type	Displays the value usage type.
Usage Criteria	Displays the value usage criteria.
Effective Date Time	Displays the effective date for account usage.
Usage	Displays the value of usage.
Currency	Displays the currency.
Business Object Code	Displays the business object code.
Status	Displays the status.
Business Object Data Area	Displays the business object data area.
Status Reason	Displays the status reason code.
Status Date time	Displays the status date and time.
Eligible for Archive	Displays the value of ILM archive switch.
ILM Date	Displays the ILM date

2.10 PersonUsage Service

PersonUsage is an inbound web service to upload the effective dated usage amount and counter related information in the system. This information can then be used while defining pricing eligibility criteria in the system.

2.10.1 Prerequisite

To setup the PersonUsage service, you need to do the following:

- Balance (BAL_FLG) and Counter (CNR_FLG) Loop up need to be configured in the application.

2.10.2 Input Parameters for PersonUsage Service

Input parameters for the PersonUsage service are defined in the following table:

Input Parameter	Comments	Mandatory
Balance Counter ID	Used to search the balance counter ID of the account.	M
Account ID	Used to search the particular account.	M
Usage Type	Used to indicate the value of usage type. Valid values are: Usage counter Usage amount	M
Usage Criteria	Used to indicate the usage criteria.	M
Effective Date Time	Used to specify the effective date and time for account usage.	M
Usage	Used to specify the value of usage.	M
Currency	Used to specify the currency. It is required during add and update request. It is required when usage type is usage amount.	C
Business Object Code	Used to specify the business object code.	M
Status	Used to specify the status.	O
Business Object Data Area	Used to specify the extra information.	O
Status Reason	Used to specify the status reason.	O
Status Date time	Used to specify the status date and time.	O
Eligible for Archive	Used to indicate the ILM Archive Switch value. Valid values are: Yes No	O
ILM Date	Used to specify the ILM Date.	O

2.10.3 Process for PersonUsage Service

You can perform the search to get the person usage by providing the eligible parameters in the request.

2.10.4 Output Parameters for PersonUsage Service

Output parameters for the PersonUsage service are defined in the following table:

Output Parameter	Comments
Balance Counter ID	Displays the value of balance counter ID.
Account ID	Displays the value account ID
Usage Type	Displays the value usage type.
Usage Criteria	Displays the value usage criteria.
Effective Date Time	Displays the effective date for account usage.
Usage	Displays the value of usage.
Currency	Displays the currency.
Business Object Code	Displays the business object code.
Status	Displays the status.
Business Object Data Area	Displays the business object data area.
Status Reason	Displays the status reason code.
Status Date time	Displays the status date and time.
Eligible for Archive	Displays the value of ILM archive switch.
ILM Date	Displays the ILM date

3. Configuration in ORMB

You need to apply these steps for configuring ORMB Pricing Services:

1. Click the **Admin** link in the **Application** toolbar.
2. From the **Admin** menu, click **I** and select **Inbound Service**.
3. Select/Add the **Schema Type** and **Schema Name** for your service.
4. Click **Save**.
5. Now again, click the **Admin** link in the **Application** toolbar.
6. From the **Admin** menu, click **I** and select **Inbound Web Service Deployment**.
7. Click **Deploy**.
8. Add name to the webservice deployed.