Oracle® Revenue Management and Billing

Version 2.5.0.3.0

Pricing Services

Revision 2.1

E79760-01

August, 2016

ORACLE®

Oracle Revenue Management and Billing Pricing Services
E79760-01

Copyright Notice

Copyright © 2016, Oracle and/or its affiliates. All rights reserved.

Trademark Notice

Oracle, Java, JD Edwards, PeopleSoft, and Siebel are registered trademarks of Oracle Corporation and/or its affiliates. Other names may be trademarks of their respective owners.

Intel and Intel Xeon are trademarks or registered trademarks of Intel Corporation. All SPARC trademarks are used under license and are trademarks or registered trademarks of SPARC International, Inc. AMD, Opteron, the AMD logo, and the AMD Opteron logo are trademarks or registered trademarks of Advanced Micro Devices. UNIX is a registered trademark of The Open Group.

License Restrictions Warranty/Consequential Damages Disclaimer

This software and related documentation are provided under a license agreement containing restrictions on use and disclosure, and are protected by intellectual property laws. Except as expressly permitted in your license agreement or allowed by law, you may not use, copy, reproduce, translate, broadcast, modify, license, transmit, distribute, exhibit, perform, publish, or display any part, in any form, or by any means. Reverse engineering, disassembly, or de-compilation of this software, unless required by law for interoperability, is prohibited.

Warranty Disclaimer

The information contained herein is subject to change without notice and is not warranted to be error-free. If you find any errors, please report them to us in writing.

Restricted Rights Notice

If this software or related documentation is delivered to the U.S. Government or anyone licensing it on behalf of the U.S. Government, the following notice is applicable:

U.S. GOVERNMENT RIGHTS

Oracle programs, including any operating system, integrated software, any programs installed on the hardware, documentation, and/or technical data delivered to U.S. Government end users are "commercial computer software" or "commercial technical data" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, use, duplication, disclosure, modification, and adaptation of the programs, including any operating system, integrated software, any programs installed on the hardware, documentation, and/or technical data shall be subject to license terms and restrictions as mentioned in Oracle License Agreement, and to the extent applicable, the additional rights set forth in FAR 52.227-19, Commercial Computer Software--Restricted Rights (June 1987). No other rights are granted to the U.S. Government.

Hazardous Applications Notice

This software is developed for general use in a variety of information management applications. It is not developed or intended for use in any inherently dangerous applications, including applications that may create a risk of personal injury. If you use this software in dangerous applications, then you shall be responsible to take all appropriate fail-safe, backup, redundancy, and other measures to ensure the safe use of this software. Oracle Corporation and its affiliates disclaim any liability for any damages caused by use of this software in dangerous applications.

Third Party Content, Products, and Services Disclaimer

This software and documentation may provide access to or information on content, products, and services from third parties. Oracle Corporation and its affiliates are not responsible for and expressly disclaim all warranties of any kind with respect to third party content, products, and services unless otherwise set forth in an applicable agreement between you and Oracle. Oracle Corporation and its affiliates will not be responsible for any loss, costs, or damages incurred due to your access to or use of third party content, products, or services.

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
Oracle Revenue Management and Billing Banking User Guide	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.
italic	Italic indicates a document or book title.
`Monospace`	Monospace indicates information that an end-user needs to enter in the application.

Change Log

Revision	Last Update	Updated Section	Comments
2.1	07-Dec-2016	Section 2: Pricing Services	Added Information

Contents

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:

- GetEligiblePriceLists Service
- GetEffectivePricing Service
- GetPricing Service
- GetAllAssignedPriceLists Service
- AssignPriceList Service
- PriceAssign Service
- AccountRate Service
- GetAccountRate Service
- AccountFees Service
- GetAccountFees Service
- AccountUsage Service
- PersonUsage Service

Note: Values for tags in pricing services are case insensitive.

2.1   GetEligiblePriceList Service

GetEligiblePriceList pricing service provides the eligible price lists to the customer on the basis of the details provided in the request.

2.1.1   Prerequisite

None.

2.1.2   Input Parameters for GetEligiblePriceList Service

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

Input Parameter	Comments	Mandatory (M)/ Optional(O)/ Conditional (C)
Effective Eligibility Date	Used to search eligible price list which is effective from a particular date onwards.	M
Price List Status	Used to indicate the status of the price lists. following are the valid values: Proposed Active	C

Input Parameter	Comments	Mandatory (M)/ Optional(O)/ Conditional (C)
	Note: Default value is Active.	
Person ID	Used to calculate the eligible pricing for the price list which is assigned to a particular person.	O
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 search eligible price list for the particular account.	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 is provided.	M
Pricing Parameters	Used to specify the pricing parameters.	O
Pricing Parameter Code	Used to specify the pricing parameter code. Required if corresponding price parameter value is given.	C
Pricing Parameter Value	Used to specify the value of pricing parameter. Required if corresponding price parameter value is given.	C
Simulation Switch	Used to indicate the value of simulation switch. Valid values are: Yes No It specifies whether the service is called for simulation or not. **Note**:-Default value is Yes.	M

2.1.3   Process for GetEligiblePriceList Service

You can perform the search to get the eligible price lists based on the pricing parameters. Consider the following cases:

- In case of prospect customer, system will gather the required details and will inquire the pricing service for the eligible price lists. This price lists can be provided to the customer which is derived on the basis prospect attributes, such as LOB, account type, and gender and other promised parameters, such as minimum average balance or minimum number of transactions for an account type or product.

- In case of existing customer, at the time of new account opening system will inquire the pricing service for the eligible price lists that can be provided to the customer by providing the customer ID and other pricing parameters such as account type or product to be offered to the customer.

- In case of joint account or where multiple customers wants to open a single account, system will call the GetEligiblePriceList service in loop for each of the prospect or customers for which the price list inquiry is done.

Consider the following example for understanding the process for the existing price lists:

Price list description	Status	Parameter 1	Operator	Value	Parameter 2	Operator	Value
P1	Active	Country	=	India	Location	=	Pune
P2	Proposed	Country	=	India	Location	=	Pune
P3	Template	Country	=	India	Location	=	Pune
P4	Active	Country	=	India	Location	=	Mumbai
P5	Active	Country	=	India	Location	=	Pune
P6	Active	Country	=	India	Location	=	Delhi

If the request contains following three pricing parameters:
Country = 'INDIA', Location = 'PUNE', Status = 'ACTIVE'

Then, in this case, above criteria will be matched with all ACTIVE price lists. Only those price lists (P1, P5) will be present in the response where above criteria fully matches.

2.1.4   Output Parameters for GetEligiblePriceList Service

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

Output Parameter	Comments
Price Lists	
Price List ID	Displays Price List ID.
Price List Description	Displays Price List Description.
Price List Validity Period	Displays Price List Validity Period.
Price List Availability Start Date	Displays Price List Availability Start Date

Output Parameter	Comments
Price List Availability End Date	Displays Price List Availability End Date
Price List Effective Start Date	Displays Price List Effective Start Date.
Price List Effective End Date	Displays Price List Effective End Date
Rule Eligibility Criteria	
Eligibility Start Date	Displays Eligibility Start Date.
Eligibility End Date	Displays Eligibility End Date.
Eligibility Description	Displays Eligibility Description.
Eligibility Criteria	
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.
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.

2.2   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 provide their account details and the service will return the effective pricing for the account based on the price item parameters such as, person or account or product attributes.

2.2.1   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**.

2.2.2   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	Used to specify the price list ID. It should be provided if the effective pricing for the price list is requested.	C

Input Parameter	Comments	Mandatory (M)/ Optional(O)/ Conditional (C)
Effective Date	Used to search effective pricing for the price list which is effective from a particular date onwards. **Note**: If no date is provided then system date is used.	C
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
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

Input Parameter	Comments	Mandatory (M)/ Optional(O)/ Conditional (C)
Show Default Pricing	Used to specify the default price list.	O
Parameter Match/Search Type	Used to specify if best fit or exact match is to be used which matching parameters	O
Simulation Switch	Used to indicate the value of simulation switch. Valid values are: • Yes • No It specifies whether the service is called for simulation or not. **Note**:-Default value is Yes.	O
Price Item Type	Used to specify the price item type (Rate or Fees) of price item to be searched as filter criteria.	O
View Type	Used to indicate whether you want to view only contributing or all price component: • **Detail** — Used when you want to view all price component. • **Summary** — Used when you want to view the only contributing component. **Note**: Default value is DT.	O
Price Item Available For	Used to specify the price item avail for (PRBL or PRIC) of price item to be searched as filter criteria.	O

2.2.3   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**.

2.2.4   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.
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.

Output Parameter	Comments
Parameter Value	Displays the parameter value of the parameter used in price item pricing.
Parameter String	Displays the parameter string as code is equal to 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.

2.3   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.

GetPricing Service can be used to simulate fees for price item type as fees, available for **Only Pricing** and **Pricing** and **Billing**.

2.3.1   Prerequisite

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

- Algorithm **C1-FEERTCPR** (Fees Rate Calculation Pre-Processing Algorithm) to be attached at division level for algorithm based SQI derivation.

2.3.2 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: • **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. **Note**: Default value is DT.	O
Person ID	Used to calculate pricing for the price list which is assigned to a particular person.	O
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 is required if Person ID is not defined.	M
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
Pricing Parameter Code	Required if corresponding Pricing Parameter Value is provided.	C
Pricing Parameter Code	Required if corresponding Pricing Parameter Value is provided.	C

Input Parameter	Comments	Mandatory (M)/ Optional(O)/ Conditional (C)
Price Assignment ID	Required if Price Parameter Code and Pricing Parameters are not provided.	M
Price Item Code	Required if request is for price simulation.	C
Pricing Parameters	Used to specify the pricing parameters. It is 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
SQUIs	Used to calculate rate.	O
SQI 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 SQI code and UOM code is not provided.	C
UOM code	Required if SQI code and TOU code is not provided.	C
Simulation Switch	Used to indicate the value of simulation switch. Valid values are: • Yes • No It specifies whether the service is called for simulation or not. **Note**:-Default value is Yes.	O

2.3.3 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.

2.3.4   Output Parameters for GetPricing Service

Output parameters for the GetPricing 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: • True • False • Insufficient
Tiering Criteria	Displays the details about 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 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	Used to indicate the values as Yes or No. 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. Note : Default value is No.	O
Status	Used to specify the value of status. Valid values are: • Active • Inactive • Proposed • Rejected **Note**: Default value is Active.	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 end 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 its 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 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 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 AssignPriceList service are defined in the following table:

Input Parameter	Comments	Mandatory
Start Date	Used to specify the start date for the price list assignment.	M
End Date	Used to specify 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: • Lowest • Highest	O
Price Inheritance	Used to indicate the value of price inheritance. Valid value are: • Yes • No **Note**: Default value is No.	O
Person ID	Used to specify the person ID. 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
Recalculate Assignment End Date	Used to specify the end date required to calculate assignment. **Note**: Default Value is No.	M

Input Parameter	Comments	Mandatory
Characteristics	Used to specify the Characteristics.	O
Characteristics 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. **Note**: Default value is No.	O
Status	Used to specify the status of assignment. Valid values are: • Active • Inactive • Proposed • Reject **Note**: Default value is Active.	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.

Output Parameter	Comments
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   AccountRate Service

AccountRate 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 of type, such as Rate. 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 AccountRate Service

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

Input Parameter	Comments	Mandatory
Account ID	Used to specify the account ID for calculating the final rate applicable for the particular account. It is required when Person ID is not provided.	M
Price Item Code	Used to specify the code for price item. It invokes 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
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: • **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. **Note**: Default value is DT.	O

Input Parameter	Comments	Mandatory
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
Simulation Switch	Used to indicate the value of simulation switch. Valid values are: • Yes • No It specifies whether the service is called for simulation or not. **Note**:-Default value is Yes.	N

2.6.3   Process for AccountRate Service

You can calculate the final rate for the account by providing the eligible parameters in the AccountRate 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	
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 Assignme ntID	Price Assign ment Level	Price Item	Price ItemPar ams	Price List	Price	Effective From Datetime	Effective End Date	FK Ref to Eligibilities /Criteria
112211	PA1	Accou nt Price List	Inter est Rate	MMS,C A,NA	Prom oPL1	2	15/01/201 5		
112211	PA2	Accou nt Price List	Inter est Rate	MMS,C A,NA	Prom oPL1	2.5	01/02/201 5		
112211	PA3	Accou nt Price List	Inter est Rate	MMS,C A,NA	Prom oPL1	3	01/03/201 5		
112211							02/04/201 5		

2.6.4   Output Parameters for AccountRate Service

Output parameters for the AccountRate 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	Displays the eligibility criteria.
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: • 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.
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   PriceAssign Service

PriceAssign 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 PriceAssign Service

Input parameters for the PriceAssign 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. 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.	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	Used to specify the price assignment ID. It is required when editing the price assignment.	C
Override Pricing	Used to specify the value of override pricing. Valid values are: • Yes • No If Yes, then Person Agreed or Account Agreed pricing is done depending upon account or person details provided in the request.	C
Price Item	Used to specify the price item. It is required for new price assignment.	C

Input Parameter	Comments	Mandatory
Price Item Parameters	Used to specify the price item parameters. It is required for specifying code of price item parameter.	C
Product Parameter Code	Used to specify the price item parameter code.	C
Product Parameter Value	Used to specify the 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
Characteristics	Used to specify the price assignment characteristics.	O

Input Parameter	Comments	Mandatory
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 PriceAssign Service

You can assign price to the price list by providing eligible parameters in the PriceAssign 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 ACCTMMS XYZ	15/05/2015	

Price Assignment ID	Price Com ID	Price
PA10	10	2.75

2.7.4   Output Parameters for PriceAssign Service

PriceAssign 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 Pricing Service

Input parameters for the Get Account Rate Pricing 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	Used to indicate whether you want to view summary or tiering details of price components. The valid values are: • **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. **Note**: Default value is DT.	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 AccountRate service based on the effective date for the account. In other words, service will search the pricing for the price Items of type as 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 Get Account Rate Pricing 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 Yes or No.
Do Not Aggregate SW	Displays the value as Yes or No.
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 Yes or No.
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.

Output Parameter	Comments
Tier Type	Displays tier type for the rate schedule.
Price Components	Displays the eligible price components.
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 Component 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 Parameter code	Displays right hand side parameter.
RHS Parameter 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	Displays the details about 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 configuration.
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.

2.9   AccountFees Service

AccountFees service calculates the fees for a transaction by passing the required details in the request. The service also persist the calculated fees with the relevant details. The price item type of the transaction should be Fees and available for Only Pricing. For the fee calculation following input details should be passed in the request.

2.9.1   Prerequisite

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

- Algorithm **C1-FEERTCPR** (Fees Rate Calculation Pre-Processing Algorithm) to be attached at division level for algorithm based SQI derivation.

2.9.2   Input Parameters for AccountFees Service

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

Input Parameter	Comments	Mandatory
Price Item Code	Used to search the account fees for selected price item.	O
Account ID	Used to search the fees for a particular account.	M
Division	Required if Account Identifier and Account Identifier Type are provided.	C
Account Identifier	Required if account ID is not provided.	C
Account Identifier Type	Required if account ID is not provided.	C
Effective Date	Used to persist fees for price item which are active and effective date lies between start and end date. **Note**: If effective date not provided, it is set to system date.	M
View Type	Used to indicate whether you want to view summary or tiering details of price components. The valid values are: - **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. **Note**: Default value is DT.	O

Input Parameter	Comments	Mandatory
Price Status Flag	Used to signify the status of pricing for fees calculation.	O
Price Assignment ID	Used to specify a specific price assignment.	O
External Transaction ID	Used to persist fees with a particular transaction ID. **Note**: If no external taxation ID is given then data will be stored with 0 as default.	O
Simulation Switch	Used to indicate whether user only wants to query or persist the data in the fees tables. Valid values are: • Yes- Enquire • No- Enquire and persist **Note**:-Default value is No.	O
Input Price Parameters		
Price Parameter Value	Used to give the input parameter value for matching eligibility if any provided.	O
Price Parameter Code	Used to give the input parameter code for matching eligibility if any provided.	O
Input Service Quantity		
Service Quantity Identifier	Used to explicitly provide the SQI value.	O
Sequence	Used to explicitly provide the SQI sequence number.	O
Time of Use	Used to explicitly provide the SQI time of use code.	O
Unit of Measure	Used to explicitly provide the SQI unit of measure code.	O
Daily Service Quantity	Used to explicitly provide the SQI code.	O

2.9.3 Process for AccountFees Service

You can use AccountFees service to calculate the fee for a requested transaction by providing the eligible parameters in the request. The AccountFees service is used for price items which are available for Only Pricing and whose price item type is Fees. It is used to persist, price item type fee on a given date.

• If the service is explicitly called using SOAP or any other routine, it will persist the latest data regardless of whether data has already been persisted for same period or not.

• If called explicitly on a date for which no schedule exists, it will persist data with the effective dates as the start and end date.

- If called explicitly on a date for which schedule exists, it will persist data with the effective start date as the start date and effective end date as end date.

> **Note**:
>
> Effective Start Date- Price assignment start date and schedule period start date whichever is later. Effective End Date- Price assignment end date and schedule period end date whichever is earlier.

2.9.4 Output Parameters for AccountFees Service

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

Output Parameter	Comments
Tiering Price Parameters	
Price Parameter Code	Displays price parameter code used while defining tiering criteria for the product pricing.
Price Parameter Value	Displays price parameter value used while defining tiering criteria for the product pricing.
Tiering Eligibility	
Upper Limit	Displays upper limit for eligible tier.
Lower Limit	Displays lower limit for eligible tier.
Price Item Parameter Code	Displays price item parameter code for eligible tier.
Price Item Code	Displays price item code for eligible tier.
Time of Use	Displays time of use for eligible tier.
Price Criteria	Displays price criteria for eligible tier.
Eligibility Criteria	
Is Insufficient	Displays the Rule is Insufficient flag for the eligibility.
Sub Rule False Flag	Displays the Rule is True flag for the eligibility.
Sub Rule True Flag	Displays the Rule is False flag for the eligibility.
Price Parameter Type Flag	Displays the type of price parameter as adhoc or predefined.
Right Parameter Code	Displays the right parameter code.
Operator Type	Displays the operator used.
Left Parameter Code	Displays the left parameter code.
Sequence Number	Displays sequence number of eligible criteria.
Contribution Lbl	Displays whether contributing or not.
Price Component ID	Display price component ID.
Price Component Description	Displays the description of price component.

Output Parameter	Comments
Price Component Sequence Number	Displays the sequence number of price component.
Value Amount	Displays the amount contributed due to that price component.
Rate Component Map ID	Displays rate component map ID.
Price Component Display	Displays whether to display price component or not.
Rate Component Map ID	
Tiered Flag	Displays the tiered flag.
Rate Component Sequence	Displays the sequence number of rate component.
Price Assignment Parameters	
Price Parameter Value	Displays the parameter value of price assignment.
Price Parameter Code	Displays the parameter code of price assignment.
Fees calculation Parameters	
Parameter Code	Displays the parameter code of fees calculation.
Parameter Value	Displays the parameter value of fees calculation.
Fees sq unit of Measure	Displays the unit of measurement for fees calculation.
Fees Service Quantity	
Time of Use	Displays the value of time of use.
Service Quantity Identifier	Displays the SQI used.
Initial Service Quantity	Displays the initial value of SQI.
Final Service Quantity	Displays the final value of SQI.
Fees Char	
Effective Date	Displays the effective date for fees characteristics.
Characteristic Type	Displays the fees characteristics type.
Characteristic Value	Displays the fees characteristics value.
Adhoc Characteristic Value	Displays the adhoc the fees characteristics value.
Characteristic Value Foreign Key 1	Displays the fees characteristics foreign Key1.
Characteristic Value Foreign Key 2	Displays the fees characteristics foreign Key2.
Characteristic Value Foreign Key 3	Displays the fees characteristics foreign Key3.
Characteristic Value Foreign Key 4	Displays the fees characteristics foreign Key4.
Characteristic Value Foreign Key 5	Displays the fees characteristics foreign Key5.
Fees Calculation Line Char	
Header Sequence	Displays the header sequence for fees calculation line characteristics.
Sequence	Displays the sequence for fees calculation line characteristics.

Output Parameter	Comments
Characteristic Type	Displays the characteristics type for fees calculation line characteristics.
Characteristic Value	Displays the characteristics value for fees calculation line characteristics.
Adhoc Characteristic Value	Displays the adhoc characteristics value for fees calculation line characteristics.
characteristicValueForeignKey1	Displays the characteristicValueForeignKey1 for calculation line characteristics.
characteristicValueForeignKey2	Displays the characteristicValueForeignKey2 for calculation line characteristics.
characteristicValueForeignKey3	Displays the characteristicValueForeignKey3 for calculation line characteristics.
characteristicValueForeignKey4	Displays the characteristicValueForeignKey4 for calculation line characteristics.
characteristicValueForeignKey5	Displays the characteristicValueForeignKey5 for calculation line characteristics.
Fees Calculation Line	
Header Sequence	Displays the header sequence number for fees calculation line.
Sequence	Displays the sequence number for fees calculation line.
Characteristic Type	Displays the characteristic type for fees calculation line.
Characteristic Value	Displays the characteristic value for fees calculation line.
Currency	Displays the currency for fees calculation line.
Unit of Measure	Displays the unit of measure value for fees calculation line.
Time of Use	Displays the time of use value for fees calculation line.
Rate Component Sequence	Displays the rate component sequence number for fees calculation line.
Should Print	Displays whether fees calculation line should print or not.
Should Appear In Summary	Displays whether fees calculation line should appear in summary or not.
Calculated Amount	Displays the calculated amount for the fees calculation line.
Fees Calculation Line Exempt Amount	Displays the exempted amount for the fees calculation line.
Fees calculation Line Base Amount	Displays the base amount for the fees calculation line.
Service Quantity Identifier	Displays the SQI for the fees calculation line.

Output Parameter	Comments
Description on Bill	Displays the description for the fees calculation line.
Pricing Currency code	Displays the pricing currency code for the fees calculation line.
Price Amount	Displays the pricing amount for the fees calculation line.
Exchange Rate ID	Displays the exchange rate ID for the fees calculation line.
Exchange Rate	Displays the exchange rate for the fees calculation line.
Total Aggregation Service Quantity	Displays the total aggregation SQ for the fees calculation line.
Price Component ID	Displays the price component ID for the fees calculation line.
Value Amount	Displays the value amount for the fees calculation line.
Fees Calculation	
Header Sequence	Displays the header sequence for the fees calculation.
Rate Schedule	Displays the rate schedule for the fees calculation.
Rate Description	Displays the rate description for the fees calculation.
Start Date	Displays the start date of the fees calculation.
End Date	Displays the end Date of the fees calculation.
Effective Date	Displays the effective date of the fees calculation.
Calculated Amount	Displays the calculated amount for fees calculation.
Currency	Displays the currency of the fees calculation.
Description on Bill	Displays the description on fees calculated bill.
Fees Header	
Account ID	Displays the account ID for which the fees has been calculated.
Price Item Code	Displays the price item code for the fees.
Price Assignment ID	Displays the price assignment ID for the fees.
Start Date	Displays the start date of the fees.
End Date	Displays the price end date of the fees.
Calculated Amount	Displays the price end date of the fees.
Currency	Displays the currency of the fees.
Creation Date Time	Displays the creation date and time of the fees.
Printif Zero Switch	Displays the print if zero switch of the fees.

Output Parameter	Comments
Pricing Frequency	Displays the pricing frequency of the fees.
Advance Pricing Switch	Displays the advance pricing switch of the fees.
Taxation Daily Rating Criteria	Displays the taxation daily rating criteria of the fees.
Do Not Aggregation Switch	Displays the do not aggregation switch of the fees.
Ignore Switch	Displays the ignore switch of the fees.
Rate Schedule	Displays the rate schedule of the fees.
Rate Description	Displays the rate description of the fees.
Calculated Amount	Displays the calculated amount of the fees.
Price Currency Code	Displays the pricing currency code of the fees.
Price Item Code	Displays the price item code of the fees
Price Item Description	Displays the price item description of the price item code for which fees has been retrieved.
Price Assignment ID	Displays the price assignment ID of price item.
Price Status Flag	Displays the status of pricing.
Start Date	Displays the start date of the fees.
End Date	Displays the end date of the fees.
Party Usage Flag	Displays the party usage flag of the fees.
Party Type Flag	Displays the party type flag of the fees.

2.10 GetAccountFees Service

GetAccountFees service provides the pre-calculated fees for a transaction by passing the required details in the request. Pricing service will search the persisted fees and will return the calculated fees if available along with the details on the fees calculations.

2.10.1 Prerequisite

None.

2.10.2 Input Parameters for GetAccountFees Service

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

Input Parameter	Comments	Mandatory
Price Item Code	Used to search the fees for selected price item.	O
Division	Used to search for account if account identifier and account identifier type are provided.	C
Account ID	Used to search for particular account.	M

Input Parameter	Comments	Mandatory
Account Identifier	Required if account ID is not provided.	C
Account Identifier Type	Required if account identifier type is provided.	C
View Type	Used to indicate whether you want to view summary or tiering details of price components. The valid values are: • **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	O
Start Date	Used to indicate the start date of the fees.	M
End Date	Used to indicate the end date of fees.	O
External Transaction ID	Used to indicate the fees of a particular external transaction ID. **Note**: If you specify the value of ID as 0 while searching, then all the data will be displayed.	O

2.10.3 Process for GetAccountFees Service

You can perform the search to get the account fees by providing the eligible parameters in the request. GetAccountRate service for an account will search the latest version of the persisted pricing by AccountRate service based on the effective date for the account, such as it will search the pricing for the price items of type **Fees** persited where **Effective Date** as mentioned in the persisted data falls within the search **Start Date** and **End Date**.

The latest version of the pricing is defined on the basis of date of creation.

It will also return the list of price components contributing the rate and the eligibility criteria, such as

a. If service is invoked with Type as **Summary** only the applicable price components and the eligibility criteria corresponding to the price component will be returned.

b. If service is invoked with Type as **Detail** all the price components and the eligibility criteria and the eligibility status of each criterion will be returned.

2.10.4 Output Parameters for GetAccountFees Service

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

Output Parameter	Comments
Tiering Price Parameters	
Price Parameter Code	Displays price parameter code used while defining tiering criteria for the product pricing.

Output Parameter	Comments
Price Parameter Value	Displays price parameter value used while defining tiering criteria for the product pricing.
Tiering Eligibility	
Upper Limit	Displays upper limit for eligible tier.
Lower Limit	Displays lower limit for eligible tier.
Price Item Parameter Code	Displays price item parameter code for eligible tier.
Price Item Code	Displays price item code for eligible tier.
Time of Use	Displays time of use for eligible tier.
Price Criteria	Displays price criteria for eligible tier.
Eligibility Criteria	
Is Insufficient	Displays the Rule is Insufficient flag for the eligibility.
Sub Rule False Flag	Displays the Rule is True flag for the eligibility.
Sub Rule True Flag	Displays the Rule is False flag for the eligibility.
Price Parameter Type Flag	Displays the type of price parameter as adhoc or predefined.
Right Parameter Code	Displays the right parameter code.
Operator Type	Displays the operator used.
Left Parameter Code	Displays the left parameter code.
Sequence Number	Displays sequence number of eligible criteria.
Contribution Lbl	Displays whether contributing or not.
Price Component ID	Display price component ID.
Price Component Description	Displays the description of price component.
Price Component Sequence Number	Displays the sequence number of price component.
Value Amount	Displays the amount contributed due to that price component.
Rate Component Map ID	Displays rate component map ID.
Price Component Display	Displays whether to display price component or not.
Rate Component Map ID	
Tiered Flag	Displays the tiered flag.
Rate Component Sequence	Displays the sequence number of rate component.
Price Assignment Parameters	
Price Parameter Value	Displays the parameter value of price assignment.

Output Parameter	Comments
Price Parameter Code	Displays the parameter code of price assignment.
Fees calculation Parameters	
Parameter Code	Displays the parameter code of fees calculation.
Parameter Value	Displays the parameter value of fees calculation.
Fees sq unit of Measure	Displays the unit of measurement for fees calculation.
Fees Service Quantity	
Time of Use	Displays the value of time of use.
Service Quantity Identifier	Displays the SQI used.
Initial Service Quantity	Displays the initial value of SQI.
Final Service Quantity	Displays the final value of SQI.
Fees Char	
Effective Date	Displays the effective date for fees characteristics.
Characteristic Type	Displays the fees characteristics type.
Characteristic Value	Displays the fees characteristics value.
Adhoc Characteristic Value	Displays the adhoc the fees characteristics value.
Characteristic Value Foreign Key 1	Displays the fees characteristics foreign Key1.
Characteristic Value Foreign Key 2	Displays the fees characteristics foreign Key2.
Characteristic Value Foreign Key 3	Displays the fees characteristics foreign Key3.
Characteristic Value Foreign Key 4	Displays the fees characteristics foreign Key4.
Characteristic Value Foreign Key 5	Displays the fees characteristics foreign Key5.
Fees Calculation Line Char	
Header Sequence	Displays the header sequence for fees calculation line characteristics.
Sequence	Displays the sequence for fees calculation line characteristics.
Characteristic Type	Displays the characteristics type for fees calculation line characteristics.
Characteristic Value	Displays the characteristics value for fees calculation line characteristics.
Adhoc Characteristic Value	Displays the adhoc characteristics value for fees calculation line characteristics.
characteristicValueForeignKey1	Displays the characteristicValueForeignKey1 for calculation line characteristics.
characteristicValueForeignKey2	Displays the characteristicValueForeignKey2 for calculation line characteristics.

Output Parameter	Comments
characteristicValueForeignKey3	Displays the characteristicValueForeignKey3 for calculation line characteristics.
characteristicValueForeignKey4	Displays the characteristicValueForeignKey4 for calculation line characteristics.
characteristicValueForeignKey5	Displays the characteristicValueForeignKey5 for calculation line characteristics.
Fees Calculation Line	
Header Sequence	Displays the header sequence number for fees calculation line.
Sequence	Displays the sequence number for fees calculation line.
Characteristic Type	Displays the characteristic type for fees calculation line.
Characteristic Value	Displays the characteristic value for fees calculation line.
Currency	Displays the currency for fees calculation line.
Unit of Measure	Displays the unit of measure value for fees calculation line.
Time of Use	Displays the time of use value for fees calculation line.
Rate Component Sequence	Displays the rate component sequence number for fees calculation line.
Should Print	Displays whether fees calculation line should print or not.
Should Appear In Summary	Displays whether fees calculation line should appear in summary or not.
Calculated Amount	Displays the calculated amount for the fees calculation line.
Fees Calculation Line Exempt Amount	Displays the exempted amount for the fees calculation line.
Fees calculation Line Base Amount	Displays the base amount for the fees calculation line.
Service Quantity Identifier	Displays the SQI for the fees calculation line.
Description on Bill	Displays the description for the fees calculation line.
Pricing Currency code	Displays the pricing currency code for the fees calculation line.
Price Amount	Displays the pricing amount for the fees calculation line.
Exchange Rate ID	Displays the exchange rate ID for the fees calculation line.
Exchange Rate	Displays the exchange rate for the fees calculation line.
Total Aggregation Service Quantity	Displays the total aggregation SQ for the fees calculation line.

Output Parameter	Comments
Price Component ID	Displays the price component ID for the fees calculation line.
Value Amount	Displays the value amount for the fees calculation line.
Fees Calculation	
Header Sequence	Displays the header sequence for the fees calculation.
Rate Schedule	Displays the rate schedule for the fees calculation.
Rate Description	Displays the rate description for the fees calculation.
Start Date	Displays the start date of the fees calculation.
End Date	Displays the end Date of the fees calculation.
Effective Date	Displays the effective date of the fees calculation.
Calculated Amount	Displays the calculated amount for fees calculation.
Currency	Displays the currency of the fees calculation.
Description on Bill	Displays the description on fees calculated bill.
Fees Header	
Account ID	Displays the account ID for which the fees has been calculated.
Price Item Code	Displays the price item code for the fees.
Price Assignment ID	Displays the price assignment ID for the fees.
Start Date	Displays the start date of the fees.
End Date	Displays the price end date of the fees.
Calculated Amount	Displays the price end date of the fees.
Currency	Displays the currency of the fees.
Creation Date Time	Displays the creation date and time of the fees.
Printif Zero Switch	Displays the print if zero switch of the fees.
Pricing Frequency	Displays the pricing frequency of the fees.
Advance Pricing Switch	Displays the advance pricing switch of the fees.
Taxation Daily Rating Criteria	Displays the taxation daily rating criteria of the fees.
Do Not Aggregation Switch	Displays the do not aggregation switch of the fees.
Ignore Switch	Displays the ignore switch of the fees.
Rate Schedule	Displays the rate schedule of the fees.
Rate Description	Displays the rate description of the fees.
Calculated Amount	Displays the calculated amount of the fees.

Output Parameter	Comments
Price Currency Code	Displays the pricing currency code of the fees.
Price Item Code	Displays the price item code of the fees
Price Item Description	Displays the price item description of the price item code for which fees has been retrieved.
Price Assignment ID	Displays the price assignment ID of price item.
Price Status Flag	Displays the status of pricing.
Start Date	Displays the start date of the fees.
End Date	Displays the end date of the fees.
Party Usage Flag	Displays the party usage flag of the fees.
Party Type Flag	Displays the party type flag of the fees.

2.11 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.

2.11.1 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.

2.11.2 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: • 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

Input Parameter	Comments	Mandatory
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

2.11.3 Process for AccountUsage Service

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

2.11.4 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.

Output Parameter	Comments
Eligible for Archive	Displays the value of ILM archive switch.
ILM Date	Displays the ILM date

2.12 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.

2.12.1 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.

2.12.2 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

Input Parameter	Comments	Mandatory
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

2.12.3 Process for PersonUsage Service

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

2.12.4 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.