

Oracle® Revenue Management and Billing for  
Financial Services

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## Oracle Revenue Management and Billing Banking User Guide

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# Preface

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## Purpose

This document helps you to understand and use the following features of the Oracle Revenue Management and Billing (ORMB) application:

- Banking Control Central
- Invoicing Group
- Pricing Management
- Division Maintenance
- Approval Workflow
- Multi-Currency Accounts
- Reporting

It explains the functionality of each screen associated with these features. This document also indicates a set of control data that needs to be setup in order to use the functionality of the ORMB application.

## Intended Audience

The following are the intended audience of this document:

- Users
- Consulting staff
- Administrators

## Organization of the Document

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

Chapter No.	Chapter Name	Chapter Description
Chapter 1	User Profiles	Provides an overview of the user profiles in the system and how the security is currently setup.
Chapter 2	Setting Up	Provides a list of control data that needs to be setup in order to use the functionality of the ORMB application.
Chapter 3	Banking Control Central	Explains the functionality of each screen associated with the Banking Control Central feature.
Chapter 4	Invoicing Group	Explains the functionality of each screen associated with the Invoicing Group feature.

Chapter No.	Chapter Name	Chapter Description
Chapter 5	Pricing Management	Explains the functionality of each screen associated with the Pricing Management feature.
Chapter 6	Division Maintenance	Explains the functionality of each screen associated with the Division Maintenance feature.
Chapter 7	Approval Workflow	Explains the approval workflow process and how to perform various tasks involved in the process. It explains how to configure the system to implement the approval workflow process. It also lists and describes the prerequisites that you need to setup before configuring the approval workflow process.
Chapter 8	Multi-Currency Accounts	Explains the Multi-Currency Accounts feature. It also lists and describes the business processes that are enhanced and administrative tasks that need to be executed for implementing this feature.
Chapter 9	Reporting	Lists and describes how to execute 10 sample reports provided with ORMB.

## Conventions

Convention	Meaning
<b>boldface</b>	Boldface type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.
<i>italic</i>	Italic type indicates book titles, emphasis or placeholder variables for which you supply particular values.
monospace	Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen or text that you enter.

## Related Documents

The following documents are related to this document:

- [Oracle Utilities User Guide v2.2](#) - Provides an overview and explanation of the basic concepts related to contracts, accounts, customers and billing.
- [Oracle Revenue Management and Billing Quick Installation Guide](#) - Provides an overview of how the product is to be installed.

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# Chapter 1: User Profiles

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Oracle Revenue Management and Billing (ORMB) for Financial Services supports the ability to create user profiles which are customized based on the user needs. The following user profiles have been pre-configured in the system with specific set of responsibilities:

- **BKADMIN** – This is the administrator user profile that has access to all the administrative and end-user functions related to the Banking functionality in the application. The security profile definition for BKADMIN is a subset of the SYSUSER user who has access to all portals, transactions and administrative functions.



Attention: BKADMIN user and password should be setup post installation because they are not pre-configured as user logins in the database or application server.

For further information on how to setup users, how to import users from LDAP and how to setup security profiles, refer to the Chapter 3: Defining Security and User Options in Oracle Utilities CCB Framework User Guide.

## Chapter 2: Setting Up

ORMB requires control data to be setup in order to function. As a part of the installation package, we provide a demo system which has examples of the required data for a sample system to run. We recommend that the control data is setup for the business functions that meet the business requirements. The basic setup involves setting up the following data with the administration user that has the BKADMIN user rights.

### Control Data Setup

Function	Menu	Auto Setup
<i>Global Context</i>		
Algorithm	Admin Menu, Algorithm. You will need to set up an algorithm that populates global context values. The global context is used by various zones in the system to display relevant data. This algorithm is plugged-in on the installation record.	You can run the CI_COPIN DB process to copy many of the algorithms that support basic functionality from the demonstration database. For more information, refer to Online Help under Contents → Administration → Preparing To Implement → How To Copy An Algorithm From The Demo Database.
<i>Accounting Environment</i>		
Country & State	Admin Menu, Country	All base package transactions are automatically populated.
Currency Codes	Admin Menu, Currency	USD is automatically populated.
Accounting Calendar	Admin Menu, Accounting Calendar	All base package transactions are automatically populated.
GL Division	Admin Menu, General Ledger Division	All base package transactions are automatically populated.
Feature Configuration	Admin Menu, Feature Configuration. While defining an account, if you want the system to validate whether the specified account number is unique for a division, you must set the Validate External Account Char option type of the C1_ACCTINFO feature configuration to Y. By default, the value is set to N.	To be setup manually as per the business requirements.

Function	Menu	Auto Setup
Feature Configuration	Admin Menu, Feature Configuration. You can change the invoice currency of an account whenever required to meet the changing business needs. To activate this Multi-Currency Accounts functionality, you must set the C1_MLTCURACC feature configuration using the following option types: <ul style="list-style-type: none"> <li>• Allow Multi-Currency Accounts – Indicates whether the Multi-Currency Accounts feature configuration is switched on or off. To switch on this feature configuration, set the Allow Multi-Currency Accounts option type to Y. By default, the value is set to N.</li> <li>• Currency Conversion Algorithm – Used to specify the name of the algorithm that you want to be used for currency conversion. This algorithm is the same as the one used for currency conversion in billing.</li> <li>• Transfer Adjustment Type for Currency Conversion – Used to specify the adjustment type that you want to be used automatically when financial amount in one currency is converted to another currency.</li> <li>• Cancel Reason Code for Currency Conversion Adjustment – Used to specify the reason code that must be used automatically when the transfer adjustments are cancelled while reopening a bill.</li> <li>• Payment Distribution To-Do – Used to specify the To Do type that you want to be generated when the bill currency does not match the excess credit amount currency.</li> </ul>	To be setup manually as per the business requirements.
<i>Security Environment</i>		
Application Service	Admin Menu, Application Service	All base package transactions are automatically populated.
Security Type	Admin Menu, Security Type	All base package transactions are automatically populated.

Function	Menu	Auto Setup
User Group	Admin Menu, User Group  Note: You will not be able to set up users at this point.	One user group, ALL-SERVICES, is automatically setup. It references all other application services and a single user called SYSUSER.  Note: You may be able to import sample user groups from the demonstration database. Also, you may be able to import user groups if your organization has already defined them using LDAP.
Language	Admin Menu, Language	ENG is automatically populated.
Display Profile	Admin Menu, Display Profile	The following two display profiles are automatically setup: <ul style="list-style-type: none"> <li>• NORTHAM - Displays currencies and dates in a classic American format</li> <li>• EURO - Displays information in a classic European format</li> </ul>
Data Access Role	Admin Menu, Data Access Role	All base package transactions are automatically populated.
Access Group	Admin Menu, Access Group	All base package transactions are automatically populated.
User	Admin Menu, User	BKADMIN is automatically set up.  Note: You may be able to import users if your organization has already defined them using LDAP.
Return to User Group	You must return to your user groups and define all of their users.	All base package transactions are automatically populated.
<i>Customer Class Environment</i>		
Customer Class	Admin Menu, Customer Class.  At this point, you will only be able to set up your customer class codes. You will return to these customer classes throughout the setup process to populate additional information.	To be setup manually as per the business requirements.
<i>Division Environment</i>		

Function	Menu	Auto Setup
Feature Configuration	Admin Menu, Feature Configuration. There are certain division-specific validations that are triggered on the Person, Account and Contract screens. In order to activate this Division functionality for Banking, you need to set up the C1_DIVFUNCT feature. The Enforce division-specific validations option type for the C1_DIVFUNCT feature must be set to Y. Validations for division will not be triggered if this value is set to N.	To be setup manually as per the business requirements.
Algorithm	Admin Menu, Algorithm. You must create algorithm for Price Assignment Search with the algorithm type as C1_PRASN.	To be setup manually as per the business requirements.
Algorithm	Admin Menu, Algorithm. You may need to set up the algorithms that would determine the actions to be taken when the status of a division is altered.	To be setup manually as per the business requirements.
Work Calendar	Admin Menu, Work Calendar	To be setup manually as per the business requirements.
Division	Admin Menu, Division. At this point, you will only be able to set up your division codes. You will return to these divisions throughout the setup process to populate additional information.	To be setup manually as per the business requirements. You must setup a division for each jurisdiction in which you conduct business using different rules. When creating customer accounts, they must be associated with an existing division. For Pricing Management functionality, setting up a division is mandatory and the system must contain information about at least one division.
Access Groups Tab in Division	Admin Menu, Division. At this time, you must define the access groups for the division.	To be setup manually as per the business requirements.
Algorithm	Admin Menu, Division. At this time, you must associate Price Assignment Search algorithm for each division.	To be setup manually as per the business requirements.
<i>Financial Transaction Environment</i>		
Work Calendar	Admin Menu, Work Calendar	To be setup manually as per the business requirements.

Function	Menu	Auto Setup
Return to Division	Admin Menu, Division. At this time, you must define the work calendar for the division.	To be setup manually as per the business requirements.
Revenue Class	Admin Menu, Revenue Class	To be setup manually as per the business requirements.
Algorithm	Admin Menu, Algorithm. You will need to set up the algorithm that constructs a distribution code's corresponding GL account when it is interfaced to the general ledger.	To be setup manually as per the business requirements.
Distribution Code	Admin Menu, Distribution Code	To be setup manually as per the business requirements.
Bank & Bank Accounts	Admin Menu, Bank	To be setup manually as per the business requirements.
Billable Charge Template	Admin Menu, Billable Charge Template.  Note: If you want the system to default service quantities onto billable charges created using this template, you must setup the appropriate unit of measure code, time-of-use code and/or service quantity identifier.	To be setup manually as per the business requirements.
Billable Charge Upload Line Type	Admin Menu, Billable Charge Line Type	To be setup manually as per the business requirements.
Algorithm	Admin Menu, Algorithm. You will need to set up several algorithms. These algorithms include: 1) Calculate a bill segment's bill lines, 2) Construct a bill segment's financial transaction	Rather than setting up these manually, you can run the CI_COPBI DB process to copy many of these algorithms from the demonstration database. Review the parameter values in these algorithms after they are copied.
Bill Segment Type	Admin Menu, Bill Segment Type	To be setup manually as per the business requirements.
Algorithm	Admin Menu, Algorithm. You will need to set up the algorithm that constructs a payment segment's financial transaction.	Rather than setting up these manually, you can run the CI_COPPY DB process to copy many of these algorithms from the demonstration database. Review the parameter values in these algorithms after they are copied.
Payment Segment Type	Admin Menu, Payment Segment Type	To be setup manually as per the business requirements.

Function	Menu	Auto Setup
Algorithm	Admin Menu, Algorithm. You will need to set up the algorithm that constructs an adjustment's financial transaction.	Rather than setting up these manually, you can run the CI_COPAD DB process to copy many of these algorithms from the demonstration database. Review the parameter values in these algorithms after they are copied.
Algorithm	Admin Menu, Algorithm. Several plug-in spots are available to perform additional logic when processing adjustments. For example, if you have the system calculate adjustments, you must set up an adjustment generation algorithm. Refer to Adjustment Type for other available plug-in spots that may be used in your implementation.	To be setup manually as per the business requirements.
Algorithm	Admin Menu, Algorithm. You may want to set up an algorithm that formats the Adjustment information that is displayed throughout the system for a specific Adjustment Type. This algorithm is plugged-in on the Adjustment Type.	To be setup manually as per the business requirements.
Algorithm	Admin Menu, Algorithm. You may want to set up an algorithm that formats the Adjustment information that is displayed throughout the system. This algorithm is plugged-in on the installation record.	To be setup manually as per the business requirements.
Adjustment Type	Admin Menu, Adjustment Type	To be setup manually as per the business requirements.
Adjustment Type Profile	Admin Menu, Adjustment Type Profile	To be setup manually as per the business requirements.
Cancel Reason – Bill	Admin Menu, Bill Cancel Reason	To be setup manually as per the business requirements.
Cancel Reason – Payment	Admin Menu, Payment Cancel Reason	To be setup manually as per the business requirements.
Cancel Reason – Adjustment	Admin Menu, Adjustment Cancel Reason	To be setup manually as per the business requirements.
Tender Type	Admin Menu, Tender Type	To be setup manually as per the business requirements
Tender Source	Admin Menu, Tender Source	To be setup manually as per the business requirements

Function	Menu	Auto Setup
Installation	Admin Menu, Installation Options - Framework and Admin Menu, Installation Options.  Many fields in the installation record impact the financial transaction environment. Refer to the description of the Billing and Financial Transaction tabs and the Messages tab in the Framework page for more information.	To be setup manually as per the business requirements.
Algorithm	Admin Menu, Algorithm.  You will need to set up an algorithm that distributes payments.	If you have executed the CI_COPPY DB process that is described above, this algorithm will have been set up for you.
Algorithm	Admin Menu, Algorithm.  You will need to set up an algorithm that handles overpayment situations.	
Algorithm	Admin Menu, Algorithm.  You may need to set up an algorithm if specific customers can have individual bill due dates.	To be setup manually as per the business requirements.
Algorithm	Admin Menu, Algorithm.  You may need to set up an algorithm if you want the system to delete bills that contain only information about historical payments.	If you have executed the CI_COPBI DB process that is described above, this algorithm will have been set up for you.
Algorithm	Admin Menu, Algorithm.  You may need to set up an algorithm if you want the system to levy a non-sufficient funds charge if a payment is canceled due to non-sufficient funds	To be setup manually as per the business requirements.
Algorithm	Admin Menu, Algorithm.  You will need to set up an algorithm that formats the bill information that is displayed throughout the system. This algorithm is plugged-in on the installation record.	You can run the CI_COPIN DB process to copy many of the algorithms that format basic information from the demonstration database.
Algorithm	Admin Menu, Algorithm.  You will need to set up an algorithm that formats the payment information that is displayed throughout the system. This algorithm is plugged-in on the installation record.	If you have executed the CI_COPIN DB process that is described above, this algorithm will have been set up for you.

Function	Menu	Auto Setup
Algorithm	Admin Menu, Algorithm. You will need to set up an algorithm that defaults the amount when a payment is manually added. This algorithm also calculates the amount of an automatic payment for a bill for an account with an active auto pay option. This algorithm is plugged-in on the installation record.	If you have executed the CI_COPIN DB process that is described above, this algorithm will have been set up for you.
Algorithm	Admin Menu, Algorithm. Refer to Customer Class for other available plug-in spots that may be used in your implementation to perform additional logic when processing payments and bills.	To be setup manually as per the business requirements.
Return to Customer Class	Admin Menu, Customer Class. You will need to plug-in the algorithms defined above on your customer classes.	To be setup manually as per the business requirements.
Algorithm	Admin Menu, Algorithm. Refer to Division for available plug-in spots that may be used in your implementation to perform additional logic when processing payments and bills for division.	To be setup manually as per the business requirements.
<i>Customer Environment</i>		
Account Management Group	Admin Menu, Account Management Group.  Note: You will probably have to set up To Do Type and To Do Roles before you can setup account management groups. Refer to Assigning A To Do Role in the online help for more information on how account management groups may be used to define an entry's role.	To be setup manually as per the business requirements.
Account Relationship	Admin Menu, Account Relationship Type	To be setup manually as per the business requirements.
Alert Type	Admin Menu, Alert Type	To be setup manually as per the business requirements.
Bill Message	Admin Menu, Bill Message	To be setup manually as per the business requirements.
Algorithm	Admin Menu, Algorithm. If you have software that is capable of reconstructing an image of a bill in a PDF (for the purpose of online display), you will need to create an algorithm that formats the extract records that are sent to your bill image software.	If you use the Doc 1 printing software, you can run the CI_COPD1 DB process to copy all the Doc 1 oriented algorithms from the demonstration database.

Function	Menu	Auto Setup
Bill Route Type	Admin Menu, Bill Route Type	To be setup manually as per the business requirements.
Contract Quantity Type	Admin Menu, Contract Quantity Type	To be setup manually as per the business requirements.
Algorithm	Admin Menu, Algorithm. If you have software that is capable of reconstructing an image of a letter in a PDF (for the purpose of online display), you will need to create an algorithm that formats the extract records that are sent to your letter image software.	If you have executed the CI_COPD1 DB process that is described above, these algorithms will have been set up for you.
Letter Template	Admin Menu, Letter Template	To be setup manually as per the business requirements.
Customer Contact Class	Admin Menu, Customer Contact Class	To be setup manually as per the business requirements.
Customer Contact Type	Admin Menu, Customer Contact Type	To be setup manually as per the business requirements.
Algorithm	Admin Menu, Algorithm. You may need to set up the algorithms that determine if person IDs are in a predefined format.	To be setup manually as per the business requirements.
Identifier Type	Admin Menu, Identifier Type	To be setup manually as per the business requirements.
SICs	Admin Menu, SIC Code	To be setup manually as per the business requirements.
Tax Exempt Type	Admin Menu, Tax Exempt Type	To be setup manually as per the business requirements.
Algorithm	Admin Menu, Algorithm. You may need to set up the algorithms that determine if phone numbers are in a predefined format.	To be setup manually as per the business requirements.
Phone Type	Admin Menu, Phone Type.	To be setup manually as per the business requirements.
Person Relationship Type	Admin Menu, Person Relationship Type.	To be setup manually as per the business requirements.
Algorithm	Admin Menu, Algorithm. You will need to set up an algorithm that formats the person information that is displayed throughout the system. This algorithm is plugged-in on the installation record.	If you have executed the CI_COPIN DB process that is described above, this algorithm will have been set up for you.

Function	Menu	Auto Setup
Algorithm	Admin Menu, Algorithm. You will need to set up an algorithm to validate a person's name. This algorithm is plugged-in on the installation record.	If you have executed the CI_COPIN DB process that is described above, this algorithm will have been set up for you.
Algorithm	Admin Menu, Algorithm. You can override the system's standard account information string by setting up an algorithm that produces this string of information. This algorithm is plugged-in on the installation record.	To be setup manually as per the business requirements.
Algorithm	Admin Menu, Algorithm. If you have software that is capable of reconstructing an image of a letter in a PDF for the purpose of online display, you will need to create an algorithm that renders this PDF. This algorithm is plugged-in on the installation record.	If you have executed the CI_COPD1 DB process that is described above, this algorithm will have been set up for you.
Algorithm	Admin Menu, Algorithm. If you have software that is capable of reconstructing an image of a bill in a PDF for the purpose of online display, you will need to create an algorithm that renders this PDF. This algorithm is plugged-in on the installation record.	If you have executed the CI_COPD1 DB process that is described above, this algorithm will have been set up for you.
Installation	Admin Menu, Installation Options. Many fields on the installation record impact the Customer Environment. Refer to the description of the Main, Person, and Account tabs for more information.	To be setup manually as per the business requirements.
Characteristic Type	Admin Menu, Characteristic Type. Characteristic types are required for the account to indicate the external account number, account type, and invoice group account indicator.	To be setup manually as per the business requirements.
Return to Division	Admin Menu, Division. At this time, you must define the valid characteristic types for the division.	To be setup manually as per the business requirements.
Feature Configuration	Admin Menu, Feature Configuration. The characteristic types that were setup for the external account number, account type, and invoice group account indicator must be indicated for feature configuration C1_ACCTINFO.	To be setup manually as per the business requirements.

Function	Menu	Auto Setup
Feature Configuration	Admin Menu, Feature Configuration. If you want to provide the ability to a user to create a person and the account for that person together, you must set the Create Person Account together option type of the C1_PERACCT feature to Y.	To be setup manually as per the business requirements.
<i>Statements</i>		
Algorithm	Admin Menu, Algorithm. If you have software that is capable of reconstructing an image of a statement in a PDF (for the purpose of online display), you will need to create an algorithm that formats the extract records that are sent to your statement image software.	If you have executed the CI_COPD1 DB process that is described above, this algorithm will have been set up for you.
Statement Route Type	Admin Menu, Statement Route Type	To be setup manually as per the business requirements.
Statement Cycle	Admin Menu, Statement Cycle	To be setup manually as per the business requirements.
Algorithm	Admin Menu, Algorithm. If you have software that is capable of reconstructing an image of a statement in a PDF for the purpose of online display, you will need to create an algorithm that renders this PDF. This algorithm is plugged-in on the installation record.	If you have executed the CI_COPD1 DB process that is described above, this algorithm will have been set up for you.
<i>Automatic Payment (EFT) Environment</i>		
Algorithm	Admin Menu, Algorithm. You will need to set up an algorithm to create automatic payments. This algorithm is plugged-in on the installation record.	You can run the CI_COPAP DB process to copy this algorithm (and other autopay-oriented algorithms) from the demonstration database.
Tender Source	Admin Menu, Tender Source  Note: Earlier you created tender sources for the remittance processor and your cash drawers. At this point, you will need to add at least one tender source for automatic payments. This is because automatic payments get linked to a tender control (which, in turn, gets linked to a tender source) when they are interfaced out of the system.	To be setup manually as per the business requirements.

Function	Menu	Auto Setup
Algorithm	Admin Menu, Algorithm. You will need to set up the appropriate automatic payment date calculation algorithm to populate the extract, GL interface and payment dates on automatic payments.	If you have executed the CI_COPAP DB process that is described above, this algorithm will have been set up for you.
Auto Pay Route Type	Admin Menu, Auto Pay Route Type	To be setup manually as per the business requirements.
Tender Type	Admin Menu, Tender Type  Note: Earlier you created tender types for things like cash, checks, etc. At this point, you will need to add a tender type for each type of automatic payments (for example, direct debt, credit card, etc.).	To be setup manually as per the business requirements.
Work Calendar	Admin Menu, Work Calendar. You need to set up additional work calendars only if the auto pay sources (that is, the financial institutions) have different working days than your organization.	To be setup manually as per the business requirements.
Algorithm	Admin Menu, Algorithm. If you need to validate the customer's bank account or credit card number, you will need to set up the appropriate validation algorithms.	If you have executed the CI_COPAP DB process that is described above, this algorithm will have been set up for you.
Auto Pay Source Type	Admin Menu, Auto Pay Source Type	To be setup manually as per the business requirements.
Algorithm	Admin Menu, Algorithm. You may need to set up an algorithm if your customers can define a maximum withdrawal limit on their autopay options.	If you have executed the CI_COPAP DB process that is described above, this algorithm will have been set up for you.
Return to Customer Class	Admin Menu, Customer Class. You should plug-in the Autopay Over Limit Algorithm in each appropriate customer class.	To be setup manually as per the business requirements.
<i>Credit and Collections Environment (if you collect overdue bills (as opposed to overdue debt), you will NOT set up these tables; refer to Overdue Processing - Set Up Tasks for the list of control tables required to collect overdue bills)</i>		
Algorithm	Admin Menu, Algorithm. You may need to set up algorithms if you have non-standard collection events.	To be setup manually as per the business requirements.

Function	Menu	Auto Setup
Algorithm	Admin Menu, Algorithm. You may need to set up a collection process cancellation algorithm if your organization allows individual contracts to be removed from a collection process if they are paid (rather than performing cancellation based on all contracts in a debt class).	To be setup manually as per the business requirements.
Collection Class	Admin Menu, Collection Class	To be setup manually as per the business requirements.
Algorithm	Admin Menu, Algorithm. At this time, you will need to set up the following algorithms: Collection Process Cancellation Criteria, Severance Process Cancellation Criteria, and Override Arrears due to Pay Plans	To be setup manually as per the business requirements.
Debt Class	Admin Menu, Debt Class	To be setup manually as per the business requirements.
Write Off Debt Class	Admin Menu, Write Off Debt Class	To be setup manually as per the business requirements.
Algorithm	Admin Menu, Algorithm. You will need to set up Collection Condition algorithms.	To be setup manually as per the business requirements.
Algorithm	Admin Menu, Algorithm. You may need to set up algorithms if you have non-standard severance events.	To be setup manually as per the business requirements.
Algorithm	Admin Menu, Algorithm. You may need to set up a severance process cancellation algorithm if your organization allows a severance process to be canceled when the related contract is paid (rather than performing cancellation based on all contracts in a debt class).	To be setup manually as per the business requirements.
Algorithm	Admin Menu, Algorithm. At this time, you will need to set up the following algorithms: How to refer debt to a collection agency, How to transfer debt to another active contract, How to write down small amounts of debt, and How to refund credit balances to a customer	To be setup manually as per the business requirements.
Algorithm	Admin Menu, Algorithm. You may need to set up algorithms if you have non-standard write-off events.	To be setup manually as per the business requirements.

Function	Menu	Auto Setup
Write Off Event Type	Admin Menu, Write Off Event Type	To be setup manually as per the business requirements.
	Note: You will have to wait until you have defined your contract types before you can set up the Write Off Events because contract type is a necessary parameter to write off debt.	
Write Off Process Template	Admin Menu, Write Off Process Template	To be setup manually as per the business requirements.
Write Off Control	Admin Menu, Write Off Control	
Collection Agency	Admin Menu, Collection Agency.	To be setup manually as per the business requirements.
	Note: Each collection agency references a person, and therefore you must set up a person for each agency before you can enter collection agency information.	
Algorithm	Admin Menu, Algorithm. You may need to set up algorithms if you have special logic that should be executed when a pay plan is canceled.	To be setup manually as per the business requirements.
Payment Method	Admin Menu, Pay Method	To be setup manually as per the business requirements.
Installation	Admin Menu, Installation. Several fields on the installation record impact the Credit and Collections Environment.	To be setup manually as per the business requirements.
Algorithm	Admin Menu, Algorithm. You will need to setup an algorithm that is called when a user writes-off debt real time.	To be setup manually as per the business requirements.
Return to Customer Class	Admin Menu, Customer Class. You should plug-in the Autopay Over Limit Algorithm in each appropriate customer class.	To be setup manually as per the business requirements.
<i>Services and Characteristics</i>		
Service Type	Admin Menu, Service Type	To be setup manually as per the business requirements.
Algorithm	Admin Menu, Algorithm. If you have ad hoc characteristic types, you may need to set up the algorithms that control how they are validated.	To be setup manually as per the business requirements.

Function	Menu	Auto Setup
Foreign Key Reference	Admin Menu, FK Reference. If you have foreign key characteristic types, you may need to set up foreign key references to control how the user selects the characteristic values (and how the foreign key values are validated).	All base package FK references are automatically populated.
Characteristic Type & Values	Admin Menu, Characteristic Type	To be setup manually as per the business requirements.
<i>Bill Cycle Environment</i>		
Bill Cycle, Bill Cycle Schedule	Admin Menu, Bill Cycle	To be setup manually as per the business requirements.
Bill Period, Bill Period Schedule	Admin Menu, Bill Period	To be setup manually as per the business requirements.
Return to Division	Admin Menu, Division. At this time, you must define the valid bill cycles for the division.	To be setup manually as per the business requirements.
<i>Rate Environment</i>		
Frequency	Admin Menu, Frequency	To be setup manually as per the business requirements.
Service Quantity Identifier	Admin Menu, Service Quantity Identifier	To be setup manually as per the business requirements.
Algorithm Type	Admin Menu, Algorithm Type. If you create new Service Quantity Rules, you must set up an algorithm type for each such rule.  Note: The algorithm type defines the types of parameters that are passed to the Service Quantity Rule.	All base package algorithm types are automatically populated.
Service Quantity Rule	Admin Menu, Service Quantity Rule	To be setup manually as per the business requirements.
Bill Factor	Main Menu, Rates, Bill Factor	To be setup manually as per the business requirements.
Rate	Main Menu, Rates, Rate Schedule	To be setup manually as per the business requirements.
Rate Version	Main Menu, Rates, Rate Version	To be setup manually as per the business requirements.
Algorithm	Admin Menu, Algorithm. If you use algorithms to dynamically change step boundaries, calculate prices, convert between currencies, or implement rate component eligibility rules, you must set up these algorithms.	To be setup manually as per the business requirements.

Function	Menu	Auto Setup
Return to Division	Admin Menu, Division. You will need to plug-in the division specific algorithms defined on the division.	To be setup manually as per the business requirements.
Rate Component	Main Menu, Rates, Rate Component	To be setup manually as per the business requirements.
Bill Factor Value	Main Menu, Rates, Bill Factor Values	To be setup manually as per the business requirements.
<i>Late Payment Environment</i>		
Algorithm	Admin Menu, Algorithm. You will need to set up the algorithm that determines whether customers in a customer class are eligible for late payment charges.	To be setup manually as per the business requirements.
Algorithm	Admin Menu, Algorithm. You will need to set up the algorithm that levies late payment charges for customers in a customer class.	To be setup manually as per the business requirements.
Return to Customer Class	Admin Menu, Customer Class. You will need to plug-in the late payment charge algorithms.	To be setup manually as per the business requirements.
<i>SA Configuration</i>		
Algorithm	Admin Menu, Algorithm. You will need to set up the algorithms that determine: <ul style="list-style-type: none"> <li>• How to calculate the late payment charge amount for contracts of a given type</li> <li>• Special criteria to be tested before a contract is severed</li> <li>• Special processing that should take place prior to the completion of a bill that references contracts of a given type</li> <li>• Special processing that should take place during completion of a bill that references contracts of a given type</li> <li>• Special processing that should take place when contracts of a given type are created.</li> <li>• Special processing that should take place when a financial transaction is frozen for contracts of a given type</li> </ul>	To be setup manually as per the business requirements.

Function	Menu	Auto Setup
Algorithm	Admin Menu, Algorithm. You may want to set up an algorithm that formats the contract information that is displayed throughout the system. This algorithm is plugged-in on the installation record.	To be setup manually as per the business requirements.
Algorithm	Admin Menu, Algorithm. You may want to set up an algorithm that formats the contract information that is displayed throughout the system for a specific contract type. This algorithm is plugged-in on the contract type.	To be setup manually as per the business requirements.
Algorithm	Admin Menu, Algorithm. If you want a Control Central alert to highlight when the current account has any stopped contract(s), you will need to set up the algorithm that does this. This algorithm is plugged-in on the installation record.	To be setup manually as per the business requirements.
Contract Type	Admin Menu, Contract Type	To be setup manually as per the business requirements.
Terms and Conditions	Admin Menu, Terms and Conditions	To be setup manually as per the business requirements.
Contract type Start Options	Admin Menu, Contract Type Start Option	To be setup manually as per the business requirements.
<i>Pricing Management</i>		
Feature Configuration	Admin Menu, Feature Configuration. Since a global customer is not associated to any division, the system cannot identify the price assignment search order to be used. Hence, the default search order is defined as a feature called C1_PRASNORDR for global customers. You can change this default search order if required. The valid value is: AGREED_PRICELIST or AGREED_FIRST. You can also create a custom search order that would require a custom algorithm.	To be setup manually as per the business requirements.

Function	Menu	Auto Setup
Feature Configuration	Admin Menu, Feature Configuration. Prices are effective for a particular duration and do not expire until you specify the end date manually. However, if you set the C1_EXP_OVRD feature to Y, the system will automatically expire the agreed pricing when the agreed pricing of a customer or an account with no end date is overridden. In case you do not want the agreed pricing to automatically expire when it is overridden, you can set the C1_EXP_OVRD feature to N.	To be setup manually as per the business requirements.
Feature Configuration	Admin Menu, Feature Configuration. You must define the maximum number of records that can be retrieved in the Pricing (Account) and Pricing (Customer) portals using the C1_PR_REC feature. If you do not specify the value for the Effective Pricing RecordSet Limit option type, then no records will be retrieved in these portals. Also, if you enter the value as 0, no records will be retrieved in these portals.	To be setup manually as per the business requirements.
Feature Configuration	Admin Menu, Feature Configuration. For division-specific exchange rate, the end date is optional. If you want the end date to be mandatory, you must set the End Date Required for Division Override option type of the C1_EXCHRATE feature to Y.	To be setup manually as per the business requirements.
Tiering Criteria	Admin Menu, – Manage Tiering Criteria	To be setup manually as per the business requirements.
Rate Definition	Main menu , Pricing Management, Manage Rate Definitions	To be setup manually as per the business requirements.
Products	Admin Menu, – Manage Products	To be setup manually as per the business requirements.
Products Tab in Division	Admin Menu, Division. At this time, you must define the valid products (including bundles) for the division.	To be setup manually as per the business requirements.
Price Lists	Main Menu, Pricing Management, Manage Price Lists	To be setup manually as per the business requirements.
Price List Tab in Division	Admin Menu, Division. At this time, you must define the valid price lists for the division.	To be setup manually as per the business requirements.
Exchange Rates	Main Menu, Pricing Management, Manage Exchange Rates	To be setup manually as per the business requirements.
<i>Notification and Workflow</i>		

Function	Menu	Auto Setup
Workflow Event Type	Admin Menu, Workflow Event Type	To be setup manually as per the business requirements.
Workflow Process Template	Admin Menu, Workflow Process Template	To be setup manually as per the business requirements.
Notification Upload Type	Admin Menu, Notification Upload Type	To be setup manually as per the business requirements.
Workflow Process Profile	Admin Menu, Workflow Process Profile	To be setup manually as per the business requirements.
Notification Download Type	Admin Menu, Notification Download Type	To be setup manually as per the business requirements.
Notification Download Profile	Admin Menu, Notification Download Profile	To be setup manually as per the business requirements.
Algorithm	Admin Menu, Algorithm. If you want a Control Central alert to highlight when the current account and/or location has active workflow processes, you will need to set up the algorithm that does this. This algorithm is plugged-in on the installation record.	To be setup manually as per the business requirements.
<i>Wrap Up</i>		
Algorithm	Admin Menu, Algorithm. You will need to set up the algorithms that determine: <ul style="list-style-type: none"> <li>• Special alerts on Control Central (assuming you have special alerts)</li> </ul>	To be setup manually as per the business requirements.
Installation Options	Admin Menu, Installation Options - Framework and Admin Menu, Installation Options. At this point, it is recommended to cross-check everything on the installation record.	To be setup manually as per the business requirements.
Postal Default	Admin Menu, Postal Code Default	To be setup manually as per the business requirements.

## Chapter 3: Banking Control Central

This chapter explains what the Banking Control Central feature is and how to search for accounts or customers using this feature.

### Overview

Banking Control Central allows you to search for accounts or customers using various search criteria such as customer name, account number, or address. Once the search results are displayed, you can drill down to view more details using the Broadcast button or by navigating to other screens such as View Account Contracts Information, View Account Financial Transaction History, View Account Payment History, Pricing (Account), Price List Assignment (Account), View Accounts of Customer, Customer Hierarchy, Pricing (Customer), Price List Assignment (Customer) using the context menu.

More detailed information about the account or customer can be viewed by clicking the hyperlink in the Account Information or Customer Name column. Based on the specified search criteria, search results will be displayed in the lower part of the screen.

You can access the Banking Control Central portal from the Main Menu. Alternatively, you can access it by clicking the Control Central Search icon (Alt+ L) on the toolbar.

Note: The Control Central Search icon (Alt+ L) and the Account Information icon (Alt +I) on the toolbar are not operational for this release.

### Pre-requisites

While searching for accounts, Banking Control Central will search and display only those accounts in the search results for which the following two characteristics are defined:

Characteristic	Description
Account Number	Used to specify the account number manually.
Account Type	Used to specify whether the account is a Current Account or a Saving Account.

### Account Search

Initially, only the Search Criteria portion is displayed. Before entering the search criteria, you must specify whether you are searching for an account or a customer. While searching for accounts, select Account from the Query Option drop-down list.

### Account Search Criteria

The criteria are grouped, as indicated by line separators between the criteria. Each group is independent from the others, and only one group can be used for any particular search. If a criterion for more than one group is entered, the information from the first group will be used. For example, if you enter Account ID and Address, which are in different criteria groups, the system will search by Account ID, which appears before Address.

Criteria Group	Description
Division	Used to specify the division to which the account belongs. The list of divisions is restricted to those to which you have access.  Note: If you specify division as a search criterion, you have to specify at least one more criterion for searching accounts.
Account Number	Used to specify the account number. The account number may be generated externally outside the system.  Note: This criteria group supports the usage of '%' wildcard.
Account ID	Used to specify the account ID generated by the application.  Note: This criteria group supports the usage of '%' wildcard.
Customer Type, Customer Name	Used to specify the customer name whose accounts you want to search. The search can be restricted to parent customers using the Customer Type field.  Note: The search is not case sensitive.
Address, City	Used to specify the street address and city of the customer whose accounts you want to search. Address can have more than one line and you can search using all the address lines.  Note: This criteria group supports case sensitive search and the usage of '%' wildcard.
Phone Number	Used to specify the phone number of the customer whose accounts you want to search. Enter the phone number in the format indicated or as a contiguous string of numbers.  Note: This criteria group supports the usage of '%' wildcard.
Identification Type, Identification Value	Used to search for the accounts of a customer using the IDs linked to the customer. Both the identification type and value must be provided.  Note: This criteria group supports the usage of '%' wildcard.

You can use the Wildcard character '%' for Wildcard searches. The Wildcard character '%' represents any number or character.

Note: Wildcard searches may require additional response time. Therefore, use wildcard character only when required.

## Account Search Results

The system searches for accounts that meet the search criteria and that you have access to based on the account's access group. The following columns are displayed in the search results:

- **Account Information:** Displays information about the account. On clicking the hyperlink in this column, the Account portal appears with the details of the respective account. In addition, there is a context menu which helps in navigating to other pages of the application.
- **Account Number:** Displays the account number assigned by an external system.
- **Customer Name:** Displays the name of the customer linked to the account.
- **Division:** Displays the division to which the account belongs.
- **Account Relationship Type:** Displays the relationship type of the customer linked to the account.
- **Address:** Displays the address of the customer.
- **City:** Displays the city in which the customer resides.
- **Account Type:** Displays the type of the account (that is whether it is a Saving or Current account).
- **Account Currency:** Displays the currency in which the account is billed (if it is not a part of an invoicing group).
- **Parent Customer Name:** Displays the parent customer (if any) of the customer linked to the account. On clicking the name, the Person Maintenance page appears with the details of the respective parent customer.
- **Identification Type:** Displays the identification type of the customer linked to the account. This column is displayed only when you are searching using the Identification Type and the Identification Value fields.
- **Identification Value:** Displays the identification value corresponding to the identification type of the customer linked to the account. This column is displayed only when you are searching using the Identification Type and the Identification Value fields.

On clicking the Broadcast button (  ) corresponding to the account, the Contract Information and the Payment History zones appear with the details of the respective account.

To view additional information of a particular account, click the Broadcast button (  ) corresponding to the account whose details you want to view. You can also click the context menu to go to one of the following screens to get more information related to the account:

- **Contract Information** – Allows you to view the contract and service agreement details of the selected account.
- **Financial History** - Allows you to view the financial history transactions of the selected account.
- **Payment History** – Allows you to view the payment history related to bills of the selected account.
- **Effective Pricing** – Allows you to perform pricing for products or services for the selected account.
- **Pricelist Assignment** - Allows you to assign price lists to the selected account.

## Contract Information Zone

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The Contract Information zone displays a list of contracts associated with the selected account. The following columns are displayed in this zone:

- **Contract ID:** Displays the contract ID. This ID is generated by the system. On clicking the contract ID, the Contract Maintenance page appears with the details of the respective contract.
- **Division:** Displays the division which governs the contract.

- Contract Type: Displays the contract type.
- Contract Type Description: Displays the description of the contract type.
- Contract Status: Displays the status of the contract.
- Effective Start Date: Displays the start date of the contract.
- Effective End Date: Displays the end date of the contract.

## Payment History Zone

The Payment History zone displays a list of payments made by the account. For each payment, the following information is displayed:

- Payment Date: Displays the date when the payment was made.
- Payment Amount: Displays the amount of the payment.
- Payment Currency: Indicates the currency in which the payment was made.
- Payment Status: Displays the status of the payment.
- Tender Amount: Displays the tender amount. Note that the payment amount typically equals the tender amount unless cash will be returned to the customer.
- Tender Currency: Indicates the currency of the tender amount.

## Customer Search

Initially, only the Search Criteria portion is displayed. Before entering the search criteria, you must specify whether you are searching for an account or a customer. While searching for customers, select Customer from the Query Option drop-down list.

### Customer Search Criteria

The criteria are grouped, as indicated by line separators between the criteria. Each group is independent from the others, and only one group can be used for any particular search. If a criterion for more than one group is entered, the information from the first group will be used. For example, if you enter Customer Name and Address, which are in different criteria groups, the system will search by Customer Name, which appears before Address.

Criteria Group	Description
Division	Used to specify the division to which the customer belongs. The list of divisions is restricted to those to which you have access.
	Note: If you specify division as a search criterion, you have to specify at least one more criterion for searching customers.

Criteria Group	Description
Customer Type, Customer Name	Used to specify the customer name and the customer type. The search can be restricted to parent customers using the Customer Type field.
Address, City	Used to specify the street address and city of the customer that you want to search. Address can have more than one line and you can search using all the address lines.  <b>Note:</b> This criteria group supports case sensitive search and the usage of '%' wildcard.
Phone Number	Used to specify the phone number of the customer that you want to search. Enter the phone number in the format indicated or as a contiguous string of numbers.  <b>Note:</b> This criteria group supports the usage of '%' wildcard.
Identification Type, Identification Value	Used to search for the customer using the IDs linked to the customer. Both the identification type and value must be provided.  <b>Note:</b> This criteria group supports the usage of '%' wildcard.

You can use the Wildcard character '%' for Wildcard searches. The Wildcard character '%' represents any number or character.

**Note:** Wildcard searches may require additional response time. Therefore, use wildcard character only when required.

## Customer Search Results

The search returns the customers that meet the search criteria and to whom you have access based on the access group. The following columns are displayed in the search results:

- Customer Name: Displays the name of the customer.
- Customer Address: Displays the address of the customer.
- City: Displays the city where the customer resides.
- Division: Displays the division to which the customer belongs.
- Parent Customer Name: Displays the parent customer (if any) of the customer. On clicking the name, the Person Maintenance page appears with the details of the respective parent customer.
- Identification Type: Displays the identification type of the customer. This column is displayed only when you are searching using the Identification Type and the Identification Value fields.
- Identification Value: Displays the identification value corresponding to the identification type of the customer. This column is displayed only when you are searching using the Identification Type and the Identification Value fields.

To view additional information of a particular customer, click the Broadcast button (  ) corresponding to the customer whose details you want to view. You can also click the context menu to go to one of the following screens to get more information related to the customer:

- Account - Allows you to view a list of accounts of the selected customer.

- Customer Hierarchy – Allows you to view the customer hierarchy of the selected customer.
- Effective Pricing – Allows you to perform pricing for products or services for the selected customer.
- Pricelist Assignment - Allows you to assign price lists to the selected customer.

## Chapter 4: Invoicing Group

This chapter explains what an invoicing group is and describes the functionality of the following screens related to invoicing group:

- Manage Invoicing Groups
- Invoicing Group Maintenance - Add/Edit
- Invoicing Group Information

### Overview

Invoicing Group allows you to combine the charges for multiple accounts onto one bill for each billing period. Invoicing Group consists of the following:

- Master account - This is the group level account that controls the billing.
- Member accounts - These are the accounts whose bills are aggregated at the group level.

You can create an invoicing group by adding member accounts to the master account. An account can be the master account in the invoicing group only when its Invoice Group Account characteristic type is set to Yes. On the other hand, an account can be added as a member to the master account only when its Invoice Group Account characteristic type is set to No.

There is no restriction on the number of accounts that can be added to an Invoicing Group. The accounts can belong to different customers and different currencies. If the Member accounts have a different billing currency from the Master account, the Member account's charges will be converted to the Master account's currency during billing.

Balances are maintained at the level of the Master account. Bills add to the Master account's balance, and payments subtract from that balance. However, the charges can be traced back to the originating Member accounts. The Master account cannot have charges of its own; all charges come from the Member accounts.

The relationship between the Member and Master accounts is defined by specifying the start and end dates so that Member accounts can be added and removed from the Invoicing Groups whenever required. During the period when an account is not a member of an Invoicing Group, it will be billed individually with its charges appearing on the bill.

### Business Process

The lifecycle for an Invoicing Group is as follows:

1. Decide which accounts should be used for billing. These are master accounts.
2. Assign non-billing accounts to the master account. Non-billing accounts are member accounts.
3. Generate bills using the standard ORMB processes. Member account's billable amounts are converted into the currency of their master account as needed.
4. View invoices. The invoices display master account information. Details include amounts from the member accounts.
5. Make payments through master accounts.
6. Review balances of master accounts.

## Manage Invoicing Groups

The Manage Invoicing Groups portal is the starting point where you can search for a Master or Member accounts using various criteria. Once the search results are displayed, you can navigate to the appropriate screen to view more detailed information, or to add or remove Member accounts from an Invoicing Group.

This portal consists of the following two sections:

- Search Criteria
- Search Results

### Search Criteria

The criteria are grouped, as indicated by line separators between the criteria. Each group is independent from the others, and only one group can be used for any particular search. If a criterion for more than one group is entered, the information from the first group will be used. For example, if you enter Account ID and Account Number, which are in different criteria groups, the system will search by Account ID, which appears before Account Number.

Criteria Group	Description
Invoicing Group Assignment Type	Used to specify whether you want search for a Master or Member account.
Account ID	Used to specify the account ID generated by the application. Note: This criteria group supports the usage of '%' wildcard.
Division, Account Number	Used to specify the account number or division to which the account belongs. The account number may be generated externally outside the system. Note: This criteria group supports the usage of '%' wildcard.
Customer Name, Billing Cycle, Customer Class	Used to specify the customer name whose accounts you want to search, or billing cycle or customer class of the account. Note: The customer name search supports the usage of '%' wildcard.

Note: The values in the drop-down lists in the Search Criteria section are access group restricted.

### Search Results

Depending on the specified search criteria, the search results section will either display Master accounts or Member accounts that meet the search criteria and that you have access to based on the account's access group. The following columns are displayed in the search results:

- Account ID: Displays the account ID generated by the application. It has a hyperlink. If the account is a Master account, the hyperlink will take you to the Invoicing Group Maintenance – Add/Edit portal where you can view the Member accounts added to this Master account, and add or remove Member accounts from the Invoicing Group. If the account is a Member account, the hyperlink will take you to the Invoicing Group Information portal where you can remove the Member account from the Invoicing Group.
- Account Number: Displays the ID generated by an external system.

- **Account Currency:** Displays the account's billing currency. Note that the charges for the Member accounts are automatically converted to the Master account's currency when a bill is generated.
- **Division:** Displays the division to which the account belongs.
- **Customer Name:** Displays the name of the main customer.
- **Customer Class:** Displays the customer class of the account.
- **Master Account Number:** Displays the Master account of all the Member accounts.
- **Master Customer Name:** Displays the name of the master account's main customer.
- **Billing Cycle:** Displays the billing cycle of the account.

## Invoicing Group Maintenance – Add/Edit

The Invoicing Group Maintenance – Add/Edit portal allows you to edit the Member accounts of an Invoicing Group. This portal consists of the following zones:

- Account Information
- Member Accounts
- Edit Member Account Assignment
- Search Accounts to Add
- Add Member

### Account Information Zone

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The Account Information zone displays the following basic information about the Master account:

- **Invoicing Group Assignment Type:** Indicates that the selected account is a master account.
- **Customer Name:** Displays the name of the main customer.
- **Account Number:** Displays the ID generated by an external system.
- **Customer Class:** Displays the customer class of the account.
- **Account Currency:** Displays the currency in which the Master account is billed.
- **Billing Cycle:** Displays the billing cycle during which the Master account will be billed.
- **Division:** Division to which the master account belongs.

### Member Accounts Zone

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The Member Accounts zone lists the Member accounts of the Invoicing Group. The following columns are displayed in this zone:

- **Account Number:** Displays the ID generated by an external system.
- **Account Currency:** Displays the currency of the Member account. During billing, the charges for the Member account are calculated in this currency and then converted to the Master account's currency.

- **Effective Start Date:** Displays the date from when the charges for this Member account will appear on the bill of the Master account.
- **Effective End Date:** Displays the date till when the charges for this Member account will appear on the bill of the Master account.
- **Customer Name:** Displays the name of the main customer.
- **Customer Class:** Displays the customer class of the Member account.
- **Billing Cycle:** Displays the billing cycle during which the Member account will be billed. If this account is removed from the Invoicing Group, it will be billed during this billing cycle.

On clicking the Broadcast button (  ) corresponding to the member account whose details you want to edit, the Edit Member Account Assignment zone appears with the details of the respective Member account.

## Edit Member Account Assignment Zone

The Edit Member Account Assignment zone allows you to change the period when the Member account is a part of the Invoicing Group. The following fields are displayed in this zone:

- **Effective Start Date:** Displays the date from when the charges for this Member account will appear on the bill of the Master account. This date is editable if it is a future date.
- **Invoicing Group Assignment Type:** Indicates that the selected account is a member account.
- **Effective End Date:** Displays the date till when the charges for this Member account will appear on the bill of the Master account. This date is editable if it is not a past date.
- **Account Number:** Displays the ID generated by an external system.

The following two buttons are available at the bottom of this zone: Save and Cancel. The Save button saves the changes and the Cancel button discards the member account assignment.

## Search Accounts to Add Zone

The Search Accounts to Add zone allows you to search for an account that you want to add to the Invoicing Group. It consists of the following two sections:

- Search Criteria
- Search Results

### Search Criteria

The following fields are displayed in this zone:

Field	Description
Account ID	Used to specify the account ID generated by the application.
Account Number	Used to specify the account number generated by an external system.
Customer Name	Used to specify the customer name whose accounts you want to search.
Billing Cycle	Used to specify the billing cycle of the account.

Field	Description
Customer Class	Used to specify the customer class of the account.

## Search Results

The search results section displays the member and non-member accounts that meet the search criteria. The following columns are displayed in the search results:

- Account ID: Displays the account ID generated by the application.
- Customer Name: Displays the name of the main customer.
- Account Number: Displays the ID generated by an external system.
- Account Currency: Displays the currency in which charges for this account are calculated. If this account becomes a part of the Invoicing Group, the charges for the account will be calculated in this currency and then converted to the Master account's currency.
- Division: Division to which the account belongs.
- Customer Class: Displays the customer class of the account.
- Billing Cycle: Displays the billing cycle during which the bills for this account are generated. If this account is added to the Invoicing Group, bills will be generated on the Master account's bill cycle.

On clicking the Broadcast button (  ) corresponding to the account that you want to add, the Add Member zone appears with the details of the respective account.

## Add Member Zone

The Add Member zone allows you to add accounts to the Invoicing Group. The following fields are displayed in this zone:

- Customer Name: Displays the name of the main customer.
- Account Number: Displays the ID generated by an external system.
- Account Currency: Displays the currency in which charges for this account are calculated. If this account becomes a part of the Invoicing Group, the charges for the account will be calculated in this currency and then converted to the Master account's currency.
- Customer Class: Displays the customer class of the account.
- Effective Start Date: Enables you to specify the date from when charges for this account will appear on the bill of the Master account. This field is required.
- Billing Cycle: Displays the billing cycle during which the bills for this account are generated. If this account is added to the Invoicing Group, bills will be generated on the Master account's bill cycle.

The following two buttons are available at the bottom of this zone: Save and Cancel. On clicking the Save button, the account is added as a member to an Invoicing Group. On clicking the Cancel button, the data in the Effective Start Date field is cleared.

## Invoicing Group Information

The Invoicing Group Information portal allows you to view the details of the Member account. It allows you to edit the period during which the Member account is a part of the Invoicing Group. This portal is displayed when you click the hyperlink on the Member account in the search results of the Manage Invoicing Groups portal.

This portal consists of the following zones:

- Invoicing Group Information
- Selected Member Account
- Edit Member Account Assignment

## Invoicing Group Information Zone

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The Invoicing Group Information zone displays the Master account details of the selected Member account. The following fields are displayed in this zone:

- Invoicing Group Assignment Type: Indicates that the account is a master account.
- Customer Name: Displays the name of the main customer.
- Account Number: Displays the ID generated by an external system.
- Customer Class: Displays the customer class of the account.
- Account Currency: Displays the currency in which the master account is billed.
- Billing Cycle: Displays the billing cycle during which the master account is billed.
- Division: Displays the division to which the master account belongs.

## Selected Member Account Zone

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The Selected Member Account zone displays the details of the Member account that was selected in the Manage Invoicing Groups portal. The following columns are displayed in this zone:

- Account Number: Displays the ID generated by an external system.
- Account Currency: Displays the currency in which the Member account is billed if it is not a part of the Invoicing Group. During billing, the charges for the Member account are calculated in this currency and then converted to the Master account's currency. If the Member account is removed from the Invoicing Group, the charges for this account are billed in this currency.
- Effective Start Date: Displays the date from when the charges for this Member account will appear on the bill of the Master account.
- Effective End Date: Displays the date till when the charges for this Member account will appear on the bill of the Master account.
- Customer Name: Displays the name of the main customer.
- Customer Class: Displays the customer class of the account.
- Billing Cycle: Displays the billing cycle during which the bills for this account are generated. If this account is added to the Invoicing Group, bills will be generated on the Master account's bill cycle.

On clicking the Broadcast button (  ) corresponding to the member account whose details you want to edit, the Edit Member Account Assignment zone appears with the details of the respective Member account.

## Edit Member Account Assignment Zone

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You can edit the Member account details in this zone. The following fields are displayed in this zone:

- **Effective Start Date:** Displays the date from when the charges for this Member account will appear on the bill of the Master account. This date is editable if it is not a past date.
- **Effective End Date:** Displays the date till when the charges for this Member account will appear on the bill of the Master account. This date is editable if it is not a past date.
- **Invoicing Group Assignment Type:** Indicates that the account is a member account.
- **Account Number:** Displays the ID generated by an external system.

The following two buttons are available at the bottom of this zone: Save and Cancel. The Save button saves the changes and the Cancel button discards the member account assignment.

# Chapter 5: Pricing Management

This chapter explains how to define and assign price lists to an account or a customer, how to assign products to a price list and how to define pricing for a product. It also lists the administrative tasks that need to be executed for managing pricing.

## Overview

Pricing Management allows you to define the prices that customers pay for products and services offered to them. These prices are either the standard prices defined in the price lists or the override prices that are specific to a customer or an account. The prices can be defined at various levels in a customer hierarchy (for example, at the account level, main customer level, or at the parent customer level). As prices can be defined at multiple places (for example, in the account's price list, main customer's price list, parent customer's price list), the order in which the system searches for prices will affect the price charged to the customer. This search order is configurable and can vary with each division. The search order is specified when you define a division. You can change the search order at any time.

However, since a global customer is not associated to any division, the system cannot identify the price assignment search order to be used. Hence, the default search order is defined for global customers via a feature configuration. You can change this default search order if required.

The prices that are specific to a customer or an account are referred to as Customer Agreed or Account Agreed prices, respectively. You can override these agreed prices. There is a feature configuration called C1\_EXP\_OVRD defined for override pricing. When this feature is set to Y and an agreed pricing of a customer or an account with no end date is overridden, the system will automatically expire the agreed pricing. However, if this feature is set to N, you need to manually specify the end date for agreed pricing in case it is overridden.

## Business Process

To setup pricing for customers, the general, system-wide options must be configured, typically by a system administrator, and the customers and accounts must be setup, typically by customer-service representatives.

Pricing Management general options:

- Create Rate Schedules, Rate Versions and Rate Components – Rate schedules, rate versions, and rates components are used to define the formulas used to calculate the total amount a customer is charged for a product. Collectively, these three things are known as the rate. Examples of formulas are: price times the number of transactions used and a flat monthly charge plus a percentage of the average daily balance. Rate schedules, rate versions, and rate components are setup using the Rate Schedule portal.
- Create Rate Definition – The rate is a formula with variables whose values are supplied by a user by setting up a price list or override price. For example, a rate might add a flat monthly charge and a percentage of the average daily balance to arrive at the amount to charge the customer. This rate would likely be used to calculate the charge for several different products, each product with its own flat amount and percentage. So, these two are factors which are defined as variables whose values must be entered by users when they setup price list or override price. To prompt users to enter values for these variables, rate definitions must be created. You can create rate definitions using the Manage Rate Definitions portal.
- Create Tiering Criteria (optional) – Tiering allows you to define criteria based on which you can define lower and upper limit ranges that can optionally be applied to pricing if standard flat pricing is not sufficient to meet business needs. This allows you to aggregate pricing to enhance your pricing model to include favorable terms for preferential customers if required. You can create tiering criteria using the Manage Tiering Criteria portal.

- Create Exchange Rate (optional) – Exchange rates are required if you define prices in one currency but bill in another. You can create exchange rates using the Manage Exchange Rates portal.
- Create Product – Products represents the final items that are either associated to price lists or are associated at customer or account hierarchies. Products need to exist in the application prior to creating price lists or associating them to customers or accounts. You can create products using the Manage Products portal.
- Create Price List (optional) – Price Lists represent a grouping of one or more products in the application and can be created if your company uses them. Price Lists can be marked as global if applicable and can be copied if required. You can create price lists using the Manage Price Lists portal. Once you have created a price list, you may assign it to a party (either an account or a person).
- Division Maintenance – For each division, the products and price lists that are offered by that division must be specified. This will reduce data entry errors when setting up pricing for a customer or account. In addition, the Price Assignment Search algorithm, which controls the order in which a customer hierarchy is searched for prices, must be specified for that division. Each division can have a different search order.

#### Customer Data:

- Customers and/or Accounts – Customers or Accounts must exist in the application in order to assign pricing.

## Account Price List Assignment

Price Lists can be assigned to accounts using the Price List Assignment (Account) portal. To assign a price list to an account, select Go To Price List Assignment from the context menu corresponding to the account to which you want to assign a price list, in the Banking Control Central portal. The Price List Assignment (Account) portal appears. It is divided into the following zones:

- Party
- Assigned Price Lists
- Edit Price List Assignment
- Search Price List to Assign
- Assign Price List

## Party Zone

This zone allows you to view information about the party which is either an account or a person. The notion of party in the system is a way to easily categorize an account or a person under a single logical entity. The following fields are displayed in this zone:

Field	Description
Customer Name	Displays the name of the main customer.
Account ID	Displays the account ID generated by the application.
Account Number	Displays the ID generated by an external system.
Division	Displays the division to which the account belongs.

## Assigned Price Lists Zone

This zone lists the price lists that are already assigned to the account. The following columns are displayed in this zone:

Column	Description
Price List	Displays the ID generated by the application for the price list.
Price List Description	Displays the description of the price list.
Effective Start Date	Displays the date from when the system will start using the prices on this price list to bill products for this account.
Effective End Date	Displays the date till when the system will use prices on this price list to bill products for this account.

You can further filter the existing assigned price lists by clicking the Filter button.

On clicking the Broadcast button (📡) corresponding to the assigned price list, the Edit Price List Assignment zone appears with the details of the respective price list assignment.

## Edit Price List Assignment Zone

This zone allows you to edit the price list assignment details. The following fields are displayed in this zone:

Field	Description
Price List	Displays the ID generated by the application for the price list.
Price List Description	Displays the description of the price list.
Effective Start Date	Displays the date from when the system will start using the prices on this price list to bill products for this account.
Effective End Date	Allows you to modify the date till when the system will use prices on this price list to bill products for this account.

The following two buttons are available at the bottom of this zone: Save and Cancel. The Save button saves the changes and the Cancel button clears the data in the Effective End Date field.

## Search Price List to Assign Zone

To search for a price list that you want to assign to the account, you can use various search criteria. The list of available price lists is limited to those that are valid for the division to which the account belongs. The following fields are displayed in this zone:

Field	Description
Query Option	<p>Allows you to perform a search against all the price lists or against those price lists that are already assigned either to a customer or to an account.</p> <p>The following two options are available in this drop-down list: Search Price List and Search Assigned Price List.</p>

Field	Description
Price List	Used to specify the ID generated by the application for the price list.
Price List Description	Used to specify the description of the price list.
Customer Name	Used to specify the customer name.  Note: This field is displayed only when you have selected the Search Assigned Price List from the Query Option drop-down list.
Account Number	Used to specify the account number.  Note: This field is displayed only when you have selected the Search Assigned Price List from the Query Option drop-down list.
Effective Start Date	Used to specify the date from when the system will start using the prices on this price list.
Effective End Date	Used to specify the date till when the system will use prices on this price list.

The following columns are displayed in the search results:

Column	Description
Price List ID	Displays the ID generated by the application for the price list.
Account Information	Displays the account ID of the account to which the price list is assigned.  Note: This column is displayed in the search results only when you have selected the Search Assigned Price List from the Query Option drop-down list.
Account Number	Displays the account number of the account to which the price list is assigned.  Note: This column is displayed in the search results only when you have selected the Search Assigned Price List from the Query Option drop-down list.
Customer Name	Displays the name of the customer to which the price list is assigned.  Note: This column is displayed in the search results only when you have selected the Search Assigned Price List from the Query Option drop-down list.
Price List Description	Displays the description of the price list.
Effective Start Date	Displays the date from when the system will start using the prices on this price list.
Effective End Date	Displays the date till when the system will use prices on this price list.

On clicking the Broadcast button (  ) corresponding to the price list, the Assign Price List zone appears with the details of the respective price list.

## Assign Price List Zone

This zone allows you to assign a price list to the account by specifying the start and end dates of price list assignment. The following fields are displayed in this zone:

Field	Description
Price List	Displays the ID generated by the application for the price list.
Price List Description	Displays the description of the price list.
Effective Start Date	Allows you to specify the date from when the price list is effective for the account.
Effective End Date	Allows you to specify the date till when the price list is effective for the account.

The following two buttons are available at the bottom of this zone: Save and Cancel. The Save button assigns the price list to the account and the Cancel button clears the data in the Effective Start Date and Effective End Date fields.

## Customer Price List Assignment

Price Lists can be assigned to customers using the Price List Assignment (Customer) portal. To assign a price list to a customer, select Go To Price List Assignment from the context menu corresponding to the customer to which you want to assign a price list, in the Banking Control Central portal. The Price List Assignment (Customer) portal appears. It is divided into the following zones:

- Party
- Assigned Price Lists
- Edit Price List Assignment
- Search Price List to Assign
- Assign Price List

## Party Zone

This zone allows you to view information about the party which is either an account or a person (customer). The notion of party in the system is a way to easily categorize an account or a person (customer) under a single logical entity. The following fields are displayed in this zone:

Field	Description
Customer Name	Displays the name of the person.
Person ID	Displays the unique identifier generated by the application for the person.
Division	Displays the division to which the person belongs.

## Assigned Price Lists Zone

This zone lists the price lists that are already assigned to the customer. The following columns are displayed in this zone:

Column	Description
Price List	Displays the ID generated by the application for the price list.
Price List Description	Displays the description of the price list.
Effective Start Date	Displays the date from when the system will start using the prices on this price list to bill products for this customer.
Effective End Date	Displays the date till when the system will use prices on this price list to bill products for this customer.

You can further filter the existing assigned price lists by clicking the Filter button.

On clicking the Broadcast button (📡) corresponding to the assigned price list, the Edit Price List Assignment zone appears with the details of the respective price list assignment.

## Edit Price List Assignment Zone

This zone allows you to edit the price list assignment details. The following fields are displayed in this zone:

Field	Description
Price List	Displays the ID generated by the application for the price list.
Price List Description	Displays the description of the price list.
Effective Start Date	Displays the date from when the system will start using the prices on this price list to bill products for this customer.
Effective End Date	Allows you to modify the date till when the system will use prices on this price list to bill products for this customer.

The following two buttons are available at the bottom of this zone: Save and Cancel. The Save button saves the changes and the Cancel button clears the data in the Effective End Date field.

## Search Price List to Assign Zone

To search for a price list that you want to assign to the customer, you can use various search criteria. If the person belongs to a division, the search results are limited to the price lists that are valid for the division. If the person does not belong to a division, all the price lists that meet the criteria, regardless of the division, are returned in the search results.

The following fields are displayed in this zone:

Field	Description
Query Option	Allows you to perform a search against all the price lists or against those price lists that are already assigned either to a customer or to an account.  The following two options are available in this drop-down list: Search Price List and Search Assigned Price List.
Price List	Used to specify the ID generated by the application for the price list.
Price List Description	Used to specify the description of the price list.
Customer Name	Used to specify the customer name.  Note: This field is displayed only when you have selected the Search Assigned Price List from the Query Option drop-down list.
Account Number	Used to specify the account number.  Note: This field is displayed only when you have selected the Search Assigned Price List from the Query Option drop-down list.
Effective Start Date	Used to specify the date from when the system will start using the prices on this price list.
Effective End Date	Used to specify the date till when the system will use prices on this price list.

The following columns are displayed in the search results:

Column	Description
Price List ID	Displays the ID generated by the application for the price list.
Account Information	Displays the account ID of the account to which the price list is assigned.  Note: This column is displayed in the search results only when you have selected the Search Assigned Price List from the Query Option drop-down list.
Account Number	Displays the account number of the account to which the price list is assigned.  Note: This column is displayed in the search results only when you have selected the Search Assigned Price List from the Query Option drop-down list.
Customer Name	Displays the name of the customer to which the price list is assigned.  Note: This column is displayed in the search results only when you have selected the Search Assigned Price List from the Query Option drop-down list.
Price List Description	Displays the description of the price list.
Effective Start Date	Displays the date from when the system will start using the prices on this price list.
Effective End Date	Displays the date till when the system will use prices on this price list.

On clicking the Broadcast button (📡) corresponding to the price list, the Assign Price List zone appears with the details of the respective price list.

## Assign Price List Zone

This zone allows you to assign a price list to the customer by specifying the start and end dates of price list assignment. The following fields are displayed in this zone:

Field	Description
Price List	Displays the ID generated by the application for the price list.
Price List Description	Displays the description of the price list.
Effective Start Date	Allows you to specify the date from when the price list is effective for the customer.
Effective End Date	Allows you to specify the date till when the price list is effective for the customer.

The following two buttons are available at the bottom of this zone: Save and Cancel. The Save button assigns the price list to the customer and the Cancel button clears the data in the Effective Start Date and Effective End Date fields.

## Pricing (Account)

Pricing Management for accounts is done through the Pricing (Account) portal. You can access this portal from the Banking Control Central portal by selecting Go To Effective Pricing from the context menu corresponding to the account whose effective pricing you want to view or define. Using the Pricing (Account) portal, you can

- View effective pricing for products assigned to the account either directly or through the customer hierarchy
- Filter products that are already assigned to the account
- Search and assign products to the account
- Edit or override a product pricing

Note: You can also access the Pricing (Account) portal by selecting Go To Effective Pricing from the context menu corresponding to the account ID in the Account portal.

The number of records that appear in the search results in the Pricing (Account) portal is controlled via a feature configuration called C1\_PR\_REC. At any time, you can change the maximum number of records that must be retrieved using the Effective Pricing RecordSet Limit option type of the feature configuration.

The Pricing (Account) portal is divided into the following zones:

- Party Information
- Effective Price Assignment
- Search Products to Assign

## Party Information Zone

This zone displays basic information about the account. The following fields are displayed in this zone:

Field	Description
Customer Name	Displays the name of the main customer.
Account ID	Displays the account ID generated by the application.
Account Number	Displays the ID generated by an external system.
Division	Displays the division to which the account belongs.

## Effective Price Assignment Zone

This zone allows you to filter product pricing based on the various search criteria. The default order in which the product pricing is listed in this zone is controlled by the Price Assignment Search algorithm defined for the division to which the account belongs.

For product pricing within bundled products, the zone lists the price at the highest priority in the search order and ensures it is shown only once.

The following fields are displayed in this zone:

Field	Description
Account ID	Displays the account ID generated by the application.
Effective Pricing Date	Used to specify the date from when the pricing assignment is effective.
Product	Used to specify the product code for which effective pricing is defined.
Product Description	Used to specify the description of the product for which effective pricing is defined.
Assignment Level	Used to specify the pricing assignment type. This field supports wildcard and partial search. You can enter any of the following assignment types: <ul style="list-style-type: none"> <li>Account Agreed – Means product pricing is agreed for the specific account within the hierarchy.</li> <li>Account Price List – Means product pricing is defined within the price list that is assigned to the account.</li> <li>Customer Agreed – Means product pricing is agreed for the specific customer within the hierarchy.</li> <li>Customer Price List – Means product pricing is defined within the price list that is assigned to the customer.</li> <li>Parent Customer Agreed – Means product pricing is agreed for the parent customer in the hierarchy.</li> <li>Parent Customer Price List – Means product pricing is defined within the price list that is assigned to the parent customer.</li> </ul>
Parent Customer	Used to specify the name of the immediate parent customer in the hierarchy.

The following columns are displayed in the search results:

Column	Description
Product	Displays the product code. It has a hyperlink that allows you to navigate to the Manage Products portal and edit the product details.
Product Description	Displays the description of the product for which effective pricing is defined.
CCY (I)	Displays the issue currency for product pricing.
Assignment Level	Displays the pricing assignment type.
Price List Description	Displays the description of the price list. The description is displayed when the price assignment type is Parent Customer Price List, Customer Price List, or Account Price List. The description is partial (up to 18 characters), but you can view the entire description in the tooltip of this column.
Rate	Displays the price of the product which can be tiered or non-tiered. It can be agreed pricing, price list pricing, or pricing inherited from the hierarchy referred to as grandfathered pricing. Pricing which is inherited is reflected with an asterisk (*) symbol.
Edit	Allows you to edit the pricing by navigating to the Edit Assigned Pricing portal where you can edit the rates, criteria, associated product and tiering ranges.  Note: The Edit icon is displayed only when the corresponding product pricing is overridden. The Edit icon is available only for Account Agreed pricing.
Override	Allows you to override the effective pricing by navigating to the Override Product Pricing portal where you can override rates, criteria, associated product and tiering ranges. This creates a new price assignment within the hierarchy.  When the C1_EXP_OVRD feature configuration is set to Y, prior override price assignments are end dated with the current price assignment date -1 and are kept as historical price assignments.
Start Date	Displays the date from when the pricing assignment is effective.
End Date	Displays the date till when the pricing assignment is effective.
CCY (P)	Displays the pricing currency used in the pricing assignment.
Parent Customer	Displays the name of the immediate parent customer in the hierarchy.

Note: You can sort all the columns except Rate, Edit and Override in the ascending or descending order.

The Export to Excel link is displayed at the bottom of the search criteria section in this zone. It allows you to export product pricing that matches the search criteria in the CSV format. You can view the exported data using Microsoft Excel.

The CSV file contains the following additional columns apart from the one displayed in the search results:

Column	Description
Lower Limit	Displays the lower limit of the tiering range.

Column	Description
Upper Limit	Displays the upper limit of the tiering range.
PA Usage Flag	Indicates whether the price assignment is applicable to all the customers or only to the new customers.
Price Assignment ID	Displays the ID that is generated automatically when the price assignment is done.
Parent Level	Displays the numerical level of the parent in the hierarchy from whom the pricing is inherited.
Price List ID	Displays the price list ID from where the pricing is inherited.
Price List Start Date	Displays the date from when the price list is effective.

## Search Products to Assign Zone

This zone allows you to search for products that you want to assign to the account. The search for products is restricted to those products that are valid for the account's division. The following fields are displayed in this zone:

Field	Description
Product	Used to specify the product code.
Product Description	Used to specify the description of the product.
Global Price List	Used to indicate whether product should be a part of a global price list or not.

The following columns are displayed in the search results:

Column	Description
Product	Displays the product code. It has a hyperlink that allows you to navigate to the Add Product Pricing portal where you can define pricing for the product that you want to assign to the account.
Product Description	Displays the description of the product.
Global Price List	Indicates whether the product should be a part of a global price list or not.
Unit of Measure	Displays the unit of measure associated with the product.
Bundled	Indicates whether the product is a bundled product or not.
Bundle Type	Displays the bundle type if the product is a bundled product.

## Pricing (Customer)

Pricing Management for customers is done through the Pricing (Customer) portal. You can access this portal from the Banking Control Central portal by selecting Effective Pricing from the context menu corresponding to the customer whose effective pricing you want to view or define.

Using the Pricing (Customer) portal, you can

- View effective pricing for products assigned to the customer either directly or through the customer hierarchy
- Filter products that are already assigned to the customer
- Search and assign products to the customer
- Edit or override a product pricing

Note: You can also access the Pricing (Customer) portal by selecting Go To Effective Pricing from the context menu corresponding to the person ID in the Person portal.

You can also view effective pricing for global customers (i.e. the customers that are not associated to any division) in this portal. The pricing for all the products assigned to the global customer either directly or through a price list is displayed in this portal. However, you will be able to view pricing for only those products that are associated to the division to which you have access.

Since a global customer is not associated to any division, the system cannot identify the price assignment search order to be used. Hence, the default search order is defined as a feature called C1\_PRASNORDR for global customers. You can change this default search order if required. The valid value is: AGREED\_PRICELIST or AGREED\_FIRST. You can also create a custom search order that would require a custom algorithm.

The number of records that appear in the search results in the Pricing (Customer) portal is controlled via a feature configuration called C1\_PR\_REC. At any time, you can change the maximum number of records that must be retrieved using the Effective Pricing RecordSet Limit option type of the feature configuration.

The Pricing (Customer) portal is divided into the following zones:

- Party
- Effective Price Assignment
- Search Products to Assign

## Party Zone

This zone displays basic information about the customer. The following fields are displayed in this zone:

Field	Description
Customer Name	Displays the name of the customer.
Person ID	Displays the unique identifier generated by the system for the customer.
Division	Displays the division to which the customer belongs.

## Effective Price Assignment Zone

This zone allows you to filter product pricing based on the various search criteria. The default order in which the product pricing is listed in this zone is controlled by the Price Assignment Search algorithm defined for the division to which the customer belongs.

For product pricing within bundled products, the zone lists the price at the highest priority in the search order and ensures it is shown only once.

The following fields are displayed in this zone:

Field	Description
Person ID	Displays the unique identifier generated by the system for the customer.
Effective Pricing Date	Used to specify the date from when the pricing assignment is effective.
Product	Used to specify the product code for which effective pricing is defined.
Product Description	Used to specify the description of the product for which effective pricing is defined.
Assignment Level	Used to specify the pricing assignment type. This field supports wildcard and partial search. You can enter any of the following assignment types: <ul style="list-style-type: none"> <li>Customer Agreed – Means product pricing is agreed for the specific customer within the hierarchy.</li> <li>Customer Price List – Means product pricing is defined within the price list that is assigned to the customer.</li> <li>Parent Customer Agreed – Means product pricing is agreed for the parent customer in the hierarchy.</li> <li>Parent Customer Price List – Means product pricing is defined within the price list that is assigned to the parent customer.</li> </ul>
Parent Customer	Used to specify the name of the immediate parent customer in the hierarchy

The following columns are displayed in the search results:

Column	Description
Product	Displays the product code. It has a hyperlink that allows you to navigate to the Manage Products portal and edit the product details.
Product Description	Displays the description of the product for which effective pricing is defined.
CCY(I)	Displays the issuing currency used in the pricing assignment.
Assignment Level	Displays the pricing assignment type.
Price List Description	Displays the description of the price list. The description is displayed when the price assignment type is Parent Customer Price List, Customer Price List, or Account Price List. The description is partial (up to 18 characters), but you can view the entire description in the tooltip of this column.
Rate	Displays the price of the product which can be tiered or non-tiered. It can be agreed pricing, price list pricing, or pricing inherited from the hierarchy referred to as grandfathered pricing. Pricing which is inherited is reflected with an asterisk (*) symbol.

Column	Description
Edit	Allows you to edit the pricing by navigating to the Edit Assigned Pricing portal where you can edit the rates, criteria, associated product and tiering ranges.  Note: The Edit icon is displayed only when the corresponding product pricing is overridden. The Edit icon is available only for Customer Agreed pricing.
Override	Allows you to override the effective pricing by navigating to the Override Product Pricing portal where you can override rates, criteria, associated product and tiering ranges. This creates a new price assignment within the hierarchy.  When the C1_EXP_OVRD feature configuration is set to Y, prior override price assignments are end dated with the current price assignment date -1 and are kept as historical price assignments.
Start Date	Displays the date from when the pricing assignment is effective.
End Date	Displays the date till when the pricing assignment is effective.
CCY(P)	Displays the pricing currency used in the pricing assignment.
Parent Customer	Displays the name of the immediate parent customer in the hierarchy.

Note: You can sort all the columns except Rate, Edit and Override in the ascending or descending order.

The Export to Excel link is displayed at the bottom of the search criteria section in this zone. It allows you to export product pricing that matches the search criteria in the CSV format. You can view the exported data using Microsoft Excel.

The CSV file contains the following additional columns apart from the one displayed in the search results:

Column	Description
Lower Limit	Displays the lower limit of the tiering range.
Upper Limit	Displays the upper limit of the tiering range.
PA Usage Flag	Indicates whether the price assignment is applicable to all the customers or only to the new customers.
Price Assignment ID	Displays the ID that is generated automatically when the price assignment is done.
Parent Level	Displays the numerical level of the parent in the hierarchy from whom the pricing is inherited.
Price List ID	Displays the price list ID from where the pricing is inherited.
Price List Start Date	Displays the date from when the price list is effective.

## Search Products to Assign Zone

This zone allows you to search for products that you want to assign to the customer. If the customer belongs to a division, the search will be limited to those products that are offered by the division. If the customer does not belong to a division, the search will be performed against all the products defined in the application.

The following fields are displayed in this zone:

Field	Description
Product	Used to specify the product code.
Product Description	Used to specify the description of the product.
Global Price List	Used to indicate whether product should be a part of a global price list or not.

The following columns are displayed in the search results:

Column	Description
Product	Displays the product code. It has a hyperlink that allows you to navigate to the Add Product Pricing portal where you can define pricing for the product that you want to assign to the account.
Product Description	Displays the description of the product.
Global Price List	Indicates whether the product should be a part of a global price list or not.
Unit of Measure	Displays the unit of measure associated with the product.
Bundled	Indicates whether the product is a bundled product or not.
Bundle Type	Displays the bundle type if the product is a bundled product.

## Banking Pricing Management Administration

The topics in this section describe some of the control tables that need to be configured, or any other setup that is required in order to implement Pricing Management. The following configuration tables are described in this section:

- Rate Definitions
- Tiering Criteria
- Exchange Rates
- Products
- Price Lists

The following additional configuration is required for pricing:

- Rate Schedule – For details, refer to the Business Process section.
- Rate Version - For details, refer to the Business Process section.
- Rate Component - For details, refer to the Business Process section.
- Price Assignment Search Algorithm - A search algorithm, which determines the order in which customers and accounts will be searched for prices, must be defined using the Algorithm portal. In addition, while defining each division, the Search algorithm must be associated to a division using the Division portal. The following algorithm options are available:

- AGREED\_PRICELIST – This order shows all agreed level pricing followed by pricelist pricing. The order of search is Account Agreed, Account Price List, Customer Agreed, Customer Price List, Parent Customer Agreed, and Parent Customer Price List.
  - AGREED\_FIRST - This order shows all agreed level pricing followed by pricelist pricing. The order of search is Account Agreed, Customer Agreed, Parent Customer Agreed, Account Price List, Customer Price List, and Parent Customer Price List.
- Division – For details, refer to the Division Maintenance chapter.

## Manage Rate Definitions

This portal determines what information should be entered to price a product. The rate schedule defines how the pricing is calculated. The rates and tiering range needs to be defined as the billing would require this input for processing. These values will change depending on the product, customer or the account. Pricing definitions allow the same rate schedule to be used for multiple products that are charged at different rates. This makes it possible to use fewer rate schedules so that rate schedules can be defined once and re-used.

In this portal, you can determine what pricing information should be entered. But, you do not actually enter the pricing in this portal.

The general flow related to rates is as follows:

1. Rate schedules are created that define how the bills should be calculated.
2. Pricing definitions are completed to determine what information should be entered when completing pricing.
3. The pricing and tiering ranges are entered by billing analysts when they configure pricing for a product based on the pricing definition associated with the rate schedule.
4. When bills are generated, the information from the rates entered by billing analysts is combined with the rate schedules to calculate the billable charges.

The Manage Rate Definitions portal is divided into the following two zones:

- Select Rate Schedule to Define Rate
- Create/Edit Rate Definition

### Select Rate Schedule to Define Rate Zone

This zone allows you to select the rate schedule for which you want to define or edit the rate. The following field is displayed in this zone:

Field	Description
Rate Schedule	Used to select a rate schedule for which you want to define or edit the rate.
	Note: Each rate schedule may have only one bill pricing definition. If the rate schedule is already associated with a pricing definition, the details for the same are displayed.

The following columns are displayed in the search results:

Column	Description
Rate Schedule	Displays the rate schedule.

Column	Description
Sequence Number	Displays the sequence number of the rate component.
Rate Component Description	Displays the description of the rate component.
Effective Start Date	Displays the date from when the rate version to which the rate component belongs is effective.
Tiering Type	Displays the tiering type. The valid values are: Step, Threshold
Maximum Tiering Combinations	Displays the maximum number of tiering ranges as supported by the bill rate component.  Note: Each range may support more than one tiering criteria, and each of those criteria may be evaluated based on different inputs. For example, the bill rate component may support tiering based on two different criteria such as transaction volumes from a product bundle, and balances of the priced product. In such a case, for a single rate, it would be possible to enter separate tiering range information for each criterion and vary this information by product.
Rate Component Map Description	Displays the description of the rate component. This provides additional information to determine pricing for a given sequence. For example, if the user is to enter a percentage based discount amount, the value for rate description could be, "Percentage based discount amount".
Action	Indicates the action that can be performed on the respective rate component.
Rate Component Map Id	Displays the rate component map ID.

## Create/Edit Rate Definition Zone

This zone allows you to define or edit rate definitions for the selected rate component. The following fields are displayed in this zone:

Field	Description
Rate Schedule	Displays the rate schedule for which you want to define or edit the rate.  Note: Each rate schedule may have only one bill pricing definition. If the rate schedule is already associated with a pricing definition, the details for the same are displayed.
Rate Component Description	Displays the description of the rate component.
Effective Start Date	Displays the date from when the rate version to which the rate component belongs is effective.
Sequence Number	Displays the sequence number of the rate component.
Tiering Type	Used to specify the tiering type. You can select either of the following values: Step, Threshold, Flat  Note: This field is disabled when you are modifying the rate definition.

Field	Description
Maximum Tiering Combinations	Used to specify the maximum number of tiering ranges as supported by the bill rate component.  Note:  Each range may support more than one tiering criteria, and each of those criteria may be evaluated based on different inputs. For example, the bill rate component may support tiering based upon two different criteria such as transaction volumes from a product bundle, and balances of the priced product. In such a case, for a single rate, it would be possible to enter separate tiering range information for each criterion and vary this information by product.  This field is disabled when you are modifying the rate definition.
Rate Component Map Description	Used to specify the description of the rate component. This provides additional information to determine pricing for a given sequence. For example, if the user is to enter a percentage based discount amount, the value for rate description could be, "Percentage based discount amount".

The following three buttons are available at the bottom of this zone: Save, Delete and Cancel. The Save button saves the changes, the Delete button deletes the rate definition of the rate component and the Cancel button discards the changes.

## Manage Tiering Criteria

The Manage Tiering Criteria portal provides the ability to administrative users to define tiering criteria. Tiering criteria are a mechanism to evaluate the aggregation of activities from source systems to determine the pricing. The idea is that as customers increase their utilization of services from the financial services institution, they may receive more favorable pricing.

Example: "ABC Company" uses wire transfer services from Large Bank. If ABC Company initiates up to 1,000 wire transfers during February, the fee from Large Bank is \$5 per transfer. If ABC Company initiates more than 1,000 wire transfers, the fee will be \$3 per transfer.

Comparing the total amounts from the aggregation of transactions to tiering ranges completes the evaluation of tiering criteria. The portal is divided into the following three zones:

- Tiering Criteria
- Edit Tiering Criterion
- Create Tiering Criterion

## Tiering Criteria Zone

This zone allows you to view the existing tiering criteria in the application. The following columns are displayed in this zone:

Column	Description
Tiering Criterion	Displays the code of the tiering criterion.
Tiering Criterion Description	Displays the description of the tiering criterion.
Service Quantity Identifier	Displays the Service Quantity Identifier (SQI) of the tiering criterion.

## Edit Tiering Criterion Zone

This zone allows you to edit the selected tiering criterion. The following fields are displayed in this zone:

Field	Description
Tiering Criterion	Displays the code of the tiering criterion.
Tiering Criterion Description	Allows you to modify the description of the tiering criterion.
Service Quantity Identifier	Displays the Service Quantity Identifier (SQI) of the tiering criterion.
	Note: This field is disabled when you are modifying the tiering criterion.

The following two buttons are available at the bottom of this zone: Save and Cancel. The Save button saves the changes and the Cancel button discards the changes.

## Create Tiering Criterion Zone

This zone allows you to add the tiering criterion. This zone is available at any time in order to add data. There is no limit to the number of tiering criteria that can exist in the application. The following fields are displayed in this zone:

Field	Description
Tiering Criterion	Used to specify the code of the tiering criterion.
Tiering Criterion Description	Used to specify the description of the tiering criterion.
Service Quantity Identifier	Used to specify the Service Quantity Identifier (SQI) of the tiering criterion.
	Note: SQI is defined and setup prior to maintaining tiering. During billing, the rating engine determines which service quantities are applied to tiers.

The following two buttons are available at the bottom of this zone: Save and Cancel. The Save button creates a tiering criterion and the Cancel button clears the fields.

## Manage Exchange Rates

The Manage Exchange Rates portal provides the ability to administrative users to define exchange rates for currency conversion. You can define global exchange rates as well as division-specific exchange rates. When division specific exchange rate (for account's division) is available, it will be used during currency conversion. In case division specific exchange rate is not available in the application at the time of currency conversion, global exchange rate would be used.

The application allows you to configure which base currency to use when converting from one currency to another. The base currency is only used when division specific exchange rate is not available in the application and the conversion is done using the global exchange rates.

In the Manage Exchange Rates portal, the following five attributes are required while defining an exchange rate:

- The source currency code
- The target currency code

- The rate of exchange; this is the number of units of the target currency that is equivalent to a single unit of the source currency
- The date on which the exchange rate is effective
- The conversion type

For division-specific exchange rates, the end date is optional. If you want the end date to be mandatory, you must set the End Date Required for Division Override option type of the C1\_EXCHRATE feature to Y.

The number of exchange rate records that must be setup depends on the currency conversion algorithm used and on whether division specific exchange rates are being used. The currency conversion algorithm performs all conversions through the algorithm's base currency when using global exchange rates and requires that the global exchange rate records must be defined with the base currency as the target currency. For example, if the base currency is defined as U.S. Dollars, a conversion from Canadian Dollars to Japanese Yen will result in the following conversions in case, division specific exchange rate is not available:

- Canadian Dollars to U.S. Dollars
- U.S. Dollars to Japanese Yen

This necessitates that a global exchange rate must be defined for Canadian Dollars to U.S. Dollars and Japanese Yen to U.S. Dollars.

However, when a division specific exchange rate is available from Canadian Dollars to Japanese Yen, the base currency will be ignored and a direct conversion will be performed.

The Manage Exchange Rates portal is divided into the following three zones:

- Search Exchange Rate
- Edit Exchange Rate
- Create Exchange Rate

## Search Exchange Rate Zone

This zone allows you to search for the exchange rates that are already defined in the system. The following fields are displayed in this zone:

Field	Description
From Currency	Used to specify the source currency.
To Currency	Used to specify the target currency.
Division	Used to specify the division to which the exchange rate belongs. You must use this field when searching for division specific exchange rates. <div style="border: 1px solid black; padding: 2px;">Note: You will only be able to view those divisions to which you have access in the Division list.</div>
Conversion Type	Used to specify the conversion type.
Start Date	Used to specify the date from when the exchange rate is effective.

The following columns are displayed in the search results:

Column	Description
From Currency	Displays the source currency.
To Currency	Displays the target currency.
Division	Displays the division to which the exchange rate belongs. Note: In case of a global exchange rate, this column will not have any value.
Conversion Type	Displays the conversion type.
Start Date	Displays the date from when the exchange rate is effective.
End Date	Displays the date till when the exchange rate is effective. Note: The global exchange rates will not have an end date.
Exchange Rate	Displays the exchange rate.
Spread	Displays the spread value for the exchange rate if any.

Note: If you specify a division as search criteria, then all the exchange rates that belong to that division are displayed in the search results. However, if you do not specify a division as search criteria, then all the exchange rates that belong to the divisions to which you have access and the global exchange rates that match the specified search criteria are displayed in the search results.

On clicking the Broadcast button (📡) corresponding to the exchange rate whose details you want to edit, the Edit Exchange Rate zone appears with the details of the respective exchange rate.

## Edit Exchange Rate Zone

This zone allows you to edit the details of the selected exchange rate. The following fields are displayed in this zone:

Field	Description
From Currency	Displays the source currency.
To Currency	Displays the target currency.
Division	Displays the division to which the exchange rate belongs. Note: In case of a global exchange rate, this field will not have any value.
Conversion Type	Displays the conversion type.
Start Date	Displays the date from when the exchange rate is effective.

Field	Description
End Date	Allows you to modify the date till when the exchange rate is effective.  Note: This field is blank and non-editable when you are editing a global exchange rate. You cannot enter a date earlier than the effective date in this field. If the End Date Required for Division Override option type of the C1_EXCHRATE feature is set to Y, you must specify the end date for the exchange rate that belongs to a division.
Exchange Rate	Allows you to modify the exchange rate value.  Note: The system provides you with the facility to specify the exchange rate value with a scale of up to 0.000000000000000001 (18 decimal places).
Spread	Allows you to modify the spread value for the exchange rate.
Inverse Rate	Displays the inverse rate value for the current exchange rate. This is automatically calculated and displayed in this zone.

The following two buttons are available at the bottom of this zone: Save and Delete. The Save button saves the changes and the Delete button deletes the exchange rate record.

Note: On saving, the system will validate that the exchange rate does not overlap with the other existing exchange rate for the same division and conversion type combination.

## Create Exchange Rate Zone

This zone allows you to add exchange rates. There is no limit to the number of exchange rates that can exist in the application. The following fields are displayed in this zone:

Field	Description
From Currency	Used to specify the source currency.
To Currency	Used to specify the target currency.
Division	Used to specify the division to which the exchange rate belongs.  Note: If you want to create a global exchange rate, then do not specify a division.
Conversion Type	Used to specify the conversion type. Currently, the system only supports the Regular conversion type.
Start Date	Used to specify the date from when the exchange rate is effective.

Field	Description
End Date	Used to specify the date till when the exchange rate is effective.  Note:  If you want to create a global exchange rate, then do not specify the end date because global exchange rates do not have an end date.  You cannot enter a date earlier than the effective date in this field.  If the End Date Required for Division Override option type of the C1_EXCHRATE feature is set to Y, you must specify the end date for the exchange rate that belongs to a division.
Exchange Rate	Used to specify the exchange rate value.  Note: The system provides you with the facility to specify the exchange rate value with a scale of up to 0.000000000000000001 (18 decimal places).
Spread	Used to specify the spread value for the exchange rate.

The following two buttons are available at the bottom of this zone: Save and Cancel. The Save button adds the exchange rate and the Cancel button clears the fields.

Note: On saving, the system will validate that the exchange rate does not overlap with the other existing exchange rate for the same division and conversion type combination.

## Manage Products

The application supports the ability to define products to represent the services offered or provided by financial services institutions. The Manage Products portal allows you to add, edit or copy product and product relationships which can later be associated to price lists which in turn can be assigned to customers or accounts. Pricing is defined for a product.

The Manage Products portal is divided into the following three zones:

- Search Products
- Edit Product
- Create Product

## Search Products Zone

This zone allows you to search for products that meet the search criteria. The following fields are displayed in this zone:

Field	Description
Product	Used to specify the product code.  Note: You can enter full or partial product name. The search is case sensitive.

Field	Description
Product Description	Used to specify the description of the product.  Note: You can enter full or partial product description. The search is case sensitive.
Division	Used to restrict the search to products that are valid for a specific division.
Global Price List	Used to indicate whether the product can be assigned to a global price list or not.
Unit Of Measure	Used to specify the Unit of Measure associated with the product.  Note: This is generated automatically when the product is created.
Bundled	Used to indicate whether the product that you are searching is a bundled product or not.

The following columns are displayed in the search results:

Column	Description
Product	Displays the product code.
Product Description	Displays the description of the product.
Global Price List	Indicates whether the product can be assigned to a global price list or not.
Unit of Measure	Displays the Unit of Measure associated with the product.
Bundled	Indicates whether the product is a bundled product or not.

To search for products that are bundled, set the value of the Bundled field to 'Yes'. By default, the value is 'No'. The following additional columns are displayed in the search results:

Column	Description
Bundle Type	Displays the bundle type if the product is a bundled product. The bundle type can be Phantom, Regular, or Ratio.
Copy	Allows you to copy product assignment from the bundle.

On clicking the Broadcast button (  ) corresponding to the product, the Edit Product zone appears with the details of the respective product.

Note: The Broadcast button is not displayed corresponding to the bundled products.

## Edit Product Zone

This zone allows you to edit the products. The following fields are displayed in this zone:

Field	Description
Product	Displays the product code.
Contract Type	Allows you to modify the contract type associated with the product.

Field	Description
Product Description	Allows you to modify the product description.
Global Price List	Allows you to indicate whether the product can be assigned to a global price list or not.
Bundled	Indicates whether the product is a bundled product or not.
Bundle Type	Allows you to modify the bundle type. You can select Regular, Phantom or Ratio. This field is editable only when the Bundled value is set to Yes.

You can associate characteristics to the product or change currently associated characteristics, if required, using the following fields:

Field	Description
Effective Date	Used to specify the date from when the characteristic type is effective for the product.
	Note: This field is required when you have selected the characteristic type.
Characteristic Type	Used to specify the characteristic type that you want to associate with the product.
Characteristic Value	Used to specify the characteristic value of the corresponding characteristic type.
	Note: This field is required when you have selected the characteristic type.

The divisions that offer this product are displayed in the Division field. You can also associate or disassociate products from divisions from the Edit Product zone. The Division list will only list those divisions to which you have access. While associating a division to a product, you will only be able to associate those divisions to which you have access. Similarly, you can only disassociate those divisions to which you have access. If the product is associated to a division to which you do not have an access, then the Division list will be grayed out and non-editable.

Note:

You can also associate products to divisions using the Division portal.

If the product (for example, P1) and bundled product (for example, B1) have only one division (for example, D1) in common to which both are associated, you cannot dissociate product (P1) from that division (D1).

The following two buttons are available at the bottom of this zone: Save and Cancel. The Save button saves the changes and the Cancel button clears the fields.

## Create Product Zone

This zone allows you to create new products. The following fields are displayed in this zone:

Field	Description
Product	Used to specify the product code.
Contract Type	Used to select the contract type associated with the product.
Product Description	Used to specify the description of the product.

Field	Description
Global Price List	Used to indicate whether the product can be assigned to a global price list or not.
Bundled	Used to indicate whether the product is a bundled product or not.
Bundle Type	Used to select the bundle type. The valid bundle types are Regular, Phantom or Ratio. This field is editable only when the Bundled value is set to Yes.

You can associate characteristics to the product, if required, using the following fields:

Field	Description
Effective Date	Used to specify the date from when the characteristic type is effective for the product.
	Note: This field is required when you have selected the characteristic type.
Characteristic Type	Used to specify the characteristic type that you want to associate with the product.
Characteristic Value	Used to specify the characteristic value of the corresponding characteristic type.
	Note: This field is required when you have selected the characteristic type.

You can associate or disassociate products from divisions from the Create Product zone. The Division list will only list those divisions to which you have access. While associating a division to a product, you will only be able to associate those divisions to which you have access. Similarly, you can only disassociate those divisions to which you have access.

Note: You can also associate products to divisions using the Division portal.

The following two buttons are available at the bottom of this zone: Save and Cancel. The Save button creates a product and the Cancel button clears the fields.

## Product Relationship Maintenance

The application supports products that are bundles of other products. Once the bundle is created, it will be treated as any other product. It can be assigned to account, customer, price list and to another product. You can also define multiple pricing assignments for a bundle.

This portal allows you to associate products with other products. You can access this portal by clicking the product hyperlink in the Manage Products portal. Products can be related to other products in various ways. The following relationships are supported by the application:

Relationship	Description
Bundle	Provides the ability to define pricing for a set of products that are bundled.
Product	Provides the ability to create product to product relationship.
Numerator and Denominator	For ratio bundles, this relationship defines the products that will be included in the aggregate numerator value and aggregate denominator value.
Service	Defines products that service other products to give a more complete offering.

Relationship	Description
Service Group	Allows you to create a group of products under a service relationship.
Sweep Credit	Provides the ability to define pricing exception for customers using sweep facility.
Sweep Debit	Provides the ability to define pricing exception for customers using sweep facility.
Other	Allows you to create special purpose adhoc relationship amongst products.

The Product Relationship Maintenance portal is divided into the following zones:

- Edit Product
- Assigned Products
- Search Products to Assign
- Products – Add/Edit

## Edit Product Zone

This zone allows you to edit the details of the products. The following fields are displayed in this zone:

Field	Description
Product	Displays the product code.
Contract Type	Allows you to modify the contract type associated with the product.
Product Description	Allows you to modify the product description.
Global Price List	Allows you to indicate whether the product can be assigned to a global price list or not.
Bundled	Indicates whether the product is a bundled product or not.
Bundle Type	Allows you to modify the bundle type. You can select Regular, Phantom or Ratio. This field is editable only when the Bundled value is set to Yes.

You can associate characteristics to the product or change currently associated characteristics, if required, using the following fields:

Field	Description
Effective Date	Used to specify the date from when the characteristic type is effective for the product.
	Note: This field is required when you have selected the characteristic type.
Characteristic Type	Used to specify the characteristic type that you want to associate with the product.
Characteristic Value	Used to specify the characteristic value of the corresponding characteristic type.
	Note: This field is required when you have selected the characteristic type.

The divisions that offer this product are displayed in the Division field. You can also associate or disassociate products from divisions from the Edit Product zone. The Division list will only list those divisions to which you have access. While associating a division to a product, you will only be able to associate those divisions to which you have access. Similarly, you can only disassociate those divisions to which you have access. If the product is associated to a division to which you do not have an access, then the Division list will be grayed out and non-editable.

Note:

You can also associate products to divisions using the Division portal.

If the product (for example, P1) and bundled product (for example, B1) have only one division (for example, D1) in common to which both are associated, you cannot dissociate product (P1) from that division (D1).

The following two buttons are available at the bottom of this zone: Save and Cancel. The Save button saves the changes and the Cancel button clears the fields.

## Assigned Products Zone

This zone displays a list of products that are associated with the selected product. The following columns are displayed in this zone:

Column	Description
Product	Displays the product code.
Effective Start Date	Displays the date from when the product is associated with the selected product.
Effective End Date	Displays the date till when the product is associated with the selected product.
Product Relationship Type	Displays how the products are related.

## Search Products to Assign Zone

This zone allows you to search for products that you want to associate with the selected product. The following fields are displayed in this zone:

Field	Description
Product	Used to specify the product code.
Product Description	Used to specify the description of the product.
Global Price List	Used to indicate whether the product can be assigned to a global price list or not.
Unit of Measure	Used to specify the Unit of Measure associated with the product.
	Note: This is generated automatically when the product is created.
Contract Type	Used to specify the contract type associated with the product.

The following columns are displayed in the search results:

Column	Description
Product	Displays the product code.

Column	Description
Product Description	Displays the description of the product.
Global Price List	Indicates whether the product can be assigned to a global price list or not.
Unit of Measure	Displays the Unit of Measure associated with the product.
Bundled	Indicates whether the product is a bundled product or not.
Bundle Type	Displays the bundle type if the product is a bundled product. The bundle type can be Phantom, Regular, or Ratio.
Contract Type	Displays the contract type associated with the product.

## Products – Add/Edit Zone

This zone allows you to associate and disassociate products from the selected product. Products are often restricted to certain divisions. You can attach a product (for example, P1) to a bundled product (for example, B1) only when product belongs to at least one division to which the bundled product belongs. The products attached to a bundled product can also belong to divisions to which the bundled product is not associated.

The following fields are displayed in this zone:

Field	Description
Product	Used to specify the product code.
Product Relationship Type	Used to indicate how the products are related. The valid values are: Bundle, Denominator, Numerator, Other, Product, Service, Service Group, Sweep Credit, Sweep Debit
Effective Start Date	Used to specify the date from when you want the product to be associated with the selected product.
Effective End Date	Used to specify the date till when you want the product to be associated with the selected product.

The following two buttons are available at the bottom of this zone: Save and Cancel. The Save button saves the changes and the Cancel button clears the fields.

## Copy Bundle

This portal allows you to copy product assignments from one bundle to a new bundle. It also allows you to edit the product assignments. You can access this portal by clicking the Copy icon in the Copy column corresponding to the bundled product that you want to copy, in the Manage Products portal.

While copying a bundled product, divisions associated with the original bundled product are copied to the new bundled product.

The Copy Bundle portal is divided into the following zones:

- Bundle Information
- Product Division
- Search Products to Assign

- Copy Assigned Product

## Bundle Information Zone

This zone displays information about the original bundled product. The following columns are displayed in this zone:

Column	Description
Product	Displays the code of the bundled product.
Contract Type	Displays the contract type associated with the bundled product.
Product Description	Displays the description of the bundled product.
Global Price List	Indicates whether the bundled product can be assigned to a global price list or not.
Bundled	Indicates whether the product is a bundled product or not.
Bundle Type	Displays the bundle type.

## Product Division Zone

This zone displays a list of divisions to which the original bundled product is associated. The following columns are displayed in this zone:

Column	Description
Division	Displays the division code to which the original bundled product is associated.
Status	Displays the status of the division (that is whether it is Active, Pending or Retired).
Comments	Displays additional details about the division.

## Search Products to Assign Zone

This zone allows you to search for products that you want to associate with the bundled product. The following fields are displayed in this zone:

Field	Description
Product	Used to specify the product code.
Product Description	Used to specify the description of the product.
Global Price List	Used to indicate whether the product can be assigned to a global price list or not.
Unit of Measure	Used to specify the Unit of Measure associated with the product.
	Note: This is generated automatically when the product is created.
Contract Type	Used to specify the contract type associated with the product.

The following columns are displayed in the search results:

Column	Description
Product	Displays the product code.
Product Description	Displays the description of the product.
Global Price List	Indicates whether the product can be assigned to a global price list or not.
Unit of Measure	Displays the Unit of Measure associated with the product.
Bundled	Indicates whether the product is a bundled product or not.
Bundle Type	Displays the bundle type if the product is a bundled product. The bundle type can be Phantom, Regular, or Ratio.
Contract Type	Displays the contract type associated with the product.

## Copy Assigned Product Zone

This zone allows you to create a copy of the bundled product. The following fields are displayed in this zone:

Field	Description
New Product	Used to specify the code for the new bundled product.
New Product Description	Used to specify the description for the new bundled product.
Assign Products	It contains the following two options: <ul style="list-style-type: none"> <li>All - Allows you to copy all the products associated with the original bundled product to the new bundled product.</li> <li>None – Allows you to create a copy of the original bundled product without copying the associated products.</li> </ul>

You will be able to view all the products that are associated to the original bundled product. You can associate or disassociate the products from the new bundled product as required. The following fields are displayed in this zone:

Field	Description
Product	Used to specify the product code.
Product Relationship Type	Used to indicate how the products are related. You can only select Bundle as the product relationship type while creating a new bundled product.
Effective Start Date	Used to specify the date from when you want the product to be associated with the bundled product.
Effective End Date	Used to specify the date till when you want the product to be associated with the bundled product.

The following two buttons are available at the bottom of this zone: Save and Cancel. The Save button creates a new bundled product and the Cancel button clears the fields.

## Manage Price Lists

Price lists allow you to define standard prices for a group of products. There can be more than one price list. For example, you can create a price list for large customers, medium-sized customers and small customers. You can also create a set of price lists for different regions. These price lists are assigned to accounts and customers to indicate what prices to charge for various products. You can also designate one price list as a global price list which can be used when a price for a product is already defined for an account or customer.

The Manage Price Lists portal is divided into the following three zones:

- Search Price List
- Edit Price List
- Create Price List

### Search Price List Zone

This zone allows you to view the price lists that are already defined. The following fields are displayed in this zone:

Field	Description
Price List Description	Used to specify the description of the price list.  Note: You can enter full or partial price list description. The search is case sensitive.
Global Price List	Used to indicate whether you are searching for a global price list or not.
Effective Start Date	Used to specify the date from when the price list is effective.
Effective End Date	Used to specify the date till when the price list is effective.
Division	Used to search for a price list that is valid for a specific division.

The following columns are displayed in the search results:

Column	Description
Price List	Displays the unique identifier generated by the system for the price list. It has a hyperlink. On clicking the hyperlink, you can access the Manage Product Assignments to Price Lists portal where you can add products to that price list.
Price List Description	Displays the description of the price list.
Global Price List	Indicates whether the price list is a global price list or not.
Effective Start Date	Displays the date from when the price list is effective.
Effective End Date	Displays the date till when the price list is effective.
Copy	This icon allows you to copy the price list and its associated products.

On clicking the Broadcast button (  ) corresponding to the price list whose details you want to edit, the Edit Price List and the Price List Division zones appear with the details of the respective price list.

## Edit Price List Zone

This zone allows you to edit the details of the selected price list. The following fields are displayed in this zone:

Field	Description
Price List Description	Allows you to modify the description of the price list.
Global Price List	Allows you to indicate whether the price list is a global price list or not.
Effective Start Date	Allows you to modify the date from when the price list is effective.
Effective End Date	Allows you to modify the date till when the price list is effective.  Note: This value is used to restrict utilization of the price list. Price lists may not be used to price products for dates later than the effective end date. No value is entered by default. This field is optional.

You can associate characteristics to the price list or change currently associated characteristics, if required, using the following fields:

Field	Description
Effective Date	Used to specify the date from when the characteristic type is effective for the price list.  Note: This field is required when you have selected the characteristic type.
Characteristic Type	Used to specify the characteristic type that you want to associate with the price list.
Characteristic Value	Used to specify the characteristic value of the corresponding characteristic type.  Note: This field is required when you have selected the characteristic type.

The divisions that offer this price list are displayed in the Division field. You can also associate or disassociate price lists from divisions from the Edit Price List zone. The Division list will only list those divisions to which you have access. While associating a division to a price list, you will only be able to associate those divisions to which you have access. Similarly, you can only disassociate those divisions to which you have access. If the price list is associated to a division to which you do not have an access, then the Division list will be grayed out and non-editable.

Note: You can also associate price lists to divisions using the Division portal.

The following two buttons are available at the bottom of this zone: Save and Cancel. The Save button saves the changes and the Cancel button discards the changes.

## Create Price List Zone

This zone allows you to create new price lists. The following fields are displayed in this zone:

Field	Description
Price List Description	Used to specify the description of the price list.
Global Price List	Used to indicate whether the price list is a global price list or not.

Field	Description
Effective Start Date	Used to specify the date from when the price list is effective.
	Note: Price lists may not be used for pricing products for dates earlier than the effective start date. The default value is the current system date.
Effective End Date	Used to specify the date till when the price list is effective.
	Note: This value is used to restrict utilization of the price list. Price lists may not be used to price products for dates later than the effective end date. No value is entered by default. This field is optional.

You can associate characteristics to the price list, if required, using the following fields:

Field	Description
Effective Date	Used to specify the date from when the characteristic type is effective for the price list.
	Note: This field is required when you have selected the characteristic type.
Characteristic Type	Used to specify the characteristic type that you want to associate with the price list.
Characteristic Value	Used to specify the characteristic value of the corresponding characteristic type.
	Note: This field is required when you have selected the characteristic type.

You can associate or disassociate price lists from divisions from the Create Price List zone. The Division list will only list those divisions to which you have access. While associating a division to a price list, you will only be able to associate those divisions to which you have access. Similarly, you can only disassociate those divisions to which you have access.

Note: You can also associate price lists to divisions using the Division portal.

The following two buttons are available at the bottom of this zone: Save and Cancel. The Save button creates a price list and the Cancel button clears the fields.

## Manage Product Assignments to Price Lists

This portal allows you to view detailed information about the selected price list, search for products that are currently associated with the price list, and associate additional products with the selected price list. By default, all products associated with the price list are displayed. You can search for additional products that you want to associate with the selected price list.

The Manage Product Assignments to Price Lists portal is divided into the following four zones:

- Price List Information
- Price List Division
- Price List Products
- Search Products

## Price List Information Zone

This zone displays information about the selected price list. The following fields are displayed in this zone:

Field	Description
Price List Description	Displays the description of the selected price list.
Global Price List	Indicates whether the selected price list is a global price list or not.
Effective Start Date	Displays the date from when the price list is effective.
Effective End Date	Displays the date till when the price list is effective.

## Price List Division Zone

This zone displays a list of divisions to which the price list is associated. The following columns are displayed in this zone:

Column	Description
Division	Displays the division code to which the price list is associated.
Status	Displays the status of the division (that is whether it is Active, Pending or Retired).
Comments	Displays additional details about the division.

## Price List Products Zone

This zone allows you to search, filter and view products that are already associated with the price list. The following fields are displayed in this zone:

Field	Description
Product	Used to specify the product code.
Product Description	Used to specify the description of the product.
Effective Start Date	Used to specify the date from when the price list assignment for the product is effective.

The following columns are displayed in the search results:

Column	Description
Product	Displays the product code of the product that is already associated with the price list.
Product Description	Displays the description of the product.
Issue Currency	Displays the issue currency of the product.
Effective Start Date	Displays the date from when the price list assignment for the product is effective.
Effective End Date	Displays the date till when the price list assignment for the product is effective.
Price CCY	Displays the pricing currency of the product.
Rate Schedule	Displays the rate schedule of the product.

Column	Description
Delete	Allows you to delete the product assignment.

## Search Products Zone

This zone allows you to search for products that you want to associate with the price list. The following fields are displayed in this zone:

Field	Description
Product	Used to specify the product code.
	Note: You can enter full or partial product name. The search is case sensitive.
Product Description	Used to specify the description of the product.
	Note: You can enter full or partial product description. The search is case sensitive.
Global Price List	Used to indicate whether the product can be assigned to a global price list or not.
Bundle	Used to indicate whether the product is a part of a bundle relationship or not.

The following columns are displayed in the search results:

Column	Description
Product	Displays the product code.
	Note: On clicking the product hyperlink, the Add Product Pricing portal appears
Product Description	Displays the description of the product.
Global Price List	Indicates whether the product can be assigned to a global price list or not.
Unit of Measure	Displays the unit of measure associated with the product.
	Note: This is automatically generated by the system while creating the product.
Bundled	Indicates whether the product is a part of a bundle relationship or not.
Bundle Type	Displays the bundle type associated with the product.

Price lists and products are valid for certain divisions only when they are associated with those divisions. You can associate price lists or products with a division using the Price Lists and Products tabs in the Division portal. When adding a product price to a price list, the product must be valid for all the divisions for which the price list is valid. For example, if the price list is valid for divisions A and B, then the product must also be valid for divisions A and B. The product can be valid for other divisions as well. The system will alert you if the product is not valid for all the price list's divisions.

## Copy Price List

This portal allows you to copy price lists. You can access this portal by clicking the Copy icon in the Copy column corresponding to the price list that you want to copy, in the Manage Price Lists portal.

The Copy Price List portal is divided into the following four zones:

- Price List Information
- Price List Division
- Price List Products
- Copy Price List

### Price List Information Zone

This zone displays information about the original price list. The following fields are displayed in this zone:

Field	Description
Price List Description	Displays the description of the original price list.
Global Price List	Indicates whether the original price list is a global price list or not.
Effective Start Date	Displays the date from when the original price list is effective.
Effective End Date	Displays the date till when the original price list is effective.

### Price List Division Zone

This zone displays a list of divisions to which the original price list is associated. The following columns are displayed in this zone:

Column	Description
Division	Displays the division code to which the original price list is associated.
Status	Displays the status of the division (that is whether it is Active, Pending or Retired).
Comments	Displays additional details about the division.

### Price List Products Zone

This zone allows you to search, filter and view products that are already associated with the price list. The following fields are displayed in this zone:

Field	Description
Product	Used to specify the product code.
Product Description	Used to specify the description of the product.
Effective Start Date	Used to specify the date from when the price list assignment for the product is effective.

The following columns are displayed in the search results:

Column	Description
Product	Displays the product code of the product that is already associated with the price list.
Product Description	Displays the description of the product.
Issue Currency	Displays the issue currency of the product.
Effective Start Date	Displays the date from when the price list assignment for the product is effective.
Effective End Date	Displays the date till when the price list assignment for the product is effective.
Price CCY	Displays the pricing currency of the product.
Rate Schedule	Displays the rate schedule of the product.

## Copy Price List Zone

This zone allows you to create a copy of the price list. The following fields are displayed in this zone:

Column	Description
Price List Description	Displays the description of the price list whose copy you want to create.
New Price List Description	Used to specify the description for the new price list.
Effective Start Date	Used to specify the date from when the new price list is effective.
Effective End Date	Used to specify the date till when the new price list is effective.
Copy Pricing	It contains the following two options: <ul style="list-style-type: none"> <li>All - Allows you to copy all the products associated with the original price list along with product pricing to the new price list.</li> <li>None – Allows you to copy only products associated with the original price list and not the product pricing to the new price list.</li> </ul>

While copying a price list, divisions associated with the original price list are copied to the new price list.

The following two buttons are available at the bottom of this zone: Save and Cancel. The Save button creates a price list and the Cancel button clears the fields.

## Add Product Pricing

This portal allows you to define pricing for a product that you want to assign to a price list, customer or an account. You can also add price assignment characteristics while defining pricing for a product. The system provides you with the predefined characteristic types that you can associate with the price assignment. You can also setup required characteristic types in the system and then associate the same with the price assignment.

You can access this portal from the Pricing (Account), Pricing (Customer) and the Manage Product Assignments to Price Lists portals.

The following fields are displayed in this portal:

Field	Description
Product	Displays the product code for which you are defining the pricing.
Product Description	Displays the description of the product.
Rate Schedule	Used to specify the rate schedule that should be assigned to the product. This is a mandatory field.  Note: Rate schedules control how the billing for the selected product will be calculated. When you select the rate schedule, a zone appears at the bottom of the portal.
Price Assignment Type	Used to specify the price assignment type. You can select either of the following values: Regular, Post Processing
Issue Currency	Used to specify the issue currency to be used.
Pricing Currency	Used to specify the currency in which the pricing is defined.
Effective Start Date	Used to specify the date from when the product pricing is effective. By default, the current system date is displayed in this field.
Effective End Date	Used to specify the date till when the product pricing is effective.
Print Zero	Used to specify whether zero pricing should be displayed in the bill. The default value is 'Yes'.
Apply To	Used to specify whether you want the product pricing to be applied to all the customers or only to the new customers. In other words, it controls whether to apply grandfathered product pricing based on date to new customers or not.  Note: This field appears in this portal only when you access this portal from the Manage Product Assignments to Price Lists portal.

When you select the rate schedule, a zone appears at the bottom of the portal. This zone is divided into two parts. The first part on the left hand side contains rate components and tiering type as defined during rate definition of the selected rate schedule. The number of rows displayed indicates the number of rate components associated with the selected rate schedule. The Rate column is the column where the price is entered. The value can be positive or negative. Decimals are allowed. The second part on the right hand side contains the tiering ranges per component. You can add additional tiering ranges by clicking the "+" sign or delete them by clicking the "-" sign. Tiering is not applicable when pricing is flat (or non-tiered).

The following columns are displayed in this zone:

Column	Description
Sequence Number	Displays the sequence number.
Tiering Type	Displays the tiering type.
Rate Schedule Description	Displays the description of the rate schedule.

Column	Description
Rate	Used to specify the price for the product. This value is fed into the rate schedule for billing calculations.  Note: The system provides you with the facility to specify the rate value with a precision of up to 18 places before decimal and 18 places after decimal. This gives you the flexibility to specify very large and very low values for the rates.
Tiering Criterion	Used to select the tiering criterion.
Product	Used to specify the product to which you want to associate the tiering range.
Issue Currency	Used to specify the issue currency for the pricing.
From	Used to specify the lower limit of the tiering range.  Note: The system provides you with the facility to specify the lower limit value with a precision of up to 18 places before decimal and 18 places after decimal. This gives you the flexibility to specify very large and very low values in the tiering range.
To	Used to specify the upper limit of the tiering range.  Note: The system provides you with the facility to specify the upper limit value with a precision of up to 18 places before decimal and 18 places after decimal. This gives you the flexibility to specify very large and very low values in the tiering range.

Note: You can add multiple tiering ranges per rate component. The screen will scroll down as you add additional tiering ranges. A price assignment for a product is represented by a combination of the rate value and the tiering range. For flat pricing, you do not have to enter the tiering range.

The following three buttons are available at the bottom of this portal:

- Save - Saves the product pricing
- Cancel - Returns to the portal from where this portal was called without saving the changes.
- Add Characteristics – Allows you to optionally associate characteristic types and values with the price assignment. On clicking the Add Characteristics button, the Price Assignment Characteristics screen appears.

## Override Product Pricing

You can override the product pricing. Overriding means creating a copy of the existing product pricing within the hierarchy and then editing it to meet the business requirements. Using the Override feature, you create a new price assignment within the hierarchy.

When you override the product pricing, a copy of price assignment characteristics is also created. You can then add, edit or delete the price assignment characteristics if required.

The prices that are specific to a customer or an account are referred to as Customer Agreed or Account Agreed prices, respectively. Agreed prices are effective for a particular duration and do not expire until you specify the end date manually. However, if you set the C1\_EXP\_OVRD feature to Y, the system will automatically expire the agreed pricing when the agreed pricing of a customer or an account with no end date is overridden. In case you do not want the agreed pricing to automatically expire when it is overridden, you must set the C1\_EXP\_OVRD feature to N.

The Override Product Pricing portal allows you to override effective pricing for a product that is assigned to a customer or an account either directly or through a price list. You can access this portal from the Pricing (Account) and the Pricing (Customer) portals.

The following fields are displayed in this portal:

Field	Description
Product	Displays the product code whose pricing you are overriding.
Product Description	Displays the description of the product.
Rate Schedule	Used to specify the rate schedule that should be assigned to the product. This is a mandatory field.  Note: Rate schedules control how the billing for the selected product will be calculated. When you select the rate schedule, a zone appears at the bottom of the portal.
Price Assignment Type	Used to specify the price assignment type. You can select either of the following values: Regular, Post Processing
Issue Currency	Used to specify the issue currency to be used.
Pricing Currency	Used to specify the currency in which the pricing is defined.
Effective Start Date	Used to specify the date from when the product pricing is effective. By default, the current system date is displayed in this field.
Effective End Date	Used to specify the date till when the product pricing is effective.
Print Zero	Used to specify whether zero pricing should be displayed in the bill. The default value is 'Yes'.

When you select the rate schedule, a zone appears at the bottom of the portal. This zone is divided into two parts. The first part on the left hand side contains rate components and tiering type as defined during rate definition of the selected rate schedule. The number of rows displayed indicates the number of rate components associated with the selected rate schedule. The Rate column is the column where the price is entered. The value can be positive or negative. Decimals are allowed. The second part on the right hand side contains the tiering ranges per component. You can add additional tiering ranges by clicking the "+" sign or delete them by clicking the "-" sign. Tiering is not applicable when pricing is flat (or non-tiered).

The following columns are displayed in this zone:

Column	Description
Sequence Number	Displays the sequence number.
Tiering Type	Displays the tiering type.
Rate Schedule Description	Displays the description of the rate schedule.
Rate	Used to specify the price for the product. This value is fed into the rate schedule for billing calculations.  Note: The system provides you with the facility to specify the rate value with a precision of up to 18 places before decimal and 18 places after decimal. This gives you the flexibility to specify very large and very low values for the rates.

Column	Description
Tiering Criterion	Used to select the tiering criterion.
Product	Used to specify the product to which you want to associate the tiering range.
Issue Currency	Used to specify the issue currency for the pricing.
From	Used to specify the lower limit of the tiering range.  Note: The system provides you with the facility to specify the lower limit value with a precision of up to 18 places before decimal and 18 places after decimal. This gives you the flexibility to specify very large and very low values in the tiering range.
To	Used to specify the upper limit of the tiering range.  Note: The system provides you with the facility to specify the upper limit value with a precision of up to 18 places before decimal and 18 places after decimal. This gives you the flexibility to specify very large and very low values in the tiering range.

The following three buttons are available at the bottom of this portal:

- Save - Saves the product pricing
- Cancel - Returns to the portal from where this portal was called without saving the changes.
- Edit Characteristics – Allows you to optionally associate characteristic types and values with the price assignment. On clicking the Edit Characteristics button, the Price Assignment Characteristics screen appears.

Note: When you override the product pricing, a copy of price assignment characteristics is also created. You can then add, edit or delete the price assignment characteristics if required.

## Edit Assigned Pricing

This portal allows you to edit pricing for a product that is assigned to a price list, customer or an account. You can also edit the price assignment characteristics if required. You can access this portal from the Pricing (Account), Pricing (Customer) and the Manage Product Assignments to Price Lists portals.

The following fields are displayed in this portal:

Field	Description
Product	Displays the product code whose pricing you are modifying.
Product Description	Displays the description of the product.
Rate Schedule	Used to modify the rate schedule that should be assigned to the product. This is a mandatory field.  Note: Rate schedules control how the billing for the selected product will be calculated. When you select the rate schedule, a zone appears at the bottom of the portal.
Price Assignment Type	Used to modify the price assignment type. You can select either of the following values: Regular, Post Processing

Field	Description
Issue Currency	Used to modify the issue currency to be used.
Pricing Currency	Used to modify the currency in which the pricing is defined.
Effective Start Date	Used to modify the date from when the product pricing is effective.
Effective End Date	Used to modify the date till when the product pricing is effective.
Print Zero	Used to modify whether zero pricing should be displayed in the bill. The default value is 'Yes'.
Apply To	Used to modify whether you want the product pricing to be applied to all the customers or only to the new customers. In other words, it controls whether to apply grandfathered product pricing based on date to new customers or not.
	Note: This field appears in this portal only when you access this portal from the Manage Product Assignments to Price Lists portal.

When you select the rate schedule, a zone appears at the bottom of the portal. This zone is divided into two parts. The first part on the left hand side contains rate components and tiering type as defined during rate definition of the selected rate schedule. The number of rows displayed indicates the number of rate components associated with the selected rate schedule. The Rate column is the column where the price is entered. The value can be positive or negative. Decimals are allowed. The second part on the right hand side contains the tiering ranges per component. You can add additional tiering ranges by clicking the "+" sign or delete them by clicking the "-" sign. Tiering is not applicable when pricing is flat (or non-tiered).

The following columns are displayed in this zone:

Column	Description
Sequence Number	Displays the sequence number.
Tiering Type	Displays the tiering type.
Rate Schedule Description	Displays the description of the rate schedule.
Rate	Used to modify the price for the product. This value is fed into the rate schedule for billing calculations.
	Note: The system provides you with the facility to specify the rate value with a precision of up to 18 places before decimal and 18 places after decimal. This gives you the flexibility to specify very large and very low values for the rates.
Tiering Criterion	Used to modify the tiering criterion.
Product	Used to modify the product to which you want to associate the tiering range.
Issue Currency	Used to modify the issue currency for the pricing.

Column	Description
From	Used to modify the lower limit of the tiering range.  Note: The system provides you with the facility to specify the lower limit value with a precision of up to 18 places before decimal and 18 places after decimal. This gives you the flexibility to specify very large and very low values in the tiering range.
To	Used to modify the upper limit of the tiering range.  Note: The system provides you with the facility to specify the upper limit value with a precision of up to 18 places before decimal and 18 places after decimal. This gives you the flexibility to specify very large and very low values in the tiering range.

The following three buttons are available at the bottom of this portal:

- Save - Saves the product pricing
- Cancel - Returns to the portal from where this portal was called without saving the changes.
- Edit Characteristics – Allows you to edit the price assignment characteristics and their values. On clicking the Edit Characteristics button, the Price Assignment Characteristics screen appears.

## Price Assignment Characteristics

This portal allows you to optionally associate characteristic types and values with the price assignment. The following fields are displayed in this portal:

Field	Description
Effective Date	Used to specify the date from when the characteristic type is effective for the price assignment.  Note: This field is required when you have selected the characteristic type.
Characteristic Type	Used to specify the characteristic type that you want to associate with the price assignment.
Characteristic Value	Used to specify the characteristic value of the corresponding characteristic type.  Note: This field is required when you have selected the characteristic type. For predefined type of characteristics, you can search for available characteristic values.

The following two buttons are available at the bottom of this zone: Save and Cancel. The Save button saves the price assignment characteristics and the Cancel button exits the portal.

## Chapter 6: Division Maintenance

This chapter describes the division-specific aspects of how the system behaves. The controls are spread over several tabs with each tab dedicated to a specific functional area of the system. This chapter explains each of these tabs and provides a list of validations related to this functionality.

### Overview

The following two types of divisions are used while defining a contract type:

- **General Ledger (GL) Division:** GL divisions typically comprise of individual entities (for example, companies) in the general ledger. You must set up a GL division for each such entity. The GL division's main purpose in the system is to define the accounting period associated with financial transactions linked to contracts. Contracts are associated with GL divisions via their contract type. The system uses accounting periods in order to prevent a user from performing financial transactions in the closed periods. It also uses accounting periods when it generates the flat file that contains the consolidated journal entry that is interfaced to the general ledger.
- **Division:** A division is associated with a jurisdiction. The definition of a jurisdiction is a geographic-oriented entity with unique business rules. For example, if you conduct business in California and Japan, each jurisdiction has different set of rules and therefore you need to have a separate jurisdiction for each division. You must set up a division for each jurisdiction in which you conduct the business. For the Pricing Management functionality, setting up a division is mandatory and the system must contain information about at least one division.

A division is associated with the following:

- **Person:** You may or may not associate person to a division. It is optional. But, when you are using division specific functionality, you have to associate person to a division while creating a local person or customer.
- **Contract:** The division on contract is actually a part of the contract's contract type. The contract type controls multiple business rules which are defined for a given jurisdiction and contract type combination. In addition to controlling the business rules defined on the contract's contract type, the contract's division also controls the type of collection criteria used to determine if and how to collect overdue debt.
- **Location:** The division on location defines the jurisdiction in which the location is located. The location includes the physical address of the division.
- **Account:** The division on account when combined with the account's customer class defines the jurisdiction that governs financial business rules (for example, the bill's due date, when and how late payment charges are calculated, etc.). The division on account can also play a part in the addressee of To Do entries associated with the account. To assign To Do entries to a role based on the division, simply link the To Do type to the division.

You can access the Division portal from the Admin menu. The following tabs are available in this portal:

- **Main** – Used for maintaining basic details of a division.
- **Access Groups** – Used for associating access groups (which control the division security) with a division. This is a mandatory association.
- **Products** – Used for associating one or more products with a division.
- **Price Lists** – Used for associating one or more price lists with a division.
- **Transaction Codes** – Used for associating one or more transaction codes with a division. Transaction codes are external to the application and maintained outside the system.

- Languages – Used for associating languages with a division. This is the valid language code in which the division operates.
- Invoice Currencies – Used for associating one or more invoicing currencies with a division.
- Id Types – Used for associating one or more Id types with a division.
- Algorithms – Used for defining the hierarchy order in which pricing for a product is calculated for a division. This is a mandatory association.
- Characteristics – Used for defining one or more characteristics for a division.
- Bill Messages – Used for associating unique bill messages with a division. This allows bills to show specific messages which are unique to the division.
- Party Char Types – Used for associating unique valid characteristic types for a person or an account (“Party”) with a division.
- Bill Cycles – Used for associating unique bill cycles with a division.

Note: Both Division and GL Division are stored on the financial transactions associated with a contract. However, only GL Division plays a part in the GL Interface.

There are further attributes which can be defined for the division including Time Zone, Descriptions, Working Calendars and To Dos which are used for setting up a division in the application.

In order to activate the Division functionality for Banking, a feature configuration setup is required for the C1\_DIVFUNCT feature. The Enforce division-specific validations option type for the C1\_DIVFUNCT feature must be set to Y. Validations for division will not be triggered if this value is set to N.

## Division

The Division portal is used by a system administrator to control various division-specific aspects of how the system behaves. The controls are spread over several tabs with each tab dedicated to a specific functional area of the system.

The Division portal can be accessed by clicking Admin Menu, Division. It has the following tabs:

- Main
- Access Groups
- Products
- Price Lists
- Transaction Codes
- Languages
- Invoice Currencies
- Id Types
- Algorithms
- Characteristics
- Bill Messages
- Party Char Types
- Bill Cycles

## Main Tab

---

The Main tab is used for maintaining basic details of a division. It contains the following fields:

- **Division** – Displays the code that is automatically generated by the system when you define a division.
- **Description** – Used to specify the description of the division. This description is displayed in the Division list that is available on the various portals in the application. This field is required.
- **Work Calendar** – Used to define the days on which this division operates. This calendar is used to ensure that system calculated dates (for example, bill due date, credit and collection event dates, etc.) fall on a working day. This field is required.
- **Status** – Used to indicate whether the division can be used in the system, or is it still being defined, or is it no longer available for use. The valid values in this drop-down list are: Active, Pending, and Retired. This field is optional. If the user does not specify the status, by default the status is set to Pending.
- **Bill Format** – Used to specify the default bill format for accounts in the division. This field is optional.
- **Bill Route Type** – Used to specify the default bill route type for accounts in the division. This field is optional.
- **Base Currency Code** – Used when accounts in the division can be billed in a currency that is different from the currency required by the GL. The system generates GL entries in the currency defined for an account. If this field is populated, the system will convert the GL amounts maintained in the account's currency into this currency. Amounts for both currencies are recorded with the financial transactions. However, this field is optional.
- **Time Zone** – Used to indicate the time zone in which the division operates. This is only informational and serves no functional purpose. It is not used by any system processes. This field is optional.
- **Comments** – Used to specify additional details about the division.
- **Business Object** – Used to specify a business object that may govern additional rules related to this division.

Use the To Do Roles section if an account's division influences the role assigned to To Do entries associated with the account. In the collection, define the To Do Role to be assigned to entries of a given To Do Type that are associated with accounts that reference the division. Only To Do entries that are account-oriented take advantage of the roles defined for a division.

## Access Groups Tab

---

This tab is used to define the users who have right to assign persons and accounts to this division. This tab is optional.

Access groups define the security profile to be associated with the division. This allows you to define the access groups that are associated with the division. Any drop-down used in the system will only list those divisions that the user has been associated with via the Access Group definition. Once you select the access group from the list, the description of the access group is displayed automatically.

## Products Tab

---

This tab is used to define which products are available to persons or accounts in this division. The products are defined in the Manage Products portal.

Once the product is defined, you need to associate it with a division. This tab is optional.

## Price Lists Tab

---

Price lists are a set of prices for products that are paid by a subgroup of accounts. This tab is used to define which price lists are available to persons or accounts in this division. Price lists are defined using the Manage Price Lists portal.

Once the price list is defined, you need to associate it with a division. To be eligible for a division, all the products in the price list must be associated with the division. This tab is optional.

## Transaction Codes Tab

---

Transaction codes are maintained in an external system. However, this tab allows you to associate transaction codes to a division. This tab is optional.

## Languages Tab

---

This tab is used to limit the languages that you can select for a person's bills and correspondence. In other words, it allows you to define valid languages that you can select for persons in this division. This tab is optional.

## Invoice Currencies Tab

---

This tab is used to limit the invoicing currencies that you can select for an account in this division. The currency code indicates a valid currency in which an account in this division can be billed. This tab is optional.

## ID Types Tab

---

This tab is used to limit the ID types that you can select for a person or customer in this division. Persons or customers in the system typically have one or more alphanumeric values that can be used to uniquely identify them. The ID type indicates what that alphanumeric value represents. It is typically a government-issued number.

The ID Type indicates a valid identifier type which can be specified on a person in this division. This tab is optional.

## Algorithms Tab

---

Once a division is created, you must associate the Price Assignment Search algorithm to it. For the Banking functionality, this is required to ensure that the pricing of products is displayed in the correct order as defined by the hierarchy order which is defined by the algorithm. Each division can have unique hierarchy order or more than one division can share the same hierarchy order. The same order is used in Billing when the price determination is controlled by the sort order definition of the algorithm.

In this tab, you must select Price Assignment Search from the Division Alg Entity drop-down list and type 1 in the Sequence Number field.

The algorithm is defined in the Algorithm portal. The search order is governed by the second parameter of the algorithm and the valid values of the same are:

- **AGREED\_PRICELIST** – This order shows all agreed level pricing followed by pricelist pricing. The order of search is Account Agreed, Account Price List, Customer Agreed, Customer Price List, Parent Customer Agreed and Parent Customer Price List.

- **AGREED\_FIRST** - This order shows all agreed level pricing followed by pricelist pricing. The order of search is Account Agreed, Customer Agreed, Parent Customer Agreed, Account Price List, Customer Price List and Parent Customer Price List.

## Characteristics Tab

---

This tab is used to maintain characteristics of the division. The characteristic types are defined somewhere else in the application.

This tab is used to maintain miscellaneous information about the division that is not covered in any of the other division tabs. In this tab, you specify the date from when the information is effective in the Effective Date field, the type of information being stored in the Characteristic Type field and the information in the Characteristic Value field. This tab is optional.

## Bill Messages Tab

---

This tab is used to specify the bill messages that are valid for accounts in the division. The bill messages are defined using the Bill Message portal.

In this tab, you can specify the bill message and the date from when the bill message can appear on a bill. You can also specify the date till when the bill message should appear on a bill. The End Date field is optional.

This tab is optional.

## Party Char Types Tab

---

This tab is used to limit the characteristic types that you can select for persons and accounts (party) in the division. The characteristic types are defined using the Characteristic Type portal.

In this tab, you select a characteristic entity to indicate whether the characteristic type applies to a person or an account, and a characteristic type that is valid for the person or account.

## Bill Cycles Tab

---

This tab is used to limit the bill cycles that you can select for accounts in the division. The bill cycles are defined in the Bill Cycle portal.

This tab is optional.

## Validations

There are various validations that are triggered to ensure data integrity. The following section lists the error messages or alerts that might occur while maintaining divisions.

### Division Validations List

The following table lists the validations that take place while maintaining divisions:

Tab	Validation Rule	Message ID (Appears when the validation fails)
Algorithms	Cannot add multiple crawling algorithms after sequencing them.	1011
Bill Cycles	Cannot remove a bill cycle if it is linked to an account.	1027
	A bill cycle can be attached to only one division.	1026
Bill Messages	Cannot remove a bill message if it is linked to an account.	1003
	Cannot remove a bill message if it is linked to a contract.	1004
	Cannot have overlapping date ranges for the same bill message.	1033
Languages	Cannot remove language if it is linked to a person.	1001
ID types	Cannot remove id type if it is linked to a person.	1000
Invoice Currency	Cannot remove invoice currency if it is linked to an account.	1002
Party Char Types	Invalid entity selected.	1008
	Note: Only person and account can be selected.	
	Invalid entity char type combination.	1005
	Cannot remove the char type if it is linked to a person.	1006
	Cannot remove the char type if it is linked to an account.	1007
Products	Cannot remove product if it is attached to a price list.	1012
	Cannot remove product if it is attached to a person.	1013
	Cannot remove product if it is attached to an account.	1014
	Cannot remove product if it is attached to a billable charge.	1015
Price Lists	Cannot remove price list if it is attached to a person.	1010
	Cannot remove price list if it is attached to an account.	1009

## Person Validations List

---

There are certain division-specific validations that are triggered on the Person screen. These validations are triggered only when the Enforce division-specific validations option type for the C1\_DIVFUNCT feature configuration is set to Y.

The following division-specific validations are triggered on the Person screen:

- A person with a division is called a local person. Whereas a person without a division is called a global person. A global person cannot be the main customer of any account in the system.
- You can only assign a division with the status as Active to a person and not the divisions with the status as Pending or Retired.
- The ID Type in the Main tab, the Language in the Contact Information tab and the Characteristic Type in the Characteristics tab that you select must be valid for the division assigned to the person. For example, if you are selecting Division A and English as the language, then the system will check whether the language English is associated with the Division A or not. If the language English is not associated with the Division A while defining the Division A, then the system will throw an error message indicating that the selected language is not valid for the selected division.
- Also, the access group that you select should be valid for the division assigned to the person.
- At anytime, a global person can be converted to a local person provided the selected ID type, Language and Characteristic type are valid for the selected division.
- When you want to change the division assigned to a customer, all products and price lists currently associated to the customer must be valid for the new division.
- A local person can be converted to a global person provided that person is not the main customer of any account in the system.
- For a global person, all products and price lists are valid. There is no division dependency.
- If a local person is defined as the main customer of any account, then the division of that local person cannot be changed.

The following is one more division-specific validation that is triggered on the Person screen when the Create Person Account together option type for the C1\_PERACCT feature configuration is set to Y:

- The Add Account and Start Service check box is enabled only when a division is assigned to a person.

## Account Validations List

---

There are certain division-specific validations that are triggered on the Account screen. These validations are triggered only when the Enforce division-specific validations option type for the C1\_DIVFUNCT feature configuration is set to Y.

The following division-specific validations are triggered on the Account screen:

- The division to which the account belongs should be the same as the division to which the person belongs if that person is the main customer of that account.

- The Invoice Currency and Bill Cycle in the Main tab, the Bill Message in the Bill Messages tab and the Characteristic Type in the Characteristics tab that you select must be valid for the division assigned to the account. For example, if you are selecting Division A and the invoice currency as USD, then the system will check whether USD is associated with the Division A or not. If the invoice currency USD is not associated with the Division A while defining the Division A, then the system will throw an error message indicating that the selected invoice currency is not valid for the selected division.
- Also, the access group that you select should be valid for the division assigned to the account.
- In an account, a local person from a different division can be a miscellaneous customer of an account.
- When products and price lists are associated to an account, they must be valid for the division assigned to the account.
- When you want to change the division assigned to an account, all products and price lists currently associated to the account must be valid for the new division.

## Contract Validations List

---

There are certain division-specific validations that are triggered on the Contract screen. These validations are triggered only when the Enforce division-specific validations option type for the C1\_DIVFUNCT feature configuration is set to Y.

The following division-specific validations are triggered on the Contract screen:

- The division to which the contract belongs should be the same as the division to which the account belongs.
- The Bill Message in the Misc tab that you select should be valid for the division assigned to the contract.

# Chapter 7: Approval Workflow

This chapter explains the approval workflow process and how to perform various tasks involved in the process. It explains how to configure the system to implement the approval workflow process. It also lists and describes the prerequisites that you need to setup before configuring the approval workflow process.

## Overview

Oracle Revenue Management and Billing may optionally be configured to use the approval workflow process whenever any addition, modification or deletion is done manually by a user. The approval workflow process routes any changes made to the business objects (such as person, account, contract, division and so on) to a group of people for approval. The approval workflow process allows you to manage and track all the tasks involved in the approval process and provides a record of the process after it is completed.

Approval Workflow allows you to define the rules for requiring an approval step before the data changes are committed to the database. Once you establish the approval workflow rules, the application manages the business process flow for having data changes approved before they are reflected in the database.

The system provides you with a flexible set of options used to determine when approvals are required and how the approval process is to be managed including:

- Turning approval on or off for individual business objects within the application
- Grouping business objects so that approval is required for the group rather than the individual business objects within the group
- Who should approve
- How many levels of approvals are required
- Different approval workflow chains based on different criteria

Once you have turned approval workflow on for an object, or a group of objects, the system will use the approval workflow configuration to manage the entire approval process including:

- Determining whether approval is required based on data changes submitted by a user
- Routing approval workflow requests to one or more qualified approvers
- Managing rejected data changes and sending these back to the submitter for resolution
- Committing the changes once all the required approvals are received

## Prerequisites

You need to setup the following prerequisites in order to implement the approval workflow process:

- Setup Feature Configuration for Approval Workflow – If you create new Maintenance Objects (MOs) and want the access control for these MOs in the approval workflow transactions to be based on the access group and division, then you have to create a custom algorithm and attach it to the Approval Transaction Entity Access Algorithms option type of the C1\_AXENTITY feature configuration. Note that you will then have two access algorithms; one default algorithm (that is, C1-APPTXN) and another custom algorithm.

- **Create and Attach Determine BO Algorithm** – To use approval workflow for a business object, check the corresponding maintenance object to see if a Determine BO algorithm is already attached to it. If not, create a Determine BO algorithm using the algorithm type F1-MOBO and specify the appropriate business object name on the newly created algorithm. Attach this algorithm on the Determine BO algorithm spot of the maintenance object.
- **Attach Audit Algorithm to Business Objects** – To use the approval workflow process for a business object, you need to attach the C1-APPTXNBAS algorithm on the Audit algorithm spot of the business object. Unless you attach the audit algorithm to a business object, the approval workflow process will not be triggered for the respective business object. This step is only required when you are using the base panels. If you have created custom UI maps to enter or modify data for a specific business object, this step is not needed.
- **Attach Validation Algorithms to Business Objects** – The following algorithms are shipped with ORMB:

Business Object	Basic Validation Algorithm	Pending Transaction Validation Algorithm
C1-AppBOChain	C1-GRPCHNALG	C1-APPGRPCHL
C1-AppGrp	C1-GRPALG	C1-APPGROUPV
C1-ApprovalChainEligible	C1-ADMALG	C1-APGBYPORT
C1-ApprovalTransactionChain	C1-APCHALGO	C1-APCHNPEND

The basic validation algorithms are attached to the respective business objects and then shipped with ORMB. However, the pending transaction validation algorithms are not attached to the respective business objects. If you want to restrict the users from either editing or deleting the approval workflow group, approval workflow settings, approval workflow chain or the approval workflow group chain linkage when the respective approval workflow requests are in the Pending, Work-in-Progress or Rejected state, then you must attach the pending transaction validation algorithm on the Validation algorithm spot of the respective business object.

- **Set Colors for Highlighting during Comparison** – While approving, rejecting or cancelling approval workflow requests where the submitter action is Update (UPD), you will be able to compare the existing and new data. By default, any modifications will be highlighted in the Yellow (9933FF) color and new additions will be highlighted in the Purple (FFFF66) color. You can also change these colors using the Approval Transaction Compare New or Missing Entry Color and the Approval Transaction Compare Value Changed Color option types of the C1\_AXENTITY feature configuration.
- **Create To Do Types** – You need to create the To Do types that you want to use in the approval workflow process. Once the To Do type is created, you need to link it to the required To Do roles so that users belonging to the To Do role can view and work on the To Do type.
- **Create To Do Roles** – You need to create the To Do roles that you want to use in the approval workflow process. Once the To Do role is created, you need to add the users whom you want to assign this role.

**Note:** User who is withdrawing the approval workflow request must be assigned to the To Do role to which the approver at the first level in the hierarchy is assigned. Otherwise, the user will not be able to withdraw the approval workflow request.

- **Create Input UI Map for an Approval Workflow Group** – The system provides you with the ability to automatically generate an Input UI map and associate it to the approval workflow group when the approval workflow is activated for the group. Alternatively, you can create an Input UI map manually, and attach it to the approval workflow group. To create an Input UI map manually:
  1. Enter the name and description of the Input UI map.

Note: The system uses the CM\_<Approval Workflow Group Code>\_AppTxn\_Input naming convention while automatically generating an Input UI map. Therefore, do not use this naming convention while creating an Input UI map manually.

2. Select Complete HTML Document from the UI Map Type list.
3. Add the following schema in the Scheme Editor zone:

```
<schema>
  <approvalTransactionId/>
  <action/>
  <<Business Object Name> type="group">
    <includeBO name="<Business Object Name>"/>
  </<Business Object Name>>
</schema>
```

In the above schema, you must replace <Business Object Name> with the name of the business object. For example, if you want to create an Input UI map for account, you must use the following schema:

```
<schema>
  <approvalTransactionId/>
  <action/>
  <account type="group">
    <includeBO name="Account"/>
  </account>
</schema>
```

The <approvalTransactionId/> tag is used in the schema to retrieve the approval transaction ID of the respective business object. The <action/> tag is used in the schema to retrieve the action performed by the submitter.

4. Click Save. The Display Only and Input Map buttons are enabled on the dashboard.
5. Click the Input Map button. The HTML code is generated in the HTML Editor zone.
6. Add the following tag in the head tag:

```
<script language="javascript" type="text/javascript" src="code/approvalWorkflow.js"></script>
```

7. Add the text highlighted in bold within the tag as shown below:

```
<td><input onClick="performAction('<Approval Workflow Group Code>');"
oraMdLabel="SAVE_BTN_LBL" class="oraButton" type="button"><input
onClick="oraSubmitMap('CANCEL', false);" oraMdLabel="CANCEL_LBL" class="oraButton"
type="button"></td>
```

In the above HTML code, you must replace <Approval Workflow Group Code> with the code of the approval workflow group for which you are creating a UI map.

8. Click Save. The Input UI map is generated.

- Create Display UI Map for an Approval Workflow Group - The system provides you with the ability to automatically generate a Display UI map and associate it to the approval workflow group when the approval workflow is activated for the group. Alternatively, you can create a Display UI map manually, and attach it to the approval workflow group. To create a Display UI map manually:
  1. Enter the name and description of the Display UI map.

Note: The system uses the CM\_<Approval Workflow Group Code>\_AppTxn\_Display naming convention while automatically generating a Display UI map. Therefore, do not use this naming convention while creating a Display UI map manually.

2. Select Complete HTML Document from the UI Map Type list.
3. Add the following schema in the Scheme Editor zone:

```
<schema>
  <<Business Object Name> type="group">
    <includeBO name="<Business Object Name>" />
  </<Business Object Name>>
</schema>
```

In the above schema, you must replace <Business Object Name> with the name of the business object. For example, if you want to create a Display UI map for account, you must use the following schema:

```
<schema>
  <account type="group">
    <includeBO name="Account" />
  </account>
</schema>
```

4. Click Save. The Display Only and Input Map buttons are enabled on the dashboard.
5. Click the Display Only button. The HTML code is generated in the HTML Editor zone.
6. Click Save. The Display UI map is generated.

## Business Process

In order to understand the approval workflow process, you must know the most commonly used terms in the approval workflow process:

- **Submitter** – A person who adds, modifies or deletes a business object, such as person, account, contract, and division is called a submitter.
- **Approver** – A person who approves any changes made to a business object is called an approver.
- **Approval Workflow Group** – A group of one or more business objects for which approval is required, under some or all conditions, when data changes are made.
- **Approval Workflow Chain** – The approval workflow chain indicates how many levels of approvals are required to approve the changes made by the submitter.



Field	Description
Reference ID	Used to search the approval workflow requests created for the business object having the specified reference ID.
Division	Used to search the approval workflow requests that belong to a particular division.  Note: You will only be able to view those divisions to which you have access in the Division list.
From Date	Used to search the approval workflow requests that are created from a particular date onwards.
To Date	Used to search the approval workflow requests that are created till a particular date.
Action	Used to search the approval workflow requests that are created for adding, updating or deleting a business object.
Submitter ID	Used to search the approval workflow requests that are created by a particular submitter.
To Do Type	Used to search the approval workflow requests using a particular To Do Type.
Transaction ID	Used to search the approval workflow request using the approval transaction ID.  Note: The approval transaction ID is generated automatically when the approval workflow request is created.

- Enter the search criteria. For example, to view all the approval workflow requests created for adding a business object, select Add from the Action list.
- Click Refresh. The following columns are displayed in the Search Results section:

Column	Description
Transaction ID	Displays the approval transaction ID.  Note: The approval transaction ID is generated automatically when the approval workflow request is created.
Task	On clicking the View hyperlink, you can review the changes and accordingly approve, reject or cancel the request based on the observations.
Group	Displays the approval workflow group for which the approval workflow request is created.
Submitter ID	Indicates the submitter who has created the approval workflow request.
To Do Type	Displays the type of To Do (notification) received for the approval workflow request.
Action	Indicates the type of action, such as Add, Update (UPD) or Delete (DEL), performed by the submitter on a business object.
Division	Displays the division to which the approval workflow request belongs.
Submit Date	Displays the date and time when the approval workflow request was created by the submitter.
Reference ID 1	Displays the reference ID of the business object for which the approval workflow request is created.

Column	Description
Reference ID 2	Displays the reference ID of the business object for which the approval workflow request is created.
Reference ID 3	Displays the reference ID of the business object for which the approval workflow request is created.
Reference ID 4	Displays the reference ID of the business object for which the approval workflow request is created.

Note: The system provides you with a facility in case you want to view the log of an approval workflow request from the Approve portal before approving, rejecting or cancelling a request. You can view the log of an approval workflow request by clicking the Broadcast button (  ) corresponding to the request.

- Click the View hyperlink in the Task column corresponding to the approval workflow request on which you want to take an action. A screen appears where you can review the changes and accordingly approve, reject or cancel the request based on your observations. In case where the submitter action is Update (UPD), you will be able to compare the existing and new data, and accordingly take an action.

Note:

By default, any modifications will be highlighted in the Yellow (9933FF) color and new additions will be highlighted in the Purple (FFFF66) color. You can also change these colors. For more information on how to set the color for highlighting, refer to the [Prerequisites](#) section.

Only those users who have access to the application services for each business object within the approval workflow group will be able to view the details of the approval workflow request.

- Review the changes and if they are accurate, then click Approve. A To Do (notification) is sent to the approver at the next level in the hierarchy. You will no longer be able to view this request in your workflow for approval. In case you are the last approver in the hierarchy, the changes are committed to the database.

## Rejecting a Request

To reject a request:

- From the Main Menu, select Approval Workflow Management → Approve. The Approve portal appears. The Search zone consists of the following two sections – Search Criteria and Search Results. The Search Criteria section will help you to search for the approval workflow requests that are pending in your workflow for approval. It contains the following fields:

Field	Description
Group	Used to search the approval workflow requests created for the business objects that belong to a particular approval workflow group.
Reference ID	Used to search the approval workflow requests created for the business object having the specified reference ID.
Division	Used to search the approval workflow requests that belong to a particular division.
	Note: You will only be able to view those divisions to which you have access in the Division list.

Field	Description
From Date	Used to search the approval workflow requests that are created from a particular date onwards.
To Date	Used to search the approval workflow requests that are created till a particular date.
Action	Used to search the approval workflow requests that are created for adding, updating or deleting a business object.
Submitter ID	Used to search the approval workflow requests that are created by a particular submitter.
To Do Type	Used to search the approval workflow requests using a particular To Do Type.
Transaction ID	Used to search the approval workflow request using the approval transaction ID.  Note: The approval transaction ID is generated automatically when the approval workflow request is created.

2. Enter the search criteria. For example, to view all the approval workflow requests created by a submitter, enter the submitter ID in the respective field.
3. Click Refresh. The following columns are displayed in the Search Results section:

Column	Description
Transaction ID	Displays the approval transaction ID.  Note: The approval transaction ID is generated automatically when the approval workflow request is created.
Task	On clicking the View hyperlink, you can review the changes and accordingly approve, reject or cancel the request based on the observations.
Group	Displays the approval workflow group for which the approval workflow request is created.
Submitter ID	Indicates the submitter who has created the approval workflow request.
To Do Type	Displays the type of To Do (notification) received for the approval workflow request.
Action	Indicates the type of action, such as Add, Update (UPD) or Delete (DEL), performed by the submitter on a business object.
Division	Displays the division to which the approval workflow request belongs.
Submit Date	Displays the date and time when the approval workflow request was created by the submitter.
Reference ID 1	Displays the reference ID of the business object for which the approval workflow request is created.
Reference ID 2	Displays the reference ID of the business object for which the approval workflow request is created.
Reference ID 3	Displays the reference ID of the business object for which the approval workflow request is created.
Reference ID 4	Displays the reference ID of the business object for which the approval workflow request is created.

Note: The system provides you with a facility in case you want to view the log of an approval workflow request from the Approve portal before approving, rejecting or cancelling a request. You can view the log of an approval workflow request by clicking the Broadcast button (  ) corresponding to the request.

- Click the View hyperlink in the Task column corresponding to the approval workflow request on which you want to take an action. A screen appears where you can review the changes and accordingly approve, reject or cancel the request based on your observations. In case where the submitter action is Update (UPD), you will be able to compare the existing and new data, and accordingly take an action.

Note:

By default, any modifications will be highlighted in the Yellow (9933FF) color and new additions will be highlighted in the Purple (FFFF66) color. You can also change these colors. For more information on how to set the color for highlighting, refer to the [Prerequisites](#) section.

Only those users who have access to the application services for each business object within the approval workflow group will be able to view the details of the approval workflow request.

- Review the changes and if they are not appropriate, then click Reject. The Rejection/Cancellation Reason portal appears.
- Select the reason for rejecting the approval workflow request and enter the comments in the respective field.
- Click OK.
- Click Reject. A To Do (notification) is sent to the submitter. You will no longer be able to view this request in your workflow for approval.

## Cancelling a Request

To cancel a request:

- From the Main Menu, select Approval Workflow Management → Approve. The Approve portal appears. The Search zone consists of the following two sections – Search Criteria and Search Results. The Search Criteria section will help you to search for the approval workflow requests that are pending in your workflow for approval. It contains the following fields:

Field	Description
Group	Used to search the approval workflow requests created for the business objects that belong to a particular approval workflow group.
Reference ID	Used to search the approval workflow requests created for the business object having the specified reference ID.
Division	Used to search the approval workflow requests that belong to a particular division.  Note: You will only be able to view those divisions to which you have access in the Division list.
From Date	Used to search the approval workflow requests that are created from a particular date onwards.
To Date	Used to search the approval workflow requests that are created till a particular date.

Field	Description
Action	Used to search the approval workflow requests that are created for adding, updating or deleting a business object.
Submitter ID	Used to search the approval workflow requests that are created by a particular submitter.
To Do Type	Used to search the approval workflow requests using a particular To Do Type.
Transaction ID	Used to search the approval workflow request using the approval transaction ID.  Note: The approval transaction ID is generated automatically when the approval workflow request is created.

2. Enter the search criteria. For example, to view all the approval workflow requests created on 11<sup>th</sup> October 2010, enter 10-11-2010 in the From Date and To Date fields.
3. Click Refresh. The following columns are displayed in the Search Results section:

Column	Description
Transaction ID	Displays the approval transaction ID.  Note: The approval transaction ID is generated automatically when the approval workflow request is created.
Task	On clicking the View hyperlink, you can review the changes and accordingly approve, reject or cancel the request based on the observations.
Group	Displays the approval workflow group for which the approval workflow request is created.
Submitter ID	Indicates the submitter who has created the approval workflow request.
To Do Type	Displays the type of To Do (notification) received for the approval workflow request.
Action	Indicates the type of action, such as Add, Update (UPD) or Delete (DEL), performed by the submitter on a business object.
Division	Displays the division to which the approval workflow request belongs.
Submit Date	Displays the date and time when the approval workflow request was created by the submitter.
Reference ID 1	Displays the reference ID of the business object for which the approval workflow request is created.
Reference ID 2	Displays the reference ID of the business object for which the approval workflow request is created.
Reference ID 3	Displays the reference ID of the business object for which the approval workflow request is created.
Reference ID 4	Displays the reference ID of the business object for which the approval workflow request is created.

Note: The system provides you with a facility in case you want to view the log of an approval workflow request from the Approve portal before approving, rejecting or cancelling a request. You can view the log of an approval workflow request by clicking the Broadcast button (  ) corresponding to the request.

- Click the View hyperlink in the Task column corresponding to the approval workflow request on which you want to take an action. A screen appears where you can review the changes and accordingly approve, reject or cancel the request based on your observations. In case where the submitter action is Update (UPD), you will be able to compare the existing and new data, and accordingly take an action.

**Note:**

By default, any modifications will be highlighted in the Yellow (9933FF) color and new additions will be highlighted in the Purple (FFFF66) color. You can also change these colors. For more information on how to set the color for highlighting, refer to the [Prerequisites](#) section.

Only those users who have access to the application services for each business object within the approval workflow group will be able to view the details of the approval workflow request.

- Review the changes and if you want to cancel the request, then click Cancel. The Rejection/Cancellation Reason portal appears.
- Select the reason for cancelling the approval workflow request and enter the comments in the respective field.
- Click OK.
- Click Cancel. You will no longer be able to view this request in your workflow for approval.

## Modifying a Request

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To modify a request:

- From the Main Menu, select Approval Workflow Management → Modify. The Modify portal appears. The Search zone consists of the following two sections – Search Criteria and Search Results. The Search Criteria section will help you to view the approval workflow requests which are in the Pending Approval status. It contains the following fields:

Field	Description
Group	Used to search the approval workflow requests created for the business objects that belong to a particular approval workflow group.
Reference ID	Used to search the approval workflow requests created for the business object having the specified reference ID.
Division	Used to search the approval workflow requests that belong to a particular division.  <b>Note:</b> You will only be able to view those divisions to which you have access in the Division list.
Action	Used to search the approval workflow requests that are created for adding, updating or deleting a business object.
From Date	Used to search the approval workflow requests that are created from a particular date onwards.
To Date	Used to search the approval workflow requests that are created till a particular date.
Transaction ID	Used to search the approval workflow request using the approval transaction ID.  <b>Note:</b> The approval transaction ID is generated automatically when the approval workflow request is created.

2. Enter the search criteria. For example, to search all the records added by you on 10<sup>th</sup> January 2010, select Add from the Action list and enter 01-10-2010 in the From Date and To Date fields.
3. Click Refresh. The following columns are displayed in the Search Results section:

Column	Description
Transaction ID	Displays the approval transaction ID.  Note: The approval transaction ID is generated automatically when the approval workflow request is created.
Group	Displays the approval workflow group for which the approval workflow request is created.
Action	Indicates the type of action, such as Add, Update (UPD) or Delete (DEL), performed by the submitter on a business object.
Submit Date	Displays the date and time when the approval workflow request was created by the submitter.
Division	Displays the division to which the approval workflow request belongs.
Modify	On clicking the Modify hyperlink, you can review and modify the details of the approval workflow request.
Withdraw	On clicking the Withdraw hyperlink, you can withdraw the approval workflow request. Once you withdraw the request, no further action will be taken on the request.  For more information, refer to <a href="#">Withdrawing a Request</a> .
Reference ID 1	Displays the reference ID of the business object for which the approval workflow request is created.
Reference ID 2	Displays the reference ID of the business object for which the approval workflow request is created.
Reference ID 3	Displays the reference ID of the business object for which the approval workflow request is created.
Reference ID 4	Displays the reference ID of the business object for which the approval workflow request is created.

Note: The system provides you with a facility in case you want to view the log of an approval workflow request from the Modify portal before modifying or withdrawing a request. You can view the log of an approval workflow request by clicking the Broadcast button (  ) corresponding to the request.

4. Click the Modify hyperlink in the Modify column corresponding to the approval workflow request that you want to modify. A screen appears where you can review and make the changes.

Note: Only those users who have access to the application services for each business object within the approval workflow group will be able to modify the details of the approval workflow request.

5. Make the required changes.
6. Click Save. The approval workflow request is updated.

## Resolving a Request

To resolve a request:

1. From the Main Menu, select Approval Workflow Management → Resolve. The Resolve portal appears. The Search zone consists of the following two sections – Search Criteria and Search Results. The Search Criteria section will help you to view the approval workflow requests rejected by approvers and pending for you to resolve. It contains the following fields:

Field	Description
Group	Used to search the approval workflow requests created for the business objects that belong to a particular approval workflow group.
Reference ID	Used to search the approval workflow requests created for the business object having the specified reference ID.
Division	Used to search the approval workflow requests that belong to a particular division.  Note: You will only be able to view those divisions to which you have access in the Division list.
From Date	Used to search the approval workflow requests that are rejected from a particular date onwards.
To Date	Used to search the approval workflow requests that are rejected till a particular date.
Action	Used to search the approval workflow requests that are created for adding, updating or deleting a business object.
Approver ID	Used to search the approval workflow requests that are rejected by a particular approver.
To Do Type	Used to search the approval workflow requests using a particular To Do Type.
Transaction ID	Used to search the approval workflow request using the approval transaction ID.  Note: The approval transaction ID is generated automatically when the approval workflow request is created.

2. Enter the search criteria. For example, to search all the requests rejected on 10<sup>th</sup> January 2010, enter 01-10-2010 in the From Date and To Date fields.
3. Click Refresh. The following columns are displayed in the Search Results section:

Column	Description
Transaction ID	Displays the approval transaction ID.  Note: The approval transaction ID is generated automatically when the approval workflow request is created.
To Do Type	Indicates the type of To Do (notification) received when the approval workflow request is rejected.
Group	Displays the approval workflow group for which the approval workflow request is created.

Column	Description
Action	Indicates the type of action, such as Add, Update (UPD) or Delete (DEL), performed by the submitter on a business object.
Approver ID	Indicates the approver who has rejected the approval workflow request.
Reject Date	Displays the date and time when the approval workflow request was rejected by the approver.
Division	Displays the division to which the approval workflow request belongs.
Reject Reason	Indicates the reason why the approval workflow request has been rejected.
Reject Comment	Displays the additional details entered by the approver on rejecting the approval workflow request.
Resolve	On clicking the Resolve hyperlink, you can modify the details of the approval workflow request and resubmit the request. On resubmitting, the approval workflow process starts once again from the first level in the hierarchy.
Withdraw	On clicking the Withdraw hyperlink, you can withdraw the approval workflow request. Once you withdraw the request, no further action will be taken on the request. For more information, refer to <a href="#">Withdrawing a Request</a> .
Reference ID 1	Displays the reference ID of the business object for which the approval workflow request is created.
Reference ID 2	Displays the reference ID of the business object for which the approval workflow request is created.
Reference ID 3	Displays the reference ID of the business object for which the approval workflow request is created.
Reference ID 4	Displays the reference ID of the business object for which the approval workflow request is created.

Note: The system provides you with a facility in case you want to view the log of an approval workflow request from the Resolve portal before resolving or withdrawing a request. You can view the log of an approval workflow request by clicking the Broadcast button (  ) corresponding to the request.

4. Click the Resolve hyperlink in the Resolve column corresponding to the approval workflow request that you want to resolve. A screen appears where you can review and make the changes.

Note: Only those users who have access to the application services for each business object within the approval workflow group will be able to resolve the request and resubmit it for approval.

5. Make the required changes.
6. Click Save. The approval workflow request is updated and resubmitted for approval.

## Withdrawing a Request

You can withdraw an approval workflow request when it is in the Pending Approval status or when it has been rejected by an approver at any level in the hierarchy. To withdraw a request:

1. Click the Withdraw hyperlink in the Withdraw column corresponding to the approval workflow request that you want to withdraw. A message box appears confirming whether you want to delete the approval workflow request.

2. Click OK. You will no longer be able to view this request in your workflow.

Note: The system provides you with a facility in case you want to view the log of an approval workflow request from the Modify and the Resolve portals before withdrawing a request. You can view the log of an approval workflow request by clicking the Broadcast button (  ) corresponding to the request.

## Viewing Log of an Approval Workflow Request

To view the log of an approval workflow request:

1. From the Main Menu, select Approval Workflow Management → Logs. The Logs portal appears. The Search zone consists of the following two sections – Search Criteria and Search Results. The Search Criteria section will help you to search for the approval workflow requests for which you can view the complete trail of submitter and approver actions. It contains the following fields:

Field	Description
Group	Used to search the approval workflow requests created for the business objects that belong to a particular approval workflow group.
Reference ID	Used to search the approval workflow requests created for the business object having the specified reference ID.
Division	Used to search the approval workflow requests that belong to a particular division.  Note: You will only be able to view those divisions to which you have access in the Division list.
From Date	Used to search the approval workflow requests that are created from a particular date onwards.
To Date	Used to search the approval workflow requests that are created till a particular date.
Submitter ID	Used to search the approval workflow requests that are created by a particular submitter.
Approval Status	Used to search the approval workflow requests with the specified status.
To Do Type	Used to search the approval workflow requests using a particular To Do Type.
Transaction ID	Used to search the approval workflow request using the approval transaction ID.  Note: The approval transaction ID is generated automatically when the approval workflow request is created.

2. Enter the search criteria. For example, to view the logs of all the approval workflow requests which are rejected, select Rejected from the Approval Status list.
3. Click Refresh. The following columns are displayed in the Search Results section:

Column	Description
Transaction ID	Displays the approval transaction ID.  Note: The approval transaction ID is generated automatically when the approval workflow request is created.

Column	Description
To Do Type	Displays the type of To Do (notification) received for the approval workflow request.
Group	Displays the approval workflow group for which the approval workflow request is created.
Action	Indicates the type of action, such as Add, Update (UPD) or Delete (DEL), performed by the submitter on a business object.
Submitter ID	Indicates the submitter who has created the approval workflow request.
Submit Date	Displays the date and time when the approval workflow request was created by the submitter.
Division	Displays the division to which the approval workflow request belongs.
Status	Indicates the status of the approval workflow request.
Reference ID 1	Displays the reference ID of the business object for which the approval workflow request is created.
Reference ID 2	Displays the reference ID of the business object for which the approval workflow request is created.
Reference ID 3	Displays the reference ID of the business object for which the approval workflow request is created.
Reference ID 4	Displays the reference ID of the business object for which the approval workflow request is created.

4. Click the Broadcast (📢) icon corresponding to the approval workflow request whose log you want to view. The Log zone appears with the following columns:

Column	Description
Date	Displays the date and time when the action was performed on the approval workflow request.
User	Indicates the user who has performed the action on the approval workflow request.
Status	Displays the status of the approval workflow request. The status can be Pending Approval, In Process, Approved, Rejected, Cancelled or Deleted.
Sequence	Indicates the sequence in which the actions were performed on the approval workflow request.
View	On clicking the View hyperlink, you can view the details of the approval workflow request.
Reason	Displays the reason why the approval workflow request was rejected or cancelled.
Comment	Displays the additional details entered by the approver on rejecting or cancelling the approval workflow request.

5. Click the View hyperlink in the View column corresponding to the record to view the details of the approval workflow request at that stage in the approval process.

Note: Only those users who have access to the application services for each business object within the approval workflow group will be able to view the details of the approval workflow request.

## Approving Price Assignment Request for an Account

To approve price assignment request for an account:

1. From the Main Menu, select Approval Workflow Management → Approve Price Assignment. The Approve Price Assignment portal appears. The Search zone consists of the following two sections – Search Criteria and Search Results. The Search Criteria section will help you to search for the approval workflow requests that are pending in your workflow for approval. It contains the following fields:

Field	Description
Customer ID	Used to search for approval workflow requests created when pricing for a product is added, overridden or edited for a customer.
Account ID	Used to search for approval workflow requests created when pricing for a product is added, overridden or edited for an account.
Account Number	Used to search for approval workflow requests created when pricing for a product is added, overridden or edited for an account.
Price List Description	Used to search for approval workflow requests created when product is assigned to a price list.
Submitter ID	Used to search the approval workflow requests that are created by a particular submitter.

2. Enter the account ID or account number as the search criteria.
3. Click Refresh. The following columns are displayed in the Search Results section:

Column	Description
Account ID	Displays the account ID generated by the application.
Account Number	Displays the ID generated by an external system.
Division	Displays the division to which the account belongs.

4. Click the Broadcast (  ) icon corresponding to the account whose price assignments you want to review for approval. The List of Price Assignments zone appears with the following columns:

Column	Description
Select All	Allows you to select one or more approval workflow requests that you can approve, reject or cancel at once.
Transaction ID	Displays the approval transaction ID.  <div style="border: 1px solid black; background-color: #ffffcc; padding: 5px;">Note: The approval transaction ID is generated automatically when the approval workflow request is created.</div>
Submitter ID	Indicates the submitter who has created the approval workflow request.
Action	Indicates the type of action, such as Add, Update (UPD) or Delete (DEL), performed by the submitter during price assignment.

Column	Description
Submit Date	Displays the date and time when the approval workflow request was created by the submitter.
To Do Type	Displays the type of To Do (notification) received for the approval workflow request.
Product	Displays the product code.
Description	Displays the description of the product.
Pricing Currency	Displays the currency in which the pricing is defined.
Start Date	Displays the date from when the product pricing is effective.
End Date	Displays the date till when the product pricing is effective.
View Changes	On clicking the View Change hyperlink, you can view the details of the approval workflow request.
View Log	On clicking the View Log hyperlink, you can view the log of an approval workflow request from the Approve Price Assignment portal before approving, rejecting or cancelling a request.

- Click the View Change hyperlink in the View Changes column corresponding to the approval workflow request on which you want to take an action. A screen appears where you can review the pricing details, tiering ranges, and price assignment characteristics, and accordingly approve, reject or cancel the request based on your observations. In case where the submitter action is Update (UPD), you will be able to compare the existing and new data, and accordingly take an action.

Note:

By default, any modifications will be highlighted in the Yellow (9933FF) color and new additions will be highlighted in the Purple (FFFF66) color. You can also change these colors. For more information on how to set the color for highlighting, refer to the [Prerequisites](#) section.

Only those users who have access to the application services for each business object within the approval workflow group will be able to view the details of the approval workflow request.

- Review the pricing details, tiering ranges, and price assignment characteristics, and if they are accurate, then click Approve. A To Do (notification) is sent to the approver at the next level in the hierarchy. You will no longer be able to view this request in your workflow for approval. In case you are the last approver in the hierarchy, the changes are committed to the database.

Note: Alternatively, in the List of Price Assignments zone, you can select the check box corresponding to the approval workflow request that you want to approve and click Approve.

## Approving Price Assignment Request for a Price List

To approve price assignment request for a price list:

1. From the Main Menu, select Approval Workflow Management → Approve Price Assignment. The Approve Price Assignment portal appears. The Search zone consists of the following two sections – Search Criteria and Search Results. The Search Criteria section will help you to search for the approval workflow requests that are pending in your workflow for approval. It contains the following fields:

Field	Description
Customer ID	Used to search for approval workflow requests created when pricing for a product is added, overridden or edited for a customer.
Account ID	Used to search for approval workflow requests created when pricing for a product is added, overridden or edited for an account.
Account Number	Used to search for approval workflow requests created when pricing for a product is added, overridden or edited for an account.
Price List Description	Used to search for approval workflow requests created when product is assigned to a price list.
Submitter ID	Used to search the approval workflow requests that are created by a particular submitter.

2. Enter the description of the price list as the search criteria.
3. Click Refresh. The following columns are displayed in the Search Results section:

Column	Description
Price List	Displays the unique identifier generated by the system for the price list.
Price List Description	Displays the description of the price list.
Division	Displays the division to which the price list belongs.

4. Click the Broadcast (  ) icon corresponding to the price list whose price assignments you want to review for approval. The List of Price Assignments zone appears with the following columns:

Column	Description
Select All	Allows you to select one or more approval workflow requests that you can approve, reject or cancel at once.
Transaction ID	Displays the approval transaction ID.  Note: The approval transaction ID is generated automatically when the approval workflow request is created.
Submitter ID	Indicates the submitter who has created the approval workflow request.
Action	Indicates the type of action, such as Add, Update (UPD) or Delete (DEL), performed by the submitter during price assignment.

Column	Description
Submit Date	Displays the date and time when the approval workflow request was created by the submitter.
To Do Type	Displays the type of To Do (notification) received for the approval workflow request.
Product	Displays the product code.
Description	Displays the description of the product.
Pricing Currency	Displays the currency in which the pricing is defined.
Start Date	Displays the date from when the product pricing is effective.
End Date	Displays the date till when the product pricing is effective.
View Changes	On clicking the View Change hyperlink, you can view the details of the approval workflow request.
View Log	On clicking the View Log hyperlink, you can view the log of an approval workflow request from the Approve Price Assignment portal before approving, rejecting or cancelling a request.

- Click the View Change hyperlink in the View Changes column corresponding to the approval workflow request on which you want to take an action. A screen appears where you can review the pricing details, tiering ranges, and price assignment characteristics, and accordingly approve, reject or cancel the request based on your observations. In case where the submitter action is Update (UPD), you will be able to compare the existing and new data, and accordingly take an action.

**Note:**

By default, any modifications will be highlighted in the Yellow (9933FF) color and new additions will be highlighted in the Purple (FFFF66) color. You can also change these colors. For more information on how to set the color for highlighting, refer to the [Prerequisites](#) section.

Only those users who have access to the application services for each business object within the approval workflow group will be able to view the details of the approval workflow request.

- Review the pricing details, tiering ranges, and price assignment characteristics, and if they are accurate, then click Approve. A To Do (notification) is sent to the approver at the next level in the hierarchy. You will no longer be able to view this request in your workflow for approval. In case you are the last approver in the hierarchy, the changes are committed to the database.

**Note:** Alternatively, in the List of Price Assignments zone, you can select the check box corresponding to the approval workflow request that you want to approve and click Approve.

## Approving Price Assignment Request for a Customer

To approve price assignment request for a customer:

1. From the Main Menu, select Approval Workflow Management → Approve Price Assignment. The Approve Price Assignment portal appears. The Search zone consists of the following two sections – Search Criteria and Search Results. The Search Criteria section will help you to search for the approval workflow requests that are pending in your workflow for approval. It contains the following fields:

Field	Description
Customer ID	Used to search for approval workflow requests created when pricing for a product is added, overridden or edited for a customer.
Account ID	Used to search for approval workflow requests created when pricing for a product is added, overridden or edited for an account.
Account Number	Used to search for approval workflow requests created when pricing for a product is added, overridden or edited for an account.
Price List Description	Used to search for approval workflow requests created when product is assigned to a price list.
Submitter ID	Used to search the approval workflow requests that are created by a particular submitter.

2. Enter the customer or person ID as the search criteria.
3. Click Refresh. The following columns are displayed in the Search Results section:

Column	Description
Customer ID	Displays the person ID.
Customer Name	Displays the name of the customer.
Division	Displays the division to which the customer belongs.

4. Click the Broadcast (i) icon corresponding to the customer whose price assignments you want to review for approval. The List of Price Assignments zone appears with the following columns:

Column	Description
Select All	Allows you to select one or more approval workflow requests that you can approve, reject or cancel at once.
Transaction ID	Displays the approval transaction ID.  Note: The approval transaction ID is generated automatically when the approval workflow request is created.
Submitter ID	Indicates the submitter who has created the approval workflow request.
Action	Indicates the type of action, such as Add, Update (UPD) or Delete (DEL), performed by the submitter during price assignment.

Column	Description
Submit Date	Displays the date and time when the approval workflow request was created by the submitter.
To Do Type	Displays the type of To Do (notification) received for the approval workflow request.
Product	Displays the product code.
Description	Displays the description of the product.
Pricing Currency	Displays the currency in which the pricing is defined.
Start Date	Displays the date from when the product pricing is effective.
End Date	Displays the date till when the product pricing is effective.
View Changes	On clicking the View Change hyperlink, you can view the details of the approval workflow request.
View Log	On clicking the View Log hyperlink, you can view the log of an approval workflow request from the Approve Price Assignment portal before approving, rejecting or cancelling a request.

- Click the View Change hyperlink in the View Changes column corresponding to the approval workflow request on which you want to take an action. A screen appears where you can review the pricing details, tiering ranges, and price assignment characteristics, and accordingly approve, reject or cancel the request based on your observations. In case where the submitter action is Update (UPD), you will be able to compare the existing and new data, and accordingly take an action.

**Note:**

By default, any modifications will be highlighted in the Yellow (9933FF) color and new additions will be highlighted in the Purple (FFFF66) color. You can also change these colors. For more information on how to set the color for highlighting, refer to the [Prerequisites](#) section.

Only those users who have access to the application services for each business object within the approval workflow group will be able to view the details of the approval workflow request.

- Review the pricing details, tiering ranges, and price assignment characteristics, and if they are accurate, then click Approve. A To Do (notification) is sent to the approver at the next level in the hierarchy. You will no longer be able to view this request in your workflow for approval. In case you are the last approver in the hierarchy, the changes are committed to the database.

**Note:** Alternatively, in the List of Price Assignments zone, you can select the check box corresponding to the approval workflow request that you want to approve and click Approve.

## Rejecting Price Assignment Request for an Account

To reject price assignment request for an account:

1. From the Main Menu, select Approval Workflow Management → Approve Price Assignment. The Approve Price Assignment portal appears. The Search zone consists of the following two sections – Search Criteria and Search Results. The Search Criteria section will help you to search for the approval workflow requests that are pending in your workflow for approval. It contains the following fields:

Field	Description
Customer ID	Used to search for approval workflow requests created when pricing for a product is added, overridden or edited for a customer.
Account ID	Used to search for approval workflow requests created when pricing for a product is added, overridden or edited for an account.
Account Number	Used to search for approval workflow requests created when pricing for a product is added, overridden or edited for an account.
Price List Description	Used to search for approval workflow requests created when product is assigned to a price list.
Submitter ID	Used to search the approval workflow requests that are created by a particular submitter.

2. Enter the account ID or account number as the search criteria.
3. Click Refresh. The following columns are displayed in the Search Results section:

Column	Description
Account ID	Displays the account ID generated by the application.
Account Number	Displays the ID generated by an external system.
Division	Displays the division to which the account belongs.

4. Click the Broadcast (  ) icon corresponding to the account whose price assignments you want to review for approval. The List of Price Assignments zone appears with the following columns:

Column	Description
Select All	Allows you to select one or more approval workflow requests that you can approve, reject or cancel at once.
Transaction ID	Displays the approval transaction ID.  Note: The approval transaction ID is generated automatically when the approval workflow request is created.
Submitter ID	Indicates the submitter who has created the approval workflow request.
Action	Indicates the type of action, such as Add, Update (UPD) or Delete (DEL), performed by the submitter during price assignment.

Column	Description
Submit Date	Displays the date and time when the approval workflow request was created by the submitter.
To Do Type	Displays the type of To Do (notification) received for the approval workflow request.
Product	Displays the product code.
Description	Displays the description of the product.
Pricing Currency	Displays the currency in which the pricing is defined.
Start Date	Displays the date from when the product pricing is effective.
End Date	Displays the date till when the product pricing is effective.
View Changes	On clicking the View Change hyperlink, you can view the details of the approval workflow request.
View Log	On clicking the View Log hyperlink, you can view the log of an approval workflow request from the Approve Price Assignment portal before approving, rejecting or cancelling a request.

- Click the View Change hyperlink in the View Changes column corresponding to the approval workflow request on which you want to take an action. A screen appears where you can review the pricing details, tiering ranges, and price assignment characteristics, and accordingly approve, reject or cancel the request based on your observations. In case where the submitter action is Update (UPD), you will be able to compare the existing and new data, and accordingly take an action.

Note:

By default, any modifications will be highlighted in the Yellow (9933FF) color and new additions will be highlighted in the Purple (FFFF66) color. You can also change these colors. For more information on how to set the color for highlighting, refer to the [Prerequisites](#) section.

Only those users who have access to the application services for each business object within the approval workflow group will be able to view the details of the approval workflow request.

- Review the pricing details, tiering ranges, and price assignment characteristics, and if they are not appropriate, then click Reject. The Rejection/Cancellation Reason portal appears.

Note: Alternatively, in the List of Price Assignments zone, you can select the check box corresponding to the approval workflow request that you want to reject and click Reject.

- Select the reason for rejecting the approval workflow request and enter the comments in the respective field.
- Click OK.
- Click Reject. A To Do (notification) is sent to the submitter. You will no longer be able to view this request in your workflow for approval.

## Rejecting Price Assignment Request for a Price List

To reject price assignment request for a price list:

1. From the Main Menu, select Approval Workflow Management → Approve Price Assignment. The Approve Price Assignment portal appears. The Search zone consists of the following two sections – Search Criteria and Search Results. The Search Criteria section will help you to search for the approval workflow requests that are pending in your workflow for approval. It contains the following fields:

Field	Description
Customer ID	Used to search for approval workflow requests created when pricing for a product is added, overridden or edited for a customer.
Account ID	Used to search for approval workflow requests created when pricing for a product is added, overridden or edited for an account.
Account Number	Used to search for approval workflow requests created when pricing for a product is added, overridden or edited for an account.
Price List Description	Used to search for approval workflow requests created when product is assigned to a price list.
Submitter ID	Used to search the approval workflow requests that are created by a particular submitter.

2. Enter the description of the price list as the search criteria.
3. Click Refresh. The following columns are displayed in the Search Results section:

Column	Description
Price List	Displays the unique identifier generated by the system for the price list.
Price List Description	Displays the description of the price list.
Division	Displays the division to which the price list belongs.

4. Click the Broadcast (  ) icon corresponding to the price list whose price assignments you want to review for approval. The List of Price Assignments zone appears with the following columns:

Column	Description
Select All	Allows you to select one or more approval workflow requests that you can approve, reject or cancel at once.
Transaction ID	Displays the approval transaction ID.  Note: The approval transaction ID is generated automatically when the approval workflow request is created.
Submitter ID	Indicates the submitter who has created the approval workflow request.
Action	Indicates the type of action, such as Add, Update (UPD) or Delete (DEL), performed by the submitter during price assignment.
Submit Date	Displays the date and time when the approval workflow request was created by the submitter.

Column	Description
To Do Type	Displays the type of To Do (notification) received for the approval workflow request.
Product	Displays the product code.
Description	Displays the description of the product.
Pricing Currency	Displays the currency in which the pricing is defined.
Start Date	Displays the date from when the product pricing is effective.
End Date	Displays the date till when the product pricing is effective.
View Changes	On clicking the View Change hyperlink, you can view the details of the approval workflow request.
View Log	On clicking the View Log hyperlink, you can view the log of an approval workflow request from the Approve Price Assignment portal before approving, rejecting or cancelling a request.

- Click the View Change hyperlink in the View Changes column corresponding to the approval workflow request on which you want to take an action. A screen appears where you can review the pricing details, tiering ranges, and price assignment characteristics, and accordingly approve, reject or cancel the request based on your observations. In case where the submitter action is Update (UPD), you will be able to compare the existing and new data, and accordingly take an action.

Note:

By default, any modifications will be highlighted in the Yellow (9933FF) color and new additions will be highlighted in the Purple (FFFF66) color. You can also change these colors. For more information on how to set the color for highlighting, refer to the [Prerequisites](#) section.

Only those users who have access to the application services for each business object within the approval workflow group will be able to view the details of the approval workflow request.

- Review the pricing details, tiering ranges, and price assignment characteristics, and if they are not appropriate, then click Reject. The Rejection/Cancellation Reason portal appears.

Note: Alternatively, in the List of Price Assignments zone, you can select the check box corresponding to the approval workflow request that you want to reject and click Reject.

- Select the reason for rejecting the approval workflow request and enter the comments in the respective field.
- Click OK.
- Click Reject. A To Do (notification) is sent to the submitter. You will no longer be able to view this request in your workflow for approval.

## Rejecting Price Assignment Request for a Customer

To reject price assignment request for a customer:

1. From the Main Menu, select Approval Workflow Management → Approve Price Assignment. The Approve Price Assignment portal appears. The Search zone consists of the following two sections – Search Criteria and Search Results. The Search Criteria section will help you to search for the approval workflow requests that are pending in your workflow for approval. It contains the following fields:

Field	Description
Customer ID	Used to search for approval workflow requests created when pricing for a product is added, overridden or edited for a customer.
Account ID	Used to search for approval workflow requests created when pricing for a product is added, overridden or edited for an account.
Account Number	Used to search for approval workflow requests created when pricing for a product is added, overridden or edited for an account.
Price List Description	Used to search for approval workflow requests created when product is assigned to a price list.
Submitter ID	Used to search the approval workflow requests that are created by a particular submitter.

2. Enter the customer or person ID as the search criteria.
3. Click Refresh. The following columns are displayed in the Search Results section:

Column	Description
Customer ID	Displays the person ID.
Customer Name	Displays the name of the customer.
Division	Displays the division to which the customer belongs.

4. Click the Broadcast (i) icon corresponding to the customer whose price assignments you want to review for approval. The List of Price Assignments zone appears with the following columns:

Column	Description
Select All	Allows you to select one or more approval workflow requests that you can approve, reject or cancel at once.
Transaction ID	Displays the approval transaction ID.  Note: The approval transaction ID is generated automatically when the approval workflow request is created.
Submitter ID	Indicates the submitter who has created the approval workflow request.
Action	Indicates the type of action, such as Add, Update (UPD) or Delete (DEL), performed by the submitter during price assignment.

Column	Description
Submit Date	Displays the date and time when the approval workflow request was created by the submitter.
To Do Type	Displays the type of To Do (notification) received for the approval workflow request.
Product	Displays the product code.
Description	Displays the description of the product.
Pricing Currency	Displays the currency in which the pricing is defined.
Start Date	Displays the date from when the product pricing is effective.
End Date	Displays the date till when the product pricing is effective.
View Changes	On clicking the View Change hyperlink, you can view the details of the approval workflow request.
View Log	On clicking the View Log hyperlink, you can view the log of an approval workflow request from the Approve Price Assignment portal before approving, rejecting or cancelling a request.

- Click the View Change hyperlink in the View Changes column corresponding to the approval workflow request on which you want to take an action. A screen appears where you can review the pricing details, tiering ranges, and price assignment characteristics, and accordingly approve, reject or cancel the request based on your observations. In case where the submitter action is Update (UPD), you will be able to compare the existing and new data, and accordingly take an action.

Note:

By default, any modifications will be highlighted in the Yellow (9933FF) color and new additions will be highlighted in the Purple (FFFF66) color. You can also change these colors. For more information on how to set the color for highlighting, refer to the [Prerequisites](#) section.

Only those users who have access to the application services for each business object within the approval workflow group will be able to view the details of the approval workflow request.

- Review the pricing details, tiering ranges, and price assignment characteristics, and if they are not appropriate, then click Reject. The Rejection/Cancellation Reason portal appears.

Note: Alternatively, in the List of Price Assignments zone, you can select the check box corresponding to the approval workflow request that you want to reject and click Reject.

- Select the reason for rejecting the approval workflow request and enter the comments in the respective field.
- Click OK.
- Click Reject. A To Do (notification) is sent to the submitter. You will no longer be able to view this request in your workflow for approval.

## Cancelling Price Assignment Request for an Account

To cancel price assignment request for an account:

1. From the Main Menu, select Approval Workflow Management → Approve Price Assignment. The Approve Price Assignment portal appears. The Search zone consists of the following two sections – Search Criteria and Search Results. The Search Criteria section will help you to search for the approval workflow requests that are pending in your workflow for approval. It contains the following fields:

Field	Description
Customer ID	Used to search for approval workflow requests created when pricing for a product is added, overridden or edited for a customer.
Account ID	Used to search for approval workflow requests created when pricing for a product is added, overridden or edited for an account.
Account Number	Used to search for approval workflow requests created when pricing for a product is added, overridden or edited for an account.
Price List Description	Used to search for approval workflow requests created when product is assigned to a price list.
Submitter ID	Used to search the approval workflow requests that are created by a particular submitter.

2. Enter the account ID or account number as the search criteria.
3. Click Refresh. The following columns are displayed in the Search Results section:

Column	Description
Account ID	Displays the account ID generated by the application.
Account Number	Displays the ID generated by an external system.
Division	Displays the division to which the account belongs.

4. Click the Broadcast (  ) icon corresponding to the account whose price assignments you want to review for approval. The List of Price Assignments zone appears with the following columns:

Column	Description
Select All	Allows you to select one or more approval workflow requests that you can approve, reject or cancel at once.
Transaction ID	Displays the approval transaction ID.  Note: The approval transaction ID is generated automatically when the approval workflow request is created.
Submitter ID	Indicates the submitter who has created the approval workflow request.
Action	Indicates the type of action, such as Add, Update (UPD) or Delete (DEL), performed by the submitter during price assignment.
Submit Date	Displays the date and time when the approval workflow request was created by the submitter.

Column	Description
To Do Type	Displays the type of To Do (notification) received for the approval workflow request.
Product	Displays the product code.
Description	Displays the description of the product.
Pricing Currency	Displays the currency in which the pricing is defined.
Start Date	Displays the date from when the product pricing is effective.
End Date	Displays the date till when the product pricing is effective.
View Changes	On clicking the View Change hyperlink, you can view the details of the approval workflow request.
View Log	On clicking the View Log hyperlink, you can view the log of an approval workflow request from the Approve Price Assignment portal before approving, rejecting or cancelling a request.

- Click the View Change hyperlink in the View Changes column corresponding to the approval workflow request on which you want to take an action. A screen appears where you can review the pricing details, tiering ranges, and price assignment characteristics, and accordingly approve, reject or cancel the request based on your observations. In case where the submitter action is Update (UPD), you will be able to compare the existing and new data, and accordingly take an action.

Note:

By default, any modifications will be highlighted in the Yellow (9933FF) color and new additions will be highlighted in the Purple (FFFF66) color. You can also change these colors. For more information on how to set the color for highlighting, refer to the [Prerequisites](#) section.

Only those users who have access to the application services for each business object within the approval workflow group will be able to view the details of the approval workflow request.

- Review the pricing details, tiering ranges, and price assignment characteristics, and if you want to cancel the request, then click Cancel. The Rejection/Cancellation Reason portal appears.

Note: Alternatively, in the List of Price Assignments zone, you can select the check box corresponding to the approval workflow request that you want to cancel and click Cancel.

- Select the reason for cancelling the approval workflow request and enter the comments in the respective field.
- Click OK.
- Click Cancel. You will no longer be able to view this request in your workflow for approval.

## Cancelling Price Assignment Request for a Price List

To cancel price assignment request for a price list:

1. From the Main Menu, select Approval Workflow Management → Approve Price Assignment. The Approve Price Assignment portal appears. The Search zone consists of the following two sections – Search Criteria and Search Results. The Search Criteria section will help you to search for the approval workflow requests that are pending in your workflow for approval. It contains the following fields:

Field	Description
Customer ID	Used to search for approval workflow requests created when pricing for a product is added, overridden or edited for a customer.
Account ID	Used to search for approval workflow requests created when pricing for a product is added, overridden or edited for an account.
Account Number	Used to search for approval workflow requests created when pricing for a product is added, overridden or edited for an account.
Price List Description	Used to search for approval workflow requests created when product is assigned to a price list.
Submitter ID	Used to search the approval workflow requests that are created by a particular submitter.

2. Enter the description of the price list as the search criteria.
3. Click Refresh. The following columns are displayed in the Search Results section:

Column	Description
Price List	Displays the unique identifier generated by the system for the price list.
Price List Description	Displays the description of the price list.
Division	Displays the division to which the price list belongs.

4. Click the Broadcast (  ) icon corresponding to the price list whose price assignments you want to review for approval. The List of Price Assignments zone appears with the following columns:

Column	Description
Select All	Allows you to select one or more approval workflow requests that you can approve, reject or cancel at once.
Transaction ID	Displays the approval transaction ID.  Note: The approval transaction ID is generated automatically when the approval workflow request is created.
Submitter ID	Indicates the submitter who has created the approval workflow request.
Action	Indicates the type of action, such as Add, Update (UPD) or Delete (DEL), performed by the submitter during price assignment.

Column	Description
Submit Date	Displays the date and time when the approval workflow request was created by the submitter.
To Do Type	Displays the type of To Do (notification) received for the approval workflow request.
Product	Displays the product code.
Description	Displays the description of the product.
Pricing Currency	Displays the currency in which the pricing is defined.
Start Date	Displays the date from when the product pricing is effective.
End Date	Displays the date till when the product pricing is effective.
View Changes	On clicking the View Change hyperlink, you can view the details of the approval workflow request.
View Log	On clicking the View Log hyperlink, you can view the log of an approval workflow request from the Approve Price Assignment portal before approving, rejecting or cancelling a request.

- Click the View Change hyperlink in the View Changes column corresponding to the approval workflow request on which you want to take an action. A screen appears where you can review the pricing details, tiering ranges, and price assignment characteristics, and accordingly approve, reject or cancel the request based on your observations. In case where the submitter action is Update (UPD), you will be able to compare the existing and new data, and accordingly take an action.

Note:

By default, any modifications will be highlighted in the Yellow (9933FF) color and new additions will be highlighted in the Purple (FFFF66) color. You can also change these colors. For more information on how to set the color for highlighting, refer to the [Prerequisites](#) section.

Only those users who have access to the application services for each business object within the approval workflow group will be able to view the details of the approval workflow request.

- Review the pricing details, tiering ranges, and price assignment characteristics, and if you want to cancel the request, then click Cancel. The Rejection/Cancellation Reason portal appears.

Note: Alternatively, in the List of Price Assignments zone, you can select the check box corresponding to the approval workflow request that you want to cancel and click Cancel.

- Select the reason for cancelling the approval workflow request and enter the comments in the respective field.
- Click OK.
- Click Cancel. You will no longer be able to view this request in your workflow for approval.

## Cancelling Price Assignment Request for a Customer

To cancel price assignment request for a customer:

1. From the Main Menu, select Approval Workflow Management → Approve Price Assignment. The Approve Price Assignment portal appears. The Search zone consists of the following two sections – Search Criteria and Search Results. The Search Criteria section will help you to search for the approval workflow requests that are pending in your workflow for approval. It contains the following fields:

Field	Description
Customer ID	Used to search for approval workflow requests created when pricing for a product is added, overridden or edited for a customer.
Account ID	Used to search for approval workflow requests created when pricing for a product is added, overridden or edited for an account.
Account Number	Used to search for approval workflow requests created when pricing for a product is added, overridden or edited for an account.
Price List Description	Used to search for approval workflow requests created when product is assigned to a price list.
Submitter ID	Used to search the approval workflow requests that are created by a particular submitter.

2. Enter the customer or person ID as the search criteria.
3. Click Refresh. The following columns are displayed in the Search Results section:

Column	Description
Customer ID	Displays the person ID.
Customer Name	Displays the name of the customer.
Division	Displays the division to which the customer belongs.

4. Click the Broadcast (i) icon corresponding to the customer whose price assignments you want to review for approval. The List of Price Assignments zone appears with the following columns.

Column	Description
Select All	Allows you to select one or more approval workflow requests that you can approve, reject or cancel at once.
Transaction ID	Displays the approval transaction ID.  Note: The approval transaction ID is generated automatically when the approval workflow request is created.
Submitter ID	Indicates the submitter who has created the approval workflow request.
Action	Indicates the type of action, such as Add, Update (UPD) or Delete (DEL), performed by the submitter during price assignment.

Column	Description
Submit Date	Displays the date and time when the approval workflow request was created by the submitter.
To Do Type	Displays the type of To Do (notification) received for the approval workflow request.
Product	Displays the product code.
Description	Displays the description of the product.
Pricing Currency	Displays the currency in which the pricing is defined.
Start Date	Displays the date from when the product pricing is effective.
End Date	Displays the date till when the product pricing is effective.
View Changes	On clicking the View Change hyperlink, you can view the details of the approval workflow request.
View Log	On clicking the View Log hyperlink, you can view the log of an approval workflow request from the Approve Price Assignment portal before approving, rejecting or cancelling a request.

- Click the View Change hyperlink in the View Changes column corresponding to the approval workflow request on which you want to take an action. A screen appears where you can review the pricing details, tiering ranges, and price assignment characteristics, and accordingly approve, reject or cancel the request based on your observations. In case where the submitter action is Update (UPD), you will be able to compare the existing and new data, and accordingly take an action.

**Note:**

By default, any modifications will be highlighted in the Yellow (9933FF) color and new additions will be highlighted in the Purple (FFFF66) color. You can also change these colors. For more information on how to set the color for highlighting, refer to the [Prerequisites](#) section.

Only those users who have access to the application services for each business object within the approval workflow group will be able to view the details of the approval workflow request.

- Review the pricing details, tiering ranges, and price assignment characteristics, and if you want to cancel the request, then click Cancel. The Rejection/Cancellation Reason portal appears.

**Note:** Alternatively, in the List of Price Assignments zone, you can select the check box corresponding to the approval workflow request that you want to cancel and click Cancel.

- Select the reason for cancelling the approval workflow request and enter the comments in the respective field.
- Click OK.
- Click Cancel. You will no longer be able to view this request in your workflow for approval.

## Modifying Price Assignment Request for an Account

To modify price assignment request for an account:

1. From the Main Menu, select Approval Workflow Management → Modify Price Assignment. The Modify Price Assignment portal appears. The Search zone consists of the following two sections – Search Criteria and Search Results. The Search Criteria section will help you to view the approval workflow requests which are in the Pending Approval status. It contains the following fields:

Field	Description
Customer ID	Used to search for approval workflow requests created when pricing for a product is added, overridden or edited for a customer.
Account ID	Used to search for approval workflow requests created when pricing for a product is added, overridden or edited for an account.
Account Number	Used to search for approval workflow requests created when pricing for a product is added, overridden or edited for an account.
Price List Description	Used to search for approval workflow requests created when product is assigned to a price list.
Submitter ID	Used to search the approval workflow requests that are created by a particular submitter.

2. Enter the account ID or account number as the search criteria.
3. Click Refresh. The following columns are displayed in the Search Results section:

Column	Description
Account ID	Displays the account ID generated by the application.
Account Number	Displays the ID generated by an external system.
Division	Displays the division to which the account belongs.

4. Click the Broadcast (📢) icon corresponding to the account whose price assignment requests you want to modify. The List of Price Assignments zone appears with the following columns:

Column	Description
Transaction ID	Displays the approval transaction ID.  Note: The approval transaction ID is generated automatically when the approval workflow request is created.
Submitter ID	Indicates the submitter who has created the approval workflow request.
Action	Indicates the type of action, such as Add, Update (UPD) or Delete (DEL), performed by the submitter during price assignment.
Submit Date	Displays the date and time when the approval workflow request was created by the submitter.

Column	Description
To Do Type	Displays the type of To Do (notification) received for the approval workflow request.
Product	Displays the product code.
Description	Displays the description of the product.
Pricing Currency	Displays the currency in which the pricing is defined.
Start Date	Displays the date from when the product pricing is effective.
End Date	Displays the date till when the product pricing is effective.
Modify	On clicking the Modify hyperlink, you can review and modify the details of the approval workflow request.
Withdraw	On clicking the Withdraw hyperlink, you can withdraw the approval workflow request. Once you withdraw the request, no further action will be taken on the request.  For more information, refer to <a href="#">Withdrawing Price Assignment Request</a> .
View Log	On clicking the View Log hyperlink, you can view the log of an approval workflow request from the Modify Price Assignment portal before modifying or withdrawing a request.

- Click the Modify hyperlink in the Modify column corresponding to the approval workflow request that you want to modify. A screen appears where you can modify the pricing details, tiering ranges, and price assignment characteristics.

Note: Only those users who have access to the application services for each business object within the approval workflow group will be able to modify the details of the approval workflow request.

- Make the required changes.
- Click Save. The approval workflow request is updated.

## Modifying Price Assignment Request for a Price List

To modify price assignment request for a price list:

- From the Main Menu, select Approval Workflow Management → Modify Price Assignment. The Modify Price Assignment portal appears. The Search zone consists of the following two sections – Search Criteria and Search Results. The Search Criteria section will help you to view the approval workflow requests which are in the Pending Approval status. It contains the following fields:

Field	Description
Customer ID	Used to search for approval workflow requests created when pricing for a product is added, overridden or edited for a customer.
Account ID	Used to search for approval workflow requests created when pricing for a product is added, overridden or edited for an account.
Account Number	Used to search for approval workflow requests created when pricing for a product is added, overridden or edited for an account.

Field	Description
Price List Description	Used to search for approval workflow requests created when product is assigned to a price list.
Submitter ID	Used to search the approval workflow requests that are created by a particular submitter.

2. Enter the description of the price list as the search criteria.
3. Click Refresh. The following columns are displayed in the Search Results section:

Column	Description
Price List	Displays the unique identifier generated by the system for the price list.
Price List Description	Displays the description of the price list.
Division	Displays the division to which the price list belongs.

4. Click the Broadcast (📢) icon corresponding to the price list whose price assignment requests you want to modify. The List of Price Assignments zone appears with the following columns:

Column	Description
Transaction ID	Displays the approval transaction ID.  Note: The approval transaction ID is generated automatically when the approval workflow request is created.
Submitter ID	Indicates the submitter who has created the approval workflow request.
Action	Indicates the type of action, such as Add, Update (UPD) or Delete (DEL), performed by the submitter during price assignment.
Submit Date	Displays the date and time when the approval workflow request was created by the submitter.
To Do Type	Displays the type of To Do (notification) received for the approval workflow request.
Product	Displays the product code.
Description	Displays the description of the product.
Pricing Currency	Displays the currency in which the pricing is defined.
Start Date	Displays the date from when the product pricing is effective.
End Date	Displays the date till when the product pricing is effective.
Modify	On clicking the Modify hyperlink, you can review and modify the details of the approval workflow request.
Withdraw	On clicking the Withdraw hyperlink, you can withdraw the approval workflow request. Once you withdraw the request, no further action will be taken on the request.  For more information, refer to <a href="#">Withdrawing Price Assignment Request</a> .
View Log	On clicking the View Log hyperlink, you can view the log of an approval workflow request from the Modify Price Assignment portal before modifying or withdrawing a request.

- Click the **Modify** hyperlink in the **Modify** column corresponding to the approval workflow request that you want to modify. A screen appears where you can modify the pricing details, tiering ranges, and price assignment characteristics.

Note: Only those users who have access to the application services for each business object within the approval workflow group will be able to modify the details of the approval workflow request.

- Make the required changes.
- Click **Save**. The approval workflow request is updated.

## Modifying Price Assignment Request for a Customer

To modify price assignment request for a customer:

- From the Main Menu, select **Approval Workflow Management** → **Modify Price Assignment**. The **Modify Price Assignment** portal appears. The Search zone consists of the following two sections – **Search Criteria** and **Search Results**. The **Search Criteria** section will help you to view the approval workflow requests which are in the **Pending Approval** status. It contains the following fields:

Field	Description
Customer ID	Used to search for approval workflow requests created when pricing for a product is added, overridden or edited for a customer.
Account ID	Used to search for approval workflow requests created when pricing for a product is added, overridden or edited for an account.
Account Number	Used to search for approval workflow requests created when pricing for a product is added, overridden or edited for an account.
Price List Description	Used to search for approval workflow requests created when product is assigned to a price list.
Submitter ID	Used to search the approval workflow requests that are created by a particular submitter.

- Enter the customer or person ID as the search criteria.
- Click **Refresh**. The following columns are displayed in the **Search Results** section:

Column	Description
Customer ID	Displays the person ID.
Customer Name	Displays the name of the customer.
Division	Displays the division to which the customer belongs.

4. Click the Broadcast (📢) icon corresponding to the customer whose price assignment requests you want to modify. The List of Price Assignments zone appears with the following columns:

Column	Description
Transaction ID	Displays the approval transaction ID.  Note: The approval transaction ID is generated automatically when the approval workflow request is created.
Submitter ID	Indicates the submitter who has created the approval workflow request.
Action	Indicates the type of action, such as Add, Update (UPD) or Delete (DEL), performed by the submitter during price assignment.
Submit Date	Displays the date and time when the approval workflow request was created by the submitter.
To Do Type	Displays the type of To Do (notification) received for the approval workflow request.
Product	Displays the product code.
Description	Displays the description of the product.
Pricing Currency	Displays the currency in which the pricing is defined.
Start Date	Displays the date from when the product pricing is effective.
End Date	Displays the date till when the product pricing is effective.
Modify	On clicking the Modify hyperlink, you can review and modify the details of the approval workflow request.
Withdraw	On clicking the Withdraw hyperlink, you can withdraw the approval workflow request. Once you withdraw the request, no further action will be taken on the request.  For more information, refer to <a href="#">Withdrawing Price Assignment Request</a> .
View Log	On clicking the View Log hyperlink, you can view the log of an approval workflow request from the Modify Price Assignment portal before modifying or withdrawing a request.

5. Click the Modify hyperlink in the Modify column corresponding to the approval workflow request that you want to modify. A screen appears where you can modify the pricing details, tiering ranges, and price assignment characteristics.

Note: Only those users who have access to the application services for each business object within the approval workflow group will be able to modify the details of the approval workflow request.

6. Make the required changes.  
7. Click Save. The approval workflow request is updated.

## Resolving Price Assignment Request for an Account

To resolve price assignment request for an account:

1. From the Main Menu, select Approval Workflow Management → Resolve Price Assignment. The Resolve Price Assignment portal appears. The Search zone consists of the following two sections – Search Criteria and Search Results. The Search Criteria section will help you to view the approval workflow requests rejected by approvers and pending for you to resolve. It contains the following fields:

Field	Description
Customer ID	Used to search for approval workflow requests created when pricing for a product is added, overridden or edited for a customer.
Account ID	Used to search for approval workflow requests created when pricing for a product is added, overridden or edited for an account.
Account Number	Used to search for approval workflow requests created when pricing for a product is added, overridden or edited for an account.
Price List Description	Used to search for approval workflow requests created when product is assigned to a price list.
Submitter ID	Used to search the approval workflow requests that are created by a particular submitter.

2. Enter the account ID or account number as the search criteria.
3. Click Refresh. The following columns are displayed in the Search Results section:

Column	Description
Account ID	Displays the account ID generated by the application.
Account Number	Displays the ID generated by an external system.
Division	Displays the division to which the account belongs.

4. Click the Broadcast (📢) icon corresponding to the account whose price assignment requests you want to resolve. The List of Price Assignments zone appears with the following columns:

Column	Description
Transaction ID	Displays the approval transaction ID.  Note: The approval transaction ID is generated automatically when the approval workflow request is created.
Submitter ID	Indicates the submitter who has created the approval workflow request.
Action	Indicates the type of action, such as Add, Update (UPD) or Delete (DEL), performed by the submitter during price assignment.
Submit Date	Displays the date and time when the approval workflow request was created by the submitter.

Column	Description
To Do Type	Displays the type of To Do (notification) received for the approval workflow request.
Product	Displays the product code.
Description	Displays the description of the product.
Pricing Currency	Displays the currency in which the pricing is defined.
Start Date	Displays the date from when the product pricing is effective.
End Date	Displays the date till when the product pricing is effective.
Approver ID	Indicates the approver who has rejected the approval workflow request.
Reject Date	Displays the date and time when the approval workflow request was rejected by the approver.
Reject Reason	Indicates the reason why the approval workflow request has been rejected.
Reject Comment	Displays the additional details entered by the approver on rejecting the approval workflow request.
Resolve	On clicking the Resolve hyperlink, you can modify the details of the approval workflow request and resubmit the request. On resubmitting, the approval workflow process starts once again from the first level in the hierarchy.
Withdraw	On clicking the Withdraw hyperlink, you can withdraw the approval workflow request. Once you withdraw the request, no further action will be taken on the request.  For more information, refer to <a href="#">Withdrawing Price Assignment Request</a> .
View Log	On clicking the View Log hyperlink, you can view the log of an approval workflow request from the Resolve Price Assignment portal before resolving or withdrawing a request.

- Click the Resolve hyperlink in the Resolve column corresponding to the approval workflow request that you want to resolve. A screen appears where you can modify the pricing details, tiering ranges, and price assignment characteristics.

Note: Only those users who have access to the application services for each business object within the approval workflow group will be able to resolve the request and resubmit it for approval.

- Make the required changes.
- Click Save. The approval workflow request is updated and resubmitted for approval.

## Resolving Price Assignment Request for a Price List

To resolve price assignment request for a price list:

- From the Main Menu, select Approval Workflow Management → Resolve Price Assignment. The Resolve Price Assignment portal appears. The Search zone consists of the following two sections – Search Criteria and Search Results. The Search Criteria section will help you to view the approval workflow requests rejected by approvers and pending for you to resolve. It contains the following fields:

Field	Description
Customer ID	Used to search for approval workflow requests created when pricing for a product is added, overridden or edited for a customer.
Account ID	Used to search for approval workflow requests created when pricing for a product is added, overridden or edited for an account.
Account Number	Used to search for approval workflow requests created when pricing for a product is added, overridden or edited for an account.
Price List Description	Used to search for approval workflow requests created when product is assigned to a price list.
Submitter ID	Used to search the approval workflow requests that are created by a particular submitter.

2. Enter the description of the price list as the search criteria.
3. Click Refresh. The following columns are displayed in the Search Results section:

Column	Description
Price List	Displays the unique identifier generated by the system for the price list.
Price List Description	Displays the description of the price list.
Division	Displays the division to which the price list belongs.

4. Click the Broadcast  icon corresponding to the price list whose price assignment requests you want to resolve. The List of Price Assignments zone appears with the following columns:

Column	Description
Transaction ID	Displays the approval transaction ID.  <div style="background-color: #ffffcc; padding: 5px;">Note: The approval transaction ID is generated automatically when the approval workflow request is created.</div>
Submitter ID	Indicates the submitter who has created the approval workflow request.
Action	Indicates the type of action, such as Add, Update (UPD) or Delete (DEL), performed by the submitter during price assignment.
Submit Date	Displays the date and time when the approval workflow request was created by the submitter.
To Do Type	Displays the type of To Do (notification) received for the approval workflow request.
Product	Displays the product code.
Description	Displays the description of the product.
Pricing Currency	Displays the currency in which the pricing is defined.
Start Date	Displays the date from when the product pricing is effective.
End Date	Displays the date till when the product pricing is effective.
Approver ID	Indicates the approver who has rejected the approval workflow request.

Column	Description
Reject Date	Displays the date and time when the approval workflow request was rejected by the approver.
Reject Reason	Indicates the reason why the approval workflow request has been rejected.
Reject Comment	Displays the additional details entered by the approver on rejecting the approval workflow request.
Resolve	On clicking the Resolve hyperlink, you can modify the details of the approval workflow request and resubmit the request. On resubmitting, the approval workflow process starts once again from the first level in the hierarchy.
Withdraw	On clicking the Withdraw hyperlink, you can withdraw the approval workflow request. Once you withdraw the request, no further action will be taken on the request.  For more information, refer to <a href="#">Withdrawing Price Assignment Request</a> .
View Log	On clicking the View Log hyperlink, you can view the log of an approval workflow request from the Resolve Price Assignment portal before resolving or withdrawing a request.

- Click the Resolve hyperlink in the Resolve column corresponding to the approval workflow request that you want to resolve. A screen appears where you can modify the pricing details, tiering ranges, and price assignment characteristics.

Note: Only those users who have access to the application services for each business object within the approval workflow group will be able to resolve the request and resubmit it for approval.

- Make the required changes.
- Click Save. The approval workflow request is updated and resubmitted for approval.

## Resolving Price Assignment Request for a Customer

To resolve price assignment request for a customer:

- From the Main Menu, select Approval Workflow Management → Resolve Price Assignment. The Resolve Price Assignment portal appears. The Search zone consists of the following two sections – Search Criteria and Search Results. The Search Criteria section will help you to view the approval workflow requests rejected by approvers and pending for you to resolve. It contains the following fields:

Field	Description
Customer ID	Used to search for approval workflow requests created when pricing for a product is added, overridden or edited for a customer.
Account ID	Used to search for approval workflow requests created when pricing for a product is added, overridden or edited for an account.
Account Number	Used to search for approval workflow requests created when pricing for a product is added, overridden or edited for an account.
Price List Description	Used to search for approval workflow requests created when product is assigned to a price list.

Field	Description
Submitter ID	Used to search the approval workflow requests that are created by a particular submitter.

2. Enter the customer or person ID as the search criteria.
3. Click Refresh. The following columns are displayed in the Search Results section:

Column	Description
Customer ID	Displays the person ID.
Customer Name	Displays the name of the customer.
Division	Displays the division to which the customer belongs.

4. Click the Broadcast (📢) icon corresponding to the customer whose price assignment requests you want to resolve. The List of Price Assignments zone appears with the following columns:

Column	Description
Transaction ID	Displays the approval transaction ID.  Note: The approval transaction ID is generated automatically when the approval workflow request is created.
Submitter ID	Indicates the submitter who has created the approval workflow request.
Action	Indicates the type of action, such as Add, Update (UPD) or Delete (DEL), performed by the submitter during price assignment.
Submit Date	Displays the date and time when the approval workflow request was created by the submitter.
To Do Type	Displays the type of To Do (notification) received for the approval workflow request.
Product	Displays the product code.
Description	Displays the description of the product.
Pricing Currency	Displays the currency in which the pricing is defined.
Start Date	Displays the date from when the product pricing is effective.
End Date	Displays the date till when the product pricing is effective.
Approver ID	Indicates the approver who has rejected the approval workflow request.
Reject Date	Displays the date and time when the approval workflow request was rejected by the approver.
Reject Reason	Indicates the reason why the approval workflow request has been rejected.
Reject Comment	Displays the additional details entered by the approver on rejecting the approval workflow request.
Resolve	On clicking the Resolve hyperlink, you can modify the details of the approval workflow request and resubmit the request. On resubmitting, the approval workflow process starts once again from the first level in the hierarchy.

Column	Description
Withdraw	On clicking the Withdraw hyperlink, you can withdraw the approval workflow request. Once you withdraw the request, no further action will be taken on the request.  For more information, refer to <a href="#">Withdrawing Price Assignment Request</a> .
View Log	On clicking the View Log hyperlink, you can view the log of an approval workflow request from the Resolve Price Assignment portal before resolving or withdrawing a request.

- Click the Resolve hyperlink in the Resolve column corresponding to the approval workflow request that you want to resolve. A screen appears where you can modify the pricing details, tiering ranges, and price assignment characteristics.

Note: Only those users who have access to the application services for each business object within the approval workflow group will be able to resolve the request and resubmit it for approval.

- Make the required changes.
- Click Save. The approval workflow request is updated and resubmitted for approval.

## Withdrawing Price Assignment Request

You can withdraw a price assignment request when it is in the Pending Approval status or when it has been rejected by an approver at any level in the hierarchy. To withdraw a price assignment request for an account, a customer or a price list:

- Click the Withdraw hyperlink in the Withdraw column corresponding to the approval workflow request that you want to withdraw. A message box appears confirming whether you want to delete the approval workflow request.
- Click OK. You will no longer be able to view this request in your workflow.

Note: The system provides you with a facility in case you want to view the log of an approval workflow request from the Modify Price Assignment and the Resolve Price Assignment portals before withdrawing a request. You can view the log of an approval workflow request by clicking the View Log hyperlink in the View Log column corresponding to the request.

## Approval Workflow Administration

To setup the approval workflow process, the following must be configured by a system administrator:

- Approval Workflow Group – The system has predefined data objects, such as person, account, contract, and so on. These predefined data objects are managed through business objects. Approval workflow is configured to act on approval workflow group which consists of either one or more business objects. When you add multiple business objects in the approval workflow group, the system generates a single approval workflow request for the changes made to these objects. This would be useful if you have created custom UI maps that can be used to update or add data for multiple business objects. In this case, the approver will receive one request to approve changes made to these objects rather than receiving separate request for changes made to each business object.

- **Approval Workflow Chain** – The system supports multi-level approval workflow. You can define an approval workflow chain or hierarchy where users with different To Do role at each level can approve or reject the approval workflow request. For example, you can define a chain called Material Procurement with two levels of approval. At the first level, a user with the M1 role will approve or reject the request and at the second level, a user with the M2 role will approve or reject the request.

When the approval workflow request is created, a notification in the form of To Do is sent to all the users with the To Do role defined at the first level in the hierarchy. Once the request is approved at the first level, a notification is sent to all the users with the To Do role defined at the next level in the hierarchy. This process continues till the approval is received from all the levels in the hierarchy. Once the users at all the levels approve the request, the changes are reflected in the database. However, if an approver at any level in the hierarchy rejects the request, a notification is sent to the user who has created the request.

- **Approval Workflow Criteria** – The approval workflow request is associated to the approval workflow chain based on the approval workflow criteria. For example, approval workflow requests for the Account group can be associated with different approval workflow chains based on account's division. In this case, account's division would be the criteria type and division equal to California would be the criteria. Therefore, you need to define the criteria type for each business object that you would like to use for associating approval workflow requests with the approval workflow chains. The system also provides you with a default criteria type named DEF, which can be used for associating approval workflow requests with the approval workflow chains.
- **Approval Workflow Group Chain Linkage** – Once the approval workflow group and chain are created, you must link them using the approval workflow criteria. For example, if you want approval workflow requests for all the accounts in the California division should be sent to Chain A, then you will have to create a linkage between the Account group and the Chain A using the criteria, division is equal to California. You can also link approval workflow group and chain using the default criterion type, DEF. In this case, you must also set the value of the default criterion type to Y.
- **Approval Workflow Settings, Active Flag** – The Active flag is used to indicate whether approval workflow request should be created for an approval workflow group or not. If the flag for an approval workflow group (for example, the Account group) is set to Yes, then the approval workflow request is created when changes are made to any account.
- **Approval Workflow Reason Code** – You have to define the reason codes which are used when the approval workflow request is either rejected or cancelled. The reason code helps to indicate the reason why a particular request has been rejected or cancelled.

For price list, product and price assignment, the configuration for approval workflow will be shipped with ORMB. The following groups will be available in the system:

- C1PRODUCT – Contains the C1\_PRICEITEM\_BO business object
- C1PRICELST – Contains the C1\_F\_ADDPLBO business object
- C1PRICEASG – Contains the C1\_PRICECOMP and C1\_PRICEASGN\_BO business objects

After creating the approval workflow chains, you need to link these groups to the corresponding approval workflow chains. To setup the approval workflow process for price assignment, you need to do the following:

For Product	<ol style="list-style-type: none"> <li>1. If a Determine BO algorithm is not specified for the C1_PRICEITEM maintenance object, create a Determine BO algorithm using the algorithm type F1-MOBO and specify C1_PRICEITEM_BO as the business object on this algorithm.</li> <li>2. Attach this algorithm on the Determine BO algorithm spot of the C1_PRICEITEM MO.</li> <li>3. Link the C1PRODUCT group to the appropriate approval workflow chain.</li> <li>4. Activate the approval workflow for the C1PRODUCT group by setting the Active flag in the Approval Workflow Settings portal to Y.</li> </ol>
For Price List	<ol style="list-style-type: none"> <li>1. If a Determine BO algorithm is not specified for the C1_PRICELIST maintenance object, create a Determine BO algorithm using the algorithm type F1-MOBO and specify C1_F_ADDPLBO as the business object on this algorithm.</li> <li>2. Attach this algorithm on the Determine BO algorithm spot of the C1_PRICELIST MO.</li> <li>3. Link the C1PRICELST group to the appropriate approval workflow chain.</li> <li>4. Activate the approval workflow for the C1PRICELST group by setting the Active flag in the Approval Workflow Settings portal to Y.</li> </ol>
For Price Assignments	<ol style="list-style-type: none"> <li>1. If a Determine BO algorithm is not specified for the C1_PRICECOMP maintenance object, create a Determine BO algorithm using the algorithm type F1-MOBO and specify C1_PRICECOMP as the business object on this algorithm.</li> <li>2. Attach this algorithm on the Determine BO algorithm spot of the C1_PRICECOMP MO.</li> <li>3. If a Determine BO algorithm is not specified for the C1_PRICEASGN maintenance object, create a Determine BO algorithm using the algorithm type F1-MOBO and specify C1_PRICEASGN_BO as the business object on this algorithm.</li> <li>4. Attach this algorithm on the Determine BO algorithm spot of the C1_PRICEASGN MO.</li> <li>5. Link the C1PRICEASG group to the appropriate approval workflow chain.</li> <li>6. Activate the approval workflow for the C1PRICEASG group by setting the Active flag in the Approval Workflow Settings portal to Y.</li> </ol>

Similarly, for invoice group, the configuration for approval workflow will be shipped with ORMB. The following groups will be available in the system:

- C1IGADD
- C1IGUPD

After creating the approval workflow chains, you need to link these groups to the corresponding approval workflow chains and activate the approval workflow for these groups by setting the Active flag in the Approval Workflow Settings portal to Y.

## Approval Workflow Group

This portal allows you to define an approval workflow group. A group can contain one or multiple business objects. You can access this portal by selecting Admin Menu → A → Approval Workflow Group.

The Approval Workflow Group portal is divided into the following zones:

- Approval Workflow Groups
- Business Objects
- Group BO Relation

## Approval Workflow Groups

This zone displays a list of approval workflow groups that are already defined in the system. You can add, edit and delete an approval workflow group through this zone.

The following columns are displayed in this zone:

Column	Description
Code	Displays the code of the approval workflow group.
Description	Displays the description of the approval workflow group.
Display UI Map	Indicates the UI Map that will be used for viewing data of the business objects within the approval workflow group.
Input UI Map	Indicates the UI Map that will be used for modifying data of the business objects within the approval workflow group.
Dependency Algorithm	Indicates the dependency algorithm that will be triggered before creating the approval workflow request.  Note: This algorithm can be used to check for all the prerequisites before creating the approval workflow request.
Approval Algorithm	Indicates the algorithm that will be triggered after the approval workflow request is approved by the approver at the last level in the hierarchy.
Approval Post Processing	Indicates the algorithm that will be triggered after the approval workflow request is approved by the approver at the last level in the hierarchy and changes are committed to the database.
Transaction Creation Algorithm	Indicates the algorithm that will create approval workflow requests.
Data Retrieval Algorithm	Indicates the data retrieval algorithm for an approval workflow group. This algorithm is used to retrieve the original data for the group from the application that will help an approver to compare the original and new data in case where the submitter action is Update (UPD).
Edit	Allows you to navigate to the Approval Workflow Group portal where you can edit the details of the approval workflow group.
Delete	Allows you to delete the approval workflow group.

On clicking the Broadcast button (  ) corresponding to the approval workflow group, the Business Objects zone appears.

## Business Objects

This zone displays a list of business objects that you have added in the selected approval workflow group. You can add, edit and delete the business objects from the approval workflow group through this zone.

The following columns are displayed in this zone:

Column	Description
Code	Displays the code of the business object.
Description	Displays the description of the business object.
Sequence	Indicates the order in which the business objects will be committed to the database.
Reference ID 1	Displays the XPATH key of the field in the business object that you want to use as criteria for searching the approval workflow request.
Reference ID 2	Displays the XPATH key of the field in the business object that you want to use as criteria for searching the approval workflow request.
Reference ID 3	Displays the XPATH key of the field in the business object that you want to use as criteria for searching the approval workflow request.
Reference ID 4	Displays the XPATH key of the field in the business object that you want to use as criteria for searching the approval workflow request.
List Flag	Indicates whether the group contains one instance of the business object or multiple.
Edit	Allows you to navigate to the Business Object portal where you can change the business object if required.
Delete	Allows you to delete the business object from the approval workflow group.

On clicking the Broadcast button (  ) corresponding to the business object, the Group BO Relation zone appears.

## Group BO Relation

This zone indicates how the business objects within a group are linked to each other. The following columns are displayed in this zone:

Column	Description
Parent BO	Displays the parent business object. This would be one of the business objects within the group.
From Key	Displays the XPATH key of the field or list of fields in the parent business object.
To Key	Displays the XPATH key of the field or list of fields in the current business object.
Sequence	Indicates the order in which the business objects will be grouped.
Edit	Allows you to navigate to the Group BO Relation portal where you can add or change business object's relationships.
Delete	Allows you to delete the business object's relationships.

Column	Description
BO Sequence Number	Indicates the sequence number of the business object that you have selected.

## Add Approval Workflow Group

This portal allows you to create a new approval workflow group. You can access this portal by clicking the Add link in the Approval Workflow Groups zone.

The following fields are displayed in this portal:

Field	Description
Code	Used to specify the code that uniquely identifies the approval workflow group.
Description	Used to specify the description for the approval workflow group.
Display UI Map	<p>Used to specify the UI Map that you want to use for viewing data of the business objects within the approval workflow group. This field is optional.</p> <p>For more information on how to create a Display UI map manually, refer to Prerequisites.</p> <p>Note:</p> <p>If you do not specify the Display UI map for the approval workflow group, it is generated automatically and associated to the approval workflow group when the approval workflow is activated for the group. For more information, refer to <a href="#">Add Approval Workflow Setting</a>.</p> <p>On clicking the Search button corresponding to this field, the Search UI Map portal appears. For more information about this portal, refer to <a href="#">Search UI Map</a>.</p>
Input UI Map	<p>Used to specify the UI Map that you want to use for modifying data of the business objects within the approval workflow group. This field is optional.</p> <p>For more information on how to create an Input UI map manually, refer to Prerequisites.</p> <p>Note:</p> <p>If you do not specify the Input UI map for the approval workflow group, it is generated automatically and associated to the approval workflow group when the approval workflow is activated for the group. For more information, refer to <a href="#">Add Approval Workflow Setting</a>.</p> <p>On clicking the Search button corresponding to this field, the Search UI Map portal appears. For more information about this portal, refer to <a href="#">Search UI Map</a>.</p>

Field	Description
Dependency Algorithm	<p>Used to specify the dependency algorithm that you want to trigger before creating the approval workflow request. This field is optional.</p> <p>Note:</p> <p>This algorithm can be used to check for all the prerequisites before creating the approval workflow request.</p> <p>On clicking the Search button corresponding to this field, the Search Algorithm portal appears. For more information about this portal, refer to <a href="#">Search Algorithm</a>.</p>
Approval Algorithm	<p>Used to specify the algorithm that will be triggered after the approval workflow request is approved by the approver at the last level in the hierarchy. The following algorithms are shipped with ORMB:</p> <ul style="list-style-type: none"> <li>• C1-APPPROD – This approval algorithm is used for the C1PRODUCT group which is shipped with ORMB.</li> <li>• C1-APPPL - This approval algorithm is used for the C1PRICELST group which is shipped with ORMB.</li> <li>• C1-APPASG - This approval algorithm is used for the C1PRICEASG group which is shipped with ORMB.</li> <li>• C1-APPALG – It is a standard algorithm that you can use for approval workflow groups where custom logic is not required.</li> </ul> <p>You can also create your own algorithms for custom UIs.</p> <p>Note: On clicking the Search button corresponding to this field, the Search Algorithm portal appears. For more information about this portal, refer to <a href="#">Search Algorithm</a>.</p>
Approval Post Processing	<p>Used to specify the algorithm that will be triggered after the approval workflow request is approved by the approver at the last level in the hierarchy and changes are committed to the database. This field is optional.</p> <p>Note: On clicking the Search button corresponding to this field, the Search Algorithm portal appears. For more information about this portal, refer to <a href="#">Search Algorithm</a>.</p>

Field	Description
Transaction Creation Algorithm	<p>Used to specify the algorithm that will create approval workflow requests. You can specify either of the following algorithms which are shipped with ORMB or create your own algorithms for custom UIs:</p> <ul style="list-style-type: none"> <li>• C1-APPASGCR - Allows you to create approval workflow requests for price assignment.</li> <li>• C1-AXPROD - Allows you to create approval workflow requests for product.</li> <li>• C1-AXUSR - Allows you to create approval workflow requests for user.</li> <li>• C1-IGCREATE - Allows you to create approval workflow requests for invoice group.</li> <li>• C1-AXCREATE - Allows you to create approval workflow requests. It is a standard algorithm that you can use for most of the base objects.</li> </ul> <p>In case of the base UIs, this algorithm is only used while modifying or resolving a request. The initial approval transaction creation for base UIs takes place through the Audit algorithm attached on the BO.</p> <p>Note: On clicking the Search button corresponding to this field, the Search Algorithm portal appears. For more information about this portal, refer to <a href="#">Search Algorithm</a>.</p>
Data Retrieval Algorithm	<p>Used to specify the data retrieval algorithm for an approval workflow group. This algorithm is used to retrieve the original data for the group from the application that will help an approver to compare the original and new data in case where the submitter action is Update (UPD). You can specify either of the following algorithms which are shipped with ORMB or create your own algorithms for custom UIs:</p> <ul style="list-style-type: none"> <li>• C1-APPIGDR – Allows you to retrieve data for an invoice group.</li> <li>• C1-AXPRICEOV - Allows you to retrieve data for price assignment.</li> <li>• C1_APPDATA - It is a standard algorithm that you can use to retrieve data for most of the base objects.</li> </ul> <p>Note: On clicking the Search button corresponding to this field, the Search Algorithm portal appears. For more information about this portal, refer to <a href="#">Search Algorithm</a>.</p>

The following two buttons are available at the bottom of this portal: Save and Cancel. The Save button creates the approval workflow group and the Cancel button exits the portal without saving the changes.

**Note:**

When you create an approval workflow group for user BO, you need to do the following:

1. Attach the C1-APPTXNBAS algorithm on the Audit algorithm spot of the business object belonging to the USER-SC MO and not the USER MO
2. Attach the C1-APPALGUSR algorithm in the Approval Algorithm field on the Approval Workflow Group portal
3. Attach the C1-AXUSR algorithm in the Transaction Creation Algorithm field on the Approval Workflow Group portal

## Edit Approval Workflow Group

This portal allows you to edit the details of the selected approval workflow group. You can access this portal by clicking the Edit icon in the Edit column corresponding to the approval workflow group in the Approval Workflow Groups zone.

The following fields are displayed in this portal:

Field	Description
Code	Displays the code that uniquely identifies the approval workflow group.
Description	Used to modify the description of the approval workflow group.
Display UI Map	<p>Used to modify the UI Map that you want to use for viewing data of the business objects within the approval workflow group. This field is optional.</p> <p>For more information on how to create a Display UI map manually, refer to Prerequisites.</p> <p>Note:</p> <p>If you clear the Display UI Map field, you need to either manually specify the UI map or regenerate the UI map by clicking the Regenerate UI Maps icon in the Approval Workflow Settings portal. For more information, refer to <a href="#">Approval Workflow Settings</a>.</p> <p>On clicking the Search button corresponding to this field, the Search UI Map portal appears. For more information about this portal, refer to <a href="#">Search UI Map</a>.</p>
Input UI Map	<p>Used to modify the UI Map that you want to use for modifying data of the business objects within the approval workflow group. This field is optional.</p> <p>For more information on how to create an Input UI map manually, refer to Prerequisites.</p> <p>Note:</p> <p>If you clear the Input UI Map field, you need to either manually specify the UI map or regenerate the UI map by clicking the Regenerate UI Maps icon in the Approval Workflow Settings portal. For more information, refer to <a href="#">Approval Workflow Settings</a>.</p> <p>On clicking the Search button corresponding to this field, the Search UI Map portal appears. For more information about this portal, refer to <a href="#">Search UI Map</a>.</p>
Dependency Algorithm	<p>Used to modify the dependency algorithm that you want to trigger before creating the approval workflow request. This field is optional.</p> <p>Note:</p> <p>This algorithm can be used to check for all the prerequisites before creating the approval workflow request.</p> <p>On clicking the Search button corresponding to this field, the Search Algorithm portal appears. For more information about this portal, refer to <a href="#">Search Algorithm</a>.</p>

Field	Description
Approval Algorithm	<p>Used to modify the algorithm that will be triggered after the approval workflow request is approved by the approver at the last level in the hierarchy. The following algorithms are shipped with ORMB:</p> <ul style="list-style-type: none"> <li>• C1-APPPROD – This approval algorithm is used for the C1PRODUCT group which is shipped with ORMB.</li> <li>• C1-APPPL - This approval algorithm is used for the C1PRICELST group which is shipped with ORMB.</li> <li>• C1-APPASG - This approval algorithm is used for the C1PRICEASG group which is shipped with ORMB.</li> <li>• C1-APPALG – It is a standard algorithm that you can use for approval workflow groups where custom logic is not required.</li> </ul> <p>You can also create your own algorithms for custom UIs.</p> <p>Note: On clicking the Search button corresponding to this field, the Search Algorithm portal appears. For more information about this portal, refer to <a href="#">Search Algorithm</a>.</p>
Approval Post Processing	<p>Used to modify the algorithm that will be triggered after the approval workflow request is approved by the approver at the last level in the hierarchy and changes are committed to the database. This field is optional.</p> <p>Note: On clicking the Search button corresponding to this field, the Search Algorithm portal appears. For more information about this portal, refer to <a href="#">Search Algorithm</a>.</p>
Transaction Creation Algorithm	<p>Used to modify the algorithm that will create approval workflow requests. You can specify either of the following algorithms which are shipped with ORMB or create your own algorithms for custom UIs:</p> <ul style="list-style-type: none"> <li>• C1-APPASGCR - Allows you to create approval workflow requests for price assignment.</li> <li>• C1-AXPROD - Allows you to create approval workflow requests for product.</li> <li>• C1-AXUSR - Allows you to create approval workflow requests for user.</li> <li>• C1-IGCREATE - Allows you to create approval workflow requests for invoice group.</li> <li>• C1-AXCREATE - Allows you to create approval workflow requests. It is a standard algorithm that you can use for most of the base objects.</li> </ul> <p>In case of the base UIs, this algorithm is only used while modifying or resolving a request. The initial approval transaction creation for base UIs takes place through the Audit algorithm attached on the BO.</p> <p>Note: On clicking the Search button corresponding to this field, the Search Algorithm portal appears. For more information about this portal, refer to <a href="#">Search Algorithm</a>.</p>

Field	Description
Data Retrieval Algorithm	<p>Used to modify the data retrieval algorithm for an approval workflow group. This algorithm is used to retrieve the original data for the group from the application that will help an approver to compare the original and new data in case where the submitter action is Update (UPD). You can specify either of the following algorithms which are shipped with ORMB or create your own algorithms for custom UIs:</p> <ul style="list-style-type: none"> <li>• C1-APPIGDR – Allows you to retrieve data for an invoice group.</li> <li>• C1-AXPRICEOV - Allows you to retrieve data for price assignment.</li> <li>• C1_APPDATA - It is a standard algorithm that you can use to retrieve data for most of the base objects.</li> </ul> <p>Note: On clicking the Search button corresponding to this field, the Search Algorithm portal appears. For more information about this portal, refer to <a href="#">Search Algorithm</a>.</p>

The following two buttons are available at the bottom of this portal: Save and Cancel. The Save button saves the changes and the Cancel button exits the portal without saving the changes.

## Add Business Object

This portal allows you to add a business object in the approval workflow group. It also allows you to specify how the business objects within the approval workflow group relate to each other. You can access this portal by clicking the Add link in the Business Objects zone.

Note: When you want to add a business object to a newly created approval workflow group, you must click the Broadcast button (  ) corresponding to the approval workflow group and then click the Add link in the Business Objects zone. Otherwise, the Add link will not work.

You should always add a business object that can be created independently and does not require a parent business object first within the approval workflow group. For the subsequent business objects, you should specify how these business objects are related to each other. This helps the system to determine which fields need to be copied from the parent to the dependent business object before the dependent business objects are invoked.

For example, you have a group with two business objects (BOs) - Person and Account. When the Account BO is invoked, an appropriate person ID must be passed in the Account BO. This person ID must come from the Person BO. In this case, the person BO will be defined with no parent BO within the group. However, when the Account BO is added to the group, it must be linked to the Person BO. You can link the Account BO with the Person BO by specifying:

- Person BO as the parent BO
- XPATH of the person ID in the Person BO (in the From Field)
- XPATH of the person ID in the Account BO (in the TO Field)

Before ORMB invokes the Account BO (for validation or for creating the account in the application after the approval is received), ORMB will copy the person ID from person BO to account BO (based on XPATHS) so that the correct person ID is available in account BO before it is invoked.

The following fields are displayed in this portal:

Field	Description
Approval Workflow Group	Displays the code of the approval workflow group.
Business Object	Used to specify the business object that you want to include in the approval workflow group.  Note: On clicking the Search button corresponding to this field, the Search Business Object portal appears. For more information about this portal, refer to <a href="#">Search Business Object</a> .
Reference ID 1	Used to specify the XPATH key of the field in the business object that you want to use as criteria for searching the approval workflow request. This field is optional.
Reference ID 2	Used to specify the XPATH key of the field in the business object that you want to use as criteria for searching the approval workflow request. This field is optional.
Reference ID 3	Used to specify the XPATH key of the field in the business object that you want to use as criteria for searching the approval workflow request. This field is optional.
Reference ID 4	Used to specify the XPATH key of the field in the business object that you want to use as criteria for searching the approval workflow request. This field is optional.
List Flag	Used to indicate whether the group contains one instance of the business object or multiple. For example, if you want to create a group that contains a list of account objects, you need to set this flag for the Account BO to True. If you want to create a group that contains single instance of the business object, you must set this flag for the business object to False.

The following two buttons are available at the bottom of this portal: Save and Cancel. The Save button adds the business object in the approval workflow group and the Cancel button exits the portal without saving the changes.

Note: When you add business objects to an approval workflow group, you need to regenerate the Input and Display UI map by clicking the Regenerate UI Maps icon in the Approval Workflow Settings portal. You must do this only when you are using automatically generated UI maps and not otherwise. For more information, refer to [Approval Workflow Settings](#).

## Edit Business Object

This portal allows you to change the business object in the approval workflow group. You can access this portal by clicking the Edit icon in the Edit column corresponding to the business object in the Business Objects zone.

The following fields are displayed in this portal:

Field	Description
Approval Workflow Group	Displays the code of the approval workflow group.

Field	Description
Business Object	Used to modify the business object that you want to include in the approval workflow group.  Note: On clicking the Search button corresponding to this field, the Search Business Object portal appears. For more information about this portal, refer to <a href="#">Search Business Object</a> .
Reference ID 1	Used to modify the XPATH key of the field in the business object that you want to use as criteria for searching the approval workflow request. This field is optional.
Reference ID 2	Used to modify the XPATH key of the field in the business object that you want to use as criteria for searching the approval workflow request. This field is optional.
Reference ID 3	Used to modify the XPATH key of the field in the business object that you want to use as criteria for searching the approval workflow request. This field is optional.
Reference ID 4	Used to modify the XPATH key of the field in the business object that you want to use as criteria for searching the approval workflow request. This field is optional.
List Flag	Used to indicate whether the group contains one instance of the business object or multiple. For example, if you want to create a group that contains a list of account objects, you need to set this flag for the Account BO to True. If you want to create a group that contains single instance of the business object, you must set this flag for the business object to False.

The following two buttons are available at the bottom of this portal: Save and Cancel. The Save button saves the changes and the Cancel button exits the portal without saving the changes.

Note: When you change business objects in an approval workflow group, you need to regenerate the Input and Display UI map by clicking the Regenerate UI Maps icon in the Approval Workflow Settings portal. You must do this only when you are using automatically generated UI maps and not otherwise. For more information, refer to [Approval Workflow Settings](#).

## Add Group BO Relation

This portal allows you to specify how the business objects within the approval workflow group relate to each other.

Note: When you want to add a BO relation to a newly added business object, you must click the Broadcast button (📢) corresponding to the business object and then click the Add link in the Group BO Relation zone. Otherwise, the Add link will not work.

The following fields are displayed in this portal:

Field	Description
Approval Workflow Group	Displays the code of the approval workflow group.

Field	Description
Parent BO	Used to specify the parent business object. This should be one of the business objects within the group.
From Key	Used to specify the XPATH key of the field or list of fields in the parent business object.
To Key	Used to specify the XPATH key of the field or list of fields in the current business object.

The following two buttons are available at the bottom of this portal: Save and Cancel. The Save button adds the BO relation to the business object and the Cancel button exits the portal without saving the changes.

## Edit Group BO Relation

This portal allows you to change the business object's relationship. You can access this portal by clicking the Edit icon in the Edit column corresponding to the relation record in the Group BO Relation zone.

The following fields are displayed in this portal:

Column	Description
Approval Workflow Group	Displays the code of the approval workflow group.
Parent BO	Used to modify the parent business object. This should be one of the business objects within the group.
From Key	Used to modify the XPATH key of the field or list of fields in the parent business object.
To Key	Used to modify the XPATH key of the field or list of fields in the current business object.

The following two buttons are available at the bottom of this portal: Save and Cancel. The Save button saves the changes and the Cancel button exits the portal without saving the changes.

## Approval Workflow Chain

This portal allows you to define multi-level approval workflow chain. You can access this portal by selecting Admin Menu → A → Approval Workflow Chain.

The Approval Workflow Chain portal is divided into the following zones:

- Approval Workflow Chains
- Approval Levels

### Approval Workflow Chains

This zone displays a list of approval workflow chains that are already defined in the system. You can add, edit and delete an approval workflow chain through this zone.

The following columns are displayed in this zone:

Column	Description
Code	Displays the code of the approval workflow chain.

Column	Description
Description	Displays the description of the approval workflow chain.
To Do Role To Resolve	Indicates that the users with the specified To Do role will be sent a notification when the approval workflow request is rejected by the approver at any level in the hierarchy.  Note: Only those users who have access to the application services for each business object within the approval workflow group will be able to resolve the request and resubmit for approval.
Edit	Allows you to navigate to the Approval Workflow Chain portal where you can edit the details of the approval workflow chain.
Delete	Allows you to delete the approval workflow chain.

## Approval Levels

This zone lists the levels defined in the approval workflow chain. For each level in the hierarchy, a To Do role is specified indicating that users with the respective To Do role can either accept or reject the approval workflow request. You can define, edit and delete the levels in the hierarchy through this zone.

The following columns are displayed in this zone:

Column	Description
Action Algorithm	Indicates the additional action that the system will perform apart from generating a notification when the approver approves or rejects the request.
Level	Indicates the level in the hierarchy.
Approver To Do Role	Indicates that the users with the specified To Do role will either approve or reject the request at this level in the hierarchy.  Note: Only those users who have access to the application services for each business object within the approval workflow group will be able to approve or reject the request.
Approval To Do Type	Indicates the type of notification that will be generated when the approver approves or rejects the request.
Edit	Allows you to navigate to the Approval Level portal where you can edit the details of the level defined in the approval workflow chain.
Delete	Allows you to delete the level in the approval workflow chain.

## Add Approval Workflow Chain

This portal allows you to create a new approval workflow chain. You can access this portal by clicking the Add link in the Approval Workflow Chains zone.

The following fields are displayed in this portal:

Field	Description
Code	Used to specify the code that uniquely identifies the approval workflow chain.
Description	Used to specify the description for the approval workflow chain.

Field	Description
To Do Role To Resolve	Used to specify the To Do role to indicate the users who will be sent a notification when the approval workflow request is rejected by the approver at any level in the hierarchy.
	Note: On clicking the Search button corresponding to this field, the Search To Do Role portal appears. For more information about this portal, refer to <a href="#">Search To Do Role</a> .

The following two buttons are available at the bottom of this portal: Save and Cancel. The Save button creates the approval workflow chain and the Cancel button exits the portal without saving the changes.

## Edit Approval Workflow Chain

This portal allows you to edit the details of the approval workflow chain. You can access this portal by clicking the Edit icon in the Edit column corresponding to the approval workflow chain in the Approval Workflow Chains zone.

The following fields are displayed in this portal:

Field	Description
Code	Displays the code of the approval workflow chain.
Description	Used to modify the description of the approval workflow chain.
To Do Role To Resolve	Used to modify the To Do role to indicate the users who will be sent a notification when the approval workflow request is rejected by the approver at any level in the hierarchy.
	Note: On clicking the Search button corresponding to this field, the Search To Do Role portal appears. For more information about this portal, refer to <a href="#">Search To Do Role</a> .

The following two buttons are available at the bottom of this portal: Save and Cancel. The Save button saves the changes and the Cancel button exits the portal without saving the changes.

## Add Approval Level

This portal allows you to add a level in the approval workflow chain. You can access this portal by clicking the Add link in the Approval Levels zone.

Note: When you want to add a level in a newly created approval workflow chain, you must click the Broadcast button (  ) corresponding to the approval workflow chain and then click the Add link in the Approval Levels zone. Otherwise, the Add link will not work.

The following fields are displayed in this portal:

Field	Description
Code	Displays the code of the approval workflow chain.

Field	Description
Action Algorithm	Used to specify the additional action that you want the system to perform apart from generating a notification when the approver approves or rejects the request. This field is optional.  Note: On clicking the Search button corresponding to this field, the Search Algorithm portal appears. For more information about this portal, refer to <a href="#">Search Algorithm</a> .
Approver To Do Role	Used to specify the To Do role to indicate the users who will either approve or reject the request at this level in the hierarchy.  Note: On clicking the Search button corresponding to this field, the Search To Do Role portal appears. For more information about this portal, refer to <a href="#">Search To Do Role</a> .
Approval To Do Type	Used to specify the type of notification that you want to generate when the approver approves or rejects the request.  Note: On clicking the Search button corresponding to this field, the Search To Do Type portal appears. For more information about this portal, refer to <a href="#">Search To Do Type</a> .

The following two buttons are available at the bottom of this portal: Save and Cancel. The Save button adds the level in the approval workflow chain and the Cancel button exits the portal without saving the changes.

## Edit Approval Level

This portal allows you to edit the details of the level in the approval workflow chain. You can access this portal by clicking the Edit icon in the Edit column corresponding to the level in the Approval Levels zone.

The following fields are displayed in this portal:

Field	Description
Code	Displays the code of the approval workflow chain.
Action Algorithm	Used to modify the additional action that you want the system to perform apart from generating a notification when the approver approves or rejects the request. This field is optional.  Note: On clicking the Search button corresponding to this field, the Search Algorithm portal appears. For more information about this portal, refer to <a href="#">Search Algorithm</a> .
Approver To Do Role	Used to modify the To Do role to indicate the users who will either approve or reject the request at this level in the hierarchy.  Note: On clicking the Search button corresponding to this field, the Search To Do Role portal appears. For more information about this portal, refer to <a href="#">Search To Do Role</a> .

Field	Description
Approval To Do Type	Used to modify the type of notification that you want to generate when the approver approves or rejects the request.
	Note: On clicking the Search button corresponding to this field, the Search To Do Type portal appears. For more information about this portal, refer to <a href="#">Search To Do Type</a> .

The following two buttons are available at the bottom of this portal: Save and Cancel. The Save button saves the changes and the Cancel button exits the portal without saving the changes.

## Approval Workflow Criteria Type

This portal allows you to define approval workflow criteria types. You can access this portal by selecting Admin Menu → A → Approval Workflow Criteria Type.

The Approval Workflow Criteria Type portal contains the Approval Workflow Criteria Types zone.

### Approval Workflow Criteria Types

This zone displays a list of approval workflow criteria types that are already defined in the system. You can add, edit and delete an approval workflow criteria type through this zone.

The following columns are displayed in this zone:

Column	Description
Code	Displays the code of the approval workflow criteria type.
Description	Displays the description of the approval workflow criteria type.
Business Object	Displays the business object for which you have defined the approval workflow criteria type.
Field	Displays the field using which the criteria for associating approval workflow requests with the approval workflow chains will be defined.
Edit	Allows you to navigate to the Approval Workflow Criteria Type portal where you can edit the criteria type if required.
Delete	Allows you to delete the approval workflow criteria type.

Note: The system provides you with a default criteria type named DEF, which can be used for associating approval workflow requests with the approval workflow chains. While using this criteria type for linking approval workflow group and chain, you must always set the value of this criteria type to Y.

## Add Approval Workflow Criteria Type

This portal allows you to create a new approval workflow criteria type. You can access this portal by clicking the Add link in the Approval Workflow Criteria Types zone.

The following fields are displayed in this portal:

Field	Description
Code	Used to specify the code that uniquely identifies the approval workflow criteria type.
Description	Used to specify the description for the approval workflow criteria type.
Business Object	Used to specify the business object for which you are defining the approval workflow criteria type.  Note: On clicking the Search button corresponding to this field, the Search Business Object portal appears. For more information about this portal, refer to <a href="#">Search Business Object</a> .
Field	Used to specify the field that you will use to define the criteria for associating approval workflow requests with the approval workflow chains.  Note: On clicking the Search button corresponding to this field, the Search Business Object Field portal appears. For more information about this portal, refer to <a href="#">Search Business Object Field</a> .

The following two buttons are available at the bottom of this portal: Save and Cancel. The Save button creates the approval workflow criteria type and the Cancel button exits the portal without saving the changes.

## Edit Approval Workflow Criteria Type

This portal allows you to edit the approval workflow criteria type. You can access this portal by clicking the Edit icon in the Edit column corresponding to the criteria type in the Approval Workflow Criteria Types zone.

The following fields are displayed in this portal:

Field	Description
Code	Displays the code of the approval workflow criteria type.
Description	Used to modify the description of the approval workflow criteria type.
Business Object	Used to modify the business object for which you are defining the approval workflow criteria type.  Note: On clicking the Search button corresponding to this field, the Search Business Object portal appears. For more information about this portal, refer to <a href="#">Search Business Object</a> .
Field	Used to modify the field that you will use to define the criteria for associating approval workflow requests with the approval workflow chains.  Note: On clicking the Search button corresponding to this field, the Search Business Object Field portal appears. For more information about this portal, refer to <a href="#">Search Business Object Field</a> .

The following two buttons are available at the bottom of this portal: Save and Cancel. The Save button saves the changes and the Cancel button exits the portal without saving the changes.

## Approval Workflow Group Chain Linkage

This portal allows you to create a link between an approval workflow group and approval workflow chain with or without using criteria. This ensures that requests created for the business objects in a particular approval workflow group are sent to the approval workflow chain to which the group is associated.

You can access this portal by selecting Admin Menu → A → Approval Workflow Group Chain Linkage. The Approval Workflow Group Chain Linkage portal is divided into the following zones:

- Approval Workflow Group Chain Linkages
- Approval Workflow Criteria

### Approval Workflow Group Chain Linkages

This zone displays a list of links created between approval workflow groups and approval workflow chains. You can add, edit and delete the links through this zone.

The following columns are displayed in this zone:

Column	Description
Group Chain Linkage ID	Displays the ID which is generated automatically when the link is created.
Approval Workflow Group	Displays the approval workflow group for which the link is created.
Approval Workflow Chain	Displays the approval workflow chain for which the link is created.
Edit	Allows you to navigate to the Approval Workflow Group Chain Linkage portal where you can edit the approval workflow group and chain.
Delete	Allows you to delete the approval workflow group chain link.

### Approval Workflow Criteria

This zone displays the approval workflow criteria that you have defined for associating the approval workflow group with the approval workflow chain. You can add, edit and delete the approval workflow criteria through this zone.

The following columns are displayed in this zone:

Column	Description
Logical Operator	Displays the logical operator used to define the criteria. By default, the system uses AND operator.
Criterion Type	Displays the description of the criteria type.
Operator	Displays the relational operator used to define the relation between the criterion type and the criterion value.
Criterion Value	Displays the value of the criteria type.
Sequence	Indicates the order in which the criterion is verified.
Edit	Allows you to navigate to the Approval Workflow Criteria portal where you can edit the criterion.
Delete	Allows you to delete the criterion.

## Add Approval Workflow Group Chain Linkage

This portal allows you to create a new approval workflow group chain link. You can access this portal by clicking the Add link in the Approval Workflow Group Chain Linkages zone.

The following fields are displayed in this portal:

Field	Description
Approval Group	<p>Workflow Used to specify the approval workflow group for which you are creating a link.</p> <p>Note: On clicking the Search button corresponding to this field, the Search Approval Workflow Group portal appears. For more information about this portal, refer to <a href="#">Search Approval Workflow Group</a>.</p>
Approval Chain	<p>Workflow Used to specify the approval workflow chain for which you are creating a link.</p> <p>Note: On clicking the Search button corresponding to this field, the Search Approval Workflow Chain portal appears. For more information about this portal, refer to <a href="#">Search Approval Workflow Chain</a>.</p>

The following two buttons are available at the bottom of this portal: Save and Cancel. The Save button creates the approval workflow group chain link and the Cancel button exits the portal without saving the changes.

## Edit Approval Workflow Group Chain Linkage

This portal allows you to edit the approval workflow group chain link. You can access this portal by clicking the Edit icon in the Edit column corresponding to the link in the Approval Workflow Group Chain Linkages zone.

The following fields are displayed in this portal:

Field	Description
Approval Group	<p>Workflow Used to modify the approval workflow group for which you are creating a link.</p> <p>Note: On clicking the Search button corresponding to this field, the Search Approval Workflow Group portal appears. For more information about this portal, refer to <a href="#">Search Approval Workflow Group</a>.</p>
Approval Chain	<p>Workflow Used to modify the approval workflow chain for which you are creating a link.</p> <p>Note: On clicking the Search button corresponding to this field, the Search Approval Workflow Chain portal appears. For more information about this portal, refer to <a href="#">Search Approval Workflow Chain</a>.</p>

The following two buttons are available at the bottom of this portal: Save and Cancel. The Save button saves the changes and the Cancel button exits the portal without saving the changes.

## Add Approval Workflow Criterion

This portal allows you to define the approval workflow criterion. You can access this portal by clicking the Add link in the Approval Workflow Criteria zone.

Note: When you want to add criteria for a newly created approval workflow group chain linkage, you must click the Broadcast button (  ) corresponding to the approval workflow group chain linkage and then click the Add link in the Approval Workflow Criteria zone. Otherwise, the Add link will not work.

The following fields are displayed in this portal:

Field	Description
Group Chain Linkage ID	Displays the ID which is generated automatically when the link is created.
Criterion Type	Used to specify the criteria type that you want to use for defining the criterion.  Note: On clicking the Search button corresponding to this field, the Search Approval Workflow Criteria Type portal appears. For more information about this portal, refer to <a href="#">Search Approval Workflow Criteria Type</a> .
Criterion Value	Used to specify the criterion value.

The following two buttons are available at the bottom of this portal: Save and Cancel. The Save button creates the approval workflow criterion and the Cancel button exits the portal without saving the changes.

## Edit Approval Workflow Criterion

This portal allows you to edit the approval workflow criterion. You can access this portal by clicking the Edit icon in the Edit column corresponding to the criterion in the Approval Workflow Criteria zone.

The following fields are displayed in this portal:

Field	Description
Group Chain Linkage ID	Displays the ID which is generated automatically when the link is created.
Criterion Type	Used to modify the criteria type that you want to use for defining the criterion.  Note: On clicking the Search button corresponding to this field, the Search Approval Workflow Criteria Type portal appears. For more information about this portal, refer to <a href="#">Search Approval Workflow Criteria Type</a> .
Criterion Value	Used to modify the criterion value.

The following two buttons are available at the bottom of this portal: Save and Cancel. The Save button saves the changes and the Cancel button exits the portal without saving the changes.

## Approval Workflow Settings

This portal allows you to define various settings for approval workflow groups. You can access this portal by selecting Admin Menu → A → Approval Workflow Setting.

The Approval Workflow Settings portal contains the Approval Workflow Settings zone.

### Approval Workflow Settings

This zone displays the various settings defined for a list of approval workflow groups. You can add, edit and delete the settings for an approval workflow group through this zone.

The following columns are displayed in this zone:

Column	Description
Approval Workflow Group	Displays the description of the approval workflow group.
Approval Chain Selection Algorithm	Indicates the algorithm that will be triggered after creating the approval workflow request.  Note: This algorithm identifies the approval workflow chain that must be used for the approval workflow group.
Active	Indicates whether the approval workflow is required for the business objects in the approval workflow group.
Prevalidation Flag	Indicates whether validation must be done before the approval workflow request is created.
Edit	Allows you to navigate to the Approval Workflow Setting portal where you can edit the settings of the approval workflow group.
Regenerate UI Maps	On clicking the icon in this column, you can regenerate the Input and Display UI maps for the approval workflow group.  Note: If the Input and Display UI maps already exist for the approval workflow group, they are overwritten with the new Input and Display UI maps. Any manual modifications made to the previous UI maps will be lost. If you want to make any modifications to an automatically generated UI map, it is recommended that you create a copy of an automatically generated UI map with a new name, make the modifications in the new UI map and then attach it to the group.
Delete	Allows you to delete the settings of the approval workflow group.

## Add Approval Workflow Setting

This portal allows you to define the settings for an approval workflow group. You can access this portal by clicking the Add link in the Approval Workflow Settings zone.

The following fields are displayed in this portal:

Field	Description
Approval Workflow Group	Used to specify the approval workflow group.  Note: On clicking the Search button corresponding to this field, the Search Approval Workflow Group portal appears. For more information about this portal, refer to <a href="#">Search Approval Workflow Group</a> .
Approval Chain Selection Algorithm	Used to specify the algorithm that you want to trigger after creating the approval workflow request.  Note:  This algorithm identifies the approval workflow chain that must be used for the approval workflow group.  On clicking the Search button corresponding to this field, the Search Algorithm portal appears. For more information about this portal, refer to <a href="#">Search Algorithm</a> .
Active	Used to specify whether the approval workflow is required for the business objects in the approval workflow group. The valid values are Yes and No.
Prevalidation Flag	Used to specify whether validation must be done before the approval workflow request is created. The valid values are Yes and No.

The following two buttons are available at the bottom of this portal: Save and Cancel. The Save button sets the flag for the approval workflow group and the Cancel button exits the portal without saving the changes.

Note: On clicking the Save button, the system checks whether the Active flag for the approval workflow group is set to Yes. If yes, the system checks whether you have already specified the Input and Display UI maps manually for the approval workflow group. If not, the system automatically creates the Input and Display UI maps. If you now go back to the Approval Workflow Group portal, you will be able to view the names of the Input and Display UI maps (which are automatically generated) corresponding to the approval workflow group for which the approval workflow is activated. The Input UI map is named using the CM\_<Approval Workflow Group Code>\_AppTxn\_Input naming convention and the Display UI map is named using the CM\_<Approval Workflow Group Code>\_AppTxn\_Display naming convention.

## Edit Approval Workflow Setting

This portal allows you to edit the settings of the approval workflow group. You can access this portal by clicking the Edit icon in the Edit column corresponding to the approval workflow group in the Approval Workflow Settings zone.

The following fields are displayed in this portal:

Field	Description
Approval Workflow Group	Displays the code of the approval workflow group.

Field	Description
Approval Chain Selection Algorithm	Used to modify the algorithm that you want to trigger after creating the approval workflow request.  Note:  This algorithm identifies the approval workflow chain that must be used for the approval workflow group.  On clicking the Search button corresponding to this field, the Search Algorithm portal appears. For more information about this portal, refer to <a href="#">Search Algorithm</a> .
Active	Used to specify whether the approval workflow is required for the business objects in the approval workflow group. The valid values are Yes and No.
Prevalidation Flag	Used to specify whether validation must be done before the approval workflow request is created. The valid values are Yes and No.

The following two buttons are available at the bottom of this portal: Save and Cancel. The Save button saves the changes and the Cancel button exits the portal without saving the changes.

Note: On clicking the Save button, the system checks whether the Active flag for the approval workflow group is set to Yes. If yes, the system checks whether the Input and Display UI maps already exist for the approval workflow group. If not, the system automatically creates the Input and Display UI maps. If you now go back to the Approval Workflow Group portal, you will be able to view the names of the Input and Display UI maps (which are automatically generated) corresponding to the approval workflow group for which the approval workflow is activated. The Input UI map is named using the CM\_<Approval Workflow Group Code>\_AppTxn\_Input naming convention and the Display UI map is named using the CM\_<Approval Workflow Group Code>\_AppTxn\_Display naming convention.

## Approval Workflow Reason

This portal allows you to define a reason code. You can access this portal by selecting Admin Menu → A → Approval Workflow Reason.

The Approval Workflow Reason portal contains the Approval Workflow Reasons zone.

### Approval Workflow Reasons

This zone displays a list of reason codes that are already defined in the system. You can create, edit and delete a reason code through this zone.

The following columns are displayed in this zone:

Column	Description
Code	Displays the reason code.
Description	Displays the description of the reason code.
Category	Displays the category to which the reason code belongs.
Edit	Allows you to navigate to the Approval Workflow Reason portal where you can edit the details of the reason code.

Column	Description
Delete	Allows you to delete the reason code.

## Add Approval Workflow Reason

This portal allows you to create a new reason code. You can access this portal by clicking the Add link in the Approval Workflow Reasons zone.

The following fields are displayed in this portal:

Field	Description
Code	Used to specify the reason code.
Description	Used to specify the description of the reason code.
Category	Used to specify the category to which the reason code belongs. You can either select Reject or Cancelled.

The following two buttons are available at the bottom of this portal: Save and Cancel. The Save button creates the reason code and the Cancel button exits the portal without saving the changes.

## Edit Approval Workflow Reason

This portal allows you to edit the details of the reason code. You can access this portal by clicking the Edit icon in the Edit column corresponding to the reason code in the Approval Workflow Reasons zone.

The following fields are displayed in this portal:

Field	Description
Code	Displays the reason code.
Description	Used to modify the description of the reason code.
Category	Used to modify the category to which the reason code belongs. You can either select Reject or Cancelled.

The following two buttons are available at the bottom of this portal: Save and Cancel. The Save button saves the changes and the Cancel button exits the portal without saving the changes.

## Search UI Map

This portal allows you to search for UI maps using the various search criteria. The following fields are displayed in this portal:

Field	Description
UI Map Code	Used to specify the code of the UI Map.
Description	Used to specify the description of the UI Map.

Note: You can also search using the percentage (%) wildcard character or by specifying partial search criteria.

Once you specify the search criteria in the field and click the Search button corresponding to that field, the search results are displayed. The following columns are displayed in the search results:

Column	Description
UI Map	Displays the code of the UI Map. It has a hyperlink. When you click the hyperlink, the respective UI Map is selected.
Description	Displays the description of the UI Map.

The Cancel button is available at the bottom of this portal. It allows you to exit the portal.

## Search Algorithm

This portal allows you to search for algorithms using the various search criteria. The following fields are displayed in this portal:

Field	Description
Algorithm Code	Used to specify the code of the algorithm.
Description	Used to specify the description of the algorithm.

Note: You can also search using the percentage (%) wildcard character or by specifying partial search criteria.

Once you specify the search criteria in the field and click the Search button corresponding to that field, the search results are displayed. The following columns are displayed in the search results:

Column	Description
Algorithm	Displays the code of the algorithm. It has a hyperlink. When you click the hyperlink, the respective algorithm is selected.
Description	Displays the description of the algorithm.

The Cancel button is available at the bottom of this portal. It allows you to exit the portal.

## Search Business Object

This portal allows you to search for business objects using the various search criteria. The following fields are displayed in this portal:

Field	Description
Code	Used to specify the code of the business object.
Description	Used to specify the description of the business object.

Note: You can also search using the percentage (%) wildcard character or by specifying partial search criteria.

Once you specify the search criteria in the field and click the Search button corresponding to that field, the search results are displayed. The following columns are displayed in the search results:

Column	Description
Code	Displays the code of the business object. It has a hyperlink. When you click the hyperlink, the respective business object is selected.
Description	Displays the description of the business object.

The Cancel button is available at the bottom of this portal. It allows you to exit the portal.

## Search Business Object Field

This portal allows you to search for fields using the various search criteria. The following fields are displayed in this portal:

Field	Description
Field	Used to specify the name of the field.
Description	Used to specify the description of the field.

Note: You can also search using the percentage (%) wildcard character or by specifying partial search criteria.

Once you specify the search criteria in the field and click the Search button corresponding to that field, the search results are displayed. The following columns are displayed in the search results:

Column	Description
Field	Displays the name of the field. It has a hyperlink. When you click the hyperlink, the respective field is selected.
Description	Displays the description of the field.

The Cancel button is available at the bottom of this portal. It allows you to exit the portal.

## Search To Do Role

This portal allows you to search for To Do roles using the various search criteria. The following fields are displayed in this portal:

Field	Description
Role ID	Used to specify the To Do Role ID.
Description	Used to specify the description of the To Do role.

Note: You can also search using the percentage (%) wildcard character or by specifying partial search criteria.

Once you specify the search criteria in the field and click the Search button corresponding to that field, the search results are displayed. The following columns are displayed in the search results:

Column	Description
Role ID	Displays the To Do Role ID. It has a hyperlink. When you click the hyperlink, the respective To Do role is selected.
Description	Displays the description of the To Do role.

The Cancel button is available at the bottom of this portal. It allows you to exit the portal.

## Search To Do Type

This portal allows you to search for To Do types using the various search criteria. The following fields are displayed in this portal:

Field	Description
To Do Type	Used to specify the code of the To Do type.
Description	Used to specify the description of the To Do type.

Note: You can also search using the percentage (%) wildcard character or by specifying partial search criteria.

Once you specify the search criteria in the field and click the Search button corresponding to that field, the search results are displayed. The following columns are displayed in the search results:

Column	Description
To Do Type	Displays the code of the To Do type. It has a hyperlink. When you click the hyperlink, the respective To Do type is selected.
Description	Displays the description of the To Do type.

The Cancel button is available at the bottom of this portal. It allows you to exit the portal.

## Search Approval Workflow Group

This portal allows you to search for approval workflow groups using the various search criteria. The following fields are displayed in this portal:

Field	Description
Code	Used to specify the code of the approval workflow group.
Description	Used to specify the description of the approval workflow group.

Note: You can also search using the percentage (%) wildcard character or by specifying partial search criteria.

Once you specify the search criteria in the field and click the Search button corresponding to that field, the search results are displayed. The following columns are displayed in the search results:

Column	Description
Code	Displays the code of the approval workflow group. It has a hyperlink. When you click the hyperlink, the respective group is selected.
Description	Displays the description of the approval workflow group.

The Cancel button is available at the bottom of this portal. It allows you to exit the portal.

## Search Approval Workflow Chain

This portal allows you to search for approval workflow chains using the various search criteria. The following fields are displayed in this portal:

Field	Description
Code	Used to specify the code of the approval workflow chain.
Description	Used to specify the description of the approval workflow chain.

Note: You can also search using the percentage (%) wildcard character or by specifying partial search criteria.

Once you specify the search criteria in the field and click the Search button corresponding to that field, the search results are displayed. The following columns are displayed in the search results:

Column	Description
Code	Displays the code of the approval workflow chain. It has a hyperlink. When you click the hyperlink, the respective chain is selected.
Description	Displays the description of the approval workflow chain.

The Cancel button is available at the bottom of this portal. It allows you to exit the portal.

## Search Approval Workflow Criteria Type

This portal allows you to search for approval workflow criteria types using the various search criteria. The following fields are displayed in this portal:

Field	Description
Code	Used to specify the code of the approval workflow criteria type.
Description	Used to specify the description of the approval workflow criteria type.

Note: You can also search using the percentage (%) wildcard character or by specifying partial search criteria.

Once you specify the search criteria in the field and click the Search button corresponding to that field, the search results are displayed. The following columns are displayed in the search results:

Column	Description
Code	Displays the code of the approval workflow criteria type. It has a hyperlink. When you click the hyperlink, the respective criteria type is selected.
Description	Displays the description of the approval workflow criteria type.

The Cancel button is available at the bottom of this portal. It allows you to exit the portal.

# Chapter 8: Multi-Currency Accounts

This chapter explains the Multi-Currency Accounts feature. It also lists and describes the business processes that are enhanced and administrative tasks that need to be executed for implementing this feature.

## Overview

Oracle Revenue Management and Billing allows you to change the currency in which an account is invoiced. While the charges on a bill must be in a single currency, accounts can now be billed in different currencies over time. For example, when a customer opens an account, it might be billed in US Dollars. However, with the Multi-Currency Accounts feature enabled, the same account can be billed in Euros in the future. You can use the Multi-Currency Accounts functionality only when:

- You set the C1\_MLTCURACC feature configuration. For more details, refer to the [Administration](#) section.
- The account's customer class is enabled for open item accounting. In other words, the Open Item Accounting check box of the account's customer class is selected.
- The account does not have any active or pending loans, payment plans, payment arrangements, or recurring charge contracts.

There are some limitations while using the Multi-Currency Accounts functionality:

- Overdue charges in multiple currencies may not be referred to a collection agency. Such cases would be handled via a manual referral.
- Because the account's customer class must be enabled for open-item accounting, you can only use Overdue Processing to collect overdue bills. The Collections and Severance processes are not supported for open-item accounting.
- Write offs involving multiple currencies must be performed manually.
- Budgets, deposits, pay plans and payment arrangements are not supported.

Note: If there is outstanding debt for an account in more than one currency, the system displays “\*\*\*” instead of the total account balance across the application.

## Business Process

The following business processes are enhanced for implementing the Multi-Currency Accounts functionality:

- Creating Adjustments
- Generating Bills
- Applying Payments
- Monitoring Overdue Debt
- Generating History

## Creating Adjustments

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If you are using the Multi-Currency Accounts functionality, you can create adjustments in the currency which is different from the account's invoice currency.

## Generating Bills

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A bill is generated in the account's invoice currency. If you change the invoice currency of an account, any new bills will be generated in the new currency. For example, if you have changed the invoice currency of an account from US Dollars to Euros on 1<sup>st</sup> Feb 2010, all the bills generated thereafter will be generated in Euros.

When a bill is completed and adjustments are swept onto the bill, adjustments that are created in the currency which is different from the account's invoice currency will be converted to the account's invoice currency. The system will create a transfer adjustment for each adjustment that is converted to provide complete audit information. The adjustment type used for the conversion will be as defined in the Transfer Adjustment Type for Currency Conversion option type of the C1\_MLTCURACC feature. The original adjustment and the to-side of the transfer adjustment will be placed on the same match event.

Also, during bill completion, the Contract Type – Bill Completion algorithm type, CREDIT-XFER, which is usually specified on the credit contract, will automatically convert credit amounts in one currency to the invoice currency before distributing those credits.

## Applying Payments

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If you are using the Multi-Currency Accounts functionality, you can apply payments in the currency which is different from the account's invoice currency. You must always apply payments in the currency in which the bill is generated. When applying a payment, the only match type that you can select is Bill ID. Also, all the tenders for the same payment event must be in the same currency.

## Monitoring Overdue Debt

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Currency code is now optional when defining collection class overdue rules. When a batch job is processed, the Overdue Debt Monitor will search for overdue rules that match the account's collection class, division, and currency. If overdue rules for that combination are found, those rules will be executed. If the overdue rules are not found, the Overdue Debt Monitor will search for overdue rules that match the account's collection class and division. If overdue rules for that combination are found, those rules will be executed. If the overdue rules are not found, the account will be skipped.

## Generating History

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If the account has financial transactions in multiple currencies, zero is displayed throughout the Current Balance and the Payoff Balance columns of the Account Financial History, Contract Financial History and the View Account Financial Transaction History portals.

# Administration

You can use the Multi-Currency Accounts functionality only when you set the C1\_MLTCURACC feature configuration using the following option types:

- Allow Multi-Currency Accounts – Indicates whether the Multi-Currency Accounts feature is switched on or off. To switch on this feature, set the Allow Multi-Currency Accounts option type to Y. By default, the value is set to N.
- Currency Conversion Algorithm – Used to specify the name of the algorithm that you want to be used for currency conversion. This algorithm is the same as the one used for currency conversion in billing.
- Transfer Adjustment Type for Currency Conversion – Used to specify the adjustment type that you want to be used automatically when financial amount in one currency is converted to another currency.
- Cancel Reason Code for Currency Conversion Adjustment – Used to specify the reason code that must be used automatically when the transfer adjustments are cancelled while reopening a bill.
- Payment Distribution To-Do – Used to specify the To Do type that you want to be generated when the bill currency does not match the excess credit amount currency.

Besides this, you must do the following:

- Define required currencies along with currency symbols
- Define invoice currencies for divisions because while changing the invoice currency of an account, you can only view those invoice currencies that are associated to the account's division
- Define exchange rates for currencies
- Create tender control and deposit control for every invoice currency defined in the system
- Define an adjustment type that you want to use during currency conversion and link it to the relevant adjustment profile
- Define an adjustment type that you want to use during Write off process and link it to the relevant adjustment profile
- Define a contract type that you want to use during over payments to transfer the credit balance to other contracts
- Create an algorithm using the CM\_MEST algorithm type and attach it on the Match Event Status algorithm spot in the Installation Options – Framework portal
- Set the collection method of the account's customer class to Overdue
- Setup auto-pay to debit the bill amount and not the account's balance
- Setup the account's customer class to keep credits on a separate contract

# Chapter 9: Reporting

This chapter provides an overview and pre-requisites for the reporting feature. It explains how to execute 10 sample reports provided with ORMB.

## Overview

Oracle Revenue Management and Billing may optionally be configured to use the reporting feature where Oracle Business Intelligence Publisher (OBIP) is used as a reporting tool. ORMB provides you with 10 sample reports that you can use for reporting or as a starting point for creating a new report. While generating the report, data is extracted from ORMB database and presented in the pre-defined format to the user. OBIP is used for creating the format in which the data in the report needs to be presented to the user.

You can generate reports from ORMB only if the OBIP reporting tool is integrated with ORMB. You can also schedule the reports that you want to execute at a predefined time and interval in OBIP. Once the reports are generated, you can view these reports in OBIP.

## Pre-requisites

To use the reporting feature, you need to:

1. Install Oracle Business Intelligence Publisher (OBIP).
2. Configure ORMB to use the reporting feature. For more information on how to install and configure reports in ORMB, refer to the RMB\_Install\_Reports document.
3. Import report specific metadata from the ORMB sample database and/or manually enter the metadata for reports. For more information on how to import the metadata, refer to the RMB\_Install\_Reports document

## Business Process

Oracle Revenue Management and Billing provides you with the following reports that you can use for reporting or as a starting point for creating a new report:

- Open Cases by Type (CI\_CSEOPN)
- Case Statistics for a Given Status (CI\_CSESGS)
- Case Statistics by Case Type (CI\_CSESTS)
- Customer Contact by Type (CI\_CUSTCN)
- GL Accounting Summary (CI\_GLACSM)
- Letter Print - Sample Welcome Letter (CI\_LTRGN\_ENG)
- Payments Balance (CI\_PMTBAL)
- Receivables Aging (CI\_RCVAGA)
- To Do Entries (CI\_TDENTR)
- Tax Payables Analysis (CI\_TXPYBL)

## Generating the CI\_CSEOPN Report

The Open Cases by Type (CI\_CSEOPN) report allows you to view cases of a given type that are open within a given date range. For each case type, the report shows the following:

- Number of open cases by age bucket (the last three parameters control the size (in days) of each bucket)
- Percentage of open cases by age bucket
- Details of the open cases

To generate the CI\_CSEOPN report:

1. From the Main Menu, select Batch → Report Submission. The Report Search portal appears.
2. Enter CI\_CSEOPN in the Report Code field and click the Search button corresponding to this field. The Report Submission portal appears with the following parameters:

Parameter	Description
Start Date (YYYY-MM-DD)	Used to specify the date from when the report should be generated.  Note: If the start date is not specified, the report will be generated for seven days prior to the end date.
End date (YYYY-MM-DD)	Used to specify the date till when the report should be generated.  Note: If the end date is not specified, by default the current date is considered as the end date.
Case Type	Used to specify the case type. If specified, only cases of this type are included in the report.
Responsible User	Used to specify the user name. If specified, only cases handled by the specified user are included in the report.
First Bucket High Limit	Used to group cases that are open for less than or equal to this number of days for statistical reporting.
Second Bucket High Limit	Used to group cases that are open for less than or equal to this number of days but greater than the number of days specified in the First Bucket High Limit field.
Third Bucket High Limit	Used to group cases that are open for less than or equal to this number of days but greater than the number of days specified in the Second Bucket High Limit field.

3. Enter the parameters based on which you want to generate the report.
4. Click Submit. The Oracle BI Publisher Enterprise Login page appears.
5. Enter the BI publisher user name and password.
6. Click Login. The report appears in Oracle BI Publisher.

## Generating the CI\_CSESGS Report

The Case Statistics for a Given Status (CI\_CSESGS) report allows you to view cases of a given case type that transitioned to a given status within a given date range. It also shows the number and percentage of cases grouped by the time it took to reach the status in the graphical format. These statistics are grouped into age buckets whose size is controlled by the following parameters:

- First Bucket High Limit
- Second Bucket High Limit
- Third Bucket High Limit

In addition, this report shows the minimum, maximum, average and median time taken to reach the status.

To generate the CI\_CSESGS report:

1. From the Main Menu, select Batch → Report Submission. The Report Search portal appears.
2. Enter CI\_CSESGS in the Report Code field and click the Search button corresponding to this field. The Report Submission portal appears with the following parameters:

Parameter	Description
Start Date (YYYY-MM-DD)	Used to specify the date from when the report should be generated.  Note: If the start date is not specified, the report will be generated for seven days prior to the end date.
End date (YYYY-MM-DD)	Used to specify the date till when the report should be generated.  Note: If the end date is not specified, by default the current date is considered as the end date.
Case Type/Status	Used to specify the case type and status for which you want to generate the report. You must specify the criteria in the Case Type/Status format.
Responsible User	Used to specify the user name. If specified, only cases handled by the specified user are included in the report.
First Bucket High Limit (in days)	Used to group cases that took less than or equal to this number of days to reach the specified status for statistical reporting.
Second Bucket High Limit (in days)	Used to group cases that took less than or equal to this number of days but greater than the number of days specified in the First Bucket High Limit field to reach the specified status.
Third Bucket High Limit (in days)	Used to group cases that are open for less than or equal to this number of days but greater than the number of days specified in the Second Bucket High Limit field to reach the specified status.

3. Enter the parameters based on which you want to generate the report.
4. Click Submit. The Oracle BI Publisher Enterprise Login page appears.
5. Enter the BI publisher user name and password.
6. Click Login. The report appears in Oracle BI Publisher.

## Generating the CI\_CSESTS Report

The Case Statistics by Case Type (CI\_CSESTS) report allows you to view the number and percentage of cases that are open or closed within a given date range. It also contains the following information in the graphical format:

- Number of cases (that are open or closed) for each case type
- Percentage of cases (that are open or closed) for each case type

To generate the CI\_CSESTS report:

1. From the Main Menu, select Batch → Report Submission. The Report Search portal appears.
2. Enter CI\_CSESTS in the Report Code field and click the Search button corresponding to this field. The Report Submission portal appears with the following parameters:

Parameter	Description
Start Date (YYYY-MM-DD)	Used to specify the date from when the report should be generated.  Note: If the start date is not specified, the report will be generated for seven days prior to the end date.
End date (YYYY-MM-DD)	Used to specify the date till when the report should be generated.  Note: If the end date is not specified, by default the current date is considered as the end date.
Case Condition	Used to indicate whether you want to generate the report for open or closed cases. You can specify either of the following: <ul style="list-style-type: none"> <li>• OPEN</li> <li>• CLSD</li> </ul> If you want to generate the report for both open and closed cases, leave this field blank.

3. Enter the parameters based on which you want to generate the report.
4. Click Submit. The Oracle BI Publisher Enterprise Login page appears.
5. Enter the BI publisher user name and password.
6. Click Login. The report appears in Oracle BI Publisher.

## Generating the CI\_CUSTCN Report

The Customer Contact by Type (CI\_CUSTCN) report allows you to view all the customer contacts that are created for a given contact class and contact type within a given date range. It displays information both in textual and graphical formats.

**Performance Consideration:** If your implementation chooses to use this report, you may consider adding an index to the CI\_CC table on CC\_DTTM to aid in performance. When making this decision, carefully weigh the benefit of improving report performance against the possible degradation to the performance of day-to-day processing as a result of defining a new index. Note that many companies opt to create a reporting database that is a shadow of production to ensure that indexes defined to benefit reports may be created without any affect on the production environment.

To generate the CI\_CUSTCN report:

1. From the Main Menu, select Batch → Report Submission. The Report Search portal appears.
2. Enter CI\_CUSTCN in the Report Code field and click the Search button corresponding to this field. The Report Submission portal appears with the following parameters:

Parameter	Description
Start Date (YYYY-MM-DD)	Used to specify the date from when the report should be generated.
	Note: If the start date is not specified, the report will be generated for seven days prior to the end date.
End date (YYYY-MM-DD)	Used to specify the date till when the report should be generated.
	Note: If the end date is not specified, by default the current date is considered as the end date.
Customer Contact Class/Type	Used to specify the customer contact class and type for which you want to generate the report. If you want to generate the report for all the contact types within a given contact class, just specify the customer contact class. However, if you want to generate the report for a given contact type within a given contact class, then specify both in the Customer Contact Class/Type format.

3. Enter the parameters based on which you want to generate the report.
4. Click Submit. The Oracle BI Publisher Enterprise Login page appears.
5. Enter the BI publisher user name and password.
6. Click Login. The report appears in Oracle BI Publisher.

## Generating the CI\_GLACSM Report

The GL Accounting Summary (CI\_GLACSM) report allows you to view the financial transactions created in ORMB for a given accounting period. The data is grouped based on the GL account types, divisions and GL divisions.

**Performance Consideration:** If your implementation chooses to use this report, you may consider adding an index to the CI\_FT table on ACCOUNTING\_DT to aid in performance. When making this decision, carefully weigh the benefit of improving report performance against the possible degradation to the performance of day-to-day processing as a result of defining a new index. Note that many companies opt to create a reporting database that is a shadow of production to ensure that indexes defined to benefit reports may be created without any affect on the production environment.

To generate the CI\_GLACSM report:

1. From the Main Menu, select Batch → Report Submission. The Report Search portal appears.

2. Enter CI\_GLACSM in the Report Code field and click the Search button corresponding to this field. The Report Submission portal appears with the following parameters:

Parameter	Description
Accounting period	Used to specify the accounting period for which you want to generate the report. A valid fiscal year and accounting period for a valid accounting calendar must be provided in the following format:  CALENDAR_ID/FISCAL_YEAR/ACCOUNTING_PERIOD
Characteristic Type Account type	Used to specify the GL account type for which you want to generate the report.

3. Enter the parameters based on which you want to generate the report.
4. Click Submit. The Oracle BI Publisher Enterprise Login page appears.
5. Enter the BI publisher user name and password.
6. Click Login. The report appears in Oracle BI Publisher.

## Generating the CI\_LTRGN\_ENG Report

The Letter Print - Sample Welcome Letter (CI\_LTRGN\_ENG) report allows you to produce a sample welcome letter for a new customer. The letter contains the name and address of the company which is extracted from the installation options. The text for the letter is defined in the report layout and not provided with ORMB. The report is printed according to the customer's language definition and not based on the user's language definition.

This report contains the following text:

“Welcome to %1. You have been filed with ID Number %2.

We hope to provide you with our best possible service. If you experience any problems or have any questions, please contact one of our customer service representatives at (800)1234567.”

Note: %1 is the company name which is stored as a message in the installation options and %2 is the Person ID which is stored in the customer contact.

To generate the CI\_LTRGN\_ENG report:

1. From the Main Menu, select Batch → Report Submission. The Report Search portal appears.
2. Enter CI\_LTRGN\_ENG in the Report Code field and click the Search button corresponding to this field. The Report Submission portal appears with the following parameters:

Parameter	Description
Batch Switch	Used to indicate whether you want to access this report online or not. To access the report online, set the value to N.
Customer Contact ID	Used to specify the ID of the customer contact associated with the main customer for which you want to generate the letter.

3. Enter the parameters based on which you want to generate the report.
4. Click Submit. The Oracle BI Publisher Enterprise Login page appears.
5. Enter the BI publisher user name and password.

6. Click Login. The report appears in Oracle BI Publisher.

## Generating the CI\_PMTBAL Report

The Payments Balance (CI\_PMTBAL) report allows you to view all the payments received and cancelled within a given date range. The data is grouped based on the tender source and the type of payment. This report is used for financial control and audit purposes.

To generate the CI\_PMTBAL report:

1. From the Main Menu, select Batch → Report Submission. The Report Search portal appears.
2. Enter CI\_PMTBAL in the Report Code field and click the Search button corresponding to this field. The Report Submission portal appears with the following parameters:

Parameter	Description
Start Date (YYYY-MM-DD)	Used to specify the date from when the report should be generated.
	Note: If the start date is not specified, the report will be generated for seven days prior to the end date.
End date (YYYY-MM-DD)	Used to specify the date till when the report should be generated.
	Note: If the end date is not specified, by default the current date is considered as the end date.

3. Enter the parameters based on which you want to generate the report.
4. Click Submit. The Oracle BI Publisher Enterprise Login page appears.
5. Enter the BI publisher user name and password.
6. Click Login. The report appears in Oracle BI Publisher.

## Generating the CI\_RCVAGA Report

The Receivables Aging (CI\_RCVAGA) report lists all accounts and their arrears information as of the input cutoff date using the balance forward accounting method. Outstanding debt is placed into the buckets provided as input using the age of the debt as of the cutoff date. For each account, charges that are not yet billed are displayed in the Unbilled A/R (\$) column.

To generate the CI\_RCVAGA report:

1. From the Main Menu, select Batch → Report Submission. The Report Search portal appears.
2. Enter CI\_RCVAGA in the Report Code field and click the Search button corresponding to this field. The Report Submission portal appears with the following parameters:

Parameter	Description
Cutoff Date	Used to specify the date from when the arrears should be calculated.
	Note: If the cutoff date is not specified, seven days prior to the current date will be considered as the cutoff date.

Parameter	Description
1 <sup>st</sup> Bucket High Limit	Used to group debts that are outstanding for less than or equal to this number of days for statistical reporting.
2 <sup>nd</sup> Bucket High Limit	Used to group debts that are outstanding for less than or equal to this number of days but greater than the number of days specified in the First Bucket High Limit field.
3 <sup>rd</sup> Bucket High Limit	Used to group debts that are outstanding for less than or equal to this number of days but greater than the number of days specified in the Second Bucket High Limit field.

3. Enter the parameters based on which you want to generate the report.
4. Click Submit. The Oracle BI Publisher Enterprise Login page appears.
5. Enter the BI publisher user name and password.
6. Click Login. The report appears in Oracle BI Publisher.

## Generating the CI\_TDENTR Report

The To Do Entries (CI\_TDENTR) report allows you to view the total number of TO DO entries that are open or being worked on for each To Do Type. It displays information both in textual and graphical formats.

To generate the CI\_TDENTR report:

1. From the Main Menu, select Batch → Report Submission. The Report Search portal appears.
2. Enter CI\_TDENTR in the Report Code field and click the Search button corresponding to this field. The Report Submission portal appears with the following parameters:

Parameter	Description
To Do Entry Status	Used to include To Do entries with the specified status in the report. Note: If you leave this field blank, the report will show To Do entries for all the statuses.
To Do Type	Used to include To Do entries with the specified To Do type in the report. Note: If you leave this field blank, the report will show To Do entries for all the To Do types.

3. Enter the parameters based on which you want to generate the report.
4. Click Submit. The Oracle BI Publisher Enterprise Login page appears.
5. Enter the BI publisher user name and password.
6. Click Login. The report appears in Oracle BI Publisher.

## Generating the CI\_TXPYBL Report

The Tax Payables Analysis (CI\_TXPYBL) report allows you to view the tax amounts that were levied by the company to customers within a given date range. It also shows the tax exempted during that period.

This report considers tax amounts of only those financial transactions which satisfy the following criteria:

- The financial transaction is frozen.
- The accounting date of the financial transaction is within a given date range.
- The distribution code associated with the financial transaction has a characteristic type and value that matches the one specified as the input parameters.

The report also provides tax exemption information for bill segments whose financial transactions satisfy the above criteria. The tax exemption information is retrieved by looking at the bill calculation lines associated with the financial transaction's bill segment.

**Performance Consideration:** If your implementation chooses to use this report, you may consider adding an index to the CI\_FT table on ACCOUNTING\_DT to aid in performance. When making this decision, carefully weigh the benefit of improving report performance against the possible degradation to the performance of day-to-day processing as a result of defining a new index. Note that many companies opt to create a reporting database that is a shadow of production to ensure that indexes defined to benefit reports may be created without any affect on the production environment.

To generate the CI\_TXPYBL report:

1. From the Main Menu, select Batch → Report Submission. The Report Search portal appears.
2. Enter CI\_TXPYBL in the Report Code field and click the Search button corresponding to this field. The Report Submission portal appears with the following parameters:

Parameter	Description
Start Date (YYYY-MM-DD)	Used to specify the date from when the report should be generated.  Note: If the start date is not specified, the report will be generated for seven days prior to the end date.
End date (YYYY-MM-DD)	Used to specify the date till when the report should be generated.  Note: If the end date is not specified, by default the current date is considered as the end date.
Account Type Characteristic	Used to specify the characteristic type. You must only specify the characteristic type as Account Type. Otherwise, the report will not be generated.
Account Type Char Value for Tax Related GL Account	Used to specify the characteristic value corresponding to the characteristic type.

3. Enter the parameters based on which you want to generate the report.
4. Click Submit. The Oracle BI Publisher Enterprise Login page appears.
5. Enter the BI publisher user name and password.
6. Click Login. The report appears in Oracle BI Publisher.