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Version 2.8.0.0.0

Release Notes

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About this Document

This document describes the new features, enhancements, UI and database level changes, supported platforms, framework upgrade, supported upgrades, and technology upgrade made in this release. It also highlights the discontinued features, bug fixes, and known issues in this release.

This document does not describe the functionality of Oracle Revenue Management and Billing or technical know-how on how to install or upgrade Oracle Revenue Management and Billing. For more detailed information, you can refer to the following documents:

Document	Description
Oracle Revenue Management and Billing Banking User Guide	Lists and describes various banking features in Oracle Revenue Management and Billing. It also describes all screens related to these features and explains how to perform various tasks in the application.
Oracle Revenue Management and Billing Insurance User Guide	Lists and describes various insurance features in Oracle Revenue Management and Billing. It also describes all screens related to these features and explains how to perform various tasks in the application.
Oracle Revenue Management and Billing Installation Guide	Lists the application server pre-requisites, supported platforms, and software and hardware requirements for installing the Oracle Revenue Management and Billing application. It explains how to install the Oracle Revenue Management and Billing application.
Oracle Revenue Management and Billing Quick Installation Guide	Provides high-level information on how to install the Oracle Revenue Management and Billing (ORMB) application and selected additional software.
Oracle Revenue Management and Billing Database Administrator's Guide	Provides information about the Oracle Database Server and Client required for installing the Oracle Revenue Management and Billing database. It explains how to install database with and without demo data. It provides database configuration guidelines including recommended settings for the Oracle Exadata Database machine.
Oracle Revenue Management and Billing Server Administration Guide	Explains the Oracle Revenue Management and Billing (ORMB) architecture and technical know-how required for configuring and using the ORMB application. It explains how to configure and deploy web and business application servers. In addition, it explains how to monitor client machines, web and/or business application servers, and database connections.

Document	Description
Oracle Revenue Management and Billing Security Guide	Lists the security features available in the Oracle Revenue Management and Billing application. It explains how to configure security for the Oracle Revenue Management and Billing application using the default security features.
ORMB - Transaction Feed Management - Batch Execution Guide	Describes the sequence in which the batches must be executed while performing various tasks in the Transaction Feed Management module.
Oracle Revenue Management and Billing Batch Guide	Lists and describes various ORMB batches.
Oracle Revenue Management and Billing Upgrade Guide	Explains how to upgrade the Oracle Revenue Management and Billing framework, application, and its database.
Oracle Revenue Management and Billing Upgrade Path Guide	Explains the path and pre-requisites for upgrading Oracle Revenue Management and Billing from one version to another.
Oracle Revenue Management and Billing Pricing Services	Lists and describes the inbound web services related to the Pricing module. It also explains the pre-requisites, input parameters, and output parameters of these inbound web services.

Change Log

Revision	Last Update	Updated Section	Comments
1.1	19-July-2019	Refund/Write Off Request	Added Section
		Offset Request	Added Section
		User Interface (UI) Level Changes	Updated Information
1.2	24-July-2019	Person Information	Added Section
		Deprecation Planned for Future Releases	Updated Information
1.3	25-Sep-2019	Deprecation Notices for ORMB Version 2.8.0.0.0	Added Information
1.4	15-May-2020	Deprecation Notices for ORMB Version 2.8.0.0.0	Updated Information
1.5	02-Sep-2020	Unsupported Integrations	Added Section

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Prerequisites

If a customer is already using the Transaction Feed Management feature and wants to upgrade to Oracle Revenue Management and Billing Version 2.8.0.0.0, then the customer needs to ensure the following (before upgrading):

- All bills generated in the system are in the **Complete** status. In other words, there should not be any bills in the **Pending** status. If there are any bills in the **Pending** status or if any billable charge (generated through TFM) is not yet billed, disaggregation and cancellation of transactions which are uploaded using 2.7.0.1.0 will not happen successfully.
- Transactions which are uploaded using 2.7.0.1.0 must not be in the **Initial Product Determined (INPD)** status. They can be in the **Uploaded (UPLD)**, **Invalid (INVL)**, **Error (EROR)**, **Completed (COMP)**, or **Cancelled (CNCL)** status.
- Equal to (=) or tilde (~) symbol is not used in any existing price item parameter code or value. Otherwise, erroneous results might occur.

New Features (Generic)

This section describes the following new features added in this release which can be used in both financial services and insurance domains:

- Multiple Parameter Based Post-Processing Pricing

Multiple Parameter Based Post-Processing Pricing

Until now, while deriving the post-processing bill segments, the system aggregated the regular bill segments of related price items without considering the price item parameters. Now, if you specify a price item parameter while associating regular price items with a post-processing price item and if the pricing for the post-processing price item is based on the price item parameter, the system aggregates the bill segments of regular price item and price item parameter combination. The system searches for the exact match. In this case, if the exact match is not found, the system does not aggregate the bill segments of the related price item. For example, the PR1 post processing price item is associated with the following regular price items:

Regular Price Item	Price Item Parameter
R1	Country = US
R2	Country = US

And, the pricing for PR1 post processing price item is based on Country = US. Now, if the following bill segments are generated for R1 and R2 in a bill:

Bill Segment	Price Item	Parameter 1	Parameter 2
BS1	R1	Country = US	-
BS2	R1	Country = US	Currency = USD
BS3	R1	Country = US	-
BS4	R1	-	-
BS5	R2	Country = US	-
BS6	R2	Country = US	-

Then, the system will aggregate the following regular bill segments while creating the post-processing bill segment for PR1:

- BS1
- BS3
- BS5
- BS6

However, if you specify a price item parameter while associating regular price items with a post-processing price item, but the pricing for the post-processing price item is not based on the price item parameter, the system aggregates all bill segments of regular price item irrespective of the price item parameter. For example, the PR1 post processing price item is associated with the following regular price items:

Regular Price Item	Price Item Parameter
R1	Country = US
R2	-

And, the pricing for PR1 post processing price item is not based on a price item parameter. Now, if the following bill segments are generated for R1 and R2 in a bill:

Bill Segment	Price Item	Parameter 1	Parameter 2
BS1	R1	Country = US	-
BS2	R1	Country = US	Currency = USD
BS3	R1	Country = US	-
BS4	R1	-	-
BS5	R2	Country = US	-
BS6	R2	-	-

Then, the system will aggregate the following regular bill segments while creating the post-processing bill segment for PR1:

- BS1
- BS2
- BS3
- BS4
- BS5
- BS6

New Features (Specific to Financial Services)

This section describes the following new features added in this release which can be used in the financial services domain.

- Customer Registration

Customer Registration

Until now, you were able to create person and account from the different screens. Now, ORMB provides the ability to create a person and multiple accounts for the person from the same user interface. A new object named **Customer Registration** is introduced in this release. Through a customer registration object, you can create person, accounts and contracts at the same time from the same interface. Before creating a customer registration object, you need to create the following:

- **Customer Registration Template** – A customer registration template encapsulates the following information:
    - List of pages that should appear when you create a person or account using the respective customer registration template
    - List of sections that should appear in each page
    - Field or characteristic attributes, such as:
        - Default value for a field or characteristic type
        - Default value for a person or account identifier type or phone type
        - Primary identifier type for a person or account
        - Mandatory field in each section
        - Enable or disable the field value, identifier type, identifier value, characteristic type, characteristic value, phone type, or phone number

  You can create multiple customer registration templates for person and account. Depending on whether you are creating a customer registration template for person or account, you can include the following pages and define field or characteristic attributes for the following sections:

Template Category	Template Page	Template Section
Person	Main	Person Main
		Person Names
		Person Identifiers
		Person Phones
	Contact Information	Person Address

Template Category	Template Page	Template Section
		Person Email
	Accounts	-
	Person Hierarchy	Person Hierarchy – Main
		Person Hierarchy – Characteristics
	Person Characteristics	Person Characteristics
	Deal Information	Deal – Main
	Registration Characteristics	Customer Registration Characteristics
Account	Main	Account Information
		Account Identifiers
	Auto Pay	Account Autopay
	Persons	Main
		Account Address Override Information
		Bill Routing
	Account Characteristics	Account Characteristics
	Credit Ratings	Credit Rating

- **Customer Registration Type** - A customer registration type encapsulates the following information:
    - Users with a particular access group can only create a customer registration object using the customer registration type.
    - Whether the customer registration type can be used to create a customer registration object from the user interface, through the inbound message, or through the **File Upload Interface** utility.
    - Whether the approval is required when you create, edit, or delete a customer registration object.
    - The business objects using which the person, account, and address should be created when a customer registration object is created using the customer registration type.
    - A customer registration template which indicates the pages and sections that should appear when you are creating a customer registration object using the customer registration type. You can specify one customer registration template for person and one or more customer registration templates for account.

- Information, such as person names, person identifiers, person phones, person characteristics, person addresses, person hierarchy, accounts, account identifiers, account characteristics, account auto pay information, account persons, account bill routing information, or credit rating history, which should be copied when you create a copy of a customer registration object which is created using the customer registration type.

While creating a customer registration object, you need to specify the following:

- A customer registration type using which the customer registration object should be created
- A source system from the customer information is received
- A type of person that you want to create through the customer registration object

Once you specify the above details, the **Customer Registration** screen appears with a set of pages and sections which are added in the respective person template. The default values for the fields, characteristic types, identifier types, and phone types are shown as specified in the person template. In addition, the field values, characteristic types, characteristic values, identifier types, identifier values, phone types, and phone numbers are disabled as specified in the person template. On the **Accounts** page, you can view one row for each account template which is added in the customer registration type. You can then edit the row and thereby create an account for the person. You can create multiple accounts for the person using the same or different template.

Note: The system creates effective dated address using the address business object which is specified in the customer registration type. By default, the account override address is effective from the date when the customer registration object is created in the system.

On clicking the **View/Edit** icon or the **Add New Account** button, the **Customer Registration - Add Account** screen appears with a set of pages and sections which are added in the respective account template. The default values for the fields, characteristic types, and identifier types are shown as specified in the account template. In addition, the field values, characteristic types, characteristic values, identifier types, and identifier values are disabled as specified in the account template.

You can save the person and account details as and when you are entering the data by clicking the **Save as Draft** button. On clicking the **Save as Draft** button, the system creates a customer registration object in the **Draft** status. Once all person and account details are specified, you can click the **Validate and Save** button. The system then validates the information. You can edit, delete, or submit a customer registration object when it is in the **Draft** status. On submitting a customer registration object, the person and accounts are created in the system. If an algorithm created using the **C1-CRECONT** algorithm type is attached to the **Post-Processing** system event of the account business object (which is specified in the customer registration type), the system creates the contracts for each account. Finally, the status of the customer registration object is changed to **Complete**.

You can optionally configure the approval process for the customer registration. If the **Approval Required** option is selected in the customer registration type, the status of the customer registration object is changed to **Approval In Progress** on submitting it. A To Do using the approval To Do type is created and assigned to the users with the approval To Do role. The approver can then review the

customer registration object and accordingly approve, reject, or request the submitter to resubmit the customer registration object for approval. On approving a customer registration object, the person, accounts, and contracts (if the required algorithm is attached) are created in the system. Finally, the status of the customer registration object is changed to **Complete**.

If the approver rejects a customer registration object due to some reason, the status of the customer registration object is changed to **Rejected**. However, if the approver requests the submitter to resubmit a customer registration object for approval after making the required changes, the status of the customer registration object is changed to **Draft**. The submitter can then make the required changes and resubmit the customer registration object for approval.

Note: The system enables you to create maximum 10 accounts for a person through a customer registration object from the user interface.

You can also create a customer registration object using the **File Upload Interface** utility. On creating a customer registration object using the **File Upload Interface** utility, the status of the customer registration object is set to **Draft**. You can then submit the customer registration object manually from the user interface. Note that, at present, only the XML format is supported for creating a customer registration object using the **File Upload Interface** utility.

To implement the **Customer Registration** feature, the following new screens are introduced in this release:

- Customer Registration Template
- Customer Registration Type
- Customer Registration

New Features (Specific to Insurance)

This section describes the following new features added in this release which can be used in the insurance domain:

- Fully Insured Customer Management
- Customer Registration
- Healthcare Inbound Message
- Audit Framework
- Audit Framework for Membership and Fully Insured Pricing Rules
- Bill Group Derivation for Membership
- Account and Price Item Derivation for Membership
- Membership Premium Calculation
- State of Issue
- Fully Insured Pricing
- Fully Insured Pass-Through Billable Charge
- Repricing
- Fully Insured Billable Charge Creation

Fully Insured Customer Management

Oracle Revenue Management and Billing enables you to create the following entities for the fully insured business:

- **Parent Customer** - The employers must be configured as parent customers in the system. You can configure a person as the parent customer by setting its person type to **Parent Customer**.
- **Bill Groups** - The system allows you to maintain one or more bill groups for a parent customer. Each bill group can be used for billing premium of the employees with specific attributes. You can configure a person as the bill group by setting its person type to **Bill Group**. The bill groups should be defined as the child persons of the parent customer (i.e. employer) using the relationship type which is specified in the **Person Relationship Type** option type of the **C1-ASOBLLNG** feature configuration.
- **Bill Group's Account** – The membership premium are billed on the bill group's account. Therefore, every bill group should have at least one account in the system. The bill group can have more than one account. Depending on the employer's preference, the billable charges for one or more membership and price item combination can be billed on the same or different accounts of the bill group. The system enables you to maintain different types of accounts (such as, standard and retention) for a bill group. You can specify the type of account by defining the **Invoice Type (C1INVTYP)** characteristic for the account. You can also set the priority for an account based on the invoice type while specifying the billing account information for a price item in a pricing rule type. The system then considers the account which is available for billing based on the priority.

Note: At present, no values are shipped for the **Invoice Type (C1INVTYP)** characteristic type. You must define the predefined characteristic values as per the business requirements.

Customer Registration

Until now, you were able to create person, account, policy, and policy plan from the different screens. Now, ORMB provides the ability to create a person, multiple accounts for the person, multiple policies for the person, and multiple policy plans for the policy from the same user interface. A new object named **Customer Registration** is introduced in this release. Through a customer registration object, you can create person, accounts, policies, and policy plans at the same time from the same interface. Before creating a customer registration object, you need to create the following:

- **Customer Registration Template** – A customer registration template encapsulates the following information:
    - List of pages that should appear when you create a person, account, policy, or policy plan using the respective customer registration template
    - List of sections that should appear in each page
    - Field or characteristic attributes, such as:
        - Default value for a field or characteristic type
        - Default value for a person or account identifier type or phone type
        - Primary identifier type for a person or account
        - Mandatory field in each section
        - Enable or disable the field value, identifier type, identifier value, characteristic type, characteristic value, phone type, or phone number

  You can create multiple customer registration templates for person, account, policy and policy plan. Depending on whether you are creating a customer registration template for person, account, policy or policy plan, you can include the following pages and define field or characteristic attributes for the following sections:

Template Category	Template Page	Template Section
Person	Main	Person Main
		Person Names
		Person Identifiers
		Person Phones
	Contact Information	Person Address
		Person Email
	Accounts	-
	Person Hierarchy	Person Hierarchy – Main

Template Category	Template Page	Template Section
		Person Hierarchy – Characteristics
	Person Characteristics	Person Characteristics
	Policies	Policies
		Parent Policies
	Registration Characteristics	Customer Registration Characteristics
Account	Main	Account Information
		Account Identifiers
	Auto Pay	Account Autopay
	Persons	Main
		Account Address Override Information
		Bill Routing
	Account Characteristics	Account Characteristics
Policy	Policy – Main	Policy Main
		Policy Persons
		Policy Characteristics
Policy Plan	Plan	Plan - Main
		Plan - Characteristics

- **Customer Registration Type** - A customer registration type encapsulates the following information:
    - Users with a particular access group can only create a customer registration object using the customer registration type.
    - Whether the customer registration type can be used to create a customer registration object from the user interface, through the inbound message, or through the **File Upload Interface** utility.
    - Whether the approval is required when you create, edit, or delete a customer registration object.
    - Whether the final level approval is required once the approver at the first level approves the customer registration object.
    - Whether a To Do should be created indicating that the users have to manually create the billing hierarchy and pricing for the parent customer.

- The business objects using which the person, account, policy plan, membership, and address should be created when a customer registration object is created using the customer registration type.
- A customer registration template which indicates the pages and sections that should appear when you are creating a customer registration object using the customer registration type. You can specify one customer registration template for person and one or more customer registration templates for account, policy, and policy plan.
- Information, such as person names, person identifiers, person phones, person characteristics, person addresses, person hierarchy, accounts, account identifiers, account characteristics, account auto pay information, account persons, account bill routing information, policies, policy plans, policy characteristics, or policy plan characteristics, which should be copied when you create a copy of a customer registration object which is created using the customer registration type.

While creating a customer registration object, you need to specify the following:

- A customer registration type using which the customer registration object should be created
- A source system from the customer information is received
- A type of person that you want to create through the customer registration object

Once you specify the above details, the **Customer Registration** screen appears with a set of pages and sections which are added in the respective person template. The default values for the fields, characteristic types, identifier types, and phone types are shown as specified in the person template. In addition, the field values, characteristic types, characteristic values, identifier types, identifier values, phone types, and phone numbers are disabled as specified in the person template. On the **Accounts** page, you can view one row for each account template which is added in the customer registration type. You can then edit the row and thereby create an account for the person. You can create multiple accounts for the person using the same or different template.

Note:

You cannot create sort records and derivation and pricing parameters for the bill group from the **Customer Registration** screen. You can only create these from the **Customer 360° Information** screen or using the healthcare inbound message.

The system creates effective dated address using the address business object which is specified in the customer registration type. By default, the account override address is effective from the date when the customer registration object is created in the system.

On the **Policies** page, you can view one row for each policy template which is added in the customer registration type. You can then edit the row and thereby create a policy for the person. You can create multiple policies for the person using the same or different template. On clicking the **Add** icon corresponding to the policy row, you can view one row for each policy plan template which is added in the customer registration type. You can then edit the row and thereby create a policy plan for the policy.

On clicking the **View/Edit** icon or the **Add New Account** button in the **Accounts** page, the **Customer Registration - Add Account** screen appears with a set of pages and sections which are added in the respective account template. The default values for the fields, characteristic types, and identifier types are shown as specified in the account template. In addition, the field values, characteristic types, characteristic values, identifier types, and identifier values are disabled as specified in the account template.

On clicking the **View/Edit** icon or the **Add New Policy** button in the **Policies** page, you need to specify a policy type. The policy type indicates the category to which the policy belongs (i.e. whether it is Self Funded, Fully Insured Group, or Fully Insured Individual) and the policy business object using which the policy should be created. Once you specify a policy type, the **Policy** screen appears with a set of sections which are added in the respective policy template. The default values for the fields and characteristic types are shown as specified in the policy template. In addition, the field values, characteristic types, and characteristic values are disabled as specified in the policy template. You can create one or more policies for the person using the same or different policy type.

On clicking the **View/Edit** icon or the **Add New Plan** button corresponding to a policy plan row in the **Policies** page, the **Plan** screen appears with a set of sections which are added in the respective policy plan template. The default values for the fields and characteristic types are shown as specified in the policy plan template. In addition, the field values, characteristic types, and characteristic values are disabled as specified in the policy plan template.

You can save the person, account, policy, and policy plan details as and when you are entering the data by clicking the **Save as Draft** button. On clicking the **Save as Draft** button, the system creates a customer registration object in the **Draft** status. The status of the policies which are created through the customer registration object is set to **Pending**. Once the person, account, policy, and policy plan details are specified, you can click the **Validate and Save** button. The system then validates the information. You can edit, delete, or submit a customer registration object when it is in the **Draft** status. On submitting a customer registration object, the person, accounts, policies, and policy plans are created in the system. Finally, the status of the customer registration object is changed to the following depending on the type of person:

Person Type	Status
Parent Customer	Parent Customer Approved
Bill Group	Bill Group Approved
Any Other Person Type Other Than Parent Customer and Bill Group	Complete

You can optionally configure the approval process for the customer registration. If the **Approval Required** option is selected in the customer registration type, the status of the customer registration object is changed to **Approval In Progress** on submitting it. A To Do using the approval To Do type is created and assigned to the users with the approval To Do role. The approver can then review the customer registration object and accordingly approve, reject, or request the submitter to resubmit the customer registration object for approval. On approving a customer registration object, the person,

accounts, policies, and policy plans are created in the system. Finally, the status of the customer registration object is changed to the following depending on the type of person:

Person Type	Status
Parent Customer	Parent Customer Approved
Bill Group	Bill Group Approved
Any Other Person Type Other Than Parent Customer and Bill Group	Complete

If the approver rejects a customer registration object due to some reason, the status of the customer registration object is changed to **Rejected**. However, if the approver requests the submitter to resubmit a customer registration object for approval after making the required changes, the status of the customer registration object is changed to **Draft**. The submitter can then make the required changes and resubmit the customer registration object for approval.

The system provides the following two options while defining a customer registration type:

- **Manual Billing Hierarchy and Pricing** – Used when you want to inform the user to create the billing hierarchy and pricing for the parent customer manually. In other words, you want the user to create the required bill groups for the parent customer, the bill group's accounts, pricing rules, bill group sorting information, and bill group derivation and pricing parameters. If this option is selected, a To Do is created using the **Billing Hierarchy and Pricing** To Do type and assigned to the users with the **Billing Hierarchy and Pricing** To Do role. This feature can be used only for customer registration objects where the person type is set to **Parent Customer**. Once the billing hierarchy and pricing is created for the parent customer, the user must complete the corresponding To Do which is created using the **Billing Hierarchy and Pricing** To Do type. On executing the **Customer Registration Monitor (C1-CUSRG)** batch, the system considers all customer registration objects which are in the **Parent Customer Approved** or **Pending Pricing Correction** status. It checks whether the corresponding To Do (if any) created using the **Billing Hierarchy and Pricing** To Do type is completed. If so, it changes the status of the customer registration object to the following depending on whether the **Final Approval Required** option is selected:

Final Approval Required (✓ or ✗)	Status
✗	Complete
✓	Pending Final Approval

- **Final Approval Required** - Used to indicate whether the final approval is required once the approver at the first level approves the customer registration object. Ideally, the final approval is required when the **Manual Billing Hierarchy and Pricing** option is selected. This ensures that the information related to the following entities is created and verified before the customer registration object moves to the **Complete** status:
    - Bill Group
    - Bill Group's Accounts
    - Bill Group's Sorting Records
    - Bill Group's Derivation and Pricing Parameters
    - Pricing Rules for the Policy Plans

  If this option is selected, a To Do is created using the **Final Approval** To Do type and assigned to the users with the **Final Approval** To Do role. This feature can be used only for customer registration objects where the person type is set to **Parent Customer**. Once the user with the **Final Approval** To Do role approves the customer registration object, the status of the customer registration object is changed to **Complete**.

  If the approver requests the submitter to resubmit a customer registration object for approval, the status of the customer registration object is changed to **Pending Pricing Correction**.

Note: The system enables you to create maximum 10 accounts and 5 policies for a person and maximum 10 policy plans for a policy through a customer registration object from the user interface.

Once the status of a customer registration object is changed to **Complete** or **Bill Group Approved**, the system changes the status of the policies created through the customer registration object to **In Force/Active**. In addition, the status of the pricing rules which are created for such policies' policy plans is set to **Active**.

You can also create a customer registration object using the **File Upload Interface** utility through an inbound message. On creating an inbound message using the **File Upload Interface** utility, the status of the inbound message is set to **Pending**. Once the inbound message is processed, a customer registration object is created in the following status depending on the person type:

Person Type	Status
Parent Customer	Complete
Bill Group	Bill Group Approved
Any Other Person Type Other Than Parent Customer and Bill Group	Complete

Note: The above status transition is mentioned based on the assumption that the data uploaded through the **File Upload Interface** utility will be pre-approved and does not require any approval in the system.

At present, only the XML format is supported for creating a customer registration object using the **File Upload Interface** utility through an inbound message.

To implement the **Customer Registration** feature, the following new screens are introduced in this release:

- Customer Registration Template
- Customer Registration Type
- Customer Registration

Healthcare Inbound Message

A new inbound web service named **C1-HCInboundMessage** is introduced in this release. On calling the **C1-HCInboundMessage** web service, you can create a healthcare inbound message using a healthcare inbound message type. You can create a healthcare inbound message type using the **Healthcare Inbound Message Type (C1-HCInboundMsgType)** business object. The healthcare inbound message type helps the system to determine:

- The business object using which the healthcare inbound message should be created.

Note: The **Healthcare Inbound Message (C1-HCInboundMessage)** business object is shipped with the product.

- The customer registration type using which the customer registration object should be created in the system.

The **C1-HCInboundMessage** web service enables you to do the following depending on the category to which the policy belongs:

Policy Category	Person Type	Enables you to:
Self Funded	Parent Customer	• Create or edit a parent customer • Create or edit a bill group of the parent customer • Create or edit the accounts of the bill group • Create or edit the policies of the bill group
	Bill Group	• Create or edit a bill group • Create or edit the accounts of the bill group • Create or edit the policies of the bill group
	Any Other Person Type	• Create or edit a person • Credit or edit the accounts of the person
Fully Insured Group	Parent Customer	• Create or edit a parent customer • Create or edit a bill group of the parent customer • Create the derivation and pricing parameters for the bill group • Create or edit the accounts of the parent customer and bill group • Create or edit the policies of the parent customer and bill group

Policy Category	Person Type	Enables you to:
		• Create or edit the policy plans of the policies • Associate one or more pricing rule types with a policy plan • Create or edit the pricing rules of the policy plans • Terminate, reinstate, or renew policies of the parent customer and bill group
	Bill Group	• Create or edit a bill group • Create the derivation and pricing parameters for the bill group • Create or edit the accounts of the bill group • Create or edit the policies of the bill group • Create or edit the policy plans of the policies • Associate one or more pricing rule types with a policy plan • Create or edit the memberships of the policy plans • Add or remove members from a membership • Create or edit the one-time or recurring pass through billable charges of members • Create or edit the pricing rules of the policy plans • Terminate, reinstate, or renew policies of the bill group
	Any Other Person Type	• Create or edit a person • Credit or edit the accounts of the person

Note:

On creating a new policy, the system automatically associates the parent customer of the bill group with the policy using the policy person role specified in the **Parent Customer Policy Person Role** option type of the **C1-ASOBLLNG** feature configuration.

If the derivation and pricing parameters are specified for a bill group in the healthcare inbound message, the system automatically creates one bill group sort ID for the bill group. Here, the sort ID is set to the bill group ID. The start and end dates of the sort record are set to the bill group and parent customer's relationship start and end dates. Then, the system creates the derivation and pricing parameters for the bill group and sort ID combination.

Note:

The system supports the **Add** and **Update** operations for all entities except the derivation and pricing parameters for the bill group. Through the healthcare inbound message, each time, the system creates a new derivation and pricing parameters record for the bill group and does not update the existing derivation and pricing parameters record of the bill group.

While associating a pricing rule type with a policy plan, you must only specify a pricing rule type where the pricing rule type category is set to **Age Based**, **Tier Based**, or **Pass-Through Billable Charge**.

You can create or update a pricing rule type from the user interface and not through a healthcare inbound message. In addition, you can create or update the following pricing rules from the user interface and not through a healthcare inbound message – Claim, Specific Stop-Loss, Aggregate Stop-Loss, Retention Type Claim Based, Retention Type Enrollment Based, One-Time Flat Fees, Recurring Flat Fess, Ancillary, Discount Arrangement, and Level Funded. However, you cannot create or update the following pricing rules from the user interface - **Age Based** and **Tier Based**. At present, you can only create or update the **Age Based** and **Tier Based** pricing rules through a healthcare inbound message. Note that the system supports the **Replace** operation and not the **Update** operation when you are editing these pricing rules through a healthcare inbound message.

You can renew a policy where the policy category is set to **Self Funded** (i.e. ASO policy) from the user interface and not through a healthcare inbound message. However, you can renew a policy where the policy category is set to **Fully Insured Group** through a healthcare inbound message and not from the user interface.

We recommend you to create or update the following through separate healthcare inbound messages:

>> Entities, such as parent customer, bill group, accounts, policies, policy plans,

>> Pricing rules

>> Membership, member persons, and their pass through billable charges

The system creates effective dated address using the address business object which is specified in the customer registration type. By default, the account override address is effective from the date when the customer registration object is created in the system.

If the price item, account identifier type, and account identifier are given in the billable charge information, the system directly creates an SQI based billable charge when you process the healthcare inbound message. But, if only the price item is given in the billable charge information, the system checks whether the price item is included in any pricing rule type where the pricing rule type category is set to **Pass-Through Billable Charge**. If so, the system checks whether the pass-through billable charge pricing rule type is associated with the policy plan to which the membership belongs (for which the billable charge information is received). If so, the system creates an SQI based billable charge using the respective pass-through billable charge pricing rule type.

A new feature configuration named **C1-PERSTYPE** is introduced in this release. It contains the following option types:

- **Bill Group Person Type** – Used to specify the person type which indicates that the person is a bill group.
- **Parent Person Type** - Used to specify the person type which indicates that the person is a parent customer.

The system uses the **C1-PERSTYPE** feature configuration to decide whether the person type specified in the healthcare inbound message represents **Parent Customer** or **Bill Group**. If the person type specified in the healthcare inbound message matches the person type specified in the **Bill Group Person Type** or **Parent Person Type** option type, the system creates or updates the person and its other entities through a customer registration object. However, if the person type specified in the healthcare inbound message does not match the person type specified in the **Bill Group Person Type** or **Parent Person Type** option type, the system creates or updates the person and its other entities directly and not through the **Customer Registration** feature. In this case, the system only refers the customer registration type for the business objects using which the person, account, and address should be created or updated in the system.

On calling the **C1-HCInboundMessage** web service, a healthcare inbound message is created in the **Pending** status. When the **Healthcare Customer Inbound Message Periodic Monitor (C1-HCINB)** batch is executed, the system checks whether there are any healthcare inbound messages in the **Pending** status. If there is a healthcare inbound message in the **Pending** status, the system validates the inbound message. If the healthcare inbound message is successfully validated, it is processed further and the above mentioned entities are either created or updated in the system based on the available information. If the person type is **Parent Customer**, the customer registration object is created in the **Complete** status. However, if the person type is **Bill Group**, the customer registration object is created in the **Bill Group Approved** status. The policies are created in the **In Force/Active** status and the pricing rules are created in the **Active** status. Finally, the status of the healthcare inbound message is changed to **Processed**.

Note: The above status transition is mentioned for a customer registration object based on the assumption that the data sent through the healthcare inbound message will be pre-approved and does not require any approval in the system.

If any error occurs while validating or processing a healthcare inbound message, the status of the healthcare inbound message is changed to **Rejected**. The system enables you to either reprocess or void a rejected healthcare inbound message. The system can reprocess a healthcare inbound message only when its status is changed to **Pending**. Using the **Retry** option, you can change the status of the healthcare inbound message from **Rejected** to **Pending**. The **Healthcare Customer Inbound Message Periodic Monitor (C1-HCINB)** batch will then reconsider and reprocess the healthcare inbound message. You can also configure the system such that the batch can automatically retry to process the rejected healthcare inbound messages. However, it will attempt to retry only when the **Maximum Retry** parameter in the **Retry for To Dos (C1-TODORETRY)** algorithm is set to a value greater than zero. Also, the maximum number of times the batch can attempt to retry and reprocess a healthcare inbound message depends on the value defined in the **Maximum Retry** parameter.

At present, if a customer registration object is created through a healthcare inbound message, you cannot edit the customer registration object from the user interface. You can only edit such customer registration objects through a healthcare inbound message.

Audit Framework

Oracle Revenue Management and Billing provides a mechanism wherein auditors can track various actions, such as add, update, and delete for an entity. To use the audit framework for a business object, you need to do the following:

- Set the **Eligible for Audit Event** option type on the business object to **Y**
- Attach an algorithm created using the **C1-REAUDEVNT** algorithm type to the **Audit** system event of the business object

At present, the audit framework is already configured for the following business objects:

- C1-POLICY
- C1-ASOPolicy
- C1-Membership
- C1-PolicyPlan
- C1_PERSON_BO
- C1-PricingRuleTierBased
- C1-PricingRuleAgeBased

Once the audit framework is configured for a business object, you need to create an active audit event type for the business object. The audit event type helps the system to determine:

- The entity business object for which the audit event type is created
- Whether the changes are audited for premium calculation
- Whether the system should create an audit event using the audit event type whenever an entity is added, updated, or deleted in the system
- Whether the system should create an audit event only when a set of fields, characteristics, or statuses of the entity are updated or when any field, characteristic, or status of the entity is updated

Note: You can select the **Update All** option in the audit event type. Alternatively, you can specifically list a set of elements (such as, fields, characteristics, or statuses of the business object) which should be monitored for the auditing purpose. In such case, whenever you change the respective field, characteristic, or status, the system creates an audit event for the entity in the system.

If you add, edit, or delete an entity when the audit framework is configured for the respective business object, the system checks whether an active audit event type exists for the business object. If so, it creates an audit event for the entity using the audit event type. The audit event is created in the **Pending** status in the C1_AUDIT_EVENT table. Note that the system creates one audit event for the entity irrespective of the number of changes made to the entity. The entity type and entity ID for which an audit event is created are added corresponding to the audit event. For example, if the audit event is

created while adding or updating a pricing rule, then the entity type is set to **Pricing Rule** and entity ID is set to Pricing Rule ID. In addition, an effective date is stamped corresponding to the audit event in the C1_AUDIT_EVENT table. Note that if the entity has a start date, then the effective date is set to the entity's start date. But, if the entity does not have a start date, then the effective date is set to the system date.

While creating an audit event, the system checks whether an audit event for the entity with the same effective date exists in the **Pending** status. If so, the system does not create a new audit event for the entity. Instead, the system adds a log in the existing audit event.

On executing the **Audit Event Process Monitor (C1-AUDEV)** batch, the system considers the audit events in the **Pending** or **Error** status from the C1_AUDIT_EVENT table. By default, it considers the audit events in the **Pending** status. The system checks whether the **C1-AUDEVMPR** algorithm is attached to the respective audit event type. If the **C1-AUDEVMPR** algorithm is not attached to the audit event type, the status of the audit event is set to **Complete** in the C1_AUDIT_EVENT table. If any error occurs, the status of the audit event is set to **Error** in the C1_AUDIT_EVENT table. The system enables you to cancel the audit events which are in the **Error** status. On cancelling an audit event, the status of the audit event is changed to **Canceled**.

To implement the **Audit Framework** feature, the following new screens are introduced in this release:

- Audit Event Type
- Audit Event

Audit Framework for Membership and Fully Insured Pricing Rules

To support the **Repricing** feature for membership, the audit framework is already configured for the following business objects:

- C1-Membership
- C1_PERSON_BO
- C1-PricingRuleTierBased
- C1-PricingRuleAgeBased

But, the audit framework will work only when you define an active audit event type for the above listed business objects. Apart from configuring the audit framework and creating an active audit event type for the following business objects, you need to do the following:

Business Object	You need to…
C1-PricingRuleTierBased	Attach an algorithm created using the **C1-AUDEVMPR** algorithm type to the **Audit Event Processing** system event of the respective audit event type

Business Object	You need to…
C1-PricingRuleAgeBased	Attach an algorithm created using the **C1-AUDEVMPR** algorithm type to the **Audit Event Processing** system event of the respective audit event type
C1-Membership	Attach an algorithm created using the **C1-FIAUDEV** algorithm type to the **Audit** system event of the business object **Note:** Do not attach an algorithm created using the **C1-REAUDEVNT** algorithm type to the **Audit** system event of the **C1-Membership** business object.
C1_PERSON_BO	Attach an algorithm created using the **C1-FIAUDEV** algorithm type to the **Audit** system event of the business object **Note:** Do not attach an algorithm created using the **C1-REAUDEVNT** algorithm type to the **Audit** system event of the **C1_PERSON_BO** business object.

In addition, you need to list the following in the pricing rule types where the category is set to **Age Based** and **Tier Based**:

- Audit event types of the C1-Membership and C1_PERSON_BO business objects using which the audit event should be created whenever a membership or member person is added, updated, or removed from the policy plan.
- Elements of the C1-Membership and C1_PERSON_BO business objects for which auditing is required.

Note:

At present, you cannot use an audit event type of the C1-Membership and C1_PERSON_BO business objects in the **Age Based** and **Tier Based** pricing rule types when the **Update All** option is selected in the audit event type. Therefore, we recommend you to select an audit event type of the C1-Membership and C1_PERSON_BO business objects where the **Update All** option is not selected.

The system creates an audit event whenever the membership start and end dates and member person's start and end dates are changed in the system irrespective of whether these fields are added in the **Age Based** and **Tier Based** pricing rule types or not.

The membership premium is recalculated in the following scenarios:

- A membership is added to the policy plan
- A member person is added or removed from the membership
- The fields, characteristics, or statuses which are monitored for the auditing purposes are updated at the membership, member person, or pricing rule level.
- A pricing rule is added or updated for the policy plan

The frequency of the above three scenarios in the business is high as compared to the last scenario. If you add, edit, or delete an entity when the audit framework is configured for the respective business object, the system behaves in the following manner:

<table>
<tr><th>Business Object</th><th>System Behavior</th></tr>
<tr><td>C1-PricingRuleTierBased and C1-PricingRuleAgeBased</td><td>The system checks whether an active audit event type exists for the business object. If so, it creates an audit event for the pricing rule using the audit event type. The audit event is created in the Pending status in the C1_AUDIT_EVENT table. Note that the system creates one audit event for the pricing rule irrespective of the number of changes made to the pricing rule. In addition, an effective date is stamped corresponding to the audit event which later helps in deriving the timeline during premium calculation. Note that the effective date is set to the pricing rule’s start date.

On executing the Audit Event Process Monitor (C1-AUDEV) batch, the system considers the audit events in the Pending or Error status from the C1_AUDIT_EVENT table. By default, it considers the audit events in the Pending status. The system checks whether the C1-AUDEVMPR algorithm is attached to the respective audit event type. If the C1-AUDEVMPR algorithm is attached to the audit event type, it identifies the policy plan where the pricing rule is defined. Once the policy plan is identified, it extracts a list of membership defined on the policy plan and the pricing rule type using which the pricing rule is created. Then, the system creates an entry for each membership, pricing rule type, and effective date combination in the Pending (P) status in the CI_REPRC_ENTITY_DTL table.

For example, an audit event is created while adding the following pricing rule:
<table>
<tr><td>Audit Event</td><td>AE1</td><td>AE2</td></tr>
<tr><td>Pricing Rule</td><td>AGBD</td><td>AFTG</td></tr>
<tr><td>Pricing Rule Type Using which the Pricing Rule is Created</td><td>PRT1</td><td>PRT3</td></tr>
<tr><td>Pricing Rule Start Date</td><td>01-01-2019</td><td>01-01-2019</td></tr>
<tr><td>Policy Plan for which the Pricing Rule is Defined</td><td>PP1</td><td>PP2</td></tr>
</table>
</td></tr>
</table>

<table>
<tr><th>Business Object</th><th>System Behavior</th></tr>
<tr><td></td><td>
<table>
<tr><td>Pricing Rule Types Associated with the Policy Plan</td><td>PRT1, PRT2, PRT3</td><td>PRT3</td></tr>
<tr><td>Memberships which Belong to the Policy Plan</td><td>M1, M2, M3, and M4</td><td>M11 and M12</td></tr>
</table>
In such case, the system creates the following entries for the AE1 audit event in the CI_REPRC_ENTITY_DTL table:

M1, PRT1, 01-01-2019
M2, PRT1, 01-01-2019
M3, PRT1, 01-01-2019
M4, PRT1, 01-01-2019

And, in the other case, the system creates the following entries for the AE2 audit event in the CI_REPRC_ENTITY_DTL table:

M11, PRT3, 01-01-2019
M12, PRT3, 01-01-2019

If an error occurs while creating entries for an audit event in the CI_REPRC_ENTITY_DTL table, the status of the audit event is set to Error in the C1_AUDIT_EVENT table.
</td></tr>
</table>

<table>
<tr><th>Business Object</th><th>System Behavior</th></tr>
<tr><td>C1-Membership</td><td>The system checks whether an active audit event type exists for the business object. If so, it creates an audit event for the membership using the audit event type. The audit event is created in the Pending status in the C1_AUDIT_EVENT table. Note that the system creates distinct audit events in the following scenarios:
<table>
<tr><th>Scenario</th><th>System Behavior</th></tr>
<tr><td>A membership is added to the policy plan.</td><td>One audit event is created for the membership. Here, the effective date in the audit event is set to the membership’s start date.</td></tr>
<tr><td>A membership is removed from the policy plan.</td><td>One audit event is created for the membership. Here, the effective date in the audit event is set to the membership’s start date.</td></tr>
<tr><td>A member person is added to the membership.</td><td>One audit event is created for the membership. Here, the effective date in the audit event is set to the member person’s start date.</td></tr>
<tr><td>A member person is removed from the membership.</td><td>One audit event is created for the membership. Here, the effective date in the audit event is set to the member person’s start date.</td></tr>
<tr><td>Membership characteristics are added or updated in the system.</td><td>Multiple audit events are created for the membership – one for each set of membership characteristics with the same effective date. Here, the effective date in the audit event is set to the date from when the membership’s characteristics are effective.</td></tr>
<tr><td>Member person characteristics are added or updated in the system.</td><td>Multiple audit events are created for the membership – one for each set of member person’s characteristics with the same effective date. Here, the effective date in the audit event is set to the date from when the member person’s characteristics are effective.</td></tr>
</table></td></tr>
</table>

Business Object	System Behavior	
	A set of membership fields except membership end date are updated in the system.	One audit event is created for the membership. Here, the effective date in the audit event is set to the membership's start date.
	The membership end date is updated in the system.	One audit event is created for the membership. Here, the effective date in the audit event is set to membership's end date.
	A set of member person's fields except member person start and end dates are updated in the system.	One audit event is created for the membership. Here, the effective date in the audit event is set to the member person's start date.

Business Object	System Behavior	
	The member person's start date is updated in the system.	Three audit events are created for the membership – one where the effective date is set to the member person's previous start date, another where the effective date is set to the member person's new start date, and third where the effective date is set to member person's end date + 1 Day. However, if the derived effective date is later than the membership end date, the system does not create the third audit event for the membership. In such scenario, it simply creates first two audit events. For example, the Mike's effective date range is changed from 04-01-2019 – 09-30-2019 to 01-15-2019 – 09-30-2019 in the M1 membership which is effective from 01-01-2019 to 12-31-2019. In such case, the system will create three audit events – one with effective date as 04-01-2019, another with effective date as 01-15-2019, and third with effective date as 10-01-2019 (i.e. 09-30-2019 + 1 Day). In addition, if there is a characteristic for the person whose effective date falls with the new enrollment date range, the system creates an audit event for the person where the effective date is set to characteristic's effective date. Note that the system considers those effective characteristics where the characteristic entity is set to **Person**. Let us assume that in the above example a characteristic for Mike was effective from 02-01-2019. In such case, the system creates three audit events for membership (with the effective dates as mentioned above) and one audit event for the person (i.e. Mike) where the effective date is set to 02-01-2019.

Business Object	System Behavior	
	The member person's end date is updated in the system.	Two audit events are created for the membership – one where the effective date is set to member person's previous end date + 1 Day and another where the effective date is set to member person's new end date + 1 Day. However, if the derived effective date is later than the membership end date, the system does not create the second audit event for the membership. In such scenario, it simply creates first audit event. For example, the Garry's effective date range is changed from 04-01-2019 – 09-30-2019 to 04-01-2019 – 12-31-2019 in the M1 membership which is effective from 01-01-2019 to 12-31-2019. In such case, the system will create one audit event with the effective date as 10-01-2019 (i.e. 09-30-2019 + 1 Day). It will not create another audit event because the derived effective date is later than membership end date. In addition, if there is a characteristic for the person whose effective date falls with the new enrollment date range, the system creates an audit event for the person where the effective date is set to characteristic's effective date. Note that the system considers those effective characteristics where the characteristic entity is set to **Person**. Let us assume that in the above example a characteristic for Garry was effective from 11-01-2019. In such case, the system creates one audit event for membership (with the effective date as mentioned above) and one audit event for the person (i.e. Garry) where the effective date is set to 11-01-2019.

<table>
<tr><th>Business Object</th><th>System Behavior</th></tr>
<tr><td></td><td>
<table>
<tr><td>The member person's start and end dates are updated in the system.</td><td>Four audit events are created for the membership – one where the effective date is set to the member person's previous start date, another where the effective date is set to the member person's new start date, third where the effective date is set to member person's previous end date + 1 Day, and fourth where the effective date is set to member person's new end date + 1 Day. However, if the derived effective date is later than the membership end date, the system does not create the fourth audit event for the membership. In such scenario, it simply creates first three audit events.

For example, the Juliet's effective date range is changed from 04-01-2019 – 09-30-2019 to 01-01-2019 – 11-30-2019 in the M1 membership which is effective from 01-01-2019 to 12-31-2019. In such case, the system will create four audit events – one with effective date as 04-01-2019, another with effective date as 01-01-2019, third with effective date as 10-01-2019 (i.e. 09-30-2019 + 1 Day), and fourth with effective date as 12-01-2019 (i.e. 11-30-2019 + 1 Day).

In addition, if there is a characteristic for the person whose effective date falls with the new enrollment date range, the system creates an audit event for the person where the effective date is set to characteristic's effective date. Note that the system considers those effective characteristics where the characteristic entity is set to Person. Let us assume that in the above example two characteristics of Garry were effective from 03-01-2019 and 10-01-2019, respectively. In such case, the system creates four audit events for membership (with the effective dates as mentioned above), fifth audit event for the person (i.e. Juliet) where the effective date is set to 03-01-2019, and sixth audit event where the effective date is set to 10-01-2019.</td></tr>
</table>
</td></tr>
<tr><td></td><td>For each audit event, the system identifies the policy plan to which the membership belongs and the active pricing rules defined on the policy plan. It then identifies the pricing rule types using which these active pricing rules are created in the system. An entry for each membership, pricing rule type, and effective date combination is created in the</td></tr>
</table>

<table>
<tr><th>Business Object</th><th>System Behavior</th></tr>
<tr><td>C1_PERSON_BO</td><td>The system checks whether an active audit event type exists for the business object. If so, it creates an audit event for the person using the audit event type. The audit event is created in the Pending status in the C1_AUDIT_EVENT table. Note that the system creates distinct audit events in the following scenarios:
<table>
<tr><th>Scenario</th><th>System Behavior</th></tr>
<tr><td>Person characteristics are added or updated in the system.</td><td>Multiple audit events are created for the person – one for each set of person characteristics with the same effective date. Here, the effective date in the audit event is set to the date from when the person’s characteristics are effective.</td></tr>
<tr><td>Person fields are updated in the system.</td><td>One audit event is created for the person. Here, the effective date in the audit event is set to the member person’s start date.</td></tr>
</table>
For each audit event, the system identifies the memberships in which the person is added as a member person. It then identifies the policy plan to which each membership belongs and the active pricing rules defined on the policy plan. It then identifies the pricing rule types using which these active pricing rules are created in the system. An entry for each membership, pricing rule type, and effective date combination is created in the Pending (P) status in the CI_REPRC_ENTITY_DTL table. For example, an audit event named AE1 is created while updating the P1 person:
<table>
<tr><td>Audit Event</td><td colspan="3">AE1</td></tr>
<tr><td>Membership to which P1 belongs</td><td>M1</td><td>M2</td><td>M3</td></tr>
<tr><td>Member Person’s Start Date</td><td>01-01-2019</td><td>01-01-2019</td><td>01-07-2019</td></tr>
<tr><td>Policy Plan to which Membership Belongs</td><td>PP1</td><td>PP2</td><td>PP3</td></tr>
<tr><td>Pricing Rules Defined on the Policy Plan</td><td>PR1 (PRT1), PR2 (PRT2)</td><td>PR3 (PRT3), PR4 (PRT3)</td><td>PR5 (PRT5), PR6 (PRT6)</td></tr>
<tr><td>Pricing Rule Types Associated with the Policy Plan</td><td>PRT1, PRT2</td><td>PRT3, PRT4</td><td>PRT5, PRT6</td></tr>
</table>
In such case, the system creates the following entries for the AE1 audit event in the CI_REPRC_ENTITY_DTL table:</td></tr>
</table>

Business Object	System Behavior
	• M1, PRT1, 01-01-2019 • M1, PRT2, 01-01-2019 • M2, PRT3, 01-01-2019 • M3, PRT5, 01-07-2019 • M3, PRT6, 01-07-2019 **Note:** If the audit event's effective date is earlier than the member person's start date, then the system uses the member person's start date while creating an entry in the CI_REPRC_ENTITY_DTL table.

Note: While creating an audit event, the system checks whether an audit event for the entity with the same effective date exists in the **Pending** status. If so, the system does not create a new audit event for the entity. Instead, the system adds a log in the existing audit event.

Bill Group Derivation for Membership

A new algorithm type named **C1_MEMBGDRV** is added in this release. You need to attach an algorithm created using the **C1_MEMBGDRV** algorithm type to the **Bill Group Derivation** system event in a pricing rule type where the category is set to **Age Based**, **Tier Based**, or **Pass-Through Billable Charge**.

This algorithm derives the policy from the policy plan to which the membership belongs. Once the policy is derived, the system derives the source system from the policy. The Bill Level 1, Bill Level 2, Bill Level 3, and Bill Level 4 characteristics defined on the membership indicate the Parameter 1, Parameter 2, Parameter 3, and Parameter 4. The system derives a bill group using the derivation and pricing parameters (i.e. Source System, Parameter 1, Parameter 2, Parameter 3, and Parameter 4) which are defined for the bill group. Note that the system considers the derivation and pricing parameters which are effective on the effective date (which is available corresponding to the record in the CI_REPRC_ENTITY_DTL table). It first searches for the bill group using the exact match. If the exact match is not available, the system finds the bill group using the best fit match. Note that while searching for a bill group, the source system and Parameter 1 (i.e. Bill Level 1) are mandatory.

This algorithm contains the following parameters:

- **Characteristic Type for Bill Level 1** – Used to indicate the characteristic type. This characteristic type must be defined on the membership. It is used to store the derivation and pricing parameter 1 for the membership.
- **Characteristic Type for Bill Level 2** - Used to indicate the characteristic type. This characteristic type must be defined on the membership. It is used to store the derivation and pricing parameter 2 for the membership.
- **Characteristic Type for Bill Level 3** - Used to indicate the characteristic type. This characteristic type must be defined on the membership. It is used to store the derivation and pricing parameter 3 for the membership.
- **Characteristic Type for Bill Level 4** - Used to indicate the characteristic type. This characteristic type must be defined on the membership. It is used to store the derivation and pricing parameter 4 for the membership.

Once the bill group is derived, the system derives the parent customer of the bill group. If the system could not derive the policy, bill group, or parent customer, the status of the record is changed to **Error (E)** in the CI_REPRC_ENTITY_DTL table.

Account and Price Item Derivation for Membership

A new algorithm type named **C1_ACCPRIMEM** is added in this release. You need to attach an algorithm created using the **C1_ACCPRIMEM** algorithm type to the **Account and Price Item Derivation** system event in a pricing rule type where the category is set to **Age Based**, **Tier Based**, or **Pass-Through Billable Charge**.

This algorithm fetches the effective pricing rule for each price item specified in the pricing rule type on the effective date. It first searches for effective pricing rules on the policy plan to which the membership belongs. If the system does not find any effective pricing rule for a price item on the policy plan, it inherits the effective pricing rule for the price item from the parent customer level.

The system then derives the account with a particular invoice type (to which a price item must be billed) based on the priority which is defined for the respective price item in the pricing rule type. Once the account is derived, the system then checks whether the account has one active contract of the contract type which is associated with the price item. If so, it fetches the contract for further processing. If the system could not derive the effective pricing rule for any price item or if the account or active contract for the account could not be derived, the status of the record is changed to **Error (E)** in the CI_REPRC_ENTITY_DTL table.

Membership Premium Calculation

The membership premium is calculated differently using the following pricing:

- **Age-Based Pricing** – The system first identifies a list of members which are eligible for premium calculation in a membership. It derives the main subscriber and member persons (i.e. Spouse and Children) which are related to the main subscriber using the relationship type specified in the **Age Based** pricing rule type. To identify a list of eligible children for premium calculation, the system uses the following characteristics:
    - **Maximum Number of Dependents** – Used to indicate the maximum number of children which are eligible for premium calculation.
    - **Maximum Age Limit for Maximum Dependent Count** – Used to indicate the maximum age limit for children which are eligible for premium calculation.
    - **Maximum Number of Dependents Order Priority** – Used to indicate whether you want to consider the youngest or eldest children during premium calculation. The valid values are - **YOUNGEST** and **ELDEST**.
    - **Age Calculation Date Basis** – Used to indicate whether the member person's age should be calculated using the member person's enrollment date or policy's start or renewal date.
    - **Newborn Gift Days** – Used to indicate the number of days you want to offer as gift days from the new born child's birth date. As a result, no premium will be calculated for this period.
    - **Newborn Gift Days Applicability** – Used to indicate whether you want to offer gift days in case of a new born. The valid values are - **Y** and **N**.
    - **Young Adult Max Age Limit** – Used to indicate the maximum age limit for young adults which are eligible for premium calculation.
    - **Young Adult Inclusion Applicability** – Used to indicate whether you want to consider the young adults during the premium calculation. The valid values are - **Y** and **N**.

Note: Only the **Age Calculation Date Basis (C1-AGCAL)** characteristic type is shipped with the product. You need to create the remaining characteristic types in the system and set their characteristic entity to the following - **Membership Person**, **Membership**, **Policy Plan**, **Policy**, and/or **State**.

The system searches for these characteristics on the following entities in the specified sequence:

1. Membership Person
2. Membership
3. State where the Membership is issued
4. Policy Plan
5. State where the Policy Plan is Issued
6. Policy
7. State where the Policy is Issued

For example, if the **Maximum Number of Dependents** characteristic is defined for all entities, the system considers the characteristic which is defined at the Member Person level because it is the lowest level. However, if the **Newborn Gift Days Applicability** characteristic is defined at the Policy Plan and Policy levels, the system considers the characteristic which is defined at the Policy Plan level because it is the lowest level. In other words, the system crawls from the lowest to the highest level while searching for the above characteristics. You can also define the above characteristics on the state where the membership, policy plan and/or policy are issued. For more information, refer to the State of Issue section.

Once the eligible members for premium are identified, the system derives the base fee and applicable modifier fee which are defined in the pricing rules. The system then calculates the timeline for each membership and price item combination. The timeline is basically calculated to understand the period for which the premium is applicable. For example, if a policy plan named **P1** has the following membership:

Membership	M1
Member Persons	P1 and P2
Membership Start Date	01-01-2019
Membership End Date	31-12-2019
P0 Main Subscriber's Start Date	01-01-2019
P0 Main Subscriber's End Date	31-12-2019
P1 Member's Start Date	01-01-2019
P1 Member's End Date	30-06-2019
P2 Member's Start Date	01-10-2019
P2 Member's End Date	31-12-2019

The **P1** policy plan is associated with an Age Based pricing rule type which contains the **Premium Fee** price item. The Age Based pricing rule for the **Premium Fee** price item is effective from 01-01-2019 to 31-12-2019.

In this case, the system will create the following timelines when you add **P2** member person in the **M1** membership:

Membership	Price Item	Timeline Start Date (Effective Date)	Timeline End Date
M1	Premium Fee	01-01-2019	30-06-2019 (i.e. P1 Member's End Date)
M1	Premium Fee	01-07-2019	30-09-2019
M1	Premium Fee	01-10-2019 (i.e. P2 Member's Start Date)	31-12-2019

It creates timelines using the membership's start and end dates, member person's start and end dates, and effective date. For each timeline, the system calculates the premium for all eligible member persons in the membership. Let us assume that the effective pricing rule is configured in the following manner:

Age-Band	Fee
0-21	$50
21-65	$100
>65	$150

P0 belongs to the 21-65 age band and P1 and P2 belongs to the 0-21 age band. Therefore, the premium is calculated using the following base fee:

Membership	Price Item	Timeline Start Date (Effective Date)	Timeline End Date	Base Fee
M1	Premium Fee	01-01-2019	30-06-2019 (i.e. P1 Member's End Date)	P0: $100 P1: $50
M1	Premium Fee	01-07-2019	30-09-2019	P0: $100
M1	Premium Fee	01-10-2019 (i.e. P2 Member's Start Date)	31-12-2019	P0: $100 P2: $50

Now, let us assume the following characteristics are defined on the **P1** policy plan which offers gift days to a new born child:

Effective Date	Characteristic Type	Characteristic Value
01-01-2019	Newborn Gift Days Applicability	Y
01-01-2019	Newborn Gift Days	30

Now, if the main subscriber adds his child named **C1** who is born on 05-03-2019, the system will create the following timelines:

Membership	Price Item	Timeline Start Date (Effective Date)	Timeline End Date
M1	Premium Fee	01-01-2019	03-04-2019 (i.e. 05-03-2019 +30 Days)
M1	Premium Fee	04-04-2019 (New Born Considered for Premium Calculation)	30-06-2019 (i.e. P1 Member's End Date)
M1	Premium Fee	01-07-2019	30-09-2019

Membership	Price Item	Timeline Start Date (Effective Date)	Timeline End Date
M1	Premium Fee	01-10-2019 (i.e. P2 Member's Start Date)	31-12-2019

It creates timelines using the membership's start and end dates, member person's start and end dates, and effective date. For each timeline, the system calculates the premium for all eligible member persons in the membership. In this case, the premium is calculated using the following base fee:

Membership	Price Item	Timeline Start Date (Effective Date)	Timeline End Date	Base Fee
M1	Premium Fee	01-01-2019	03-04-2019 (i.e. 05-03-2019 +30 Days)	P0: $100 P1: $50
M1	Premium Fee	04-04-2019 (New Born Considered for Premium Calculation)	30-06-2019 (i.e. P1 Member's End Date)	P0: $100 P1: $50 C1: $50
M1	Premium Fee	01-07-2019	30-09-2019	P0: $100 C1: $50
M1	Premium Fee	01-10-2019 (i.e. P2 Member's Start Date)	31-12-2019	P0: $100 P2: $50 C1: $50

- **Tier Based Pricing** – The system first derives the base fee which is defined in the pricing rules. It then calculates the timeline for each membership and price item combination. The timeline is basically calculated to understand the period for which the premium is applicable. For example, if a policy plan named **P2** has the following membership:

Membership	M1
Member Persons	P1 and P2
Membership Start Date	01-01-2019
Membership End Date	31-12-2019
Membership Tier	ES (Employee + Spouse)

The **P2** policy plan is associated with a Tier Based pricing rule type which contains the **Premium Fee** price item. The Tier Based pricing rule for the **Premium Fee** price item is effective from 01-01-2019 to 31-12-2019.

The system will create the following timeline when the **M1** membership is added to the **P2** policy plan:

Membership	Price Item	Timeline Start Date (Effective Date)	Timeline End Date
M1	Premium Fee	01-01-2019	31-12-2019

It creates timelines using the membership's start and end dates and effective date. For each timeline, the system calculates premium for the membership. Let us assume that the effective pricing rule is configured in the following manner:

Tier Level	Fee
E (Employee Only)	$100
ES (Employee + Spouse)	$200
F (Family)	$350
EC (Employee+ Children)	$150

The **M1** membership belongs to the **ES (Employee + Spouse)** tier. Therefore, the premium is calculated using the following base fee:

Membership	Price Item	Timeline Start Date (Effective Date)	Timeline End Date	Base Fee
M1	Premium Fee	01-01-2019	31-12-2019	$200

Now, let us assume the following characteristics are defined on the **P2** policy plan which offers gift days to a new born child:

Effective Date	Characteristic Type	Characteristic Value
01-01-2019	Newborn Gift Days Applicability	Y
01-01-2019	Newborn Gift Days	30

Now, if the main subscriber adds his child named **C1** who is born on 05-03-2019, the system will create the following timelines:

Membership	Price Item	Timeline Start Date (Effective Date)	Timeline End Date
M1	Premium Fee	01-01-2019	03-04-2019 (i.e. 05-03-2019 +30 Days)
M1	Premium Fee	04-04-2019 (New Born Considered for Premium Calculation)	31-12-2019

In this case, the premium is calculated using the following base fee considering the membership tier has changed from **ES (Employee + Spouse)** to **F (Family)**:

Membership	Price Item	Timeline Start Date (Effective Date)	Timeline End Date	Base Fee
M1	Premium Fee	01-01-2019	03-04-2019 (i.e. 05-03-2019 +30 Days)	200
M1	Premium Fee	04-04-2019 (New Born Considered for Premium Calculation)	31-12-2019	350

State of Issue

The State of Issue feature enables you to search for the following characteristics on a state:

- Maximum Number of Dependents
- Maximum Age Limit for Maximum Dependent Count
- Maximum Number of Dependents Order Priority
- Age Calculation Date Basis
- Newborn Gift Days
- Newborn Gift Days Applicability
- Young Adult Max Age Limit
- Young Adult Inclusion Applicability

It helps in identifying a list of eligible children in a membership. To enable the State of Issue feature, you need to do the following:

1. Define a predefined characteristic type named **State of Issue** where the characteristic entity is set to **Membership**, **Policy Plan** and **Policy**.
2. Define the required states as the predefined values for the **State of Issue** characteristic type.
3. Set the **State of Issue** characteristic type in the **State of Issue Characteristic Type** option type of the **C1-ASOBLLNG** feature configuration.

If the State of Issue feature is enabled, the system checks whether the **State of Issue** characteristic is defined for the membership when any of the above required characteristic is not defined at the membership person and membership levels. If the **State of Issue** characteristic is defined for the membership, the system checks whether the above required characteristic is defined on the state where the membership is issued. For example, if the **State of Issue** characteristic on the M1 membership is set to **California**, then the system will search for any of the above required characteristic on the **California** state. If the required characteristic is defined for the state, the system considers it while identifying a list of eligible children in the membership.

If the required characteristic is not defined at the membership person, membership, state where the membership is issued and policy plan levels, the system checks whether the **State of Issue** characteristic is defined for the policy plan. If the **State of Issue** characteristic is defined for the policy plan, the system checks whether the above required characteristic is defined on the state where the policy plan is issued. If the required characteristic is defined for the state, the system considers it while identifying a list of eligible children in the membership.

However, if the required characteristic is not defined at the membership person, membership, state where membership is issued, policy plan, state where the policy plan is issued, and policy levels, the system checks whether the **State of Issue** characteristic is defined for the policy. If the **State of Issue** characteristic is defined for the policy, the system checks whether the above required characteristic is defined on the state where the policy is issued. If the required characteristic is defined for the state, the system considers it while identifying a list of eligible children in the membership.

Fully Insured Pricing

A new pricing model is introduced for the fully insured business. In this pricing model, you can define pricing rules using the pricing rule types. At present, you can define the following pricing rule types for the fully insured business:

- Age Based Pricing Rule Type
- Tier Based Pricing Rule Type
- Pass-Through Billable Charge Pricing Rule Type

Note: You cannot define pricing rules using the pass-through billable charge pricing rule types. However, you can directly create SQI based billable charges using a pass-through billable charge pricing rule type. For more information, refer to the Fully Insured Pass-Through Billable Charge section.

Age Based Pricing

The base fee for a price item can vary based on the age, employee attributes (such as employee type, employee status, etc.) and modifiers (such as tobacco usage, gender, alcohol usage, etc.). Oracle Revenue Management and Billing enables you to offer an age based pricing to a fully insured customer. In the Age Based pricing, the premium is calculated for each eligible member person based on age, employee attributes and modifiers, and then aggregated to derive the total premium for the membership. An age based pricing can be defined using the age based pricing rule. You can define an age based pricing rule for a price item on the policy plan. If the age based pricing rule is defined for a price item on a policy plan, all memberships which belong to the policy plan will inherit the age based pricing from the policy plan. If the system does not find any effective pricing rule for a price item on the policy plan, it inherits the effective pricing rule for the price item from the parent customer level.

You can define an age based pricing rule using an age based pricing rule type. It is the age based pricing rule type which helps the system to determine:

- Business object using which the age based pricing rule should be created in the system.
- Algorithm which should be triggered for deriving the bill group, parent customer, and policy for a membership.

Note: You must create an algorithm using the **C1_MEMBGDRV** algorithm type and attach it to the **Bill Group Derivation** system event.

- Algorithm which should be triggered for deriving the account and price item for a membership.

Note: You must create an algorithm using the **C1_ACCPRIMEM** algorithm type and attach it to the **Account and Price Item Derivation** system event.

- Algorithm which should be triggered for identifying eligible member persons for premium calculation.

Note: You must create an algorithm using the **C1_AGEBDELG** algorithm type and attach it to the **Pricing Rule Pre Processing** system event.

- Algorithm which should be triggered for calculating the premium for each eligible member person.

Note: You must create an algorithm using the **C1_AGEPREM** algorithm type and attach it to the **Pricing Rule Premium Calculation** system event.

- Algorithm which should be triggered for deriving the bill period for the account.

Note: You must create an algorithm using the **C1-FIBCBP** algorithm type and attach it to the **Pricing Rule BC Creation Pre Processing** system event.

- Algorithm which should be triggered for creating the SQI based billable charges for each membership and price item combination.

Note: You must create an algorithm using the **C1-FICRETBC** algorithm type and attach it to the **Pricing Rule Billable Charge Creation** system event.

- Price items for which you can define age based pricing rules using the age based pricing rule type.
- Rate options that you can use while defining the pricing for the respective price item.
- Type of account to which the respective price item should be billed based on the specified priority.
- Rule type which indicates the rules that should be executed to determine whether the price item is eligible for billing.

- Audit event types of the C1-Membership and C1_PERSON_BO business objects using which the audit event should be created whenever a membership or member person is added, updated, or removed from the policy plan.
- Elements of the C1-Membership and C1_PERSON_BO business objects for which auditing is required.

Note: At present, you cannot use an audit event type of the C1-Membership and C1_PERSON_BO business objects in the **Age Based** pricing rule types when the **Update All** option is selected in the audit event type. Therefore, we recommend you to select an audit event type of the C1-Membership and C1_PERSON_BO business objects where the **Update All** option is not selected.

- Members, such as main subscriber, spouse, or children in a membership which are eligible for premium calculation. The system will only consider the member with the specified relationship type during premium calculation.
- Characteristic types to identify a list of eligible children for premium calculation. The following characteristic types must be specified in the age based pricing rule type:
    - **Maximum Number of Dependents** – This characteristic type stores the maximum number of children which are eligible for premium calculation. You must specify a characteristic type where the characteristic entity is set to **Membership Person**, **Membership**, **Policy Plan**, **Policy**, and **State**.
    - **Maximum Age Limit for Maximum Dependent Count** – This characteristic type stores the maximum age limit for children which are eligible for premium calculation. You must specify a characteristic type where the characteristic entity is set to **Membership Person**, **Membership**, **Policy Plan**, **Policy**, and **State**.
    - **Maximum Number of Dependents Order Priority** – This characteristic type indicates whether the youngest or eldest children should be considered during premium calculation. You must specify a characteristic type where the characteristic entity is set to **Membership Person**, **Membership**, **Policy Plan**, **Policy**, and **State**.
    - **Age Calculation Date Basis** – This characteristic type indicates whether the member person's age should be calculated using the member person's enrollment date or policy's start or renewal date. You must specify a characteristic type where the characteristic entity is set to **Membership Person**, **Membership**, **Policy Plan**, **Policy**, and **State**.
    - **Newborn Gift Days** – This characteristic type stores the number of days you want to offer as gift days from the new born child's birth date. You must specify a characteristic type where the characteristic entity is set to **Membership Person**, **Membership**, **Policy Plan**, **Policy**, and **State**.
    - **Newborn Gift Days Applicability** – This characteristic type indicates whether the gift days should be offered in case of a new born. You must specify a characteristic type where the characteristic entity is set to **Membership Person**, **Membership**, **Policy Plan**, **Policy**, and **State**.

- **Young Adult Max Age Limit** – This characteristic type stores the maximum age limit for young adults which are eligible for premium calculation. You must specify a characteristic type where the characteristic entity is set to **Membership Person**, **Membership**, **Policy Plan**, **Policy**, and **State**.
- **Young Adult Inclusion Applicability** – This characteristic type indicates whether the young adults should be considered during the premium calculation. You must specify a characteristic type where the characteristic entity is set to **Membership Person**, **Membership**, **Policy Plan**, **Policy**, and **State**.

Once an age based pricing rule type is defined, you can define age based pricing rules using the age based pricing rule type. Note that, at present, you can define age based pricing rules only through a healthcare inbound message and not from the user interface. However, you can view the age based pricing rules defined for a policy plan from the **Customer 360° Information** screen. While creating an age based pricing rule through a healthcare inbound message, you need to specify the following information:

- Entity type (i.e. Policy Plan) and entity ID (i.e. policy plan ID) for which you want to define the age based pricing rule
- Start and end dates of the age based pricing rule
- Age based pricing rule type using which you want to create the age based pricing rule
- Price Item for which you want to define age based pricing
- Rate option using which the price assignment should be created for the age based pricing rule

Note: If the rate option is not given in the pricing rule data, by default, it is set to a value specified in the **Default Rate Option – Flat** or **Default Rate Option – Percentage** option type of the **C1-ASOBLLNG** feature configuration depending on whether the modifier method is set to **FLAT**, **EXPT** or **INPT**.

- Whether you want to increase or decrease the premium of an eligible member by a flat amount or in percentage based on some modifier attributes (such as tobacco usage, alcohol usage, and so on).
- Age limit and employee attributes for which the base fee is applicable

Note:

The system defines the lower age limit and upper age limit pricing eligibility criteria using the parameter which is specified in the **Age Based Parameter** option type of the **C1-ASOBLLNG** feature configuration.

The employee attributes can be defined as the parameters in the system. These parameters can then be used to define eligibility criteria in the age based pricing. Here, you can use only those parameters where the parameter usage is set to **Pricing Eligibility**.

- Modifiers based on which you want to charge additional or offer discount to an eligible member

Note: The modifiers can be defined as the parameters in the system. These parameters can then be used to define eligibility criteria in the age based pricing. Here, you can use only those parameters where the parameter usage is set to **Pricing Eligibility**.

Once the age based pricing rule is defined for a policy plan, the system creates a price item pricing and price list and then assigns the price item pricing to the price list.

Tier Based Pricing

The standard tier based pricing structure contains different tiers, such as Employee Only (E), Employee + Spouse (ES), Family (F), Employee + Children (EC). A main subscriber can subscribe his/her dependents to a policy plan and may fall in one of the tier. The fee for a price item can vary based on the membership tier level and employee attributes (such as employee type, employee status, etc.). Oracle Revenue Management and Billing enables you to offer a tier based pricing to a fully insured customer. In the Tier Based pricing, the premium for the membership is derived based on tier level and employee attributes.

A tier based pricing can be defined using the tier based pricing rule. You can define a tier based pricing rule for a price item on the policy plan. If the tier based pricing rule is defined for a price item on a policy plan, all memberships which belong to the policy plan will inherit the tier based pricing from the policy plan. If the system does not find any effective pricing rule for a price item on the policy plan, it inherits the effective pricing rule for the price item from the parent customer level.

You can define a tier based pricing rule using a tier based pricing rule type. It is the tier based pricing rule type which helps the system to determine:

- Business object using which the tier based pricing rule should be created in the system.
- Algorithm which should be triggered for deriving the bill group, parent customer, and policy for a membership.

Note: You must create an algorithm using the **C1_MEMBGDRV** algorithm type and attach it to the **Bill Group Derivation** system event.

- Algorithm which should be triggered for deriving the account and price item for a membership.

Note: You must create an algorithm using the **C1_ACCPRIMEM** algorithm type and attach it to the **Account and Price Item Derivation** system event.

- Algorithm which should be triggered for calculating the premium for membership.

Note: You must create an algorithm using the **C1_TIERPREM** algorithm type and attach it to the **Pricing Rule Premium Calculation** system event.

- Algorithm which should be triggered for deriving the bill period for the account.

Note: You must create an algorithm using the **C1-FIBCBP** algorithm type and attach it to the **Pricing Rule BC Creation Pre Processing** system event.

- Algorithm which should be triggered for creating the SQI based billable charges for each membership and price item combination.

Note: You must create an algorithm using the **C1-FICRETBC** algorithm type and attach it to the **Pricing Rule Billable Charge Creation** system event.

- Price items for which you can define tier based pricing rules using the tier based pricing rule type.
- Rate options that you can use while defining the pricing for the respective price item.
- Type of account to which the respective price item should be billed based on the specified priority.
- Rule type which indicates the rules that should be executed to determine whether the price item is eligible for billing.
- Audit event types of the C1-Membership business object using which the audit event should be created whenever a membership is added, updated, or removed from the policy plan.
- Elements of the C1-Membership business object for which audit event should be created.

Note: At present, you cannot use an audit event type of the C1-Membership and C1_PERSON_BO business objects in the **Tier Based** pricing rule types when the **Update All** option is selected in the audit event type. Therefore, we recommend you to select an audit event type of the C1-Membership and C1_PERSON_BO business objects where the **Update All** option is not selected.

Once a tier based pricing rule type is defined, you can define tier based pricing rules using the tier based pricing rule type. Note that, at present, you can define tier based pricing rules only through a healthcare inbound message and not from the user interface. However, you can view the tier based pricing rules defined for a policy plan from the **Customer 360° Information** screen. While creating a tier based pricing rule through a healthcare inbound message, you need to specify the following information:

- Entity type (i.e. Policy Plan) and entity ID (i.e. policy plan ID) for which you want to define the tier based pricing rule
- Start and end dates of the tier based pricing rule
- Tier based pricing rule type using which you want to create the tier based pricing rule
- Price Item for which you want to define tier based pricing
- Rate option using which the price assignment should be created for the tier based pricing rule

Note: If the rate option is not given in the pricing rule data, by default, it is set to a value specified in the **Default Rate Option – Flat** option type of the **C1-ASOBLLNG** feature configuration when the modifier method is set to **FLAT** or **NULL**.

- Tier level and employee attributes for which the fee is applicable

Note: The tier level and employee attributes can be defined as the parameters in the system. These parameters can then be used to define eligibility criteria in the tier based pricing. Here, you can use only those parameters where the parameter usage is set to **Pricing Eligibility**.

Once the tier based pricing rule is defined for a policy plan, the system creates a price item pricing and price list and then assigns the price item pricing to the price list.

Fully Insured Pass-Through Billable Charge

At times, the system might receive pre-calculated premium for the membership through a healthcare inbound message. If the price item, account identifier type, and account identifier are given in the billable charge information of a healthcare inbound message, the system directly creates an SQI based billable charge when you process the healthcare inbound message. The pre-calculated premium amount is stored as a pass through line in the SQI based billable charge. But, if only the price item is given in the billable charge information, the system checks whether the price item is included in any pricing rule type where the pricing rule type category is set to **Pass-Through Billable Charge**. If so, the system checks whether the pass-through billable charge pricing rule type is associated with the policy plan to which the membership belongs (for which the billable charge information is received). It is the pass-through billable charge pricing rule type which helps the system to determine:

- Algorithm which should be triggered for deriving the bill group, parent customer, and policy for a membership.

Note: You must create an algorithm using the **C1_MEMBGDRV** algorithm type and attach it to the **Bill Group Derivation** system event.

- Algorithm which should be triggered for deriving the account and price item for a membership.

Note: You must create an algorithm using the **C1_ACCPRIMEM** algorithm type and attach it to the **Account and Price Item Derivation** system event.

- Algorithm which should be triggered for deriving the bill period for the account.

Note:

You must create an algorithm using the **C1-FIBCBP** algorithm type and attach it to the **Pricing Rule BC Creation Pre Processing** system event.

If the bill period or frequency is given in the billable charge information of the healthcare inbound message, the system does not derive the bill period for the account.

- Algorithm which should be triggered for creating the SQI based billable charges for each membership and price item combination.

Note: You must create an algorithm using the **C1-FICRETBC** algorithm type and attach it to the **Pricing Rule Billable Charge Creation** system event.

- Price items for which you can create the SQI based billable charges using the pass-through billable charge pricing rule type.

Note: You can add multiple price items in a pass-through billable charge pricing rule type. But, you cannot add the same price item in multiple pass-through billable charge pricing rule types.

- Type of account to which the respective price item should be billed based on the specified priority.

Repricing

Oracle Revenue Management and Billing extends the **Repricing** feature for the insurance domain. To enable this feature for fully insured line of business, you need to setup the audit framework for membership and age based and tier based pricing rules. For more information, refer to the Audit Framework for Membership and Fully Insured Pricing Rules section.

To recalculate the membership premium, you need to execute the following batches in the specified order:

1. **Identify Entities for Repricing (C1-REPC1)** - Until now, this batch identified a set of accounts which were impacted due to change in a price list and then created a repricing request for such accounts. In this release, new parameters named **Repricing Mode** and **Membership ID** are added in this batch. If the **Repricing Mode** parameter is set to **ACCT**, this batch identifies a set of accounts which were impacted due to change in a price list and then creates a repricing request for such account. However, if the **Repricing Mode** parameter is set to **MEMB**, this batch considers the records in the **Pending (P)** and **Error (E)** status from the CI_REPRC_ENTITY_DTL table. For each record, the system invokes the algorithms attached to the following system events of the pricing rule type in the specified order:
    a. **Bill Group Derivation** – Used to derives the policy, bill group, and parent customer of the bill group.
    b. **Account and Price Item Derivation** – Used to derive the pricing rules for the price items (which are present in the pricing rule type) on the policy plan (to which the membership belongs).

    Once the pricing rules are derived, the system creates a repricing request for the membership, pricing rule, and effective date combination. Finally, the status of the corresponding record is set to **Complete (C)** in the CI_REPRC_ENTITY_DTL table. If any error occurs while creating a repricing request, the status of the corresponding record is set to **Error (E)** in the CI_REPRC_ENTITY_DTL table.

    This batch is a multi-threaded batch. For more information about the batch, refer to *Oracle Revenue Management and Billing Batch Guide*.
2. **Process Repricing Request (C1-REPC2)** - Until now, this batch calculated and persisted the rate for the account, price item, and effective date combination in the CI_PRCE_CALC table. In this release, new parameters named **Repricing Mode** and **Membership ID** are added in this batch. If the **Repricing Mode** parameter is set to **ACCT**, this batch calculates and persist the rate for the account, price item, and effective date combination in the CI_PRCE_CALC table. However, if the **Repricing Mode** parameter is set to **MEMB**, this batch considers the records in the **Pending (P)** and **Error (E)** status from the CI_REPRC_REQ_DTL table. If the pricing rule in the record is **Age Based**, the system invokes the algorithms attached to the following system events of the pricing rule type in the specified order:
    a. **Pricing Rule Pre Processing** – Used to identify the eligible member persons for premium calculation.
    b. **Pricing Rule Premium Calculation** – Used to calculate the premium for the membership.

Once these algorithms are executed, the premium is calculated for each eligible member person and stored in the CI_PRCE_CALC_LN table and the total premium for the membership is stored in the CI_PRCE_CALC table. Finally, the status of the corresponding record is set to **Complete (C)** in the CI_REPRC_REQ_DTL table.

However, if the pricing rule in the record is **Tier Based**, the system invokes the algorithm attached to the following system event of the pricing rule type:

- **Pricing Rule Premium Calculation** – Used to calculate the premium for the membership.

Once the algorithm is executed, the premium is calculated for the membership and stored in the CI_PRCE_CALC table. Finally, the status of the corresponding record is set to **Complete (C)** in the CI_REPRC_REQ_DTL table.

This batch is a multi-threaded batch. For more information about the batch, refer to *Oracle Revenue Management and Billing Batch Guide*.

Fully Insured Billable Charge Creation

Oracle Revenue Management and Billing enables you to create billable charges for pre-calculated premium amount (which is received through a healthcare inbound message) and calculated premium amount (which is derived using a pricing rule defined at the policy plan level). Before creating an SQI based billable charge, the system derives the bill period for the account using the **Invoice Day (C1OFFRST)** characteristic defined on the account.

While creating a billable charge for the pre-calculated premium amount through a healthcare inbound message, the system creates an SQI based billable charge for the membership and price item combination. Note that if the bill period or frequency is given in the billable charge information in the healthcare inbound message, the system does not derive the bill period for the account.

However, for creating a billable charge for the calculated premium amount, you need to execute the **Fully Insured Billable Charge Creation (C1-FIBCR)** batch. It creates an SQI based billable charge for calculated premium amount. It considers the timelines in the **Pending (P)** and **Error (E)** status from the **CI_PRCE_CALC** table. Note that it considers only those timelines where the entity type is set to **Membership**. For each timeline, membership and price item combination, the system does the following:

1. Derives the bill period for the account using the **Invoice Day (C1OFFRST)** characteristic defined on the account.
2. Creates an SQI based billable charge. Here, the start and end dates on the billable charge are set to the timeline start and end dates.

If the premium amount of the two consecutive timelines of a membership and price item combination is same, this algorithm does not create a new billable charge. Instead, it extends the end date of the previous timeline's billable charge. If the membership end date is set to a date which is earlier than the previous date (for example, Old Membership End Date: 31-12-2019 and New Membership End Date: 31-10-2019) and a billable charge exists for the membership and price item combination with the same start date and amount, then the system behaves in the following manner:

If…	**Then…**
Bill segments for the 01-01-2019 to 31-12-2019 period are not yet generated in the system	The end date in the existing billable charge is updated to 31-10-2019.
Bill segments for the 01-01-2019 to 31-12-2019 period are in the **Freezable** status	The bill segments for the 01-11-2019 to 31-12-2019 period are deleted and the end date in the existing billable charge is updated to 31-10-2019.
Bill segments for the 01-01-2019 to 31-12-2019 period are in the **Frozen** or **Pending Cancel** status	The bill segments for the 01-11-2019 to 31-12-2019 period are canceled and the end date in the existing billable charge is updated to 31-10-2019.

However, if the membership end date is set to a date which is earlier than the previous date (for example, Old Membership End Date: 31-12-2019 and New Membership End Date: 31-10-2019) and a billable charge exists for the membership and price item combination with the same start date, but different amount, then the system behaves in the following manner:

If…	**Then…**
Bill segments for the 01-01-2019 to 31-12-2019 period are not yet generated in the system	The existing billable charge is canceled and a new billable charge is created for the 01-01-2019 to 31-10-2019 period.
Bill segments for the 01-01-2019 to 31-12-2019 period are in the **Freezable** status	The bill segments for the 01-01-2019 to 31-12-2019 period are deleted. The existing billable charge is canceled and a new billable charge is created for the 01-01-2019 to 31-10-2019 period.
Bill segments for the 01-01-2019 to 31-12-2019 period are in the **Frozen** or **Pending Cancel** status	The bill segments for the 01-01-2019 to 31-12-2019 period are canceled. The existing billable charge is canceled and a new billable charge is created for the 01-01-2019 to 31-10-2019 period.

And, if the membership end date is set to a date which is earlier than the previous date (for example, Old Membership End Date: 31-12-2019 and New Membership End Date: 31-10-2019) and a billable charge does not exist for the membership and price item combination with the same start date, then a billable charge is created for the 01-01-2019 to 31-10-2019 period. Note that if there are billable charges for the membership and price item combination whose date range is within the timeline, such billable charges are canceled and their corresponding bill segments (if any) are either deleted or canceled in the system.

The pre-calculated or calculated premium amount is stored as a pass through line in the SQI based billable charge. Note that these pass through lines are memo only and no general ledger entries will be created for these pass through lines. This algorithm fetches SQI from the **Proration SQI** option type of the **C1-ASOBLLNG** feature configuration. The SQI value is set to the total amount of the pass through lines in the billable charge. The system prorates the amount only when the SQ rule specified in the rate schedule attached to the active contract contains the SQI which is specified in the **Proration SQI** option type of the **C1-ASOBLLNG** feature configuration.

Once the billable charge is created, the membership ID is stamped as characteristic on the billable charge. This indicates that the billable charge is created for the respective membership. This algorithm fetches the characteristic type, which must be defined on the billable charge, from the **Characteristic Type For Membership Id** option type of the **C1-ASOBLLNG** feature configuration.

Finally, the status of the corresponding timeline is set to **Complete (C)** in the **CI_PRCE_CALC** table. If any error occurs while creating a billable charge, the status of the corresponding timeline is set to **Error (E)** in the **CI_PRCE_CALC** table. In addition, if an error occurs, a To Do is created using the **C1-FIBCR** To Do type and assigned to all users with a To Do role which is specified as characteristic on the parent customer. The system considers the characteristic on the parent customer which is specified in the **To Do Role Characteristic Type** option type of the **C1-ASOBLLNG** feature configuration. Note that the system does not create a To Do for each error record. Instead, the system creates distinct To Do for each membership and pricing rule combination.

This batch is a multi-threaded batch. For more information about the batch, refer to *Oracle Revenue Management and Billing Batch Guide*.

Enhancements (Generic)

This section lists the enhancements made to the following features which can be used in both financial services and insurance domains:

- Pricing Management
- State
- Bill Tolerance
- Rating Engine
- Rules Engine
- SQ Rule
- Refund/Write Off Request
- Offset Request
- Person Information
- Bill and Bill Segment Approval

Pricing Management

The following changes are made to the Pricing Management feature:

- The **Rate and Price Component Summary** zone in the **Price Item Pricing** screen is renamed to **Price Assignment Tree**.
- A new zone named **Price Component** is added in the **Price Item Pricing** screen. It allows you to define and edit a price component of a rate component. It contains the following links:
    - **Show Price Component Tier** – On clicking the link, the **Tiering Criteria** section appears in the **Price Component** zone. The **Tiering Criteria** section allows you to define and edit the tiering criteria of the price component. Note that the **Show Price Component Tier** link does not appear in the **Price Component** zone when the tiering type of the rate component is set to **FLAT**.
    - **Show Price Component Eligibility** - On clicking the link, the **Pricing Eligibility Criteria** section appears in the **Price Component** zone. The **Pricing Eligibility Criteria** section allows you to define and edit the eligibility criteria of the price component.
- The **Price Assignment Tree** zone is completely redesigned to enhance the user experience. Now, it displays the following information in a gird:
    - Information string of each rate component present in the rate schedule. The **Add** icon appears corresponding to each rate component. On clicking the **Add** icon, the **Price Component** zone appears.
    - Information string of each price component defined for the rate component. The following icons appear corresponding to the price component:

- **Edit** – On clicking the **Edit** icon, the **Price Component** zone appears where you can edit the details of the respective price component including its tiering and pricing eligibility criteria.
- **Delete** – On clicking the **Delete** icon, you can delete the price component.
- **Copy** – On clicking the **Copy** icon, you can create a copy of a price component within the rate component. Note that the copy functionality is not yet supported across rate components.

Note: The **Add**, **Edit**, and **Delete** icons appear only when the price item pricing is in the **Draft** or **Proposed** status.

All price component information strings of a rate component are grouped under the **Price Details** node.

- Information string of each tiering criteria defined in the price component. All tiering criteria information strings of a price component are grouped under the **Tier Details** node.
- Information string of each eligibility criteria defined in the price component. All pricing eligibility criteria information strings of a price component are grouped under the **Eligibility Details** node.

- The **Expand All** and **Collapse All** buttons are added in the **Price Assignment Tree** zone. You can use them to expand and collapse all nodes at once. However, note that if you have manually expanded the nodes, you cannot collapse the nodes using the **Collapse All** button. This is because the **Collapse All** button works in conjunction with the **Expand All** button.
- You can now define division-specific accrual type criteria for a price item. If the division-specific accrual type criteria for a price item is set to **Actual**, then the price item is considered for accrual only when the accrual is created using the division's accrual type where the accrual criteria is set to **Actual**. Similarly, if division-specific accrual type criteria for a price item is set to **Historical**, then the price item is considered for accrual only when the accrual is created using the division's accrual type where the accrual criteria is set to **Historical**.

  This requirement where the price item should be considered for accrual based on the accrual criteria functions only when the **PriceItem Accrual Criteria Required** option is selected in the accrual type.

  If the **PriceItem Accrual Criteria Required** option is not selected in the accrual type, the system considers all price items except the excluded ones for accrual irrespective of whether the accrual type criteria for the price item is set to **Actual**, **Historical**, or **Not Applicable**.

State

Until now, you were able to create a state for a country from the **Country** screen. Now, in addition, you can create and edit a state from a new screen named **State**. The new screen allows you to define characteristics for a state.

Bill Tolerance

Now, the Bill Tolerance feature is enhanced to work when bills are generated through the construct based billing batches.

Rating Engine

The following changes are made to the Rating Engine feature:

- You can use the following newly added algorithms while defining eligibility criteria for a rate component:

Algorithm	Algorithm Type	Entity	Algorithm Description
C1-RCVALCHK	C1-RCVALCHK	Rate Component	This algorithm compares the values of two rate components and accordingly returns TRUE or FALSE. It contains the following parameters: • **Sequence of First Rate Component** – Used to specify the sequence number of the first rate component. • **Sequence of Second Rate Component** - Used to specify the sequence number of the second rate component. If the value of first rate component is greater than the value of the second rate component, the system returns TRUE. Otherwise, the system returns FALSE. If the value is TRUE, it used in the eligibility criteria for further processing. However, if the value is FALSE, the rule is not satisfied irrespective of whether the eligibility criteria is satisfied or not.
C1-PIDIVCHCK	C1-PIDIVCHCK	Rate Component	This algorithm checks whether the characteristic type and value specified in the following parameters are used in a division-specific characteristic of the price item:

Algorithm	Algorithm Type	Entity	Algorithm Description
			• **Division-Specific Price Item Characteristic Type** – Used to specify a characteristic type. Here, you must specify a characteristic type where the characteristic entity is set to **Division/Price Item Combination**. • **Division-Specific Price Item Characteristic Value** – Used to specify a characteristic value. If a division-specific characteristic of the price item contains the characteristic type and value as mentioned in the above parameters, the system returns TRUE. Otherwise, the system returns FALSE. If the value is TRUE, it used in the eligibility criteria for further processing. However, if the value is FALSE, the rule is not satisfied irrespective of whether the eligibility criteria is satisfied or not.
C1-USGACCTCH	C1-USGACCTCH	Rate Component	This algorithm checks whether the characteristic type specified in the **Usage Account Characteristic Type** parameter is defined on the bill segment calculation line. If so, the system fetches its characteristic value (i.e. usage account ID). The system then checks whether the characteristic with the characteristic type and value specified in the **Account Type Characteristic Type** and **Account Type Characteristic Value** parameters is defined on the usage account. If so, the system checks whether the characteristic with the characteristic type and value specified in the **Account Characteristic Type** and **Account Characteristic Value** parameters is defined on the usage account. If so, the system returns TRUE. Otherwise, the system returns FALSE.

Algorithm	Algorithm Type	Entity	Algorithm Description
			It contains the following parameters: • **Account Characteristic Type** – Used to specify a characteristic type. Here, you must specify a characteristic type where the characteristic entity is set to **Account**. • **Account Characteristic Value** – Used to specify a characteristic value of the characteristic type which is specified in the **Account Characteristic Type** parameter. • **Usage Account Characteristic Type** – Used to specify a characteristic type. Here, you must specify a characteristic type where the characteristic entity is set to **Bill Segment Calc Line**. • **Account Type Characteristic Type** - Used to specify a characteristic type. Here, you must specify a characteristic type where the characteristic entity is set to **Account**. • **Account Type Characteristic Value** - Used to specify a characteristic value of the characteristic type which is specified in the **Account Type Characteristic Type** parameter. If the value is TRUE, it used in the eligibility criteria for further processing. However, if the value is FALSE, the rule is not satisfied irrespective of whether the eligibility criteria is satisfied or not.

Rules Engine

The following changes are made to the Rules Engine feature:

- You can use the following newly added algorithm while defining eligibility criteria for a rule:

Algorithm	Algorithm Type	Entity	Algorithm Description
C1-RETACCTCH	C1-RETACCTCH	Rule	This algorithm retrieves the account ID using the following output parameters in the rule: • Account Identifier Type • Account Identifier Once the account is derived, it fetches the characteristic value of a characteristic type specified in the following parameter from the account: • **Characteristic Type** – Used to specify a characteristic type. Here, you must specify a characteristic type where the characteristic entity is set to **Account**.

SQ Rule

The following SQ rule algorithm types are introduced in this release:

Algorithm	Algorithm Type	Algorithm Description
C1-DAYSM	DM	This algorithm calculates the number of days in the month in which the consumption period start date falls. Note that the number of days is calculated depending on whether it is a leap year or not.
C1-DAYSY	YD	This algorithm calculates the number of days in the year in which the processing date falls. Note that the number of days is calculated depending on whether it is a leap year or not.

Refund/Write Off Request

The following changes are made to the Refund/Write Off Request feature:

- A new status named **Deferred Void** is added in the lifecycle of the **C1-RefundReq** business object.
- A new status named **Deferred Cancel** is added in the lifecycle of the **C1-WORequest** business object.
- Now, on voiding a refund request, the system checks whether the number of refund adjustments in the refund request exceeds the online record process limit defined in the **C1-DEFERVOID** algorithm. If the number of refund adjustments does not exceed the online record process limit, the system cancels the frozen refund adjustments immediately and then changes the status of the refund request to **Voided**. However, if the number of refund adjustments exceeds the online record process limit, the system changes the status of the refund request to **Deferred Void**. On executing the **Refund Write Off Request Periodic Monitor (C1-REFWO)** batch, the system checks whether there are any refund requests in the **Deferred Void** status. If so, it cancels the frozen refund adjustments of the refund request and then changes the status of the refund request to **Voided**.
- Now, on canceling a write off request, the system checks whether the number of write off adjustments in the write off request exceeds the online record process limit defined in the **C1-DEFERVOID** algorithm. If the number of write off adjustments does not exceed the online record process limit, the system cancels the frozen write off adjustments immediately and then changes the status of the write off request to **Cancelled**. However, if the number of write off adjustments exceeds the online record process limit, the system changes the status of the write off request to **Deferred Cancel**. On executing the **Refund Write Off Request Periodic Monitor (C1-REFWO)** batch, the system checks whether there are any write off requests in the **Deferred Cancel** status. If so, it cancels the frozen write off adjustments of the write off request and then changes the status of the write off request to **Cancelled**.

Offset Request

The following changes are made to the Offset Request feature:

- A new option named **Transfer Adjustment** is added in the **Offset Request Type** screen. By default, this option is selected while creating an offset request type.
- Until now, you were able to create transfer adjustments while offsetting bills through an offset request. This impacted the performance when the match type entity is set to **BSEG** and volume of bill segments in the selected bills is high. Now, the system also enables you to alternatively create offset adjustments while offsetting bills through an offset request. You can opt for this option whenever the volume of bill segments in the selected bills is high. To create the normal adjustments while offsetting bills through an offset request, you need to ensure that the **Transfer Adjustment** option is not selected in the offset request type using which you want to create the offset request.
- A new parameter named **Credit Bill Distribution Algorithm Code** is added in the **C1-OFST-DIST** algorithm. It is used to specify an algorithm which helps to create offset adjustments at the bill segment level for a credit bill. This parameter is required when you want to create offset adjustments and not transfer adjustments. A new algorithm type named **C1-WTBS-CRBL** is

shipped with the product. You can attach an algorithm created using the **C1-WTBS-CRBL** algorithm type to the **Credit Bill Distribution Algorithm Code** parameter.

The **C1-WTBS-CRBL** algorithm is used to offset the bill segments of a credit bill. It considers the bill segments of a credit bill for offsetting based on the following parameter:

- **Date Type** – Used to indicate whether the system should consider the bill segments of a credit bill based on the freeze date or coverage start date. The valid values are:
  - **F** – Used when you want to consider the bill segments of a credit bill based on the order of the freeze date.
  - **C** – Used when you want to consider the bill segments of a credit bill based on the order of the coverage start date. Note that you can use this option only when the coverage start date is stamped against the financial transactions in the C1_FT_EXT table.

It creates a unique match event for each bill segment and adjustment.

- A new status named **Defer Unapplied** is added in the lifecycle of the **C1-OffsetRequest** business object.
- Now, on unapplying an offset request, the system checks whether the number of transfer or offset adjustments in the offset request exceeds the online record process limit defined in the **C1-DFRUNAPLY** algorithm. If the number of transfer or offset adjustments does not exceed the online record process limit, the system cancels the frozen transfer or offset adjustments immediately and then changes the status of the offset request to **Unapplied Offset**. However, if the number of transfer or offset adjustments exceeds the online record process limit, the system changes the status of the offset request to **Defer Unapplied**. On executing the **Offset Request Periodic Monitor (C1-OFSRQ)** batch, the system checks whether there are any offset requests in the **Defer Unapplied** status. If so, it cancels the frozen transfer or offset adjustments of the offset request and then changes the status of the offset request to **Unapplied Offset**.

Person Information

The following changes are made to the **Person** screen:

- Until now, the system was storing the person's mailing address in the **CI_PER** and **C1_ADDRESS** tables, but was fetching the person's mailing address from the **CI_PER** table. Similarly, the system was storing the person's seasonal address in the **CI_PER_ADDR_SEAS** and **C1_ADDRESS** tables, but was fetching the person's seasonal address from the **CI_PER_ADDR_SEAS** table. Now, the system is storing and fetching the person's mailing and seasonal addresses from the **C1_ADDRESS** table. This change is implemented in the **Contact Information** tab of the **Person** screen.
- If the **Enable Effective Dated Address Feature** option type of the **C1-ADDRESS** feature configuration is set to **Y**, the system does the following:
  - Hides the address fields in the **Contact Information** tab of the **Person** screen
  - Displays the **Address** tab in the **Person** screen

The **Address** tab in the **Person** screen allows you to search for all the mailing and seasonal addresses defined for the person. You can define a new effective dated address for the person by clicking the **Add** button in the **Page Title** area of the **Address** tab. You can edit, copy, and delete the person's mailing and seasonal addresses from the **Address** screen.

However, if the **Enable Effective Dated Address Feature** option type of the **C1-ADDRESS** feature configuration is set to **N**, the address fields as usual appear in the **Contact Information** tab of the **Person** screen.

- Until now, if the **Enable Effective Dated Address Feature** option type of the **C1-ADDRESS** feature configuration was set to **N**, the system created a new address record each time the address was updated in the **Person** screen. Now, if the **Enable Effective Dated Address Feature** option type of the **C1-ADDRESS** feature configuration is set to **N**, the system does the following:
    - Updates the existing address record when you edit the address in the **Person** screen on the creation (i.e. effective) date
    - Creates a new address record when you edit the address in the **Person** screen on a date other than the creation date

Bill and Bill Segment Approval

Until now, the approver couldn't approve, reject, or resubmit the approval transactions which were created for the **Bill** and **Bill Segment** entities. Now, the technical issue is resolved and you can configure the approval workflow process for the **Bill** and **Bill Segment** entities. If the approval workflow process is configured for the **Bill** business object, the system creates an approval transaction whenever a bill is completed or canceled. However, if the approval workflow process is configured for the **Bill Segment** business object, the system creates an approval transaction whenever a bill segment is deleted, frozen, or canceled.

To setup the approval workflow process for the **Bill** entity, you need to do the following:

1. Attach an algorithm created using the **C1_BILCOMPAP** algorithm type to the **Bill Completion** system event and an algorithm created using the **C1-BILLCANCL** algorithm type to the **Bill Segment Freeze/Cancel** system event of the required customer class.
2. Create an approval workflow group which contains the **Bill** business object. Attach an algorithm created using the **C1_BILLPOPR** algorithm type to the **Approval Post Processing Algorithm** spot in the approval workflow group. In addition, attach an algorithm created using the **C1-BILLAPR** algorithm type to the **Approval Algorithm** spot in the approval workflow group.
3. Create an approval workflow chain and approval workflow group chain linkage.
4. Define settings for the approval workflow group. Select the **Conditional** option from the **Active** list and attach an algorithm created using the **C1_BILLAPCON** algorithm type to the **Conditional Algorithm** spot in the approval workflow group settings.

However, to setup the approval workflow process for the **Bill Segment** entity, you need to do the following:

1. Attach an algorithm created using the **C1-BILLCANCL** algorithm type to the **Bill Segment Freeze/Cancel** system event of the required customer class.

2. Create an approval workflow group which contains the **Bill Segment** business object. Attach an algorithm created using the **C1_BILLPOPR** algorithm type to the **Approval Post Processing Algorithm** spot in the approval workflow group. In addition, attach an algorithm created using the **C1-BILLAPR** algorithm type to the **Approval Algorithm** spot in the approval workflow group.
3. Create an approval workflow chain and approval workflow group chain linkage.
4. Define settings for the approval workflow group. Select the **Conditional** option from the **Active** list and attach an algorithm created using the **C1_BSEGAPCON** algorithm type to the **Conditional Algorithm** spot in the approval workflow group settings.

The following new algorithm types are introduced to implement this enhancement:

Algorithm Type	Entity	System Event/Algorithm Spot
C1_BILCOMPAP	Customer Class	Bill Completion
C1-BILLCANCL	Customer Class	Bill Segment Freeze/Cancel
C1_BILLPOPR	Approval Workflow Group	Approval Post Processing Algorithm
C1-BILLAPR	Approval Workflow Group	Approval Algorithm
C1_BILLAPCON	Approval Workflow Group Settings	Conditional Algorithm
C1_BSEGAPCON	Approval Workflow Group Settings	Conditional Algorithm

Enhancements (Specific to Financial Services)

This section lists the enhancements made to the following features which can be used in the financial services domain:

- Accrual
- Earnings Credit Rate (ECR)
- Account Closure

Accrual

The following changes are made to the Accrual feature:

- Until now, you were able to create accruals in a division either using the actual trial bill or historical data. Now, the system gives the flexibility to decide whether the accruals for a price item in a division should be created based on the actual trial bill or historical data. In other words, the system enables you to specify whether a price item should be considered while calculating accrual based on the actual trial bill or historical data. A new field named **Accrual Type Criteria** is added in the **Divisions** section of the **Price Item** screen. It contains the following values:
    - Actual
    - Historical
    - Not Applicable

  If the division-specific accrual type criteria for a price item is set to **Actual**, then the price item is considered for accrual only when the accrual is created using the division's accrual type where the accrual criteria is set to **Actual**. Similarly, if division-specific accrual type criteria for a price item is set to **Historical**, then the price item is considered for accrual only when the accrual is created using the division's accrual type where the accrual criteria is set to **Historical**.

  This requirement where the price item should be considered for accrual based on the accrual criteria functions only when the **PriceItem Accrual Criteria Required** option is selected in the accrual type.

  If the **PriceItem Accrual Criteria Required** option is not selected in the accrual type, the system considers all price items (except the ones which are excluded) for accrual irrespective of whether the accrual type criteria for the price item is set to **Actual**, **Historical**, or **Not Applicable**.
- Now, you can create two accruals for an account on the same accrual date - one based on the actual trial bill data and another based on the historical data.

- Until now, you were able to associate only one accrual type with a division from a particular date. Now, you can associate two accrual types with a division from a particular date – one where the accrual criteria is set to **Actual** and another where the accrual criteria is set to **Historical**. For example, you can associate the following accrual types with the D1 division from 01-01-2019:

Accrual Type	Accrual Criteria
AT1	Actual
AT2	Historical

This enhancement enables you to create two accruals for an account - one based on the actual trial bill data and another based on the historical data.

- The **Bill Segment Level** posting method is renamed to **Price Item Level**.
- Until now, you were able to create accrual adjustments at the price item or bill level. Now, you can create accrual adjustments at the price item, bill, or distribution code level. Therefore, the following two additional posting methods are available while defining an accrual type:
    - **Bill Distribution Code Level** – If you select this posting method, the system accrues the bill segments and adjustments of bills at the distribution code level. Here, the accrual adjustments are created for the distribution codes which are used in the bills. In the **Bill Distribution Code Level** posting method, the system does not accrue the following:
        - Bill segments of a price item which is excluded in the accrual type
        - Adjustments which are created using an adjustment type which is excluded in the accrual type
        - Bill segments and adjustments which contain a distribution code which is excluded in the accrual type
    - **Price Item Distribution Code Level** - If you select this posting method, the system accrues the bill segments of a particular price item at the distribution code level. Here, the accrual adjustments are created for the distribution codes which are used for the price item. In the **Price Item Distribution Code Level** posting method, the system does not accrue the following:
        - Bill segments of a price item which is excluded in the accrual type
        - Bill segments which contain a distribution code which is excluded in the accrual type

Note: The **Bill Distribution Code Level** and **Price Item Distribution Code Level** posting methods are not supported when the accrual criteria is set to **Actual** and accrual source is set to **Transaction Feed**.

You can also view the bill segments or adjustments (i.e. calculation lines) which contributed to the accrual amount for each distribution code.

- A new parameter named **Characteristics Type for Distribution Code Level Adjustments** is added in the **Accrual Creation (C1_ACCRE)** batch. Here, you must specify a characteristic type which stores the adjustment type and whose characteristic entity is set to **Distribution Code**. If you specify a characteristic type in the **Characteristics Type for Distribution Code Level Adjustments** parameter, the system will check whether the characteristic type is defined on the distribution code. If so, the accrual adjustment for the distribution code is created using the respective adjustment type. If the characteristic type is not specified in the **Characteristics Type for Distribution Code Level Adjustments** parameter or if the specified characteristic type is not defined on the distribution code, the system creates the accrual adjustment for the distribution code using the accrual adjustment type which is specified in the accrual type.
- The **Do you want to insert detail level calculation?** parameter is removed from the **C1_ACCR_CAL** algorithm type. Instead, the **Calculation Lines Required** option is added in the **Accrual Type** screen. You can view the calculation lines for an accrual only when the **Calculation Lines Required** option is selected in the accrual type using which the accrual is created.

Note: The calculation lines for an accrual are not shown when the accrual criteria is set to **Actual** and accrual source is set to **Transaction Feed**.

- Now, you can copy an accrual type using the **Duplicate** button.
- Earlier, by default, the system prorated the accrual amount based on the invoice frequency when the trial bill had recurring bill segments. Now, the system will prorate the accrual amount only when the **Proration Required** option is selected in the accrual type.

Earnings Credit Rate (ECR)

The following changes are made to the Earnings Credit Rate (ECR) feature:

- Now, you can search the financial transaction distribution objects which are created against the bill segments and adjustments of a particular bill.
- Until now, while creating a credit distribution array, the system behaved in the following manner:
    - If the **Match Event Type** parameter in the **C1-BLDCRDARR** algorithm is set to **BILL**, the system considered the completed bills for credit distribution.
    - If the **Match Event Type** parameter in the **C1-BLDCRDARR** algorithm is set to **BSEG**, the system considered all bill segments irrespective of whether it is from the pending or completed bill.

  Now, you can specify whether the system should consider all bill segments, bill segments from the pending bills, or bill segments from the completed bills. A new parameter named **Charge Bill Status (Applicable for Match Event Type - BSEG and Valid Values - P,C,A)** is added in the **C1-BLDCRDARR** algorithm type. It is used to indicate whether the system should consider all bill segments or bill segments from the pending or completed bills. It functions when the **Match Event Type** parameter in the **C1-BLDCRDARR** algorithm is set to **BSEG**. You can specify the following values for this parameter:

    - **P** – Used when you want to consider the bill segments from the pending bills.
    - **C** – Used when you want to consider the bill segments from the completed bills.

    - **A** - Used when you want to consider all bill segments irrespective of whether it is from the pending or completed bill.
- A new parameter named **Consider Account Closure Date for Expiration (Y/N)** is added in the **C1-FTDCRTCNL** algorithm type. The valid values for this parameter are **Y** and **N**. If you set this parameter to **Y**, the system checks whether the account has a closing date whenever the financial transaction distribution object is created for the account. If so, the system checks whether the contract end date is earlier than the expiration date of the financial transaction distribution object. If so, the system sets the expiration date to the contract end date.
- A new parameter named **Order processing based on Expiration Date (Y/N)** is added in the **C1-FTDTM** and **C1-FTDTS** batch controls. It is used to indicate whether the system should consider the financial transaction distribution objects for distribution in the order of their expiration date. The valid values are **Y** and **N**. If you set this parameter to **Y**, the system considers the financial transaction distribution objects for distribution in the order of their expiration date. However, if you set this parameter to **N** or if you do not specify any value for this parameter, the system considers the financial transaction distribution objects for distribution in the order of their creation date.

Account Closure

The following changes are made to the Account Closure feature:

- The following parameters are added in the **C1-CLSACCT** algorithm type:

Parameter Name	Description
Update Financial Transaction Distribution Expiration Date (Y or N)	Used to indicate whether the system should update the expiration date on the financial transaction distribution objects whenever you add or edit a closing date on the account. The valid values are: • Y • N If you set this parameter to **Y**, the system checks whether there are any financial transaction distribution objects of the account in the **Pending** or **Validated** status. If so, the system checks whether the closing date is earlier than the expiration date of the financial transaction distribution object. If so, the system sets the expiration date to the closing date.

Parameter Name	Description
Update Recurring Billable Charge End Date (Y or N)	Used to indicate whether the system should update the end date on recurring billable charges whenever you add or edit a closing date on the account. The valid values are: • Y • N If you set this parameter to **Y**, the system checks whether there are any recurring billable charges of the account. If so, the system sets the recurring billable charge end date to the closing date or recalculated account closing date as mentioned in the **Recurring Billable Charge End Date Type (C - Closing Date or G - Closing Date + Grace days)** parameter.
Recurring Billable Charge End Date Type (C - Closing Date or G - Closing Date + Grace days)	Used to indicate whether the system should set the recurring billable charge end date to the closing date or recalculated account closing date. The valid values are: • **C** – Used when you want to set the recurring billable charge end date to the closing date. • **G** – Used when you want to set the recurring billable charge end date to recalculated account closing date (i.e. closing date + grace days).

Enhancements (Specific to Insurance)

This section lists the enhancements made to the following features which can be used in the insurance domain:

- Customer 360° View
- Policy, Plan, and Membership
- C1-ASOBLLNG Feature Configuration
- Rate Option Extendable Lookup
- Bill Segment Generation

Customer 360° View

The following changes are made to the Customer 360° View feature:

- The **Add** link is added in the upper right corner of the **Child Persons** zone in the **Person** tab of the **Customer 360° Information** screen. On clicking the **Add** link, you can create a new child person through the **Customer Registration** feature. While adding a child person to a parent person, the child person is related to the parent person using the relationship type which is specified in the **Person Relationship Type** option type of the **C1-ASOBLLNG** feature configuration.
- Now, if you are viewing the 360° information of a person whose person type is set to **Parent Customer**, the following information also appears in a tree view:
    - Information string of each account where the parent customer is the main customer.
    - Information string of each policy to which the parent customer is associated.
- A new zone named **Bill Group Information** is added in the **Person** tab of the **Customer 360° Information** screen. It appears only when you are viewing the 360° information of a person whose person type is set to **Parent Customer**. This zone lists the customer registration objects through which the parent customer's bill groups are created in the system. In other words, it indicates whether any of parent customer's bill group is created through the **Customer Registration** feature.
- The **Bill Group Accounts** zone in the **Account** tab is renamed to **Account List**. Now, it appears irrespective of whether the person type is **Parent Customer** or **Bill Group**. If you are viewing the 360° information of a parent customer, the **Account List** zone lists the accounts of the parent customer and its bill groups. However, if you are viewing the 360° information of a bill group, the **Account List** zone lists the accounts of the bill group.
- A new zone named **Policy List** is added in the **Policy** tab. If you are viewing the 360° information of a person whose person type is set to **Parent Customer**, the **Policy List** zone lists the policies to which the parent customer and its bill groups are associated. However, if you are viewing the 360° information of a person whose person type is set to **Bill Group**, the **Policy List** zone lists the policies to which the bill group is associated.

- The **View** icon appears corresponding to each policy plan in the **Policy Plans** zone. On clicking the **View** icon, you can view the pricing rules defined for the policy plan in the **Pricing** tab of the **Customer 360° Information** screen.
- The **Policy Plan Description** column in the **Policy Plans** zone is renamed to **Plan Name**. Now, this column displays the policy plan description and not the price item description.
- The following three zones are added in the **Pricing** tab:
    - **Policy Plan Pricing Rule Summary** – This zone lists the following in a tree view:
        - Information string of each policy to which the parent customer or bill groups are associated.
        - Information string of each policy plan defined for the policy.
        - Information string of each pricing rule defined for the policy plan.

      This zone appears only when you are viewing the 360° information of a person whose person type is set to **Parent Customer** and who is associated to a policy where the policy category is set to **Fully Insured Group**.
    - **Policy Plans Information** – If you are viewing the 360° information of a parent customer, the **Policy Plans Information** zone lists the policy plans of the policies to which the parent customer or its bill groups are associated. However, if you are viewing the 360° information of a bill group, the **Policy Plans Information** zone lists the policy plans of the policies to which the bill group is associated. This zone appears only when you are viewing the 360° information of a person who is associated to a policy where the policy category is set to **Fully Insured Group**.
    - **Policy Plans Pricing Rules** – This zone lists the pricing rules which are defined for a policy plan. This zone appears only when you are viewing the 360° information of a person who is associated to a policy where the policy category is set to **Fully Insured Group**.
- The **Bill Group Policy Pricing Rule Summary** zone in the **Pricing** tab is renamed to **Bill Group ASO Policy Pricing Rule Summary**. This zone appears only when you are viewing the 360° information of a person whose person type is set to **Parent Customer** and who is associated to a policy where the policy category is set to **Self Funded**.
- The **Bill Group Policy Information** zone in the **Pricing** tab is renamed to **Bill Group ASO Policy Information**. This zone appears only when you are viewing the 360° information of a person who is associated to a policy where the policy category is set to **Self Funded**.

Policy, Plan, and Membership

The following changes are made to the Policy, Plan, and Membership feature:

- Now, you can define policy types of the following categories in the system:
    - Self Funded (i.e. ASO)
    - Fully Insured Group
    - Fully Insured Individual

  As a result, when you define a policy using a policy type, the system creates the policy of the respective category for the parent customer or bill group.

Note: At present, the **Fully Insured Individual** policy category is not yet supported in the system.

- A new field named **Plan Name** is added in the **Policy Plan** screen. You can specify the description of the policy plan in this field.
- A new section named **Pricing Rule Type** appears while defining a policy plan for a policy. Here, you can associate one or more pricing rule types with the policy plan. The system allows you to define pricing rules for a policy plan only using the pricing rule types which are associated with the policy plan. You can only associate those pricing rule types where the category is set to **Age Based**, **Tier Based**, or **Pass-Through Billable Charge**. You can associate a pricing rule type with a policy plan only when the policy plan belongs to the policy where the policy category is set to **Fully Insured Group** or **Fully Insured Individual**.
- Now, while defining a policy plan for a policy where the policy category is set to **Fully Insured Group** or **Fully Insured Individual**, either a price item or a pricing rule type is required.

C1-ASOBLLNG Feature Configuration

The following option types are newly added in the **C1-ASOBLLNG** feature configuration:

- **Age Based Parameter** – Used to indicate the parameter using which you want to define the lower age limit and upper age limit pricing eligibility criteria in an Age Based pricing. Here, you must specify a parameter where the parameter usage is set to **Pricing Eligibility**.
- **Base Fee Price Component Sequence Characteristic** – Used to indicate the characteristic type where you want to store the sequence number of the eligible base fee's price component. This characteristic is then passed to the rating engine for further processing. Here, you must specify a characteristic type where the characteristic entity is set to **Rate Component**.
- **Characteristic Type For Membership Id** – Used to indicate the characteristic type where you want to store the membership ID. During the billable charge creation process, this characteristic is stamped on a billable charge which indicates the membership for which the billable charge is created. Here, you must specify a characteristic type where the characteristic entity is set to **Billable Charge**.
- **Customer Registration Characteristic For Inbound Log** – Used to indicate the characteristic type where you want to store the customer registration ID. This characteristic type is used while creating a log entry for a healthcare inbound message. The log entry then indicates the customer registration object which is created through the healthcare inbound message. Here, you must specify a characteristic type where the characteristic entity is set to **Inbound Message Log**.
- **Default Rate Option – Flat** – Used to indicate the rate option which must be used by default when the rate option is not given in the pricing rule data of the healthcare inbound message and the modifier method in the pricing rule data is set to either FLAT or NULL. You must specify a rate option where the rate schedule is set to **HC_FRTSC**.
- **Default Rate Option – Percentage** - Used to indicate the rate option which must be used by default when the rate option is not given in the pricing rule data of the healthcare inbound message and the modifier method in the pricing rule data is set to either EXPT or INPT. You must specify a rate option where the rate schedule is set to **HC_PRTSC**.

- **Membership Characteristic For Inbound Log** - Used to indicate the characteristic type where you want to store the membership ID. This characteristic type is used while creating a log entry for a healthcare inbound message. The log entry then indicates the membership which is created through the healthcare inbound message. Here, you must specify a characteristic type where the characteristic entity is set to **Inbound Message Log**.
- **Override Proration Applicability Char Type** – Used to indicate the characteristic type where you want to store whether the proration rule should be overridden for a member person. At present, this feature is used for a new born when the gift days are offered to a new born. Here, you must specify a characteristic type where the characteristic entity is set to **Membership**, **Policy Plan**, **Policy**, and **State**.
- **Override Proration EffectiveDate Char Type** - Used to indicate the characteristic type where you want to store the date from when the premium should be calculated for the new born. This characteristic is used during the bill segment generation to determine the bill period in which the date falls. The system then accordingly prorates the premium amount for the new born. Here, you must specify a characteristic type where the characteristic entity is set to **Membership Person**.
- **Override Proration Rule Char Type** - Used to indicate the characteristic type where you want to store the override SQ rule for a new born. If this characteristic is not defined at any level, the system uses the SQ rule of the rate schedule attached to the active contract to prorate the premium amount of a new born child. Here, you must specify a characteristic type where the characteristic entity is set to **Membership**, **Policy Plan**, **Policy**, and **State**.
- **Person Characteristic For Inbound Log** - Used to indicate the characteristic type where you want to store the person ID. This characteristic type is used while creating a log entry for a healthcare inbound message. The log entry then indicates the person which is created through the healthcare inbound message. Here, you must specify a characteristic type where the characteristic entity is set to **Inbound Message Log**.
- **Policy Reinstatement Status** – Used to indicate the status to which the policy must be transitioned when it is reinstated.
- **Policy Termination Status** - Used to indicate the status to which the policy must be transitioned when it is terminated.
- **Pricing Rule Characteristic For Inbound Log** - Used to indicate the characteristic type where you want to store the pricing rule ID. This characteristic type is used while creating a log entry for a healthcare inbound message. The log entry then indicates the pricing rule which is created through the healthcare inbound message. Here, you must specify a characteristic type where the characteristic entity is set to **Inbound Message Log**.
- **Proration SQI** – Used to indicate the SQI which you want to use while creating an SQI based billable charge for pre-calculated and calculated premium amount. If the SQ rule of the rate schedule attached to the active contract contains the specified SQI, the system prorates the SQI amount accordingly.
- **State of Issue Characteristic Type** – Used to indicate the characteristic type where you want to store the state for which the membership, policy plan, or policy is issued. This characteristic is used while identifying a list of eligible children in a membership for premium calculation. Here, you must specify a characteristic type where the characteristic entity is set to **Membership**, **Policy Plan**, and **Policy**.

Rate Option Extendable Lookup

You can use the **Rate Option (C1-ExtLookRetTypeRateOpt)** extendable lookup to define rate options for the fully insured business. You can define a flat or percentage based rate option for a fully insured business. While defining a flat rate option, you can specify the **HC_FRTSC** rate schedule or a custom rate schedule which is identical to **HC_FRTSC**. However, while defining a percentage based rate option, you can specify the **HC_PRTSC** rate schedule or a custom rate schedule which is identical to **HC_PRTSC**.

Bill Segment Generation

The following changes are made to the bill segment generation process:

- Now, while generating the bill segment for a membership, the system checks whether the characteristic type specified in the **Override Proration Applicability Char Type** option type of the **C1-ASOBLLNG** feature configuration is defined at any of the following levels:
    - Membership
    - State where the Membership is issued
    - Policy Plan
    - State where the Policy Plan is Issued
    - Policy
    - State where the Policy is Issued

  If the **Override Proration Applicability** characteristic is defined at any of the above level and its characteristic value is set to **Y**, the system checks whether the characteristic type specified in the **Override Proration EffectiveDate Char Type** option type of the **C1-ASOBLLNG** feature configuration is defined for an eligible member. If so, the system uses the characteristic value (i.e. date from when the premium should be calculated for the new born if the gift days are offered) to determine the coverage period in which the date falls. The system then checks whether the characteristic type specified in the **Override Proration Rule Char Type** option type of the **C1-ASOBLLNG** feature configuration is defined at any of the following levels:

    - Membership
    - State where the Membership is issued
    - Policy Plan
    - State where the Policy Plan is Issued
    - Policy
    - State where the Policy is Issued

  If the **Override Proration Rule** characteristic is defined at any of the above level, the system uses the override SQ rule to prorate the premium amount of the new born child. If this characteristic is not defined at any level, an error occurs during bill segment generation.

If the **Override Proration Applicability** characteristic is set to **Y**, but the **Override Proration Effective Date** characteristic is not defined on an eligible person, the system uses the SQ rule of the rate schedule attached to the active contract to prorate the premium amount of the new born child.

User Interface (UI) Level Changes

The following table lists changes made to the existing screens in Oracle Revenue Management and Billing:

Screen Name (in 2.7.0.1.0)	Changes
Customer 360° Information (for the Healthcare domain)	The following changes are made to this screen: • The **Add** link is added in the upper right corner of the **Child Persons** zone in the **Person** tab.. • A new zone named **Bill Group Information** is added in the **Person** tab. • The **Bill Group Accounts** zone in the **Account** tab is renamed to **Account List**. • The **Bill Group Name** column in the **Account List** zone is renamed to **Person Name**. • The **Bill Group ID** column in the **Account List** zone is renamed to **Person ID**. • The **Person Type** column is added in the **Account List** zone. • A new zone named **Policy List** is added in the **Policy** tab. • A **Plan** column in the **Policy Plans** zone is renamed to **Price Item**. • A **Policy Plan Description** column in the **Policy Plans** zone is renamed to **Plan Name**. • The **Packaged Savings Code** zone is removed from the **Policy** tab. • The **Bill Group Policy Pricing Rule Summary** zone in the **Pricing** tab is renamed to **Bill Group ASO Policy Pricing Rule Summary**. • The **Bill Group Policy Information** zone in the **Pricing** tab is renamed to **Bill Group ASO Policy Information**. • The **Policy Plan Pricing Rule Summary**, **Policy Plans Information**, and **Policy Plans Pricing Rules** zones are added in the **Pricing** tab.

Screen Name (in 2.7.0.1.0)	Changes
Plan (Used for Adding)	The following changes are made to this screen: • The **Plan Name** field is added in the **Main** section. You can specify the description of the policy plan in this field. • The **Pricing Rule Type** section is added in this screen.
Policy Plan	The following changes are made to this screen: • The **Plan Name** field is added in the **Main** section. • The **Pricing Rule Type** section is added in the **Policy Plan** zone.
Policy Type (Used for Adding)	The following changes are made to this screen: • The **Policy Category** field is added in this screen.
Policy Type	The following changes are made to this screen: • The **Policy Category** column is added in the **Policy Type List** zone. • The **Policy Category** field is added in the **Main** section of the **Policy Type** zone.
Price Item Pricing	The following changes are made to this screen: • The **Rate and Price Component Summary** zone in this screen is renamed to **Price Assignment Tree**. • The **Price Component** zone is added in this screen.
Accrual Type (Used for Searching)	The following changes are made to this screen: • The **Division** field is added in the **Search Criteria** section. • The **Bill Segment Level** option in the **Posting Method** list is renamed to **Price Item Level**. • Two new options named **Bill Distribution Code Level** and **Price Item Distribution Code Level** are added in the **Posting Method** list. • The **Division** column is added in the **Search Results** section.

Screen Name (in 2.7.0.1.0)	Changes
Accrual Type (Used for Adding and Editing)	The following changes are made to this screen: • The **Proration Required** option is added in this screen. • The **Bill Segment Level** option in the **Posting Method** list is renamed to **Price Item Level**. • Two new options named **Bill Distribution Code Level** and **Price Item Distribution Code Level** are added in the **Posting Method** list. • The **Calculation Lines Required** option is added in this screen. • The **PriceItem Accrual Criteria Required** option is added in this screen.
Accrual Type (Used for Viewing)	The following changes are made to this screen: • The **Proration Required**, **Calculation Lines Required**, and **PriceItem Accrual Criteria Required** options are added in the **Main** section. • The **Duplicate** button is added in the **Record Actions** section.
Accrual (Used for Searching)	The following changes are made to this screen: • The **Bill Segment Level** option in the **Posting Method** list is renamed to **Price Item Level**. • Two new options named **Bill Distribution Code Level** and **Price Item Distribution Code Level** are added in the **Posting Method** list.
Accrual (Used for Viewing)	The following changes are made to this screen: • The **Distribution Code Level Calculations** zone is added in this screen.
Price Item (Used for Adding)	The following changes are made to this screen: • The **Accrual Type Criteria** column is added in the **Divisions** section. On clicking the **Add** icon in this column, you can specify division-specific accrual type criteria for the price item.
Price Item (Used for Viewing)	The following changes are made to this screen: • The **Division-Specific Accrual Type Criteria for Price Item** zone is added in this screen.
Financial Transaction Distribution (Used for Searching)	The following changes are made to this screen: • A new field named **Bill ID** is added in the **Search Criteria** section when you searching using the financial transaction distribution details.

Screen Name (in 2.7.0.1.0)	Changes
Offset Request Type	The following changes are made to this screen: • A new option named **Transfer Adjustment** is added in the **Main** section of the **Offset Request Type** zone.
Offset Request Type (Used for Adding)	The following changes are made to this screen: • A new option named **Transfer Adjustment** is added in this screen.

Database Level Changes

To view the list of objects (such as tables, columns, algorithm types, business objects, and so on) which are newly added in Oracle Revenue Management and Billing Version 2.8.0.0.0, refer to the Appendix A : New Objects in the Oracle Revenue Management and Billing V2.8.0.0.0 Database in *Oracle Revenue Management and Billing Database Administrator's Guide*.

Supported Platforms

The following table lists the operating system and application server combinations on which Oracle Revenue Management and Billing Version 2.8.0.0.0 is supported:

Operating System and Web Browser (Client)	Operating System (Server)	Chipset	Web Application Server	Database Server
Windows 7, 8.x[1] 10 (64-bit) with Internet Explorer 11.x[1]	AIX 7.2 TLx[1] (64-bit)	POWER 64-bit	WebLogic 12.2.1.3+ (64-bit)	Oracle Database Server 12.1.0.2+ Oracle Database Server 12.2.0.x[1]
	Oracle Linux 6.5+ and 7.x[1] (64-bit)	x86_64	WebLogic 12.2.1.3+ (64-bit)	Oracle Database Server 12.1.0.2+ Oracle Database Server 12.2.0.x[1]
	Oracle Solaris 11.x[1]	SPARC 64-bit	WebLogic 12.2.1.3+ (64-bit)	Oracle Database Server 12.1.0.2+ Oracle Database Server 12.2.0.x[1]
	Red Hat Enterprise Linux[2] 6.5+ and 7.x[1] (64-bit)	x86_64	WebLogic 12.2.1.3+ (64-bit)	Oracle Database Server 12.1.0.2+ Oracle Database Server 12.2.0.x[1]
	Windows Server 2012 R2 (64-bit)	x86_64	WebLogic 12.2.1.3+ (64-bit)	Oracle Database Server 12.1.0.2+ Oracle Database Server 12.2.0.x[1]

Note: We strongly recommend you to install Oracle Revenue Management and Billing (ORMB) on Windows platform only for non-production activities, such as User Acceptance Testing (UAT), development setup, and so on.

[1] Here, x is the vendor supported version.

[2] Oracle Revenue Management and Billing is tested and certified on Oracle Linux 6.5+ and 7.x. Oracle Linux is 100% userspace-compatible with Red Hat Enterprise Linux, and therefore Oracle Revenue Management and Billing is supported on Red Hat Enterprise Linux.

Technical Recommendations

To improve the overall batch performance on Windows and Linux platforms, we recommend you to make changes in the following files:

File Name	Change From	Change To
hibernate.properties	hibernate.c3p0.timeout = 300	hibernate.c3p0.timeout = 600
threadpoolworker.sh	MEM_ARGS="-Xms512m -Xmx1024m -XX:MaxPermSize=768m"	MEM_ARGS="-Xms512m -Xmx4096m -XX:MaxPermSize=768m"

Supported Upgrades

At present, we support upgrade from Oracle Revenue Management and Billing Version 2.7.0.1.0 to 2.8.0.0.0. For more information on how to upgrade, refer to the following documents which are available on OTN:

- *Oracle Revenue Management and Billing Version 2.8.0.0.0 Upgrade Guide*
- *Oracle Revenue Management and Billing Version 2.8.0.0.0 Upgrade Path Guide*

For upgrading from any other version of Oracle Revenue Management and Billing other than 2.8.0.0.0, consult with Oracle Support, Oracle Partner, or Oracle Consulting that may be supporting your implementation and upgrade process.

Unsupported Integrations

We are not supporting Oracle Documaker Integration with ORMB Version 2.8.0.0.0.

Deprecation Notices for ORMB Version 2.8.0.0.0

This section describes items that are deprecated in this release and planned for deprecation in a future release of Oracle Revenue Management and Billing. It contains the following topics:

- Deprecated Functionality in This Release
- Deprecation Planned for Future Releases

Deprecated Functionality in This Release

The Product feature and related screens are deprecated in this release. Alternatively, you can use the Product Lifecycle Management (PLM) feature which is introduced in this release.

Deprecation Planned for Future Releases

The following features are scheduled to be removed in a future release of Oracle Revenue Management and Billing:

- **TOU (Variance Parameter) Based Pricing** – We strongly recommend you to use the multi parameter based pricing feature instead of the TOU based pricing feature.
- **Billable Charge Creation Using UOM** – At present, there is one-to-one relationship between UOM and price item. Therefore, you are able to create a billable charge using either UOM or price item. In a future release, the system will not allow you to search price item pricing using UOM. Therefore, we strongly recommend you to create pass through or service quantity based billable charges using price item.
- **Legacy mechanism to upload pass through billable charges using the BCU1 and BCU2 batches** - We have introduced the On Demand **Billing feature which allows you to upload both pass through and rate based billable char**ges. We strongly recommend you to start using the On Demand Billing feature for uploading pass through and rate based billable charges.
- **XAI Inbound Services** - This has already been superseded by the Inbound Web Services functionality. For more information on migrating from XAI to IWS, please refer to *Migrating from XAI to IWS Oracle Utilities Application Framework* (Doc ID 1644914.1) on My Oracle Support.
- **Accrual Based on TFM Data –** The accruals created for an account using an accrual type where the accrual criteria is set to **Actual** and accrual source is set to **Transaction Feed** are no longer supported. In the next release, we will deprecate the **Transaction Feed** accrual source and you will not be able to create accrual based on TFM data. Therefore, we recommend you to create accruals either based on actual trial bill or historical data.

- **Inbound Messages –** The following inbound messages for the fully insured and administrative services only (ASO) business will not be supported from the next release:
    - Customer Inbound Message
    - Membership Inbound Message
    - ASO Customer Inbound Message

  We recommend you to use the Healthcare Inbound Message instead of the above mentioned inbound messages. This is because, henceforth, all entities such as person, account, policy, and policy plan should be created through a customer registration object.

The following table lists the objects which will be deprecated in the next release of Oracle Revenue Management and Billing:

<table>
<tr><th>Object Type</th><th>Object Name</th></tr>
<tr><td>Algorithm Type</td><td>C1_CURALG, C1-MDOV-BILL, C1-MDOV-BSEG, C1-MDOV-ONSA, SA_DERV_POPC</td></tr>
<tr><td>Feature Configuration</td><td>C1_EX_ROUND</td></tr>
<tr><td>Option Types</td><td>Currency Conversion Algorithm and Payment Distribution To-Do (from the C1_MLTCURACC feature configuration)</td></tr>
<tr><td>Table Columns</td><td>The following table lists the columns which will be deprecated in the next release:
<table>
<tr><th>Table Name</th><th>Column Name</th></tr>
<tr><td>CI_ACCT_PER</td><td>BILL_RTE_TYPE_CD, RECEIVE_COPY_SW, BILL_FORMAT_FLG, NBR_BILL_COPIES, CUST_PO_ID, NOTIFY_SW, and BILL_ADDR_SRCE_FLG</td></tr>
</table></td></tr>
<tr><td>Batch Control</td><td>GLASSIGN, GLASSGN1, GLASSGN2, C1-IAENT, C1-DARSU
The following table lists the new batch controls that you must use instead of the above batches:
<table>
<tr><th>Batch Control (Planned for Deprecation)</th><th>New Batch Control</th></tr>
<tr><td>GLASSIGN, GLASSGN1, GLASSGN2</td><td>C1-GLASN</td></tr>
<tr><td>C1-IAENT</td><td>C1-IDENT</td></tr>
<tr><td>C1-DARSU</td><td>C1-DRSUA</td></tr>
</table></td></tr>
<tr><td>View</td><td>CI_EFF_ACCT_PRICING_VW, CI_EFF_PER_PRICING_VW</td></tr>
</table>

Object Type	Object Name
Business Service	C1-EffectivePricing, C1_PriceParmBS
	Note: Instead of using the **C1-EffectivePricing** business service, use the **C1-GetEffectivePricing** business service to view the data on the **Pricing (Account)** and **Pricing (Person)** screens. Similarly, instead of using the **C1_PriceParmBS** business service, use the **C1_PRICE_PARM** business object to add, edit, copy, and delete a parameter.
Service Program	EFFPRCSERVICE, C1_PRICEPARM
Column	ADDRESS1 , ADDRESS2 , ADDRESS3, ADDRESS4 , CITY, NUM1, NUM2, COUNTY, POSTAL, HOUSE_TYPE, GEO_CODE, IN_CITY_LIMIT, STATE, and COUNTRY from the CI_PER table
Table	CI_PER_ADDR_SEAS

Therefore, henceforth, we strongly recommend you not to use these objects in any custom implementation.

Product Documentation

User manuals and other technical documents are available in the Portable Document Format (PDF). You can download Oracle Revenue Management and Billing release-specific documentation library (for example, Oracle Revenue Management and Billing Version 2.8.X.X.X Documentation Library) using the following URL:

http://www.oracle.com/technetwork/indexes/documentation/fsgbu-1364781.html

Media Pack Download

Oracle Financial Services Revenue Management and Billing Version 2.8.0.0.0 and Oracle Insurance Revenue Management and Billing Version 2.8.0.0.0 media packs can be installed on the following supported platforms:

- AIX (64-bit)
- Microsoft Windows (64-bit)
- Linux (64-bit)
- Sun Solaris (64-bit)

The media pack includes multiple packages. For more information, refer to the Media Pack Contents section in the Oracle Revenue Management and Billing Version 2.8.0.0.0 Quick Installation Guide.

To download a package from a media pack:

1. Login to Oracle Software Delivery Cloud.
2. Select the **Release** option from the **All Categories** list.
3. Type **Oracle Financial Services Revenue Management and Billing** or **Oracle Insurance Revenue Management and Billing** in the corresponding text box.
4. Click **Search**. A list of media packs appears in the search results.
5. Click **Add to Cart** corresponding to the **Oracle Financial Services Revenue Management and Billing 2.8.0.0.0** or **Oracle Insurance Revenue Management and Billing 2.8.0.0.0** option.
6. If required, you can verify the media pack which is added to the cart by clicking the **View Cart** link.
7. Click the **Checkout** link. A page appears.
8. Select the required platform from the **Platforms/Languages** list.
9. Click **Continue**. A page appears with the license agreement.
10. Scroll and read the full license agreement and then click the **I accept the terms in the license agreement** option.
11. Click **Continue**. The **File Download** page appears.
12. Select the required package that you want to download from the media pack and then click **Download**. The **Save As** dialog box appears.
13. Browse to the location where you want to download the package and then click **Save**. The package is downloaded on your local machine.

Bug Fixes

The following table lists the bugs that are fixed in this release:

Bug Number	Copy of (Base Bug)	Description
29748058	29582736	CHARGE TYPE CHARACTERISTIC- NOT ABLE TO VIEW CHAR VALUES IN DROP DOWN, CAN SEE ONLY CHARACTERISTIC T
29747928	29635222	BARC 2701|COPY PRICE ASSIGNMENT ISSUE
29724603	29648693	ORMB2.7.0.1|CI_ACCT_INFO ISSUE
29681065	29403078	ORMB2.7|DESCRIPTION MISSING IN PRICELIST COMPONENT EDIT SCREEN
29626173	29492529	ON DEMAND BILLING -FILE GROUP - UNABLE TO ADD
29539665	29261756	UNABLE TO CREATE ACCOUNT FROM PERSON UI BY CLICKING ON ADD ACCOUNT AND START SERVICE CHECK BOX
29532062	29248438	SYSTEM IS ALLOWING USER TO CREATE BILL MESSAGES WITHOUT BILL_MSG_CD
29500008	29319887	OVERDUE PROCESS: NOT ABLE TO NAVIGATE TO CASE PORTAL
29498975	24841639	ISSUE WITH SQI AGGREGATION DURING BILLING
29482544	-	OFFSET REQUEST MISSING DEFERRED MODE FOR UN-APPLY STATUS
29353945	29173225	ERROR WHILE DOING WO OF PARTIAL ADVICE FOR ADJUSTMENT ONLY BILLS
29334486	29154400	PERFORMANCE ISSUE WITH C1-TXNSQ
29248787	-	CURRENTLY PRODUCT IS NOT ALLOWING PARAMETER BASED 'POST PROCESSING PRICE ASSIGNMENT'
29681123	29624946	INCONSISTENCY IN DISPLAYING "CHARACTERISTIC TYPE" VALUES IN UI
29681030	29628626	ACCRUAL EXPORTED EXCEL IS EMPTY
29649521	29639454	SEARCH USING PERSON IDENTIFIER TYPE AND PERSON IDENTIFIER GENERATING ERROR
29634275	29582788	DIVISION ADD `ACTION INVALID ERROR ON SELECTING BO. BUT IT ALLOWS TO SAVE AFTER CLICKING OK
29622870	29429394	POSTPROC ISSUE IN CASE OF FUTURE DATED SETTLEMENT MAPPING, EXPECTING DEFAULT TO PICK UP

Bug Number	Copy of (Base Bug)	Description
29622636	29288116	INCORRECT MAPPING GETTING PICKED UP FOR BILLING WHEN THE PRICEITEM CODE IS GREATER THAN 22 CHARACTERS
29622601	29248975	INVOICE CONSTRUCT BILLING - BSGENREG ERROR ON EXECUTING CONSTRUCT TEMPLATE'S RULE SQL
29531142	29501600	VIEW BILLED TRANSACTION UI THROWING ERROR ON CONSTRUCT ID HYPER LINK CLICK
29530853	29481574	POSTPROC BATCH - TEMP SPACE ISSUE
29530826	29200607	BILLOPEN PERFORMANCE ISSUE
29530773	29458814	ORMB2.8.0.0|PRICELIST ASSIGNMENT SCREEN DOES NOT SHOW DEFAULT VALUES WHILE ASSIGNING PRICELIST
29505631	29254882	PERFORMANCE ISSUE WITH C1-OFSRQ OFFSET PROCESSING EVEN WITH PATCH 28972517
29504861	29484273	FORWARD PORT - HOLD REQUEST UI_HOLD AMOUNT CURRENCY ALWAYS SHOWING USD
29400824	29187967	ALGORITHMS FOR CONTRACT TYPE - BILL SEGMENT POST PROCESSING ARE NOT TRIGGERED
29277932	28854257	REFUND-WO ISSUE 2
29149372	29129392	IN CONSTRUCT BASED BILLING, REGULAR BILLABLE CHARGES GETTING BILLED UNDER 'ADHOC' BILL
29149339	29020128	RECURRING BILLABLE CHARGE NOT GETTING BILLED
29148316	28885779	TRIAL BILLING AMOUNT IS LESS THAN THE PENDING AMOUNT WH
29147018	28366959	TRIAL BILL CHAR NOT GETTING CREATED USING DTO
29143884	27483563	DIVISION SPECIFIC FILTER ON CHARACTERISTICS SHOULD BE FEATURE CONFIG BASED
29626909	29608843	FORWARD PORT: BUG 29608843 - BARC2701 |TRANSACTION FEED FILES ARE HAVING DIFFERENT DATE FORMAT THROUGHOUT THE
29512707	29441479	FORWARD PORT : BUG 29441479 - ORMB2.7|TODO CALL REQUIRED ON RULE CONFIGURATION
29507006	29018132	FILE REQUEST TYPE FOR INVOICE CONSTRUCT FOR CONSTRUCT_ID GEN AND STATUS ACTIVE IN ONE STEP
29752893	28972893	BATCH JOB C1-ODET INACTIVE SESSION
29626109	29170157	PRICEITEM PARM GROUP ID BEING STAMPED AS 1 AFTER TXNIP

Bug Number	Copy of (Base Bug)	Description
29622665	*29384193*	ERROR WHILE USING CUSTOM MESSAGE FOR TO DO
29208501	*28932151*	ON DEMAND BILLING BATCH FABL GENERATES BILLABLE CHARGES ON USAGE ACCOUNT INSTEAD OF INVOICE ACCOUNT

Known Issues

This section lists the known issues in Oracle Revenue Management and Billing Version 2.8.0.0.0 along with workarounds available to handle these issues. The known issues are grouped into the following categories:

- Banking
- Insurance
- Documentation

Banking

Issue	**SEARCH RESULT FOR EXCHANGE RATE NOT DISPLAYED CORRECTLY**
Description	Searching for the lowest precision rate (0.000000000000000001 /0.00000000000000011/0.000000000000000023) from the **Search Exchange Rate** zone results in displaying the rate in exponential format "IE -18".
Workaround	None

Issue	**VALIDATION RULES FOR ADHOC CHARACTERISTIC TYPES ARE NOT TRIGGERED IN THE MANAGE PRODUCTS, MANAGE PRICE LISTS, ADD PRODUCT PRICING, OVERRIDE PRODUCT PRICING, AND EDIT ASSIGNED PRICING SCREENS**
Description	When you associate adhoc characteristic types with a product, price list, and a price assignment, validations defined for adhoc characteristic types are not triggered in the **Manage Products**, **Manage Price Lists**, **Add Product Pricing**, **Override Product Pricing**, and the **Edit Assigned Pricing** screens.
Workaround	None

Issue	**UNABLE TO CHANGE THE DIVISION STATUS FROM ACTIVE TO RETIRED**
Description	When the approval workflow functionality is enabled, the status of a division will not get changed from **Active** to **Retired**.
Workaround	None

Issue	**LOCALIZATION ISSUE WHEN MAKER AND CHECKER CHOOSE DIFFERENT LANGUAGES**
Description	When a maker and checker operate in different languages, a maker cannot see the approved transactions.
Workaround	Maker should login with a language that checker is using to see the approved transactions.

Issue	**PRE-VALIDATION ERROR MSG FOR INVOICING GROUP EVEN IF PRE-VALIDATION IS OFF**
Description	If you set the **Pre-validation** flag for both the groups (that is, **C1IGADD** and **C1IGUPD**) to **N**, the validation will still be triggered before the approval workflow request is created.
Workaround	None

Issue	**FOREIGN KEY AND FILE LOCATION CHARACTERISTIC TYPE NOT SUPPORTED IN UI MAPS**
Description	The screens created using the UI map do not support the **Foreign Key Value** and **File Location Value** characteristic types. These screens only support the **Adhoc Value** and **Predefined Value** characteristic types.
Workaround	None

Issue	**MESSAGE DOES NOT APPEAR ON CLICKING BUTTONS IN LIST OF PRICE ASSIGNMENTS ZONE**
Description	On approving, rejecting, or canceling one or more price assignment requests (at once) from the **List of Price Assignments** zone, the appropriate message does not appear when you click the **Accept Changes**, **Return to Submitter**, or the **Revert to Original** button.
Workaround	None

Issue	**VIEW RULE TYPE SCREEN - PERFORMANCE ISSUE**
Description	If you define a transaction record type with the maximum accounts to be charged set to 5, maximum products to be mapped set to 10, and the maximum product parameters set to 15 and view the details of the rule type, you might experience delay in loading the **View Rule Type** screen.
Workaround	None

Issue	**C1-TXCNC BATCH GETS EXECUTED SUCCESSFULLY EVEN IF C1-TXNCU BATCH FAILS**
Description	When you execute the C1-TXNCU batch with either of the following parameters during the cancellation process, an error occurs: • Transaction Source • Division If you further execute the C1-TXCNC batch during the cancellation process, the status of all transactions in the feed is changed to Cancelled (CNCL). But, in this case, the SQIs on the billable charges are not accurate.
Workaround	None

Issue	**ERRONEOUS RESULTS WHEN BILLABLE CHARGES ARE VOLUMINOUS & SESSION TIMEOUT IS LOW**
Description	While billing, you may notice erroneous results when the default session timeout is low and the number of billable charges of an account are high.
Workaround	In such case, we recommend you to generate the bill through a batch process instead of generating the bill through the **Bill** screen.

Issue	**CONDITIONAL APPROVAL WORKFLOW CANNOT BE USED WHILE COPYING A PRICE LIST**
Description	The system allows you to define conditional approval workflow for business objects. However, at present the conditional approval workflow cannot be used while copying a price list.
Workaround	None

Issue	**BILLS GENERATED FOR THE MEMBER ACCOUNT AND NOT FOR THE MASTER ACCOUNT**
Description	If you add a contract to a member account after the account is added to the master account, the system will not duplicate the newly added contract at the master level. Therefore, in such scenarios, billable charges related to the newly added contract will be billed to the member account and not to the master account.
Workaround	You need to ensure that no new contracts are added to the member account after the account is added to the master account.

Issue	**INCORRECT RESULTS IF DISAGGREGATION BATCHES NOT EXECUTED IN SEQUENCE**
Description	During the transaction disaggregation process, you must execute the following batches in the specified order: 1. Identify Affected Transactions (C1-IAENT) 2. Process Non Aggregated Transactions (C1-PDTXN) 3. Clean Up (C1-TXNCU) 4. Update Disaggregation Request Status (C1-DARSU) Otherwise, erroneous results might occur.
Workaround	None

Issue	**PERFORMANCE ISSUE WHILE EXECUTING THE C1-DARSU BATCH WHEN REQUEST_TYPE_FLG=PERS**
Description	The system takes long time to change the disaggregation request status when the disaggregation request is created for a person.
Workaround	None

Issue	**AGGREGATION DOESN'T WORK IF DISAGG, ROLLBACK, & CANCELLATION EXECUTED IN BETWEEN**
Description	If you execute the disaggregation, cancellation, and rollback process in between the aggregation process, the system will not allow you start the aggregation process once again.
Workaround	None

Issue	**POST PROCESSING SEGMENT NOT GENERATED IF THE PP MAX VALUE IS SET TO ZERO (0)**
Description	If the maximum value is set to zero (0) while defining pricing for a product have price assignment type as post processing, the system does not generate the post processing segments for such products.
Workaround	None

Issue	**TWO CONCURRENT RUNS WHICH DERIVE SAME DIVISION FOR TRANSACTIONS DOES NOT WORK**
Description	If you execute a batch concurrently with two different divisions (for example, D1 and D2), the erroneous results might occur when transactions in both the runs derive the same division, account, and/or product combination.
Workaround	None

Issue	**ERROR OCCURS WHEN YOU DISPLAY BILL FOR A PRODUCT THAT BELONGS TWO RELATIONSHIPS**
Description	If a product is added to two or more product to product relationships using the relationship type as Service, the system error occurs when you display bill for the product using Documaker. For example, if P3 is added in the P1 and P2 product relationship using the relationship type as Service, an error occurs when you display bill for P3 using Documaker.
Workaround	None

Issue	**ERROR OCCURS IN CASE OF AN IGA SCENARIO WHILE EXECUTING THE C1-PNDBL BATCH**
Description	There might be situations when you add an account to an invoicing group after a bill is generated for the account using the new billing batches (i.e. C1-PNDBL, C1-BSGEN, and C1-BLPPR). In such scenario, an error occurs when you execute the C1-PNDBL batch once again to bill charges of the member account on the master account. Similarly, an error occurs when you generate the bill for the account which was earlier billed through the master account using these billing batches.
Workaround	None

Issue	**ACTIVE CONSTRUCTS DETERMINED ON CUT-OFF DATE INSTEAD OF CHARGES START & END DATE**
Description	The system determines the active construct based on the cut-off date and bills the usage accounts' charges through an invoice account which is defined in the active construct. It does not determine the active construct based on the billable charge's start and end dates.
Workaround	None

Issue	**BILL SEGMENTS CREATED BUT FTS NOT CREATED WHEN ACCOUNTING CALENDAR NOT DEFINED**
Description	There might be situations when you generate bill segments for a pending bill which is created for a bill cycle whose accounting date either falls within the closed accounting calendar or does not fall within any accounting calendar. In such scenarios, the bill segments are generated, but the financial transactions are not created for the bill segments. An error occurs when you view such bills, whose financial transactions are not created, through the **Bill** screen.
Workaround	None

Issue	**STATUS OF ALL LEGS CHANGED TO ERROR IF EXCHANGE RATE NOT AVAILABLE FOR ONE LEG**
Description	If a transaction has multiple legs and the system could not find exchange rate for one of the leg while executing the C1-TXNSQ batch, the status of the transaction and all its transaction legs is changed to **Error**.
Workaround	None

Issue	**INCORRECT RESULTS APPEAR WHEN UNDERSCORE CHARACTER IS USED IN SEARCH CRITERIA**
Description	If you use the underscore (_) character in the search criteria, the system does not search strings with the underscore character. Instead, the system interprets the underscore (_) character as a wildcard character.
Workaround	None

Issue	**MULTIPLE ISSUES ON SCREENS AND ZONES WHERE PAGINATION IS USED**
Description	There are various issues on the screens and zones where pagination is used. For example, the buttons and icons do not appear in the F1-DE-MULQRY zones, paging keys are trimmed, and so on.
Workaround	To resolve these pagination related issues, you need to apply framework single fixes which are available for the following bugs: • 20302717 - PAGINATION PANEL SHOWING INCORRECT VALUE FOR TOTAL PAGES AND CUSTOM ICONS DO NOT • 20261532 - PAGINATION PANEL IS BEING DISPLAYED ON ORASEARCH OPERATION • 20113520 - BUTTON AND ICON DOESN'T APPEAR FOR PAGINATION IN F1-DE-MULQRY ZONES • 19941127 - PAGINATION FEATURE NOT WORKING FOR SUBQUERIES USED IN ZONE SQL • 19163528 - PAGINATION : PAGING KEY GETS TRIMMED AND RETURNS NO RESULTS • 18965501 - PAGINATION : ALL THE PAGES DISPLAY SAME SET RECORDS WHEN EQUAL OPERATOR IS USED • 18953690 - PAGINATION: ROW SERIAL NUMBERS RESET WHEN WE SORT COLUMN, AFTER "NEXT" CLICK • 18887503 - PAGINATION DOCUMENTATION NEEDS MORE DETAIL • 18639253 - PAGINATION - MISSING ICON, PAGE LABEL AND PAGE SIZE • 18491431 - DATA EXPLORER PAGINATION IS NOT CONSIDERING THE SQL COUNT LIMIT ZONE PARAMETER • 18399979 - PAGINATION - CRASHING IF PAGING COLUMN IS NOT DISPLAYED • 18399934 - PAGINATION - NOT WORKING FOR DESCENDING SORT • 20864137 - PAGINATION DOES NOT WORK PROPERLY WHEN PORTAL HAS MULTIPLE BROADCAST ZONES

Issue	**PAYMENT AMOUNT IS INCORRECT WHEN PAYMENTS HAVE FROZEN & OVERPAYMENT PAY SEGMENTS**
Description	If the payments have both frozen and overpayment pay segments, the payment amount displayed corresponding to the overpayment and frozen payment in the **Payments** zone of the **Remittance Summary** screen is incorrect. The system displays the total payment amount instead of displaying the overpayment and frozen pay segment amount.
Workaround	None

Issue	**ERROR OCCURS WHEN BIND VARIABLES USED IN IN AND NOT IN CLAUSES WITHOUT BRACKETS**
Description	If a template is used in a construct for selecting usage accounts, billable charges, or adjustments where bind variables are used in the IN and NOT IN clauses without brackets, an error occurs when you bill an account through such construct.
Workaround	We recommend you to use bind variables within brackets in the IN and NOT IN clauses while defining a template.

Issue	**C1-ADUP1 BATCH DOES NOT SUPPORT MULTI-CURRENCY ACCOUNTS FEATURE**
Description	An error occurs while executing the C1-ADUP1 batch when the adjustment currency is different from the account's invoice currency. This is because, at present, the C1-ADUP1 batch does not support the Multi-Currency Accounts feature.
Workaround	None

Issue	**ABLE TO CREATE BILLABLE CHARGES FOR AN INVOICE ACCOUNT**
Description	Ideally, the system should not allow you to create billable charges for an invoice account. At present, there is no restriction, and therefore you can create billable charges for an invoice account which are billed through the invoice account.
Workaround	None

Issue	**PARTIAL DATA UPLOADED WHEN USAGE RECORD HAS MORE THAN FIVE PASS THROUGH CHARGES**
Description	If you upload a usage record which has more than five pass through charges (for example, Bill Line 1, Bill Line 2, …., Bill Line 8), at present, the system uploads the details of only five pass through charges (i.e. till Bill Line 5). The details of Bill Line 6, Bill Line 7, …., and Bill Line 8 are not uploaded.
Workaround	None

Issue	**LENGTH OF UDF_CHAR_X IS 50 IN THE TFM ODI PACKAGE AND 60 IN THE DATABASE**
Description	In the ORMB database, the maximum size of the UDF_CHAR_1, UDF_CHAR_2, …., UDF_CHAR_50 columns is set to 60 characters. However, while uploading the transaction data via ODI, you can specify maximum 50 and not 60 characters in the CSV file.
Workaround	None

Issue	**ADJUSTMENT CREATED WHEN CONTRACT ID IS VALID, BUT ACCOUNT IDENTIFIER IS INVALID**
Description	If you upload an adjustment data file with a record where the contract ID is valid, but the account ID or account identifier is invalid, the system creates the adjustment against the contract. Ideally, the system should not create the adjustment until and unless the contract ID, account ID, account identifier type, and account identifier are valid.
Workaround	None

Issue	**ABLE TO GENERATE A BILL FOR A SETTLEMENT ACCOUNT FROM THE BILL SCREEN**
Description	Ideally, the system should not allow you to generate a bill for a settlement account. However, at present, you can generate a bill for a settlement account from the **Bill** screen.
Workaround	None

Issue	**ADJUSTMENT CREATED AGAINST PREVIOUS BILL IS NOT CONSIDERED DURING TRIAL BILLING**
Description	If you create an adjustment against the previous completed bill, the adjustment is not presented on the next bill during trial billing. This open item accounting feature is not supported during trial billing.
Workaround	None

Issue	**REOPEN BUTTON DISABLED WHEN C1-BILLSETT ALGORITHM ATTACHED ON CUSTOMER CLASS**
Description	If you attach an algorithm of the C1-BILLSETT algorithm type on the **Bill Completion** system event of the account's customer class, at present, you will not be able to reopen a bill.
Workaround	None

Issue	**THE PAYMENT REQUEST SCREEN DOES NOT SUPPORT MULTIPLE TENDERS**
Description	At present, the system does not support multiple tenders when you create a payment from the **Payment Request** screen.
Workaround	None

Issue	**UNABLE TO SAVE MULTIPLE CHARACTERISTICS FOR A PRICE ASSIGNMENT**
Description	While defining characteristics for a price assignment, you can specify multiple characteristics in the screen, but only one characteristic is saved in the application.
Workaround	None

Issue	**UNABLE TO SCROLL LEFT TO VIEW TABS ON THE LEFT IN THE DIVISION SCREEN**
Description	The **Scroll Left** icon is not available in the **Division** screen. Therefore, you will not be able to scroll left if you are on the extreme right tab in the screen.
Workaround	None

Issue	**POP-UP WINDOW NOT DISPLAYED PROPERLY WHEN YOU MOUSE OVER DETAILED DESCRIPTION**
Description	In the **Batch Control** screen, a pop-up window appears when you move the mouse over the **Detailed Description** field. At present, the data is not properly displayed in the pop-up window.
Workaround	None

Issue	**QUERY ZONE - HORIZONTAL SCROLL BAR SCROLLS THE SEARCH CRITERIA FIELDS**
Description	The Query zone allows you to search for an object. At present, whenever you search in the Query zone and use the Horizontal Scroll Bar, the search criteria fields are also scrolled to the left along with the search results.
Workaround	None

Issue	**PERFORMANCE ISSUE ON CHANGING THE SEARCH BY FILTER OPTION**
Description	If you change the filter option from the **Search By** list, the system takes long time to load the respective query zone. You may observe this issue in many screens where the multi-query zone is used.
Workaround	None

Issue	**EFFECTIVE PRICING NOT VISIBLE IF C1_PER_REL HAS INVALID PERSON RELATIONSHIP TYPE**
Description	If you set the **Check on Feature Configuration** parameter in an algorithm which is created using the **C1-CUSRLALGT** algorithm type to **A** and add an invalid person relationship type in the **C1_PER_REL** feature configuration, the effective pricing is not inherited properly as expected.
Workaround	None

Issue	**RECORDS IN THE ADJUSTMENT DATA FILE NOT UPLOADED IN THE SPECIFIED SEQUENCE**
Description	When you upload the records of an adjustment data file, the records are not uploaded in the sequence in which they are listed in the CSV file.
Workaround	None

Issue	**PAYMENT/TENDER SEARCH- COLUMN HEADERS INCORRECT WHEN SEARCH FILTER IS CHANGED**
Description	If you search using a particular filter option in the **Payment/Tender Search** screen, the search results are displayed accordingly. Then, if you change the search filter and criteria, the search results are displayed accordingly, but the column headers are not updated.
Workaround	None

Issue	**ERROR LOG FILES GENERATED ON EXECUTING BILLING AND C1-BLPPR BATCHES**
Description	In ORMB 2.8.0.0.0, the error log file is generated even when the following batches are executed successfully and bills are completed: • BILLING • C1-BLPPR
Workaround	None

Issue	**FIELD ALIGNMENT ISSUE ON BUSINESS OBJECT BASED GENERATED UI MAPS**
Description	You may observe that the algorithm description is not properly aligned corresponding to the **Algorithm** field in the following screens: • Upload Request Type • Upload Adjustment Data File
Workaround	None

Issue	**MANUAL DISTRIBUTION NOT WORKING IN THE PAYMENT SCREEN**
Description	On saving, the distributed amount is reset to zero when you manually distribute the tender amount among the unpaid bills in the **Payment** screen.
Workaround	None

Issue	**ERROR OCCURS ON EXECUTING BILLOPEN IF IN CLAUSE CONTAINS MULTIPLE BIND VARIABLES**
Description	If you have used template in a construct where IN clause has multiple bind variables, an error occurs while executing the **Construct Based - Pending Bill Generation (BILLOPEN)** batch.
Workaround	None

Issue	**ELIGIBLITY CRITERIA ROW IS SKIPPED IF LEFT HAND SIDE PARAMETER IS NOT SPECIFIED**
Description	If the left hand side parameter is not specified in an eligibility criteria row while defining or editing a price item pricing, the eligibility criteria row is skipped and not saved in the system.
Workaround	None

Issue	**POST-PROCESSING BILL SEGMENT NOT REGENERATED WHEN YOU CLICK THE GENERATE BUTTON**
Description	An error occurs when you click the **Generate** button in the **Bill Segment** screen while regenerating the post-processing bill segment which is present on the pending bill.
Workaround	None

Issue	**WRONG CURRENCY CONVERSION ALGORITHM IS USED WHILE EXECUTING THE C1-REPC2 BATCH**
Description	While executing the **C1-REPC2** batch, the system should use the currency conversion algorithm attached to the **Currency Conversion For Bill Segments** algorithm spot of the division. Instead, the system uses the currency conversion algorithm attached to the **Currency Conversion For Adjustments** algorithm spot of the division.
Workaround	None

Issue	**RATE CALCULATED INCORRECTLY WHEN EXCHANGE RATE IS CHANGED DURING PRICING PERIOD**
Description	At present, the rate is calculated and persisted using the exchange rate which is effective on the price item pricing effective start date. Therefore, the persisted rate shown on the **Pricing (Account)** screen might be incorrect when the exchange rate is different on the date when the results are fetched on the **Pricing (Account)** screen.
Workaround	None

Issue	**ENTRY NOT CREATED IN THE CI_REPRC_ENTITY_DTL TABLE ON EDITING A PRICE LIST**
Description	If you edit the details of a price list which is assigned to an account or a person, an entry is not created in the CI_REPRC_ENTITY_DTL table. In other words, the repricing is not triggered on editing the details of a price list which is already assigned to an account or a person.
Workaround	None

Issue	**UNABLE TO DEFINE PARAMETER FOR FIELDS WHICH BELONG TO CHILD TABLES**
Description	At present, the system does not list the fields of child tables in the **Source Type Code** field when you select the source entity as Account, Person, or Product while defining a parameter. Therefore, you cannot define a parameter for child table' fields and as a result, repricing is not triggered when you change the value of any child table' field. For example, when you change the main customer of an account, repricing is not triggered because the MAIN_CUST_SW field belongs to the child table named CI_ACCT_PER table for which you cannot define a parameter in the system.
Workaround	None

Issue	**RATE NOT PERSISTED ON PRICE ASSIGNMENT DATE WHEN C1-PRICEACCOUNT INVOKED MANUALLY**
Description	When you manually execute the C1-PriceAccount business service for an account, rate is calculated and persisted for the price item pricing available on the default and global price list on the date when the C1-PriceAccount business service is invoked. Ideally, the rate must be calculated and persisted on the price item pricing effective start date.
Workaround	None

Issue	**PERSISTED DATA NOT GETTING REFRESHED ON EDITING PRICE ASSIGNMENT**
Description	On editing a price item pricing, the rate is not properly recalculated and persisted when the details of a price component, such as rate, eligibility criteria, and so on are changed.
Workaround	None

Issue	**CALENDAR (START DATE AND END DATE) POP-UP NOT ALIGNED PROPERLY**
Description	Calendar pop-up for start date and end date of Hold Request screen is displayed partially outside the screen.
Workaround	None

Issue	**PRICELIST EDIT VALIDATIONS NOT DEPENDENT ON ASSIGNMENT DATE OR ASSIGNMENT STATUS**
Description	Available and Eligible dates can be edited in Price List though Assignment Date or Assignment Status is added for price list.
Workaround	None

Issue	**STACKING IS NOT SUPPORTED FOR PRICE SIMULATION**
Description	Stacking is supported for bill generated through an Account. Pricing Simulation does not support stacking.
Workaround	None

Issue	**ADJUSTMENT AMOUNT IS NOT PICKED UP FOR PAYMENT IN NEXT BILL**
Description	When you generate an Adjustment after a successful payment, the Adjustment amount is not picked up in the next bill that is generated and hence, payment is not created for the adjustment amount.
Workaround	None.

Issue	**IF USAGE ACCOUNT IS NOT PART OF ANY INVOICE CONSTRUCT, BILL IS NOT GENERATED.**
Description	At present system does not allow user to generate a bill on usage account which is not part of any invoice construct. System should allow user to generate a bill on usage account which is not part of any invoice construct.
Workaround	None

Issue	**SPLIT AUTO PAY NOT AVAILABLE ON SETTLEMENT CONSTRUCT ACCOUNT CREATION SCREEN.**
Description	At present split auto pay is not supported on Settlement construct because Percentage field has to be added in Auto Pay Instructions section while creating a new account.
Workaround	None

Issue	**SQL ERROR ON PRICE ASSIGNMENT SCREEN WITH ADHOC VALUE PASSED IN QUOTES.**
Description	At present SQL error is displayed in Price Assignment screen for parameter when adhoc value is added in quotes. Price Assignment should be successful though value added is in single quotes.
Workaround	None

Issue	**BS ARE NOT GETTING PICKED FOR BATCH DATE AFTER BILLABLE CHARGE END DATE**
Description	At present, batch business date is later then billable charge date and C1_BILLGEN is not creating any BS, hence bill is not generated.
Workaround	None

Issue	**RSDETAILS UPDATED INCORRECTLY WHEN PRICE COMPONENT FEES/RATE) PERSISTENCE EDITED**
Description	At present, rate schedule details after modification are displayed and not the details before editing.
Workaround	None

Issue	**FEES RATE CALCULATION PRE-PROCESSING ALGORITHM ISSUE**
Description	Algorithm only considers the latest Service Quantity Identifier, it has to consider both Parameter and Service Quantity Identifier when calculating FEES and RATE.
Workaround	None

Issue	**C1-ACFEES BATCH RUN WITH PRICE ITEM CODE AS THE ONLY PARAMETER.**
Description	C1-ACFEES batch should consider records of price assignment where FEES for same should persist.
Workaround	None

Issue	**PRICE ASSIGNMENT TYPE - POST PROCESSING ISSUE IN FEES CALCULATION BATCH.**
Description	New value to be added in Price Assignment Type for post processing issue in FEES calculation batch.
Workaround	None

Issue	**C1-ACCOUNTFEES SERVICE ISSUE**
Description	At present FEES for price assignments are not persisted if any one price assignment eligibility rule results false and if no RATE found for same.
Workaround	None

Issue	**PAYMENT STATUS REMAINS INCOMPLETE AND NO PAYMENT SEGMENT IS GENERATED EVEN WHEN TENDER CONTROL ID IS GENERATED**
Description	For `On Extract Date', if one of the split auto payments goes in to error state, BALAPY batch generates Tender Control Id and Payment Status remains Incomplete and no Payment segment is generated.
Workaround	None

Issue	**CHANGES MADE TO ACCOUNT ARE NOT UPDATED WHEN APPROVAL WORKFLOW IS ACTIVE FOR ACC**
Description	At present columns are not properly aligned and changes are not updated when Approval Workflow is Active. Changes done to account should be updated when approval workflow is active.
Workaround	None

Issue	**INBOUND WEB SERVICE DOES NOT TRIM LEADING & TRAILING SPACES FROM INPUT PARAMETER**
Description	If you pass input parameters with leading and trailing spaces to an inbound web service, the inbound web service does not trim the leading and trailing spaces from the input parameters.
Workaround	None

Issue	**IF USER ADDED DEFER AUTO PAY DATE ON ACCOUNT THEN AUTO PAY WILL NOT WORK**
Description	If you manually add the date in the **Defer Auto Pay Date** field, the automatic payment functionality will not work for the account.
Workaround	None

Issue	**TOTAL OVERDUE AMOUNT IN ACCOUNT & PERSON DETAILS SECTIONS SHOW INCORRECT VALUE**
Description	If you manually include a bill in more than one active overdue process through the user interface, the amount shown in the **Total Overdue Amount** field is incorrect when you search for an overdue process using the Person or Account details in the **Delinquency Central** screen.
Workaround	None

Issue	**SEASONAL ADDRESS ID DOES NOT APPEAR IN THE BILL ROUTINGS TAB OF THE BILL SCREEN**
Description	At present, the seasonal address which is effective at the time of billing is considered for bill routing. You can view the seasonal address details in the **Bill Routings** tab of the **Bill** screen. However, the seasonal address ID does not appear corresponding to the **Address ID** field.
Workaround	None

Issue	**ACCOUNT OVERRIDE ADDRESS IS NOT DELETED WHEN THE BILL ROUTING RECORD IS DELETED**
Description	Once you delete a bill routing record for a person from the **Account** screen where the **Address Source** field is set to **Account Override**, the corresponding account override address is not deleted from the system. You can still view the account override address on the screen.
Workaround	None

Issue	**OVERRIDE DUE DATE NOT CALCULATED CORRECTLY IN CASE OF REINSTATEMENT**
Description	If a customer is not active (i.e. does not have at least one active policy) and reinstatement request is received to reinstate the customer's policy which is terminated due to non-payment, the system should override the due date on the next bill using the **Days Until Due** parameter in the **C1-DUEDTFTCV** algorithm which is attached on the respective customer class. As per this algorithm, the override due date should be calculated as bill date plus days until due. However, at present, the system does not override the due date using the **Days Until Due** parameter. It reflects the due date which is the next coverage period start date.
Workaround	None

Issue	**ERROR OCCURS ON USING A VALUE WITH HYPHEN FOR A CHARACTERISTIC TYPE**
Description	At present, an error occurs on a screen where a characteristic value with hyphen (-) is defined for a characteristic type.
Workaround	None

Issue	**AN ERROR OCCURS ON THE TEMPLATE SEARCH WINDOW**
Description	If you do not specify at least one account selection template while defining a construct, an error occurs indicating that at least one account selection template must be specified. Now, when you search for an account selection template using the **Search** icon corresponding to the respective field, the **Template Search** window appears with the same error (indicating that at least one account selection template must be specified). The system should not display any error in the **Template Search** window.
Workaround	None

Issue	**DISPUTE AMT AT BILL LEVEL INCORRECT WHEN BILL SEGMENT OF PREVIOUS BILL CANCELED**
Description	If a bill segment of the previous bill is canceled and you create a dispute request against an account for the corresponding next bill, the dispute amount displayed against the bill in the **Dispute Details** zone is incorrect.
Workaround	None

Issue	**SAVE BUTTON IS ENABLED WHEN A BILL IS IN THE COMPLETE OR CANCELED STATUS**
Description	The **Save** button in the **Page Title** area on the **Bill** screen should be disabled when a bill is in the **Complete** or **Canceled** status. However, at present, the **Save** button is enabled when a bill is in the **Complete** or **Canceled** status.
Workaround	None

Issue	**APAYCRET BATCH DOES NOT CONSIDER ECR ADJUSTMENTS CREATED ON PENDING BILL**
Description	You can only use an adjustment type where the **Print by Default** and **Impact Next Bill Balance** check boxes are not selected to create transfer adjustment while distributing earnings credit rate. Therefore, an ECR adjustment created against a pending bill is not stamped on the bill. As a result, the **Automatic Payment Creation (APAYCRET)** batch creates automatic payment for the bill without considering the ECR adjustment.
Workaround	None

Issue	**PERCENTAGE (%) WILDCARD NOT ALLOWED IN PERSON NAME WHILE SEARCHING FOR AN ENTITY**
Description	The system does not allow you to specify the Percentage (%) wildcard in the **Person Name** field while searching for any entity across application. At present, the system automatically appends the criteria in the **Person Name** field with the Percentage (%) wildcard and accordingly searches for the entity.
Workaround	None

Issue	**SINGLE MATCH EVENT CREATED WHEN MULTIPLE BILL SEGMENTS OF A CONTRACT ARE NETTED**
Description	At present, the system creates single match event for all bill segments of a contract which are netted. For example, there are two bill segments – BS1 (50$) and BS2 (-50$) of the C1 contract on a bill. In this case, the system nets the BS1 and BS2 because it results in zero contract balance, and then creates single match event for BS1 and BS2.
Workaround	None

Issue	**RECOGNITION SCHEDULE NOT GENERATED FOR BX/AX WHEN DRR FOR BS/AD DOES NOT EXIST**
Description	There might be situations when you have attached the **C1-REVRECSCH** algorithm to a contract's contract type for which bill segments and adjustments are already generated. Now, if already generated bill segments or adjustments are canceled, the system will generate the deferred revenue recognition for BX and AX even if the deferred revenue recognition does not exist for the corresponding BS and AD. But, the recognition schedule is not generated. You cannot even edit the recognition schedule of a deferred revenue recognition which is created for BX and AX.
Workaround	None

Issue	**AUTO PAY ID IS NOT UPDATED WHEN A REOPENED BILL IS COMPLETED**
Description	When you reopen and complete a bill, the bill's due date is recalculated. On completing a reopened bill, the system does not check whether there are rule based auto pay instructions for the account which are effective on the latest bill due date. In other words, the system does not update the auto pay ID against the financial transactions in the **C1_FT_EXT** table. In addition, the entries in the **CI_BILL_ACH** table are not updated.
Workaround	None

Insurance

Issue	**OLD INSURANCE FEATURES ARE NOT TESTED AND VERIFIED IN ORMB VERSION 2.8.0.0.0**
Description	In this release, the new policy data model is introduced. The old policy data model which is accessible to the INADMIN user group is no longer operational. The old insurance features, such as Insurance Control Central, Deferred Revenue Recognition, Account Current, Pay Plan, Group Billing, and List Bill Reconciliation are not tested and verified with the new policy data model.
Workaround	None

Issue	**PERFORMANCE ISSUE WHILE CREATING DEFERRED REVENUE RECOGNITION SCHEDULE**
Description	If there are large number of bill segments and adjustments for which deferred revenue recognition schedule must be generated, the system takes long time to generate deferred revenue recognition schedules.
Workaround	None

Issue	**VALIDATION FOR FIDUCIARY CONTRACT MISSING DURING RECONCILIATION**
Description	While changing the status of the reconciliation object to Ready To Pay, the system does not validate whether fiduciary contract exists for the group account.
Workaround	You need to ensure that group customer has fiduciary contract associated with the account through which payments can be made for the list bills.

Issue	**TWO BILL SEGMENTS GENERATED WHEN REASON CODE EFFECTIVE DATE IS SAME AS BILL SEGMENT START DATE**
Description	When you select the Update option from the Reason Code list and specify the reason code effective date same as the bill segment start date, the system creates two bill segments – one with prorated billed amount and another with prorated reported amount. Ideally, the system should only create one bill segment with prorated reported amount.
Workaround	None

Issue	**UNABLE TO DISTRIBUTE THE REMAINING PAYMENT MANUALLY**
Description	If you have distributed partial payment automatically through the **Payment by Transaction** screen, the system does not allow you to distribute the remaining payment manually.
Workaround	None

Issue	**FOREIGN KEY AND FILE LOCATION CHARACTERISTIC TYPE NOT SUPPORTED IN UI MAPS**
Description	The screens created using the UI map do not support the **Foreign Key Value** and **File Location Value** characteristic types. These screens only support the **Adhoc Value** and **Predefined Value** characteristic types.
Workaround	None

Issue	**CHARACTERISTIC TYPES ARE NOT FILTERED BASED ON THE REASON CODE**
Description	While editing the reconciliation object line, the characteristic types are not filtered based on the reason code that you have selected. Currently, it lists all characteristic types where the characteristic entity is set to **Reason Code**.
Workaround	None

Issue	**RECONCILIATION DOESN'T WORK PROPERLY FOR PASS THROUGH BILLABLE CHARGES**
Description	In the sample case workflow, the system checks whether the difference between the reported and billed amounts is within the tolerance limit. If so, the system must change the status of the reconciliation object line to **WD-Match**. However, at present, in case of pass through billable charges, the system changes the status of the reconciliation object line to **Manual** instead of **WD-Match**.
Workaround	None

Issue	**ERROR OCCURS WHEN YOU RESOLVE A RECONCILIATION OBJECT LINE FROM THE CASE SCREEN**
Description	The system allows you to manually resolve a reconciliation object line from the **Case** screen and change the status of the reconciliation object line to **Manual Match**. At present, an error occurs when you click the **Manual Match** button in the **Case** screen.
Workaround	None

Issue	**OVERRIDE DESCRIPTION APPEARS INSTEAD OF DESCRIPTION IN THE SOURCE SYSTEM LIST**
Description	At present, the override description of the source system appears in the **Source System** list instead of the description when you select the **Policy** option from the **Search By** list in the **Customer 360-Degree View** screen.
Workaround	None

Issue	**UNABLE TO SELECT AUDIT EVENT TYPE IN PRT WHEN UPDATE ALL IS CONFIGURED IN AET**
Description	At present, you cannot use an audit event type of the C1-Membership and C1_PERSON_BO business objects in the Age Based and Tier Based pricing rule types when the **Update All** option is selected in the audit event type.
Workaround	Therefore, we recommend you to select an audit event type of the C1-Membership and C1_PERSON_BO business objects where the **Update All** option is not selected.

Documentation

Issue	**"ERROR 500--INTERNAL SERVER ERROR" - ONLINE HELP IS NOT WORKING**
Description	At present, an error occurs when you access online help for the following screens: • Account Collection Summary • Account Current • COBOL Program • Collection Control Central • Contract Type - Charge Type Mapping • Contract Type - Pay Plan Template Mapping • External Statement • FK Validation Summary • Pay Plan Template • Policy (P&C) • Reason Code • Reconciliation Object • Reconciliation Object Line Status • Unit of Measure
Workaround	None

Issue	**ONLINE HELP NOT AVAILABLE FOR SOME SCREENS OR TABS**
Description	At present, the online help is not available for the following screens: • Collection Type • Loan • Request In addition, the online help is not available for the following tabs: • Rate Schedule – SQ Rule Tab
Workaround	None

Issue	**INDEX ENTRIES NOT DEFINED FOR THE BANKING AND INSURANCE MODULES**
Description	At present, index entries are not defined for all topics in the Banking and Insurance modules.
Workaround	None

Issue	**CONTENT ADDED IN STEPRESULT AND INFO TAGS IS DISPLAYED IN BOLD**
Description	At present, the content added within the STEPRESULT and INFO tags is displayed in bold in the online help. This behavior is observed in Oracle Help and not in SPLHelp.
Workaround	None

Issue	**COMMENTS NOT COPIED IN MAIL WHILE SUBMITTING FEEDBACK TO THE DOCUMENTATION TEAM**
Description	The feedback entered in the **Comments** text box is not copied to the mail while submitting the feedback form in Oracle Help.
Workaround	You will have to manually add the comments in the e-mail before sending the feedback to the documentation team.

Technical Support

For any technical support, consult with Oracle Support, Oracle Partner, or Oracle Consulting that may be supporting your implementation and upgrade process.

