

# **Oracle® Revenue Management and Billing**

Version 2.7.0.1.0

## **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
<i>Oracle Revenue Management and Billing Banking User Guide</i>	Lists and describes various banking features in Oracle Revenue Management and Billing. It also describes all screens related to these features and explains how to perform various tasks in the application.
<i>Oracle Revenue Management and Billing Insurance User Guide</i>	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.
<i>Oracle Revenue Management and Billing Installation Guide</i>	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.
<i>Oracle Revenue Management and Billing Quick Installation Guide</i>	Provides high-level information on how to install the Oracle Revenue Management and Billing (ORMB) application and selected additional software.
<i>Oracle Revenue Management and Billing Database Administrator's Guide</i>	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.
<i>Oracle Revenue Management and Billing Server Administration Guide</i>	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
<i>Oracle Revenue Management and Billing Security Guide</i>	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.
<i>ORMB - Transaction Feed Management - Batch Execution Guide</i>	Describes the sequence in which the batches must be executed while performing various tasks in the Transaction Feed Management module.
<i>Oracle Revenue Management and Billing Batch Guide</i>	Lists and describes various ORMB batches.
<i>Oracle Revenue Management and Billing Upgrade Guide</i>	Explains how to upgrade the Oracle Revenue Management and Billing framework, application, and its database.
<i>Oracle Revenue Management and Billing Upgrade Path Guide</i>	Explains the path and pre-requisites for upgrading Oracle Revenue Management and Billing from one version to another.
<i>Oracle Revenue Management and Billing Pricing Services</i>	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	24-Jan-2019	Mass Pricing Update	Updated Information
		Ancillary Pricing	Updated Information
		Discount Pricing	Updated Information
		Level Funding Pricing	Updated Information
		Specific Stop-Loss Pricing Rule (for Bill Group)	Updated Information
		Aggregate Stop-Loss Pricing Rule (for Bill Group)	Updated Information
1.2	16-Apr-2019	Mass Pricing Update	Updated Information
		Ancillary Pricing	Updated Information
1.3	03-May-2019	Funding Request	Updated Information
1.4	24-July-2019	Effective Dated Address	Updated Information
1.5	02-Aug-2019	Transaction Feed Management	Added Information
		User Interface (UI) Level Changes	Added Information
1.6	25-Sep-2019	Deprecation Notices for ORMB Version 2.7.0.1.0	Added Information

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<b>Revision</b>	<b>Last Update</b>	<b>Updated Section</b>	<b>Comments</b>
1.7	15-May-2020	Deprecation Notices for ORMB Version 2.7.0.1.0	Updated Information

# Contents

<b>Prerequisites .....</b>	<b>1</b>
<b>New Features (Generic).....</b>	<b>2</b>
Mass Pricing Update .....	2
Price Item, Parameter, and SQL Upload .....	4
Product and Product Version Upload .....	9
Price List and Price Item Pricing Upload .....	13
<b>New Features (Specific to Financial Services) .....</b>	<b>17</b>
<b>New Features (Specific to Insurance) .....</b>	<b>18</b>
Flat Fee Pricing .....	18
Ancillary Pricing.....	20
Discount Pricing .....	25
Level Funding Pricing .....	28
Approval Workflow for Pricing Rules .....	33
Write-Off Charges during Post Runout .....	34
Price Item Eligibility.....	35
Related Pricing Rule Type Eligibility .....	35
<b>Enhancements (Generic) .....</b>	<b>37</b>
Pricing Management.....	37
Delinquency Central.....	38
Payment Currency Conversion.....	38
Effective Dated Address.....	38
Billing.....	40
Transaction Feed Management .....	41
Approval Profile .....	44
Funding Request .....	44
<b>Enhancements (Specific to Financial Services) .....</b>	<b>46</b>
Accrual.....	46
Earnings Credit Rate (ECR) .....	47
<b>Enhancements (Specific to Insurance).....</b>	<b>52</b>
Policy .....	52
Specific Stop-Loss Pricing Rule (for Bill Group) .....	52
Aggregate Stop-Loss Pricing Rule (for Bill Group).....	53
Customer 360° View.....	54

<b>User Interface (UI) Level Changes .....</b>	<b>55</b>
<b>Database Level Changes .....</b>	<b>63</b>
<b>Supported Platforms .....</b>	<b>64</b>
<b>Oracle Utilities Application Framework 4.3.0.6.0 Enhancements.....</b>	<b>65</b>
System Wide Enhancements.....	65
Change to the About Box for Cloud Implementations.....	65
Required Indicator Added to Fixed Pages.....	65
File Access Enhancements .....	66
Support Defining File Alias Using Extendable Lookup .....	66
Introduce Support for Cloud Storage Access .....	66
Batch Enhancements .....	67
Enhanced Bind Variable Support for Plug-in Driven Batch .....	67
Monitor Batch Programs Supports Restricting By Date.....	67
Add Start and End Date / Time to Batch Run.....	67
Backward Compatibility .....	68
Enhanced Level of Service Support.....	68
DBMS Scheduler Integration Enhancements.....	68
Job Details Service Includes Error Details .....	68
Separate Business Services Provided for Adding / Changing Entries.....	69
Support a Job Scope for Defining Options .....	69
Additional Configuration Options for Job List Service .....	69
To Do Enhancements .....	70
Recalculate To Do Priority.....	70
Monitor a To Do Entry .....	70
Expand Ability to Add Logs and Enter Comments on the To Do.....	71
Configuration Tools Enhancements .....	71
New Schema Editor .....	71
Process Flow.....	72
Terminology Change in Add Element Dialogue .....	72
Optional Display of State Transition UI Map .....	72
Analytics Configuration Enhancements .....	72
Cube Views.....	72
Web Services Enhancements .....	73
Support Configuration for REST Web Services.....	73
Backward Compatibility .....	73



Explicitly Define Owner in Service Catalog Configuration .....	74
Improve Performance for Outbound Messages .....	74
Steps to Configure.....	74
Configuration Migration Assistant Enhancements .....	74
Algorithm to Purge Unchanged Transactions .....	74
Mobile Framework Enhancements .....	75
Support to Activate Deployment Upon Creation.....	75
Restrict Mobile Image Attachment File Size .....	75
Security Enhancements.....	75
Introduce Cryptography Key Support .....	75
Change in OIM Integration Configuration.....	76
Miscellaneous Enhancements.....	76
Country Enhancements.....	76
Attachment Enhancements .....	77
Customization Setting for Extended Data Area Removed .....	77
Master Configuration List Usability Enhancement .....	77
Business Service F1-RetrieveCharValDescription Updated .....	77
New ILM Algorithms - Proactively Update ILM Switch .....	77
Support Including Column Headers in Sync Request Extract.....	78
Return All Errors On COBOL SQL Updates .....	78
Removal Of Product Specific Domain Templates .....	78
<b>Deprecated Notices for OUAF Version 4.3.0.6.0 .....</b>	<b>79</b>
Deprecated Functionality in This Release .....	79
XML Application Integration (XAI) and Multi-Purpose Listener MPL .....	79
Batch on WebLogic .....	79
Ability to Add Child Rows for Several Maintenance Objects .....	79
Deprecated Objects in This Release.....	80
Deprecation Planned for Future Releases .....	80
Process Flow Terminology Considerations .....	80
Context Menu Navigation when Field Doesn't Match Context Field.....	81
<b>Technical Recommendations .....</b>	<b>82</b>
<b>Supported Upgrades .....</b>	<b>83</b>
<b>Deprecation Notices for ORMB Version 2.7.0.1.0 .....</b>	<b>84</b>
Deprecated Functionality in This Release .....	84
Deprecation Planned for Future Releases .....	84

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<b>Product Documentation .....</b>	<b>86</b>
<b>Media Pack Download .....</b>	<b>87</b>
<b>Bug Fixes .....</b>	<b>88</b>
<b>Known Issues .....</b>	<b>92</b>
Banking.....	92
Insurance.....	117
Documentation .....	120
<b>Technical Support .....</b>	<b>122</b>

## Prerequisites

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If a customer is already using the Transaction Feed Management feature and wants to upgrade to Oracle Revenue Management and Billing Version 2.7.0.1.0, 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 2.7.0.0.0 will not happen successfully.
- Transactions which are uploaded using 2.7.0.0.0 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)

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

- Mass Pricing Update
- Price Item, Parameter, and SQI Upload
- Product and Product Version Upload
- Price List and Price Item Pricing Upload

### Mass Pricing Update

Oracle Revenue Management and Billing provides the ability for mass price item pricing update. In other words, the system enables you to update multiple active price item pricing assigned to a person, account, price list, or product at the same time. You can search for the price assignments which you want to update using the following fields:

- **Price Item** – Used when you want to search pricing which is defined for a particular price item. This field is mandatory.
- **Price Item Parameters** – Used when you want to search pricing which is defined using a particular parameter.
- **Account ID** – Used when you want to search pricing which is assigned to a particular account.
- **Person ID** – Used when you want to search pricing which is assigned to a particular person.
- **Division** – Used when you want to search pricing which belongs to a particular division. This field is mandatory.
- **Update Date** – Used to retrieve all active effective dated price item pricing. Note that the update date cannot be earlier than the system date. This field is mandatory.
- **Pricing Entity Type** - Used when you want to search pricing which is defined on a particular type of entity. The valid values are:
  - Account Agreed
  - Customer Agreed
  - Price List
  - Product

On specifying the search criteria, the system fetches the number of entities on which the price item pricing is defined and the number of price assignments on a particular type of pricing entity.

Once you select one or more price item pricing, you can create the mass pricing update request by clicking the **Mass Pricing Update** button. While creating a mass pricing update request, you need to specify a mass pricing update request type using which you want to create the mass pricing update request. It is the mass pricing update request type which helps the system to determine:

- The business object using which the mass pricing update request should be created in the system.
- Whether the approval is required for the mass pricing update request.
- Whether the mass pricing update must be performed in the deferred mode when the number of price assignments in the mass pricing update request exceeds the defer processing count.

**Note:** The **Mass Pricing Update Request (C1-MassPricingReq)** business object is shipped with the product.

Once the mass pricing update request type is selected, you need to specify the following details:

- **Mass Pricing Update Criteria** – Used to indicate whether you want to increase or decrease the rate in the price item pricing or whether you want to forcibly end the price item pricing on the specified date. The valid values are:
  - Decrease Price
  - End Date Price
  - Increase Price
- **Mass Pricing Update Type** – Used to indicate whether you want to increase or decrease the rate by an absolute value or in percentage. The valid values are:
  - Absolute
  - Percentage

You can specify the mass pricing update type only when the mass pricing update criteria is set to **Increase Price** or **Decrease Price**.

- **Rate Value** – Used to specify the rate by which you want to increase or decrease the price. You can specify the rate only when the mass pricing update criteria is set to **Increase Price** or **Decrease Price**.
- **Currency** – Used to indicate the currency in which the rate is specified. You can specify the currency only when the mass pricing update type is set to **Absolute**.

**Note:** If the pricing currency is different from the currency which is specified in the mass pricing update request, the system does the currency conversion using the algorithm which is attached to the **Currency Conversion For Bill Segments** algorithm spot of the respective division.

Once a mass pricing update request is created in the **Draft** status, you can submit the mass pricing update request. On submitting a mass pricing update request, the status of the mass pricing update request is changed to either **Deferred Processing** or **Updating Price Assignments** depending on whether the number of price assignments in the mass pricing update request exceeds the defer processing count. If the status is changed to **Deferred Processing**, you need to click the **Submit Batch** button. On clicking the **Submit Batch** button, the system automatically creates a batch job using the **C1-GENRQ** batch control. While creating the batch job, it uses the values defined for the **Thread Count** and **Thread Pool Name** option types in the **C1-MASPRI** feature configuration.

Once the batch job is executed, the status of the mass pricing update request is changed to **Updating Price Assignments**. If a price assignment is referred in past, the existing price assignment is end dated and a new price assignment is created. However, if a price assignment is not yet referred in the system, the existing price assignment is updated. Once the price assignment is newly created or updated, the status of the record in the mass pricing update request is changed to **Processed**. However, if a price assignment is referred for a future date, the status of the record in the mass pricing update request is changed to **Error**. In addition, if any error occurs while updating an existing price assignment or creating a new price assignment, the status of the record in the mass pricing update request is changed to **Error**. Finally, the status of the mass pricing update request is changed to **Processed**.

You can optionally configure the approval workflow for the mass pricing update request. If the **Approval Required** field is set to **Yes** in the mass pricing update request type, the status of the mass pricing update request is changed to **Approval In Progress** when you submit the mass pricing update request. Once the approver approves the mass pricing update request, the status of the mass pricing update request is changed to either **Deferred Processing** or **Updating Price Assignments** depending on whether the number of price assignments in the mass pricing update request exceeds the defer processing count. However, if the approver rejects a mass pricing update request, the status of the mass pricing update request is changed to **Rejected**.

## Price Item, Parameter, and SQI Upload

Oracle Revenue Management and Billing enables you to create new price items and edit the existing price items using the **File Upload Interface** utility. You can upload the price item file in the XML or CSV format using the **File Upload Interface** utility.

You can specify the following in the XML and CSV files along with the basic details of the price item:

- Parameters and divisions which you want to associate with the price item
- Characteristics for the price item
- Division-specific characteristics for the price item
- Division-specific SQIs for the price item
- Details of the price item relationship

To upload the price item file in the XML format using the **File Upload Interface** utility, you need to do the following:

1. Define a file request type with the following specifications:
  - Set the **File Format** field to **Extensible Markup Language**.
  - Attach an algorithm created using the **C1-FRHVA** algorithm type to the **File Validation Algorithm** field.
  - Add the **C1\_PRICEITEM\_BO** business object or custom price item business object in the **Services** section.
  - Attach an algorithm created using the **C1-PRCITM-PR** algorithm type to the **Pre-Processing Algorithm** field corresponding to the price item business object.
  - Set the **Operation** field to **Add** or **Replace** depending on whether you want to create new price items or edit the existing price items using the file request type.
2. Execute the **File Transformation and Upload Batch (C1-FTRAN)** batch to upload the price item file.
3. Execute the **File Request Processing (C1-FREQP)** batch to create or edit the price items in the system.

**Note:** For more information about the XML file format, refer to *Oracle Revenue Management and Billing Banking User Guide* or *Oracle Revenue Management and Billing Insurance User Guide*.

To upload the price item file in the CSV format using the **File Upload Interface** utility, you need to do the following:

1. Define a file request type with the following specifications:
  - Set the **File Format** field to **Comma Separated Values**.
  - Select the **Data Transformation Required** option.
  - Attach an algorithm created using the **C1-FRHVA** algorithm type to the **File Validation Algorithm** field.
  - Attach an algorithm created using the **C1-FRTA** algorithm type to the **Data Transformation Algorithm** field.
  - Add the **C1\_PRICEITEM\_BO** business object or custom price item business object in the **Services** section.
  - Attach an algorithm created using the **C1-PRCITM-PR** algorithm type to the **Pre-Processing Algorithm** field corresponding to the price item business object.
  - Set the **Operation** field to **Add** or **Replace** depending on whether you want to create new price items or edit the existing price items using the file request type.
  - Specify the following details in the **Field Transformation** section:
    - **Sequence** – Used to specify the data field in the CSV record which should be uploaded in the system.
    - **Field Name** – Used to indicate the field for which the data is uploaded in the system.

- **Map Field XPath** – Used to specify the XPath of the field where you want to store the data field from the CSV record.

For example,

Sequence	Field Name	Map Field XPath
1	PRICEITEMCODE	C1_PRICEITEM_BO/priceItemCode
2	DESCRIPTION	C1_PRICEITEM_BO/description

This means that the system should upload the first value (i.e. price item code) and second value (i.e. price item description) from the CSV record in the **priceItemCode** and **description** fields using the **C1\_PRICEITEM\_BO** business object.

2. Execute the **File Transformation and Upload Batch (C1-FTRAN)** batch to upload the price item file.
3. Execute the **File Request Processing (C1-FREQP)** batch to create or edit the price items in the system.

**Note:** For more information about the CSV file format, refer to *Oracle Revenue Management and Billing Banking User Guide* or *Oracle Revenue Management and Billing Insurance User Guide*.

The **C1-PRCITM-PR** algorithm does the following:

- Defaults the following fields which are required to create the price item, but are not provided by the legacy system:

Field Name	Condition	Default Value	Default Value Description
Price Item Usage	-	PRBL	Pricing and Billing
Price Item Type	Price Item Usage = PRBL	FEES	Fees
Bundle	-	No	No
Bundle Type	Price Item Usage = PRIC, Price Item Type = FEES and Bundle = Yes	REGU	Regular
Price Item Status	-	ACTV	Active
Global Price List	-	No	No

- Generates the price item parameter group using the parameter codes and parameter values for each the price item relationship.
- Validates whether the division, SQI, price item characteristic types, division-specific price item characteristic type, and parameters are already defined in the system.

When you want to edit the existing price items using the **File Upload Interface** utility, you need to provide all details of the price item and not just the details which you want to update. This is because the system supports replace operation and not the edit operation while editing the price items.



The system also enables you to create new parameters and SQIs using the **File Upload Interface** utility. You cannot edit the existing parameters and SQIs using the **File Upload Interface** utility. You can upload parameters and SQIs either along with the price items or separately based on the requirements.

To upload the parameter file in the XML format using the **File Upload Interface** utility, you need to do the following:

1. Define a file request type with the following specifications:
  - Set the **File Format** field to **Extensible Markup Language**.
  - Attach an algorithm created using the **C1-FRHVA** algorithm type to the **File Validation Algorithm** field.
  - Add the **C1\_PRICE\_PARM** business object or custom parameter business object in the **Services** section.
  - Attach an algorithm created using the **C1-PRICEUPL** algorithm type to the **Pre-Processing Algorithm** field corresponding to the parameter business object.
  - Set the **Operation** field to **Add**.
2. Execute the **File Transformation and Upload Batch (C1-FTRAN)** batch to upload the parameter file.
3. Execute the **File Request Processing (C1-FREQP)** batch to create the parameters in the system.

**Note:** For more information about the XML file format, refer to *Oracle Revenue Management and Billing Banking User Guide* or *Oracle Revenue Management and Billing Insurance User Guide*.

To upload the parameter file in the CSV format using the **File Upload Interface** utility, you need to do the following:

1. Define a file request type with the following specifications:
  - Set the **File Format** field to **Comma Separated Values**.
  - Select the **Data Transformation Required** option.
  - Attach an algorithm created using the **C1-FRHVA** algorithm type to the **File Validation Algorithm** field.
  - Attach an algorithm created using the **C1-FRTA** algorithm type to the **Data Transformation Algorithm** field.
  - Add the **C1\_PRICE\_PARM** business object or custom parameter business object in the **Services** section.
  - Attach an algorithm created using the **C1-PRICEUPL** algorithm type to the **Pre-Processing Algorithm** field corresponding to the parameter business object.
  - Set the **Operation** field to **Add**.
  - Specify the required details in the **Field Transformation** section.
2. Execute the **File Transformation and Upload Batch (C1-FTRAN)** batch to upload the parameter file.
3. Execute the **File Request Processing (C1-FREQP)** batch to create the parameters in the system.

**Note:** For more information about the CSV file format, refer to *Oracle Revenue Management and Billing Banking User Guide* or *Oracle Revenue Management and Billing Insurance User Guide*.

The **C1-PRICEUPL** algorithm does the following:

- Defaults the following fields which are required to create the parameter, but are not provided by the legacy system:

Field Name	Condition	Default Value
Parameter Usage	Source Entity = TRN	Price Item

To upload the SQI file in the XML format using the **File Upload Interface** utility, you need to do the following:

1. Define a file request type with the following specifications:
  - Set the **File Format** field to **Extensible Markup Language**.
  - Attach an algorithm created using the **C1-FRHVA** algorithm type to the **File Validation Algorithm** field.
  - Add the **C1-SQIUPLOAD** business service in the **Services** section.
  - Set the **Operation** field to **Add**.
2. Execute the **File Transformation and Upload Batch (C1-FTRAN)** batch to upload the SQI file.
3. Execute the **File Request Processing (C1-FREQP)** batch to create the SQIs in the system.

**Note:** For more information about the XML file format, refer to *Oracle Revenue Management and Billing Banking User Guide* or *Oracle Revenue Management and Billing Insurance User Guide*.

To upload the SQI file in the CSV format using the **File Upload Interface** utility, you need to do the following:

1. Define a file request type with the following specifications:
  - Set the **File Format** field to **Comma Separated Values**.
  - Select the **Data Transformation Required** option.
  - Attach an algorithm created using the **C1-FRHVA** algorithm type to the **File Validation Algorithm** field.
  - Attach an algorithm created using the **C1-FRTA** algorithm type to the **Data Transformation Algorithm** field.
  - Add the **C1-SQIUPLOAD** business service in the **Services** section.
  - Set the **Operation** field to **Add**.
  - Specify the required details in the **Field Transformation** section.
2. Execute the **File Transformation and Upload Batch (C1-FTRAN)** batch to upload the SQI file.
3. Execute the **File Request Processing (C1-FREQP)** batch to create the SQIs in the system.

**Note:** For more information about the CSV file format, refer to *Oracle Revenue Management and Billing Banking User Guide* or *Oracle Revenue Management and Billing Insurance User Guide*.

If the price item, parameter, and SQI information is available in the same file, you need to use a file request type where the **C1\_PRICE\_PARM** business object and the **C1-SQIUPLOAD** business service have higher sequence compared to the **C1\_PRICEITEM\_BO** business object in the **Services** section. Otherwise, erroneous results might occur.

## Product and Product Version Upload

Oracle Revenue Management and Billing enables you to create new products and edit the existing products using the **File Upload Interface** utility. You can upload the product file in the XML or CSV format using the **File Upload Interface** utility.

You can specify the following in the XML and CSV files along with the basic details of the product:

- Divisions which you want to associate with the product
- Characteristics for the product
- Details of the product to product relationship

To upload the product file in the XML format using the **File Upload Interface** utility, you need to do the following:

1. Define a file request type with the following specifications:
  - Set the **File Format** field to **Extensible Markup Language**.
  - Attach an algorithm created using the **C1-FRHVA** algorithm type to the **File Validation Algorithm** field.
  - Add the **C1\_PRODUCT\_BO** business object or custom product business object in the **Services** section.
  - Attach an algorithm created using the **C1-PRODUCTPR** algorithm type to the **Pre-Processing Algorithm** field corresponding to the product business object.
  - Set the **Operation** field to **Add** or **Replace** depending on whether you want to create new products or edit the existing products using the file request type.
2. Execute the **File Transformation and Upload Batch (C1-FTRAN)** batch to upload the product file.
3. Execute the **File Request Processing (C1-FREQP)** batch to create or edit the products in the system.

**Note:** For more information about the XML file format, refer to *Oracle Revenue Management and Billing Banking User Guide* or *Oracle Revenue Management and Billing Insurance User Guide*.

To upload the product file in the CSV format using the **File Upload Interface** utility, you need to do the following:

1. Define a file request type with the following specifications:
  - Set the **File Format** field to **Comma Separated Values**.
  - Select the **Data Transformation Required** option.
  - Attach an algorithm created using the **C1-FRHVA** algorithm type to the **File Validation Algorithm** field.
  - Attach an algorithm created using the **C1-FRTA** algorithm type to the **Data Transformation Algorithm** field.
  - Add the **C1\_PRODUCT\_BO** business object or custom product business object in the **Services** section.

- Attach an algorithm created using the **C1-PRODUCTPR** algorithm type to the **Pre-Processing Algorithm** field corresponding to the product business object.
- Set the **Operation** field to **Add** or **Replace** depending on whether you want to create new products or edit the existing products using the file request type.
- Specify the following details in the **Field Transformation** section:
  - **Sequence** – Used to specify the data field in the CSV record which should be uploaded in the system.
  - **Field Name** – Used to indicate the field for which the data is uploaded in the system.
  - **Map Field XPath** – Used to specify the XPath of the field where you want to store the data field from the CSV record.

For example,

Sequence	Field Name	Map Field XPath
1	PRODUCTCODE	C1_PRODUCT_BO/productCode
2	DESCRIPTION	C1_PRODUCT_BO/description

This means that the system should upload the first value (i.e. product code) and second value (i.e. product description) from the CSV record in the **productCode** and **description** fields using the **C1\_PRODUCT\_BO** business object.

2. Execute the **File Transformation and Upload Batch (C1-FTRAN)** batch to upload the product file.
3. Execute the **File Request Processing (C1-FREQP)** batch to create or edit the products in the system. On creating a product, the status of the product is set to **Draft**.

**Note:** For more information about the CSV file format, refer to *Oracle Revenue Management and Billing Banking User Guide* or *Oracle Revenue Management and Billing Insurance User Guide*.

The **C1-PRODUCTPR** algorithm does the following:

- Defines the mandatory characteristic for the product using the characteristic type which is specified in the **Characteristic Type** option type of the **C1-PRODCH** feature configuration. While defining the mandatory characteristic for the product, the effective date of the characteristic is set to the product's start date. In addition, by default, the characteristic value is set to **No**.
- Sets the status of the product to **Draft**.

The system also enables you to create new product versions and edit the existing product versions using the **File Upload Interface** utility. You can upload product versions along with the product or separately based on the requirements.

You can specify the following in the XML and CSV files along with the basic details of the product version:

- Characteristics for the product version
- Eligibility criteria for the product version
- Services and price list which you want to add in the product version

- Standard products and their services which you want to add in the product version (in case of packaged product)

To upload the product version file in the XML format using the **File Upload Interface** utility, you need to do the following:

1. Define a file request type with the following specifications:
  - Set the **File Format** field to **Extensible Markup Language**.
  - Attach an algorithm created using the **C1-FRHVA** algorithm type to the **File Validation Algorithm** field.
  - Add the **C1\_PRODUCT\_VER\_BO** business object or custom product version business object in the **Services** section.
  - Attach an algorithm created using the **C1-PRDVERPRE** algorithm type to the **Pre-Processing Algorithm** field corresponding to the product version business object
  - Attach an algorithm created using the **C1-PRDVERPST** algorithm type to the **Post-Processing Algorithm** field corresponding to the product version business object (Optional).
  - Set the **Operation** field to **Add** or **Replace** depending on whether you want to create new product versions or edit the existing product versions using the file request type.
2. Execute the **File Transformation and Upload Batch (C1-FTRAN)** batch to upload the product version file.
3. Execute the **File Request Processing (C1-FREQP)** batch to create or edit the product versions in the system.

**Note:** For more information about the XML file format, refer to *Oracle Revenue Management and Billing Banking User Guide* or *Oracle Revenue Management and Billing Insurance User Guide*.

To upload the product version file in the CSV format using the **File Upload Interface** utility, you need to do the following:

1. Define a file request type with the following specifications:
  - Set the **File Format** field to **Comma Separated Values**.
  - Select the **Data Transformation Required** option.
  - Attach an algorithm created using the **C1-FRHVA** algorithm type to the **File Validation Algorithm** field.
  - Attach an algorithm created using the **C1-FRTA** algorithm type to the **Data Transformation Algorithm** field.
  - Add the **C1\_PRODUCT\_VER\_BO** business object or custom product version business object in the **Services** section.
  - Attach an algorithm created using the **C1-PRDVERPRE** algorithm type to the **Pre-Processing Algorithm** field corresponding to the product version business object.
  - Attach an algorithm created using the **C1-PRDVERPST** algorithm type to the **Post-Processing Algorithm** field corresponding to the product version business object (Optional).

- Set the **Operation** field to **Add** or **Replace** depending on whether you want to create new product versions or edit the existing product versions using the file request type.
- Specify the following details in the **Field Transformation** section:
  - **Sequence** – Used to specify the data field in the CSV record which should be uploaded in the system.
  - **Field Name** – Used to indicate the field for which the data is uploaded in the system.
  - **Map Field XPath** – Used to specify the XPath of the field where you want to store the data field from the CSV record.

For example,

Sequence	Field Name	Map Field XPath
1	PRODUCTCODE	C1_PRODUCT_VER_BO/productCode
2	EFFECTIVEDATE	C1_PRODUCT_VER_BO/effectiveDate
3	DESCRIPTION	C1_PRODUCT_VER_BO/description

This means that the system should upload the first value (i.e. product code), second value (i.e. product version's effective date), and the third value (i.e. product version's description) from the CSV record in the **productCode**, **effectiveDate**, and **description** fields using the **C1\_PRODUCT\_VER\_BO** business object.

2. Execute the **File Transformation and Upload Batch (C1-FTRAN)** batch to upload the product version file.
3. Execute the **File Request Processing (C1-FREQP)** batch to create or edit the product versions in the system.

**Note:** For more information about the CSV file format, refer to *Oracle Revenue Management and Billing Banking User Guide* or *Oracle Revenue Management and Billing Insurance User Guide*.

The **C1-PRDVERPRE** algorithm does the following:

- Validates whether the child product is effective on the product version's effective date.
- Sets the status of the product version to **In Progress**.

However, the **C1-PRDVERPST** algorithm does the following:

- Changes the status of the product version from **In Progress** to **Finalized**.

If the product and product version information is available in the same file, you need to use a file request type where the **C1\_PRODUCT\_BO** business object has higher sequence compared to the **C1\_PRODUCT\_VER\_BO** business object in the **Services** section. Otherwise, erroneous results might occur.

## Price List and Price Item Pricing Upload

Oracle Revenue Management and Billing enables you to create new price lists and edit the existing price lists using the **File Upload Interface** utility. You can upload the price list file in the XML or CSV format using the **File Upload Interface** utility.

You can specify the following in the XML and CSV files along with the basic details of the price list:

- Divisions which you want to associate with the price list
- Characteristics for the price list
- Eligibility criteria for the price list
- Hierarchy details for the price list

To upload the price list file in the XML format using the **File Upload Interface** utility, you need to do the following:

1. Define a file request type with the following specifications:
  - Set the **File Format** field to **Extensible Markup Language**.
  - Attach an algorithm created using the **C1-FRHVA** algorithm type to the **File Validation Algorithm** field.
  - Add the **C1\_PRICEASSIGN\_SERVICE** business service in the **Services** section.
  - Set the **Operation** field to **Add** or **Replace** depending on whether you want to create new price lists or edit the existing price lists using the file request type.
2. Execute the **File Transformation and Upload Batch (C1-FTRAN)** batch to upload the price list file.
3. Execute the **File Request Processing (C1-FREQP)** batch to create or edit the price lists in the system.

**Note:** For more information about the XML file format, refer to *Oracle Revenue Management and Billing Banking User Guide* or *Oracle Revenue Management and Billing Insurance User Guide*.

To upload the price list file in the CSV format using the **File Upload Interface** utility, you need to do the following:

1. Define a file request type with the following specifications:
  - Set the **File Format** field to **Comma Separated Values**.
  - Select the **Data Transformation Required** option.
  - Attach an algorithm created using the **C1-FRHVA** algorithm type to the **File Validation Algorithm** field.
  - Attach an algorithm created using the **C1-FRTA** algorithm type to the **Data Transformation Algorithm** field.
  - Add the **C1\_PRICEASSIGN\_SERVICE** business service in the **Services** section.
  - Set the **Operation** field to **Add** or **Replace** depending on whether you want to create new price lists or edit the existing price lists using the file request type.

- Specify the following details in the **Field Transformation** section:
  - **Sequence** – Used to specify the data field in the CSV record which should be uploaded in the system.
  - **Field Name** – Used to indicate the field for which the data is uploaded in the system.
  - **Map Field XPath** – Used to specify the XPath of the field where you want to store the data field from the CSV record.

For example,

Sequence	Field Name	Map Field XPath
1	PRICELISTID	C1_PRICEASSIGN_SERVICE/0/pricelist/priceListId
2	DESCRIPTION	C1_PRICEASSIGN_SERVICE/0/pricelist/description

This means that the system should upload the first value (i.e. price list ID) and second value (i.e. price list description) from the CSV record in the **priceListId** and **description** fields using the **C1\_PRICEASSIGN\_SERVICE** business service.

2. Execute the **File Transformation and Upload Batch (C1-FTRAN)** batch to upload the price list file.
3. Execute the **File Request Processing (C1-FREQP)** batch to create or edit the price lists in the system.

**Note:** For more information about the CSV file format, refer to *Oracle Revenue Management and Billing Banking User Guide* or *Oracle Revenue Management and Billing Insurance User Guide*.

The system also enables you to create new price item pricing for an account, customer, or price list and edit the existing price item pricing assigned to an account, customer, or price list using the **File Upload Interface** utility. You can upload price item pricing along with the price list or separately based on the requirements.

You can specify the following in the XML and CSV files along with the basic details of price item pricing:

- Person, account, or price list to which you want to assign the price item pricing
- Characteristics for the price item pricing
- Price item parameters based on which you want to define the price item pricing
- Basic details for the price components
- Tiering criteria for the price component (if the **Tiering Type** of the corresponding rate component is set to **STEP** or **Threshold**)
- Eligibility criteria for the price component (if the **Tiering Type** of the corresponding rate component is set to **STEP** or **Threshold**)



To upload the price assignments file in the XML format using the **File Upload Interface** utility, you need to do the following:

1. Define a file request type with the following specifications:
  - Set the **File Format** field to **Extensible Markup Language**.
  - Attach an algorithm created using the **C1-FRHVA** algorithm type to the **File Validation Algorithm** field.
  - Add the **C1\_PRICEASSIGN\_SERVICE** business service in the **Services** section.
  - Set the **Operation** field to **Add** or **Replace** depending on whether you want to create new price item pricing or edit the existing price item pricing using the file request type.
2. Execute the **File Transformation and Upload Batch (C1-FTRAN)** batch to upload the price assignments file.
3. Execute the **File Request Processing (C1-FREQP)** batch to create or edit the price item pricing in the system.

**Note:** For more information about the XML file format, refer to *Oracle Revenue Management and Billing Banking User Guide* or *Oracle Revenue Management and Billing Insurance User Guide*.

To upload the price assignments file in the CSV format using the **File Upload Interface** utility, you need to do the following:

1. Define a file request type with the following specifications:
  - Set the **File Format** field to **Comma Separated Values**.
  - Select the **Data Transformation Required** option.
  - Attach an algorithm created using the **C1-FRHVA** algorithm type to the **File Validation Algorithm** field.
  - Attach an algorithm created using the **C1-FRTA** algorithm type to the **Data Transformation Algorithm** field.
  - Add the **C1\_PRICEASSIGN\_SERVICE** business service in the **Services** section.
  - Set the **Operation** field to **Add** or **Replace** depending on whether you want to create new price item pricing or edit the existing price item pricing using the file request type.
  - Specify the following details in the **Field Transformation** section:
    - **Sequence** – Used to specify the data field in the CSV record which should be uploaded in the system.
    - **Field Name** – Used to indicate the field for which the data is uploaded in the system.
    - **Map Field XPath** – Used to specify the XPath of the field where you want to store the data field from the CSV record.
2. Execute the **File Transformation and Upload Batch (C1-FTRAN)** batch to upload the price assignments file.

3. Execute the **File Request Processing (C1-FREQP)** batch to create or edit the price item pricing in the system.

**Note:** For more information about the CSV file format, refer to *Oracle Revenue Management and Billing Banking User Guide* or *Oracle Revenue Management and Billing Insurance User Guide*.

## **New Features (Specific to Financial Services)**

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There are no new features introduced in this release which are specific to the financial services domain.

## New Features (Specific to Insurance)

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

- Flat Fee Pricing
- Ancillary Pricing
- Discount Pricing
- Level Funding Pricing
- Approval Workflow for Pricing Rules
- Write-Off Charges during Post Runout
- Price Item Eligibility
- Related Pricing Rule Type Eligibility

### Flat Fee Pricing

The Administrative Services Only (ASO) provider would like to charge one-time or recurring flat fee to the self-funded employer. Oracle Revenue Management and Billing enables you to process and bill such one-time and recurring charges to the bill group. The system enables you to define one-time or recurring flat fee for a price item. You can define recurring flat fee based on bill period or frequency. The one-time flat fee, bill period based recurring flat fee, and frequency based recurring flat fee can be defined using the respective flat fee pricing rules. You can only define one-time flat fee, bill period based recurring flat fee, and frequency based recurring flat fee pricing rules for a bill group.

You can define the flat fee pricing rules for bill groups from the **Customer 360° Information** screen. You can define a one-time flat fee, bill period based recurring flat fee, and frequency based recurring flat fee pricing rule using the respective flat fee pricing rule type. It is the flat fee pricing rule type which helps the system to determine:

- Business object using which the flat fee pricing rule should be created in the system.

**Note:** You must not select the **Primary** option while defining a one-time flat fee, bill period based recurring flat fee, and frequency based recurring flat fee pricing rule type.

- Price items for which you can define the flat fee pricing rules.
- Rate options that you can use while defining the pricing for the price item.
- Different type of account to which a 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.
- Additional flat fee specific data, such as:
  - Bill segment cancel reason which you want to use when the one-time or recurring flat fee bill segment is canceled due to change in the flat fee amount.
  - Whether the pricing rule type is defined for one-time flat fee or recurring flat fee.

- Recurring method which indicates that the system should create recurring flat fee charge based on bill period or frequency. This information is required when you are defining a recurring flat fee pricing rule type.
- Bill period that you can use while defining a bill period based recurring flat fee pricing rule. This information is required when you are defining a bill period based recurring flat fee pricing rule type.

Once a one-time flat fee pricing rule type is defined, you can define one-time flat fee pricing rules using the one-time flat fee pricing rule type. While defining a one-time flat fee pricing rule for a bill group, you need to specify the following:

- The policy status in which the one-time flat fee pricing rule is applicable. Note that you cannot define a one-time flat fee pricing rule for the post runout period of the policy.
- Price item for which you want to create the one-time flat fee billable charge.
- Date which you want to specify as the start and end dates in the one-time flat fee billable charge.
- Billable charge line type using which you want to create the one-time flat fee billable charge.
- Bill after date which you want to stamp on the one-time flat fee billable charge.
- Flat fee amount for which you want to create the one-time flat fee billable charge.
- Override account when you want to create the one-time flat fee billable charge on a particular account. If you do not specify the bill to override account, the system will derive the account using the priority defined for the price item in the one-time flat fee pricing rule type.

Once a bill period based recurring flat fee pricing rule type is defined, you can define bill period based recurring flat fee pricing rules using the bill period based recurring flat fee pricing rule type. While defining a bill period based recurring flat fee pricing rule for a bill group, you need to specify the following:

- The policy status in which the bill period based recurring flat fee pricing rule is applicable. Note that you cannot define a bill period based recurring flat fee pricing rule for the post runout period of the policy.
- Price item for which you want to create the bill period based recurring flat fee billable charge.
- Dates which you want to specify as the start and end dates in the bill period based recurring flat fee billable charge.
- Billable charge line type using which you want to create the bill period based recurring flat fee billable charge.
- Bill period using which the recurring bill segments should be created in the system.
- Flat fee amount for which you want to create the bill period based recurring flat fee billable charge.
- Override account when you want to create the bill period based recurring flat fee billable charge on a particular account. If you do not specify the bill to override account, the system will derive the account using the priority defined for the price item in the bill period based recurring flat fee pricing rule type.

Once a frequency based recurring flat fee pricing rule type is defined, you can define frequency based recurring flat fee pricing rules using the frequency based recurring flat fee pricing rule type. While defining a frequency based recurring flat fee pricing rule for a bill group, you need to specify the following:

- The policy status in which the frequency based recurring flat fee pricing rule is applicable. Note that you cannot define a frequency based recurring flat fee pricing rule for the post runout period of the policy.
- Price item for which you want to create the frequency based recurring flat fee billable charge.
- Dates which you want to specify as the start and end dates in the frequency based recurring flat fee billable charge.
- Billable charge line type using which you want to create the frequency based recurring flat fee billable charge.
- Frequency using which the recurring bill segments should be created in the system.
- Flat fee amount for which you want to create the frequency based recurring flat fee billable charge.
- Override account when you want to create the frequency based recurring flat fee billable charge on a particular account. If you do not specify the bill to override account, the system will derive the account using the priority defined for the price item in the frequency based recurring flat fee pricing rule type.

Once a one-time flat fee, bill period based recurring flat fee, or frequency based recurring flat fee pricing rule is defined for a bill group, the system creates the one-time or recurring flat fee billable charge, respectively. The system does not create any price assignment, price list, or price list assignment in case of flat fee pricing.

## Ancillary Pricing

The Administrative Services Only (ASO) provider may process some adhoc charges with respect to preventive care, vaccination, diagnostic, and so on. These adhoc charges may also occur due to some corrections in the claim transactions which are already billed to the customer. Oracle Revenue Management and Billing enables you to process and bill these ancillary transactions to the self-funded employer.

The system enables you to create an ancillary charge in either of the following ways:

- Create a pass through charge without markup or markdown (i.e. flat charge).
- Create a pass through charge with a flat or percentage based markup or markdown.
- Create a rate based charge using the rate defined in the ancillary pricing and the service quantity specified in the ancillary transaction. You can also apply markup or markdown to a rate based charge.

You can use any custom mechanism or the file upload utility in ORMB to upload the ancillary transactions. The pricing for the ancillary transactions can be defined using the ancillary pricing rules. You can define an ancillary pricing rule at the parent customer and bill group levels. The ancillary pricing rule at the bill group level takes precedence over the ancillary pricing rule at the parent customer level.

You can define the ancillary pricing rules for parent customers and bill groups from the **Customer 360° Information** screen. You can define an ancillary pricing rule using an ancillary pricing rule type. It is the ancillary pricing rule type which helps the system to determine:

- Business object using which the ancillary pricing rule should be created in the system.
- Whether it is the primary pricing rule type from where the related pricing rule types will inherit the transaction field mapping details.

**Note:**

You must select the **Primary** option while defining an ancillary pricing rule type. On selecting the **Primary** option, the **Related Pricing Rule Types** and **Transaction Field Mapping** sections appear in the **Ancillary Pricing Rule Type** screen.

You can use any of the following pricing rule type as the related pricing rule type in an ancillary pricing rule type:

>> Specific Stop-Loss

>> Aggregate Stop-Loss

>> Level Funding

- Pricing rule types which are related to the ancillary pricing rule type.
- Rule type which indicates the rules that should be executed to determine whether the related pricing rule type is eligible for deriving the transaction legs.
- Fields in which the data from the transaction fields should be stored (for example, the data from the **UDF\_CHAR\_1** transaction field must be stored in the **Parameter 1** field which will be used for deriving the bill group and pricing).
- Algorithm which should be triggered for validating an ancillary transaction.

**Note:** An algorithm type for validating an ancillary transaction is not shipped with the product. You can create a custom algorithm type, if required.

- Algorithm which should be triggered for deriving the bill group, parent customer, and policy for an ancillary transaction.

**Note:** You must create an algorithm using the **C1\_TXNBGDRV** 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 an ancillary transaction.

**Note:** You must create an algorithm using the **C1\_ACCPRIDRV** algorithm type and attach it to the **Account and Price Item Derivation** system event.

- Algorithm which should be triggered for determining the bill after date.

**Note:** You must create an algorithm using the **C1\_BAFTDRV** algorithm type and attach it to the **Bill After Date Determination** system event.

- Pricing rule post-processing algorithm which should be triggered once the effective ancillary pricing rule is derived.

**Note:** A pricing rule post-processing algorithm type is not shipped with the product. You can create a custom algorithm type, if required.

- Additional generic information, such as:
  - Whether the price items included in the ancillary pricing rule type are eligible for specific stop-loss and aggregate stop-loss.
  - Whether the price items included in the ancillary pricing rule type are eligible for level funding.
  - Value when received in an ancillary transaction indicates that the ancillary transaction should only be considered for calculating specific stop-loss and aggregate stop-loss. In such case, a transaction leg is not derived for the ancillary transaction.
  - Whether the ancillary charges should be written off when the bill is generated in the post runout period of the policy. In this case, a write-off adjustment is created against the respective bill segment during the post bill completion. The write-off adjustment is created using the post runout write-off adjustment type which is specified in the ancillary pricing rule type.
  - Transaction field which you want to use in the rules as the output parameter to determine whether the price item should be considered for billing.
  - Transaction field which you want to use in the rules as the output parameter to determine whether the related pricing rule type should be considered for deriving the transaction legs.
  - Value which the output parameter in the rule should return when the price item and related pricing rule type in the ancillary pricing rule type should be considered for processing.
- Price items for which you can define ancillary pricing rules using the ancillary 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.
- Price item parameters based on which you want to define the price item pricing. Two price item parameters are mandatory in the ancillary pricing rule type – one which stores the billable charge line type from the ancillary transaction and another which stores the pricing arrangement from the ancillary transaction. The following pricing arrangements are supported in the ancillary pricing rule:
  - Pass Through (Markup or Markdown Optional)
  - Pass Through Without Markup or Markdown
  - Rate Based (Markup or Markdown Optional)



**Note:** The price item parameters (for example, BCHGLINETYPE and PRICINGARRANGEMENT) which you include in the ancillary pricing rule type must be defined in the **Billable Charge Line Type Parameter** and **Pricing Arrangement Parameter** option types of the **C1-ASOBLING** feature configuration, respectively.

You can define pricing for the ancillary price items only using the above two mandatory price item parameters. Any other price item parameters are not supported while defining an ancillary pricing rule.

- Additional ancillary-specific information, such as:
  - Identifiers which help to determine whether the ancillary transaction is eligible for billing for not.
  - Transaction field which you want to use in the rules as the output parameter to determine whether the markup or markdown charge line is eligible for billing.
  - Billable charge line type using which you want to create billable charges for markup and markdown.
  - Rule type which indicates the rules that should be executed to determine whether the markup or markdown calculation line is eligible for billing.
  - How the system should interpret the value stored in the pricing arrangement price item parameter (i.e. whether the value means the ancillary charge should be a pass through charge without markup or markdown, pass through charge with markup or markdown, or rate based charge with or without markup or markdown). Accordingly, the system will search for the pricing in the effective ancillary pricing rule where:
    - Billable charge line type matches the one specified in the ancillary transaction
    - Line defined for the billable charge line type has the pricing arrangement as mentioned in the ancillary transaction
  - Line item which indicates the SQL using which the ancillary charge should be created. You need to specify the line item for each pricing arrangement which is defined in the ancillary pricing rule type.

Once an ancillary pricing rule type is defined, you can create ancillary pricing rules using the ancillary pricing rule type. While defining an ancillary pricing rule for a parent customer and bill group, you need to specify the following:

- An ancillary pricing rule type using which you want to create the ancillary pricing rule.
- Price item for which you want to define the pricing rule.
- Date range during which the pricing rule is effective.
- Rate option which you want to use while defining the ancillary pricing.

- Whether you want to define the pricing for a pass through charge without markup or markdown. If you select the **Pass Through without Markup or Markdown** option, you cannot define the pricing for a pass through charge with markup or markdown and the pricing for rate based charge with or without markup or markdown in the ancillary pricing rule. However, if the **Pass Through without Markup or Markdown** option is not selected, you can define pricing for different billable charge line types which can be with markup or markdown or which can be rate based with or without markup or markdown. In addition, if the **Pass Through without Markup or Markdown** option is not selected, by default, the system will define the pricing for a pass through charge without markup or markdown. Depending on the billable charge line type and pricing arrangement information in the ancillary transaction, the system will accordingly fetch the appropriate pricing for billing the ancillary charge. For example, if the ancillary transaction contains BCLT1 as the billable charge line type and PASSMK as the pricing arrangement and the effective ancillary pricing rule contains the following pricing:

Ancillary Pricing	Billable Charge Line Type	Pricing Arrangement	Rate	Pricing Strategy	Markup Amount	Markdown Amount
AP1	BCLT0	Pass Through with Markup or Markdown	-	Markup	\$10	-
AP2	BCLT1	Pass Through with Markup or Markdown	-	Markdown	-	\$5
AP3	BCLT2	Rate Based without Markup or Markdown	\$5	-	-	-
AP4	BCLT3	Rate Based with Markup or Markdown	\$5	Markup	\$10	-
AP5	BCLT4	Rate Based with Markup or Markdown	\$5	Markdown	-	\$5
AP6	-	Pass Through without Markup or Markdown	-	-	-	-

In this case, the system will use the AP2 pricing defined in the ancillary pricing rule. The system will markdown the SQL with the specified amount (i.e. \$5)

- Whether the billable charge line type is eligible for billing or not. Accordingly, the system will create billable charge for the ancillary transaction.

In addition, while defining an ancillary pricing rule for a bill group, you need to indicate the policy status for which the ancillary pricing rule is applicable. You can also specify a pricing group while defining an ancillary pricing rule for a bill group. Once an ancillary pricing rule is created, the system creates multiple price assignments in a price list and assigns the price list to the bill group.

## Discount Pricing

The Administrative Services Only (ASO) provider may offer some discounts to its network hospitals and providers. A portion of these discounts is then charged to the self-funded employer. Oracle Revenue Management and Billing enables you to calculate and bill the discount share or discount guarantee amount to the self-funded employer. The system enables you to calculate the discount using the following methods:

- **Discount Share** - In this method, the discount is calculated while processing the claim transaction. It is calculated as follows:

$$\text{Billable Discount Amount} = \text{Discount Savings Amount} * \text{Discount Percentage}$$

Note that the discount share percentage varies depending on various parameters (such as health coverage class, In or Out Network, etc.). Therefore, the system enables you to define different discount percentage for the claim transactions which are received from employees with different set of attributes. The system allows you to define maximum discount amount that can be charged per claim transaction. You can optionally configure the minimum and maximum discount limit on the contract. Note that the minimum limit is applicable during the settlement and maximum limit is applicable when you execute the **C1-ACDA** batch. The minimum and maximum limit can be a flat limit or enrollment based limit. Once the discount is accumulated, you can charge the customer at the pre-defined frequency. If the discount amount exceeds the maximum discount limit per claim or if the discount amount exceeds maximum discount limit defined on the contract, a credit billable charge is created for the customer.

- **Discount Guarantee** – In this method, the discount is calculated while processing the claim transaction. It is calculated as follows:

$$\text{Targeted Guaranteed Amount} = \text{Covered Charge Amount} * \text{Discount Guarantee Percentage}$$

$$\text{Billable Discount Amount} = \text{Discount Savings Amount} - \text{Targeted Guaranteed Amount}$$

Note that the discount guarantee percentage varies depending on various parameters (such as health coverage class, In or Out Network, etc.). Therefore, the system enables you to define different discount percentage for the claim transactions which are received from employees with different set of attributes. The system allows you to define maximum discount amount that can be charged per claim transaction. You can optionally configure the maximum discount limit on the contract. Note that the maximum limit is applicable when you execute the **C1-ACDA** batch. The maximum limit can be a flat limit or enrollment based limit. Once the discount is accumulated, you can charge the customer at the pre-defined frequency. If the discount amount exceeds the maximum discount limit per claim or if the discount amount exceeds maximum discount limit defined on the contract, a credit billable charge is created for the customer.

The pricing for the share or guarantee discount price items can be defined using the respective discount pricing rules. You can define a share or guarantee discount pricing rule only at the parent customer level. You can define the share or guarantee discount pricing rules for parent customers from the **Customer 360° Information** screen. You can define a share or guarantee discount pricing rule using a discount arrangement pricing rule type. It is the discount arrangement pricing rule type which helps the system to determine:

- Business object using which the discount pricing rule should be created in the system.

**Note:** You must not select the **Primary** option while defining a discount arrangement pricing rule type.

- Algorithm which should be triggered for deriving the account and price item while creating the discount related transaction legs.

**Note:** You must create an algorithm using the **C1\_ACCPRIDIS** algorithm type and attach it to the **Account and Price Item Derivation** system event.

- Pricing rule post-processing algorithm which should be triggered once the effective discount pricing rule is derived.

**Note:** A pricing rule post-processing algorithm type is not shipped with the product. You can create a custom algorithm type, if required.

- Additional generic information, such as:
  - Whether the price items included in the discount arrangement pricing rule type are eligible for specific stop-loss and aggregate stop-loss.
  - Whether the price items included in the discount arrangement pricing rule type are eligible for level funding.
  - Whether the discount should be written off when the bill is generated in the post runout period of the policy. In this case, a write-off adjustment is created against the respective bill segment during the post bill completion. The write-off adjustment is created using the post runout write-off adjustment type which is specified in the discount pricing rule type.
  - Transaction field which you want to use in the rules as the output parameter to determine whether the price item should be considered for billing.
  - Value which the output parameter in the rule should return when the price item in the discount arrangement pricing rule type should be considered for processing.
- Price items for which you can define discount pricing rules using the discount arrangement pricing rule type.
- Rate options that you can use while defining the pricing for the discount price items.
- Different type of account to which a 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.

- Additional discount-specific information, such as:
  - Whether the discount arrangement pricing rule type is defined for discount guarantee or discount share.
  - Discount billable charge line type using which you want to create the charge line for discount.
  - Credit billable charge line type using which you want to create the charge line for any credit to the customer.
  - Retention type enrollment based pricing rule type which you want to use while calculating the minimum limit for the discount.
  - Price item whose pricing you want to use while calculating the minimum limit for the discount.
  - Retention type enrollment based pricing rule type which you want to use while calculating the maximum limit for the discount.
  - Price item whose pricing you want to use while calculating the maximum limit for the discount.

Once a discount arrangement pricing rule type is defined, you can create discount pricing rules using the discount arrangement pricing rule type. While defining a discount pricing rule for a parent customer, you need to specify the following:

- Price item for which you want to define the pricing.
- Pricing date range during which the pricing is effective.
- Rate option which you want to use while defining the discount pricing.
- Settlement frequency which helps to determine the bill after date. The valid values are:
  - **Manually (At Required Intervals)** - If you select this option from the list, the bill after date which is specified in the **Manual Settlement Bill After Date** parameter while executing the **C1-BCDA** batch is stamped on the credit billable charge.
  - **Yearly** – If you select this option from the list, the bill after date in the credit billable charge is set to the pricing end date.

**Note:** The bill after date is stamped on the credit billable charges and not on the discount billable charges.

- Price item parameters based on which you want to define the price item pricing. It helps to define eligibility criteria for a discount percentage.
- Maximum discount amount which is allowed per claim. If the discount amount exceeds the maximum limit per claim, the additional amount is credited to the customer.

- Whether you want to define minimum and maximum discount limit on the contract. If you select the **No Limit** option, you cannot define minimum and maximum discount limit on the contract. In such case, the discount billable charges are created against the account which is derived using the discount arrangement pricing rule type. However, if you do not select the **No Limit** option, you can define minimum and maximum discount limit on the contract. The minimum and maximum limit can be a flat limit or enrollment based limit. If the minimum or maximum limit is enrollment based limit, ensure that the minimum or maximum limit pricing rule type and price item are defined in the discount arrangement pricing rule type. If you define the minimum or maximum discount limit on the contract, you need specify the discount credit account in the discount pricing rule.

**Note:** The minimum limit on the contract is not supported in the discount guarantee pricing rules.

- Whether you want to exclude the discount offered to certain network hospitals and providers during the discount share or discount guarantee calculation. Note that for such excluded network hospitals and providers, the system creates the transaction legs and calculation lines, but does not accumulate the discount.

Once a discount pricing rule is created, the system creates multiple price assignments in a price list and assigns the price list to the parent customer.

The following new batches are introduced in this release:

- **C1-ACDA** – Once the transaction legs and calculation lines are created for discount, this batch is used to accumulate the discount. It also calculates the required minimum or maximum limit on the contract. For more information about the batch refer to *Oracle Revenue Management and Billing Batch Guide*.
- **C1-BCDA** – Once the discount is accumulated, this batch is used to create the credit (if any) and discount billable charges. It is also used to calculate the bill after date. For more information about the batch refer to *Oracle Revenue Management and Billing Batch Guide*.

## Level Funding Pricing

Level funding is a type of self-funding. It offers all benefits of traditional self-funding. However, it provides one additional benefit which helps to stabilize monthly costs of the self-funded employer to pay off the claim, ancillary, claim based fee, enrollment based fee, discount, specific stop-loss, and aggregate stop-loss charges.

Oracle Revenue Management and Billing enables you to process and bill the level-funded premium charges to the self-funded employer in either of the following ways:

- Pay the fixed flat amount in every bill period
- Pay the amount based on the enrollment based limit in every bill period

The system enables you to define whether the price items and price item parameters included in the claim, retention type claim based, retention type enrollment based, ancillary, discount, specific stop-loss, and aggregate stop-loss pricing rule types are eligible for level-funding. If the price items and price item parameters are eligible for level-funding, you can then include them in the level-funding pricing rules indicating that the charges for these price items would be accumulated so that it can be settled against the level-funded premium billable charge. Such price items' charges will not be included in the respective billable charge (for example, claim billable charge). While adjusting the level-funded billable charges against the level-funded premium billable charge, there might be some surplus or deficit in funds at the time of settlement which is ideally at the end of year. In such case, the system enables you to configure the following:

- Whether a flat amount of surplus, which is the maximum amount, that can be paid to the self-funded employer or a percentage of surplus that should be retained by the ASO provider.
- Whether a flat amount of deficit, which is the maximum amount, that can be charged to the self-funded employer or a percentage of deficit that should be offered as a discount by the ASO provider.

The pricing for the level-funded accumulation price items (i.e. price item against which level-funded charges are accumulated) can be defined using the level-funding pricing rules. You can define a level-funding pricing rule at the parent customer and bill group levels. You can define the level-funding pricing rules for parent customers and bill groups from the **Customer 360° Information** screen. You can define a level-funding pricing rule using a level-funding pricing rule type. It is the level-funding pricing rule type which helps the system to determine:

- Business object using which the level-funding pricing rule should be created in the system.

**Note:** You must not select the **Primary** option while defining a level-funding pricing rule type.

- Algorithm which should be triggered for deriving the account and price item while creating the level-funded transaction legs.

**Note:** You must create an algorithm using the **C1\_ACCPRISL** algorithm type and attach it to the **Account and Price Item Derivation** system event.

- Pricing rule post-processing algorithm which should be triggered once the effective level-funding pricing rule is derived.

**Note:** A pricing rule post-processing algorithm type is not shipped with the product. You can create a custom algorithm type, if required.

- Accumulation post-processing algorithm which should be triggered once the level-funded billable charges are accumulated. It updates the contract on the level-funded billable charges. The contract is derived using the GL only contract type which is specified in the **Level Funded – Specific Additional Data** section.

**Note:** You must create an algorithm using the **C1-LFACPOST** algorithm type and attach it to the **Accumulation Post Processing** system event.

- Additional generic information, such as:
  - Whether the level-funded settlement billable charge should be written off when the bill is generated in the post runout period of the policy. In this case, a write-off adjustment is created against the respective bill segment during the post bill completion. The write-off adjustment is created using the post runout write-off adjustment type which is specified in the level-funding pricing rule type.
  - Transaction field which you want to use in the rules as the output parameter to determine whether the level-funded accumulation price item should be considered for billing.
  - Value which the output parameter in the rule should return when the level-funded accumulation price item in the level-funding pricing rule type should be considered for processing.
- Level-funded accumulation price items for which you can define level-funding pricing rules using the level-funding pricing rule type. Note that a level-funded accumulation price item is a price item against which level-funded charges are accumulated.
- Rate options that you can use while defining the pricing for the level-funded accumulation price items.
- Rule type which indicates the rules that should be executed to determine whether the level-funded accumulation price item is eligible for billing.
- Additional level-funding specific information, such as:
  - Whether the level-funded premium (i.e. funds) should be calculated using the bill period based recurring flat fee pricing rule or using the retention type enrollment based pricing rule.
  - Bill period based recurring flat fee pricing rule type or retention type enrollment based pricing rule type which you want to use for calculating the level-funded premium.
  - Price item which you want to use for calculating the level-funded premium.
  - LF billable charge line type using which you want to create billable charges for level-funded settlement.
  - GL only contract type which indicates the contract against which the level-funded billable charges for claim, ancillary, claim based fees, enrollment based fees, discount, **specific stop-loss, and aggregate stop-loss** must be debited. The distribution code on the GL only contract type will indicate the GL account against which the level-funded billable charges (that are settled against the level-funded premium billable charge) must be debited.
  - Liability distribution code will indicate the GL account against which the level-funded billable charges (that are settled against the level-funded premium billable charge) must be credited.
  - Number of days before which you want to create a To Do for reminding the self-funded employer to renew the level-funded agreement.



- Surplus billable charge line type using which you want to create the billable charge when the surplus funds are left with the ASO provider at the time of settlement.
- Deficit billable charge line type using which you want to create the billable charge when the funds are in deficit at the time of settlement.
- Domestic provider billable charge line type using which you want to create level-funded settlement billable charge for a domestic provider.
- Markup or markdown billable charge line type using which you want to create billable charges for markup or markdown which are settled against the level-funded premium.
- Rule type which indicates the rules that should be executed to determine whether the markup or markdown calculation line is eligible for billing.
- Transaction field which you want to use in the rules as the output parameter to determine whether the markup or markdown calculation line is eligible for billing.
- Rule type which indicates the rules that should be executed to determine whether the level-funded premium is for a domestic provider.
- Transaction field which you want to use in the rules as the output parameter to determine whether the level-funded premium is for a domestic provider.

Once a level-funding pricing rule type is defined, you can create level-funding pricing rules using the level-funding pricing rule type. While defining a level-funding pricing rule for a parent customer, you need to specify the following:

- Level-funded accumulation price item for which you want to define the pricing.
- Specific stop-loss pricing rule of the parent customer whose accumulation parameters you want to inherit for the level-funding. On selecting a specific stop-loss pricing rule, the level-funding pricing date range is set automatically. The level-funding pricing date range is same as the specific stop-loss pricing rule.
- Rate option which you want to use while defining the level-funding pricing.
- Settlement frequency which helps to determine the bill after date. The valid values are:
  - **Immediately** – If you select this option from the list, the bill after date is not calculated. The level-funded settlement billable charge is billed immediately in the next bill cycle.
  - **Manually (At Required Intervals)** - If you select this option from the list, the bill after date which is specified in the **Manual Settlement Bill After Date** parameter while executing the **C1-BCLF** batch is stamped on the level-funded settlement billable charge.
  - **Never** - If you select this option from the list, the bill after date which is specified in the **Manual Settlement Bill After Date** parameter while executing the **C1-BCLF** batch is stamped on the level-funded settlement billable charge.
  - **Yearly** – If you select this option from the list, the bill after date is set to the pricing end date in the level-funded settlement billable charge.
  - **On Settlement** - If you select this option from the list, the bill after date is set to the settlement date in the level-funded settlement billable charge.

**Note:** The accumulation parameters, such as incurred start date, incurred end date, paid start date, paid end date, and settlement days are automatically inherited from the parent customer's specific stop-loss pricing rule. You cannot change any accumulation parameter except the settlement days.

- Settlement days which helps to calculate the settlement date (which is pricing end date, incurred end date, or paid end date whichever is later + the settlement days)
- Whether the customer would like to renew or cancel the level-funded agreement.
- Whether a flat amount of surplus, which is the maximum amount, that can be paid to the self-funded employer or a percentage of surplus that should be retained by the ASO provider.
- Whether a flat amount of deficit, which is the maximum amount, that can be charged to the self-funded employer or a percentage of deficit that should be offered as a discount by the ASO provider.

However, while defining a level-funding pricing rule for a bill group, you need to specify the following:

- The policy status in which the level-funding pricing rule is applicable.
- Level-funded accumulation price item for which you want to define the pricing.
- Parent customer's level-funding pricing rule from which you want to inherit the accumulation parameters.

**Note:**

The pricing date range is derived from the parent customer's level-funding pricing rule because the level-funding pricing rules for parent customer and bill group should have the same date range.

The settlement fund price item is derived from the level-funding pricing rule type using which the level-funding pricing rule is created.

- Rate option which you want to use while defining the level-funding pricing.
- Accumulation criteria which indicates the price items whose charges can be accumulated against the level-funded accumulation price item so that it can be settled against the level-funded premium.
- Whether the line items and markup or markdown in a particular claim pricing rule should be accumulated for level-funding.

OR

Whether the line items which are associated with the **Level Funded** pricing rule type category should be accumulated for level-funding.

- Whether the charges created using the billable charge line types in a particular ancillary pricing rule should be accumulated for level-funding.

OR

Whether the charges created using the billable charge line types where the **Pricing Rule Type Category** characteristic is set to **Ancillary** should be accumulated for level-funding.

- Whether the discount calculated using a particular discount arrangement pricing rule should be accumulated for level-funding.

- Whether the charges calculated using the retention type claim based or retention type enrollment based pricing for a price item should be accumulated for level-funding.

You can also specify a pricing group while defining a level-funding pricing rule for a bill group. Once a level-funding pricing rule is defined for a bill group, the system creates a price assignment in a price list and assigns the price list to the bill group.

You must create an algorithm using the **C1-ASOEXPOS** algorithm type and attach it to the **TFM - Rate Post-Processing** algorithm spot of the division to which the bill group's account belongs. Otherwise, erroneous results might occur. For more information about the algorithm, refer to the application.

The following new batches are introduced in this release:

- **C1-ACLF** – This batch is used to accumulate the level-funded billable charges which are to be settled against the level-funded premium. During the accumulation post-processing, the level-funded billable charges (which are created through the TFM process) are posted against the GL accounts which are derived using the GL only contract type and liability distribution code information specified in the level-funding pricing rule type. For more information about the batch, refer to *Oracle Revenue Management and Billing Batch Guide*.
- **C1-BCLF** – Once the level-funded billable charges are accumulated, this batch is used to settle these charges against the level-funded premium billable charge and then accordingly create level-funded settlement billable charge. It is also used to calculate and stamp the bill after date on the level-funded settlement billable charge. For more information about the batch, refer to *Oracle Revenue Management and Billing Batch Guide*.

## Approval Workflow for Pricing Rules

Oracle Revenue Management and Billing enables you to configure the approval workflow process for the pricing rules. The following approval workflow groups are shipped with the product:

Approval Workflow Group	Description
C1PRCRLCLM	Claim Pricing Rule
C1PRCSSL	Pricing Rule - Specific Stop Loss Based
C1PRCASL	Pricing Rule - Aggregate Stop Loss
C1PRETCLM	Pricing Rule Retention - Claim Based
C1PRRETENR	Pricing Rule Retention - Enrollment Based
C1PRFLTFEE	Pricing Rule Flat Fees
C1PRCANC	Ancillary Pricing Rule
C1PRCDA	Pricing Rule - Discount Arrangement
C1PRCLVLFN	Pricing Rule - Level Funded

To enable the approval workflow process for the claim, specific stop-loss, aggregate stop-loss, retention type claim based, retention type enrollment based, flat fees, ancillary, discount, or level funding pricing rules, you need to do the following:

1. Create the required approval workflow chain, approval workflow criterion type, approval workflow group chain linkage, and approval workflow reasons.
2. Define the approval workflow settings for the respective approval workflow group and set its **Active** field to **Yes**.
3. Ensure that the following value is set in the respective option type of the **C1-ASOBLNG** feature configuration:

Pricing Rule	Option Type	Value
Claim	Approval Workflow Group for Claim	C1PRCLCLM
Specific Stop-Loss	Approval Workflow Group for SSL	C1PRCSSL
Aggregate Stop-Loss	Approval Workflow Group for ASL	C1PRCASL
Retention Type Claim Based	Approval Workflow Group for Retention Type Claim Based	C1PRETCLM
Retention Type Enrollment Based	Approval Workflow Group for Retention Type Enrollment Based	C1PRETENR
One-Time or Recurring Flat Fee	Approval Workflow Group for Flat Fees	C1PRFLTFFEE
Ancillary	Approval Workflow Group for Ancillary	C1PRCANC
Discount	Approval Workflow Group for Discount Arrangement	C1PRCDA
Level Funding	Approval Workflow Group for Level Funded	C1PRCLVLFN

## Write-Off Charges during Post Runout

Oracle Revenue Management and Billing enables you to write-off the claim, specific stop-loss, aggregate stop-loss, claim based fees, enrollment based fees, ancillary, discount, and funds charges when the bill is generated in the post runout period of the policy. In this case, a write-off adjustment is created against the respective bill segment during the post bill completion. The write-off adjustment is created using the post runout write-off adjustment type which is specified in the respective pricing rule type.

To enable this feature, you need to do the following:

1. Set the **Eligible for Write-Off in Post Runout** field in the respective pricing rule type to **Yes**.
2. Specify the post runout write-off adjustment type in the respective pricing rule type.
3. Attach the **C1-PRCRLWOFF** algorithm to the **Post-Bill Completion** system event in the customer class of the accounts for which you want to write-off the charges in the post runout period of the policy.

## Price Item Eligibility

Oracle Revenue Management and Billing enables you to define eligibility rule type for a price item in a pricing rule type. Note that you can specify a rule type where the rule type usage is set to **Price Item Eligibility**.

If the eligibility rule type is defined of a price item, the system checks whether the price item is eligible for billing when the pricing rule type is called during the **Validate Transaction and Derive Price Item (C1-TXNIP)** batch execution. The system searches for all rules which are created using the rule type and then executes them one by one in the specified priority until the following conditions are met in a rule:

- The eligibility criteria defined in the rule is satisfied.
- The satisfied rule returns the output parameter and its value as specified in the **Rule Based Price Item Eligibility Field** and **Rule Based Eligibility Value** fields, respectively, of the pricing rule type.
- The **Rule True Action** field in the satisfied rule returns **Success**.

**Note:** At present, the system considers all rules created using the rule type irrespective of whether it is effective on the transaction date or not.

If all the above conditions are met, the system searches for an effective pricing rule for the price item. If none of the rules created using the rule type are satisfied, the system does not map the transaction to the price item.

## Related Pricing Rule Type Eligibility

Oracle Revenue Management and Billing enables you to define eligibility rule type for a related pricing rule type in a primary pricing rule type. Note that you can specify a rule type where the rule type usage is set to **Related Pricing Rule Type Eligibility**.

If the eligibility rule type is defined of a related pricing rule type, the system checks whether the related pricing rule type is eligible for deriving the transaction legs when it is called during the **Validate Transaction and Derive Price Item (C1-TXNIP)** batch execution. The system searches for all rules which are created using the rule type and then executes them one by one in the specified priority until the following conditions are met in a rule:

- The eligibility criteria defined in the rule is satisfied.
- The satisfied rule returns the output parameter and its value as specified in the **Rule Based Related Pricing Rule Type Eligibility Field** and **Rule Based Eligibility Value** fields, respectively, of the primary pricing rule type.
- The **Rule True Action** field in the satisfied rule returns **Success**.

**Note:** At present, the system considers all rules created using the rule type irrespective of whether it is effective on the transaction date or not.

If all the above conditions are met in a rule, the system calls the related pricing rule type for deriving the transaction legs. If none of the rules created using the rule type are satisfied, the system does not call the related pricing rule type for deriving the transaction legs.

## Enhancements (Generic)

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




- Pricing Management
- Delinquency Central
- Payment Currency Conversion
- Effective Dated Address
- Billing
- Transaction Feed Management
- Approval Profile

### Pricing Management

The following changes are made to the Pricing Management feature:

- The **Rate Components**, **Price Components**, **Tiering Criteria**, and **Pricing Eligibility Criteria** zones are removed from the **Price Item Pricing** screen.
- Earlier, the **Rate and Price Component Summary** zone listed information string of the following in the tree view:
  - Rate components of the rate schedule
  - Price components which are added for each rate component
  - Eligibility and tiering criteria defined within each price component.

Now, in addition, it enables you to add, edit, and delete a price component from a particular rate component. You can add, edit, and delete tiering and eligibility criteria from the **Price Component** screen when the tiering type of the rate component is set to **STEP** or **Threshold**.

- On clicking the **Add** () icon in the **Action** column corresponding to a rate component, you can add a new price component for the rate component.
- On clicking the **Edit** () icon corresponding to a price component information string, you can edit the details of the price component including the tiering and eligibility criteria.
- On clicking the **Delete** () icon in the **Action** column corresponding to a price component, you can delete the price component.

**Note:** The **Add**, **Edit**, and **Delete** icons are available only when the status of the price item pricing is set to **Draft** or **Proposed**.

## Delinquency Central

The following changes are made to the Delinquency Central feature:

- You can now create a payment agreement request through the **Delinquency Central** screen.

## Payment Currency Conversion

The following changes are made to the Payment Currency Conversion feature:

- Until now, the system created the FT GL entries for pay segments in the account's invoice currency when the payment currency was different from the account's invoice currency. Now, in addition, the system enables you to create additional FT GL entries for pay segments in the payment currency when the payment currency is different from the account's invoice currency. To implement this functionality, the following parameters are introduced in the **C1-NCPAY-FT**, **PSEG-AC**, **PSEG-CA**, and **PSEG-NM** algorithm types:
  - **Create Extra FTGL Entries in Original Payment Currency(Y or N)** – Used to indicate whether you want to create additional FT GL entries for the pay segments in the payment currency when the payment currency is different from the account's invoice currency. The valid values are **Y** and **N**. By default, the value is set to **N**.
  - **Payment Distribution Code Characteristic Type** – Used to specify the characteristic type which you want to use to determine the distribution code for additional FT GL entries. This characteristic type is defined on the financial transaction's distribution code. If the value for this parameter is not specified, the system will create the additional FT GL entries on the financial transaction's distribution code.
- The following two columns are added in the **CI\_FT\_GL** table:
  - ORIG\_PAY\_AMT
  - ORIG\_PAY\_CCY\_CD

## Effective Dated Address

The following changes are made to the Effective Dated Address feature:

- Until now, the following screens or tabs were fetching address from the **CI\_PER**, **CI\_PER\_ADDR\_OVRD**, and **CI\_PER\_ADDR\_SEAS** tables instead of fetching the address from the **C1\_ADDRESS** table:
  - **A/P Request** tab on the **Adjustment** screen
  - **Overdue Process Information for Account: {Account Info}** screen (accessed through the **Delinquency Central** screen)
  - **Main** tab on the **Refund Request** screen
  - **Bill Routings** tab on the **Bill** screen
  - **Customer Contact** screen
  - **Quote Routings** tab on the **Quote** screen
  - **Main** tab on the **Statement** screen



- **Main** tab on the **Order** screen

In addition, the address was also fetched from the **CI\_PER**, **CI\_PER\_ADDR\_OVRD**, and **CI\_PER\_ADDR\_SEAS** tables during the statement generation, bill extract, and while displaying effective seasonal address alert on the dashboard.

From this release onwards, the above screens, tabs, and functionalities will use a new business service named **C1-GetEffectiveDatedAddress** instead of fetching the address from the **CI\_PER**, **CI\_PER\_ADDR\_OVRD**, and **CI\_PER\_ADDR\_SEAS** tables through an SQL query.

The **C1-GetEffectiveDatedAddress** business service is used to fetch effective dated address for a person or account from the **C1\_ADDRESS** table. The following are input parameters of the **C1-GetEffectiveDatedAddress** business service:

Parameter	Description	Mandatory (Yes or No)
Address ID	Used when you want to search for a particular address.  <b>Note:</b> If the address ID is specified, all other input parameters are ignored and the address is searched using the address ID.	No
Entity	Used to indicate whether you want to search for an address associated with a person or an account. The valid values are: <ul style="list-style-type: none"> <li>• ACCT</li> <li>• PERS</li> </ul>	Yes
Entity ID	Used to indicate the person or account whose address you want to search.	Yes
Bill Address Source	Used to indicate whether the bill should be sent to the person's address or to the account override address of the person. The valid values are: <ul style="list-style-type: none"> <li>• PER</li> <li>• ACOV</li> </ul>	Yes (Conditional)  <b>Note:</b> This parameter is required when the <b>Entity</b> flag is set to <b>ACCT</b> .
Address Type	Used to indicate the type of address. The valid values are: <ul style="list-style-type: none"> <li>• MAIN</li> <li>• OVRD</li> <li>• SEAS</li> </ul> <b>Note:</b> If you do not specify the address type, by default, it is set to <b>MAIN</b> .	No

Parameter	Description	Mandatory (Yes or No)
Effective Date	Used when you to fetch addresses which are effective on a particular date.  <b>Note:</b> If you do not specify the date, by default, it is set to the system date.	No
Person ID	Used to indicate the person whose account override address you want to search.	Yes (Conditional)  <b>Note:</b> This parameter is required when the <b>Bill Address Source</b> flag is set to <b>ACOV</b> .

- A new feature configuration named **C1-ADDRESS** is introduced in this release. If the **Enable Effective Dated Address Feature** option type of the **C1-ADDRESS** feature configuration is set to **Y**, you can edit an address in the **Address** screen when it is associated to an entity using the **Person Mailing**, **Person Seasonal**, or **Account Override** address type. In addition, you can disassociate an entity from an address when the address is associated to the entity using the **Person Mailing**, **Person Seasonal**, or **Account Override** address type.

## Billing

The following changes are made to the Billing feature:

- The **Billable Charge Line Type** screen is completely redesigned in the system. Besides adding the details for a billable charge line type, you can also define characteristics for a billable charge line type.
- The **Pricing Rule Type Category (C1PRTCAT)** characteristic type is shipped with the product. You can define the pricing rule type category characteristic for a billable charge line type. It helps to associate a billable charge line type with one or more pricing rule type categories. You can then use the billable charge line type while defining pricing rule types or pricing rules for the respective category. Note that at present, you can only use this feature while defining the ancillary pricing rules. For example, if the BCLT1 and BCLT2 billable charge line types are associated with the **Ancillary** pricing rule type category, then you can use BCLT1 and/or BCLT2 while defining the ancillary pricing rules. In other words, you will not be able to use a billable charge line type while defining an ancillary pricing rule until the billable charge line type is associated with the **Ancillary** pricing rule type category.

## Transaction Feed Management

The following changes are made to the Transaction Feed Management feature:

- The TFM module is enhanced to support the pricing rule types of the following categories:
  - Ancillary
  - Discount Arrangement
  - Level Funded
- In the self-funded health care business, there might be situations when you may want to disaggregate the claim, enrollment, and ancillary transactions. The system enables you to disaggregate the claim, enrollment, and ancillary transactions until these transactions are not billed to the customer. If a transaction is billed to the customer, you cannot disaggregate the transaction using the normal transaction disaggregation process.

In the following scenarios, you may want to disaggregate the claim and ancillary transactions:

- The changes are made to the specific stop-loss (SSL), aggregate stop-loss (ASL), discount arrangement, or level funded pricing rule which is used during the transaction aggregation process.
- A new pricing rule is created using a specific stop-loss (SSL) or aggregate stop-loss (ASL) pricing rule type which is added in the claim or ancillary pricing rule type using which the claim or ancillary transaction is processed.
- A new pricing rule is created using a discount arrangement pricing rule type which is added in the claim or ancillary pricing rule type using which the claim or ancillary transaction is processed.
- A new pricing rule is created using a level funded pricing rule type which is added in the claim or ancillary pricing rule type using which the claim or ancillary transaction is processed.
- A specific stop-loss, aggregate stop-loss, discount arrangement, or level funded pricing rule type is added as related pricing rule type in the claim or ancillary pricing rule type using which the claim or ancillary transaction is processed.

The former scenario arises due to change in pricing rule, whereas the latter four scenarios arise due to late setup. In such scenarios, you can create the **Accumulation Group Based Disaggregation Request** (also known as **Reseeding Request**) to disaggregate the claim and ancillary transactions. In the **Accumulation Group Based Disaggregation** (also known as **Reseeding**) feature, the system allows you to create the reseeding requests for the accounts using a parent accumulation group. At present, you can create the reseeding requests for the accounts only from the user interface and not through the **Disaggregation Request Creation (C1-DISTG)** batch. For more information, refer to the **Reseeding** documentation in *Oracle Revenue Management and Billing Insurance User Guide*.

- Now, the system supports the following types of disaggregation:
  - **Account Based Disaggregation** – In the account based disaggregation, the system enables you to create a disaggregation request for an account. While creating a disaggregation request for an account, the disaggregation request type is set to **ACCT**. You can create a disaggregation request for an account from the user interface and through the **Disaggregation Request Creation (C1-DISTG)** batch. For each such disaggregation request, the system identifies the transaction legs (where the account is mapped) and the corresponding aggregated and non-aggregated billable charges for disaggregation. For more information about the disaggregation process, refer to the **Transaction Disaggregation** section in *Oracle Revenue Management and Billing Banking User Guide* or *Oracle Revenue Management and Billing Insurance User Guide*.
  - **Person Based Disaggregation** – In the person based disaggregation, the system enables you to create a disaggregation request for each account of the person. While creating a disaggregation request for an account, the disaggregation request type is set to **ACCT**. You can create a disaggregation request for each account of a person from the user interface and through the **Disaggregation Request Creation (C1-DISTG)** batch. For each such disaggregation request, the system identifies the transaction legs (where the account is mapped) and the corresponding aggregated and non-aggregated billable charges for disaggregation. For more information about the disaggregation process, refer to the **Transaction Disaggregation** section in *Oracle Revenue Management and Billing Banking User Guide* or *Oracle Revenue Management and Billing Insurance User Guide*.
  - **Price Item Based Disaggregation** – In the price item based disaggregation, the system enables you to create a disaggregation request for a price item. While creating a disaggregation request for a price item, the disaggregation request type is set to **PRIT**. You can create a disaggregation request for a price item only through the **Disaggregation Request Creation (C1-DISTG)** batch and not from the user interface. For each such disaggregation request, the system identifies the transaction legs (where the price item is mapped) and the corresponding aggregated and non-aggregated billable charges for disaggregation. For more information about the disaggregation process, refer to the **Transaction Disaggregation** section in *Oracle Revenue Management and Billing Banking User Guide* or *Oracle Revenue Management and Billing Insurance User Guide*.
  - **Price Assignment Based Disaggregation** – In the price assignment based disaggregation, the system enables you to create a disaggregation request for a price assignment. While creating a disaggregation request for a price assignment, the disaggregation request type is set to **PAID**. You can create a disaggregation request for a price assignment only through the **Disaggregation Request Creation (C1-DISTG)** batch and not from the user interface. For each such disaggregation request, the system identifies the transaction legs (where the price assignment is referred) and the corresponding aggregated and non-aggregated billable charges for disaggregation. For more information about the disaggregation process, refer to the **Transaction Disaggregation** section in *Oracle*

*Revenue Management and Billing Banking User Guide* or *Oracle Revenue Management and Billing Insurance User Guide*.

- **Billable Charge Based Disaggregation** – In the billable charge based disaggregation, the system enables you to create a disaggregation request for a billable charge. While creating a disaggregation request for a billable charge, the disaggregation request type is set to **BCHG**. You can create a disaggregation request for a billable charge only through the **Disaggregation Request Creation (C1-DISTG)** batch and not from the user interface. For each such disaggregation request, the system identifies the transaction legs, which are included in the billable charge, for disaggregation. For more information about the disaggregation process, refer to the **Transaction Disaggregation** section in *Oracle Revenue Management and Billing Banking User Guide* or *Oracle Revenue Management and Billing Insurance User Guide*.
- **Parent Accumulation Group Based Disaggregation** – In the parent accumulation group based disaggregation, the system enables you to create a reseeding request for an account of a bill group. If the **Disaggregate All Account** option is selected, the system considers the accounts of all bill groups of the parent customer (for whom the parent accumulation group is created) and then creates a reseeding request for each such account. However, if the **Disaggregate All Account** option is not selected, the system considers accounts of only those bill groups where the parent accumulation group is used for creating the specific stop-loss and aggregate stop-loss pricing rules and then creates a reseeding request for each such account. In addition, the system creates a reseeding request for the ASSL and ASL Credit accounts which are specified in the specific stop-loss or aggregate stop-loss pricing rule, respectively. Note that the reseeding requests are created for the ASSL and ASL Credit accounts irrespective of whether the **Disaggregate All Account** option is selected or not. While creating a reseeding request for an account, the disaggregation request type is set to **ACCT**. You can create a reseeding request for an account using a parent accumulation group from the user interface and not through the **Disaggregation Request Creation (C1-DISTG)** batch. For each such reseeding request, the system identifies the claim or ancillary transactions for disaggregation. For more information about the reseeding process, refer to the **Reseeding** section in *Oracle Revenue Management and Billing Insurance User Guide*.
- The following option types are newly added in the **C1\_FM** feature configuration:
  - Low and High Range Limit
  - Populate Summary Table Batch Description
  - Show Default Values in Price Item Pricing
  - Use C1-TXNPS During Transaction Aggregation
- The **Add Disaggregation Request** screen is completely redesigned. Now, it also allows you to create a reseeding request for an account using a parent accumulation group.

## Approval Profile

The following changes are made to the Approval Profile feature:

- A new option named **Currency Conversion Required** is added in the **Approval Profile** screen. It is used to indicate whether the currency conversion is required while determining the hierarchy level from which the approval is required. If an approval profile, where the **Currency Conversion Required** option is selected, is used in the dispute request type, refund/write off request type, accrual type, adjustment type, or funding request type, then the system will convert the total dispute amount, total refund/write off amount, accrual amount, adjustment amount, or total funding request amount to the currency which is specified in the **Installation Options – Framework** screen. Note that the currency conversion takes place when the total dispute amount, total refund/write off amount, accrual amount, adjustment amount, or total funding request amount's currency is different from the installation options' currency.

To enable this feature, you need to attach the currency conversion algorithm to the **Currency Conversion For Bill Segments** algorithm spot of the required division.

## Funding Request

The following changes are made to the Funding Request feature:

- A new field named **Account Funding Currency Characteristic Type** is added in the **Funding Request Type** screen. Here, you need to specify a characteristic type. This characteristic should be defined on the account. This characteristic indicates that the funding amount of the account's bills should be calculated in the specified currency. The data is then accordingly displayed in the **Funding Currency Amount** column of the **Selected Bills** zone in the **Funding Request** screen.
- You can use the approval profile's currency conversion feature while determining the approval hierarchy for a funding request. In the funding process, the system does currency conversion when the sum total of the debit and credit amount is in a currency which is different from the installation options currency. During the currency conversion of the sum total which is in debit, the system uses the currency conversion algorithm specified in the **Currency Conversion Payment Algorithm** field of the funding request type. However, during the currency conversion of the sum total which is in credit, the system uses the currency conversion algorithm specified in the **Currency Conversion Adjustment Algorithm** field of the funding request type.
- The **Cancelled** status of the record in the funding request is renamed to **Excluded**.
- Now, the system allows you to cancel a funding request. However, you can cancel a funding request only when it is in the **Draft** status. On canceling a funding request, the status of all bill records in the funding request is changed to **Excluded** and the status of the funding request is changed to **Canceled**. The excluded bills can then be included in some other funding request.

- The system allows the submitter to withdraw the funding request when it is in the **Approval In Progress** status. On withdrawing a funding request, the status of the funding request is changed to **Draft**. The submitter can then make the required changes and resubmit the funding request for approval. The To Do for approver is automatically closed when the submitter withdraws the funding request. Note that the To Do for approver is automatically closed only when the submitter To Do role is associated with the To Do type specified in the approval profile.
- A tab named **Bills** is introduced in the **Funding Request** screen. The **Selected Bills**, **Funding Payment Details**, and **Funding Adjustments** zones are moved from the **Main** tab to the **Bills** tab. A new zone named **Currency Statistics** is added in the **Bills** tab. Here, the outstanding amount, hold amount, garnishment amount, and funding amount of the bills is grouped based on the invoice currency.
- You can now create the hold and offset requests from the **Funding Request** screen. The following two buttons are added in the **Selected Bills** zone:
  - **Hold** – Enables you to create a hold request for one or more bills. However, you cannot select more than 20 bills. On activating or releasing a hold request, the funding amount is automatically updated in the funding request.
  - **Offset** – Enables you to create an offset request for a bill. On processing or unapplying an offset request, the funding amount is automatically updated in the funding request.
- Now, the following information is concatenated in the bill information string:
  - Alternate Bill ID
  - Bill Due Date

## 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)

### Accrual

The following changes are made to the Accrual feature:

- Earlier, the bill segments and adjustments which were considered during the accrual calculation were not listed in the **Accrual** screen. Now, the system allows you to view the bill segments and adjustments, which are used for calculating the accrual amount, in the **Accrual Calculation Lines** zone.
- The **Accrual Calculation Lines** zone appears in the **Accrual** screen when the following conditions are satisfied:
  - Accrual is created using the batch process and not manually from the user interface.
  - Accrual is created using an accrual type with either of the following combinations:

Accrual Criteria	Accrual Source	Posting Method
Historical	-	Bill Level
Historical	-	Bill Segment Level
Actual	Trial Bill	Bill Level
Actual	Trial Bill	Bill Segment Level

- The calculation lines appear in the **Accrual Calculation Lines** zone only when the **Do you want to insert detail level calculation?** parameter in the **Accrual Calculation (C1\_ACCR\_CAL)** algorithm is set to **Y**.
- Earlier, the system enabled you to define characteristics for an accrual. However, now, it enables you to define characteristics for each accrual detail using the accrual detail sequence number.
- Now, the system prorates the accrual amount based on the invoice frequency when the trial bill contains recurring bill segments. For example, if the trial bill contains a recurring bill segment with the start date as 1<sup>st</sup> Oct 2018 and the end date as 31<sup>st</sup> Dec 2018 and the accrual date is set to 15<sup>th</sup> Dec 2018, then the system prorates the amount for the month of December and only accrues the amount from 1<sup>st</sup> Oct 2018 to 15<sup>th</sup> Dec 2018.

The system enables you to prorate the accrual amount only when the trial bill contains bill segments which are created using the recurring billable charge where the **Recurring Method** is set to **Frequency**. In other words, the system does not prorate the accrual amount when the trial bill contains bill segments which are created using the recurring billable charge where the **Recurring Method** is set to **Bill Period**.



- Earlier, the **C1\_ACCR\_ELG** algorithm did not allow to create an accrual for an usage account which was included in the active construct. Now, this validation does not take place when accrual is created using an accrual type with the following specifications:

Accrual Criteria	Accrual Source	Posting Method
Historical	-	Bill Level
Historical	-	Bill Segment Level
Actual	Trial Bill	Bill Level
Actual	Trial Bill	Bill Segment Level

## Earnings Credit Rate (ECR)

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

- Earlier, the credit amount on the financial transaction distribution object was first distributed to the source account's bills and then, by default, to its sibling accounts' bills. The remaining credit amount was then distributed amongst the bills of the accounts which were derived using the distribution hierarchy specified in the financial transaction distribution rule. However, now, the credit amount on the financial transaction distribution object, by default, will not be distributed to the sibling accounts' bills. If you want to distribute the remaining credit amount to the sibling accounts' bills, you need to include the **Sibling Accounts of Main Customer** option in the distribution hierarchy. Otherwise, the system will not distribute the remaining credit amount to sibling accounts' bills.
- Earlier, you were able to define the **Financial Transaction Distribution Object** characteristic on the contract type. This characteristic helped the system to determine the financial transaction distribution type using which the financial transaction distribution object should be created for a particular financial transaction type. Now, in addition, you can define the financial transaction distribution object (extendable lookup value) for each account (in the **Earnings Credit Rate Eligibility** screen). This helps the system to determine the financial transaction distribution type using which the financial transaction distribution object should be created for a particular financial transaction type. If the **Financial Transaction Distribution Object** characteristic is defined for the contract type and the financial transaction distribution object (extendable lookup value) is specified for the account, then the system will consider the financial transaction distribution object (extendable lookup value) defined at the account level which has higher precedence.
- Earlier, the debit amount on the financial transaction distribution object was distributed to the source account's non-ECR contract randomly. Now, you can distribute the debit amount on the financial transaction distribution object to a contract of a given contract type. The following parameters are added in the **C1-BLDDEBARR** algorithm type:
  - **Division** – Used to indicate the division to which the contract type belongs.
  - **Contract Type** – Used when you want to distribute the debit amount on the financial transaction distribution object to a contract of a particular contract type.

**Note:** If the account has more than one active contract of a given contract type, the system will distribute the debit amount to the non-ECR contract with the latest start date.

- A new parameter named **Characteristic Type to store top person in the hierarchy** is added in the **C1-FTDCRTCNL** algorithm type. It is used to specify the characteristic type which you want to define on the financial transaction distribution object. This characteristic indicates the top person in the customer hierarchy.
- The **C1-TOPPR** characteristic type is newly added in this release. It is defined on the financial transaction distribution object. It should be used to store the top person in the customer hierarchy.
- A new batch named **C1-FTDTM** is introduced in this release. It is used to monitor or check whether there are any financial transaction distribution objects in the **Validated** status. If there is a financial transaction distribution object in the **Validated** status, the system changes the status of the financial transaction distribution object to **Apply Rule** and executes the algorithm attached to the **Apply Rule** system event on the financial transaction distribution rule version which is effective on the batch business date. Once the credit or debit distribution array of accounts is created, the status of the financial transaction distribution object is changed to **Distributed** and then the algorithm attached to the **Distribute** system event on the financial transaction distribution rule version which is effective on the batch business date is executed.

On the credit amount distribution, two adjustments are created – one against the source contract and another against the bill segment or adjustment’s contract to which the amount is distributed. However, on the debit amount distribution, two adjustments are created – one against the source ECR contract and another against the non-ECR contract to which the amount is distributed.

Once the credit or debit amount on the financial transaction distribution object is fully distributed, the status of the financial transaction distribution object is changed to **Complete**. However, if the credit or debit amount on the financial transaction distribution object is not yet fully distributed, the status of the financial transaction distribution object is changed to **Validated**.

This batch is a multi-threaded batch. You can specify the following parameters while executing this batch:

Parameter Name	Mandatory (Yes or No)	Description
Account ID	No	Used when you want to distribute the credit or debit amount on the financial transaction distribution objects which are created for a particular account. You can specify comma separated values for this parameter.
Division	No	Used when you want to distribute the credit or debit amount on the financial transaction distribution objects which are created for accounts belonging to a particular division.
Bill Cycle	No	Used when you want to distribute the credit or debit amount on the financial transaction distribution objects which are created for accounts having a particular bill cycle.

Parameter Name	Mandatory (Yes or No)	Description
Business Object	Yes	Used when you want to distribute the credit or debit amount on the financial transaction distribution objects which are created using a particular business object.  <b>Note:</b> By default, the parameter value is set to <b>C1-FTDIST</b> .
Status	Yes	Used when you want to distribute the credit or debit amount on the financial transaction distribution objects which are in a particular status.  <b>Note:</b> By default, the parameter value is set to <b>VALIDATED</b> .
Next Status	Yes	Used to indicate the next status to which the financial transaction distribution objects must be transitioned.  <b>Note:</b> By default, the parameter value is set to <b>APPLYRULE</b> .
Credit Objects First (Y/N)	No	Used to indicate whether you want to first process the credit financial transaction distribution objects and then process the debit financial transaction distribution objects or vice-versa. The valid values are: <ul style="list-style-type: none"> <li>• Y</li> <li>• N</li> </ul> <b>Note:</b> By default, the parameter value is set to <b>N</b> . It means that the system should first process the debit financial transaction distribution objects and then process the credit financial transaction distribution objects.
Characteristic Type for Top Person in the Hierarchy	Yes	Used to specify the characteristic type which is defined on the financial transaction distribution object. It indicates the top person in the customer hierarchy. This batch processes financial transaction distribution objects with the same top person in the same thread.
Thread Pool Name	No	Used to specify the thread pool on which you want to execute the batch.

**Note:** You should use the **C1-FTDTM** batch only when every person in the customer hierarchy has only one effective parent person.

- A new parameter named **Credit Objects First (Y/N)** is added in the **C1-FTDTS** batch control. It is used to indicate whether you want to first process the credit financial transaction distribution objects and then process the debit financial transaction distribution objects or vice-versa. The valid values are:
  - Y
  - N

**Note:** By default, the parameter value is set to **N**. It means that the system should first process the debit financial transaction distribution objects and then process the credit financial transaction distribution objects.

- Now, you can distribute the credit amount of the financial transaction distribution object from the invoice account to the usage account and vice-versa. To implement this feature, the following options are newly added in the **Hierarchy** list:
  - **Invoice Account to Constructs' Linked Accounts** – Enables you to distribute the credit amount of the financial transaction distribution object from the invoice account (i.e. source account) to the usage accounts which are included in the active construct. However, note that the system will only consider the usage accounts from the construct which belong to the invoice account's customer hierarchy.
  - **Linked Account to Construct's Invoice Accounts** - Enables you to distribute the credit amount of the financial transaction distribution object from the usage account (i.e. linked source account) to the invoice accounts which are included in the active construct. However, note that the system will only consider the invoice accounts from the construct which belong to the usage account's customer hierarchy.
- If a billable charge or adjustment of a usage account must be billed on an invoice account, then you need to ensure the following:
  - Target contract type on the usage account's contract type should have the **C1-FTDCRTCNL** algorithm (which creates the financial transaction distribution object) attached when the **C1-FTDCRTCNL** algorithm is attached on the usage account's contract type.
  - Target contract type on the usage account's contract type should not have the **C1-FTDCRTCNL** algorithm (which creates the financial transaction distribution object) attached when the **C1-FTDCRTCNL** algorithm is not attached on the usage account's contract type.
- Earlier, for the **Parent Persons' Accounts from Other Division** and **Parent Persons' Accounts from Same Division** hierarchies, the system distributed the credit amount on the financial transaction distribution object to all parent persons in the customer hierarchy irrespective of whether the parent person is effective or not. However, now, the system distributes the credit amount on the financial transaction distribution object to only those parent persons which are effective in the customer hierarchy.

- Earlier, for the **Child Persons' Accounts from Other Division** and **Child Persons' Accounts from Same Division** hierarchies, the system distributed the credit amount on the financial transaction distribution object to all child persons in the customer hierarchy irrespective of whether the child person is effective or not. However, now, the system distributes the credit amount on the financial transaction distribution object to only those child persons which are effective in the customer hierarchy.

## Enhancements (Specific to Insurance)

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

- Policy
- Specific Stop-Loss Pricing Rule (for Bill Group)
- Aggregate Stop-Loss Pricing Rule (for Bill Group)
- Customer 360° View

### Policy

The following changes are made to the Policy feature:

- You can now copy the following pricing rules for a bill group while renewing the policy:
  - Claim
  - Retention Type Claim Based
  - Retention Type Enrollment Based
  - Recurring Flat Fees
  - Ancillary
  - Level Funding

While copying a pricing rule, the start and end dates of the new pricing rule are set to the renewed policy's start and end dates, respectively.

### Specific Stop-Loss Pricing Rule (for Bill Group)

The following changes are made to the Specific Stop-Loss pricing rule at the bill group level:

- Earlier, you were able to indicate either of the following:
  - Whether the line items in a particular claim pricing rule are eligible for specific stop-loss.
  - Whether the line items which are associated with the **Specific Stop-Loss** pricing rule type category are eligible for specific stop-loss.

Now, the system enables you to indicate the following:

- Whether the line items in a particular pricing rule, which is created using a pricing rule type where the pricing rule type category is set to **Claim**, are eligible for specific stop-loss.

OR

Whether the line items which are associated with the **Specific Stop-Loss** pricing rule type category are eligible for specific stop-loss.

- Whether the billable charge line types in a particular pricing rule, which is created using a pricing rule type where the pricing rule type category is set to **Ancillary**, are eligible for specific stop-loss.

OR

Whether the billable charge line types where the **Pricing Rule Type Category** characteristic is set to **Ancillary** are eligible for specific stop-loss.

- Whether a particular pricing rule, which is created using a pricing rule type where the pricing rule type category is set to **Discount Arrangement**, is eligible for specific stop-loss.

You can add specific stop-loss pricing information for multiple claim, ancillary, and discount arrangement pricing rules. However, note that these pricing rules should not belong to the same pricing rule type.

To implement the above change, the following new sections are added in the **Specific Stop-Loss (SSL) Pricing Rule** screen which appears at the bill group level:

- Pricing Information for rule type category : Claim
- Pricing Information for rule type category : Ancillary
- Pricing Information for rule type category : Discount

## Aggregate Stop-Loss Pricing Rule (for Bill Group)

The following changes are made to the Aggregate Stop-Loss pricing rule at the bill group level:

- Earlier, you were able to indicate either of the following:
  - Whether the line items in a particular claim pricing rule are eligible for aggregate stop-loss.
  - Whether the line items which are associated with the **Aggregate Stop-Loss** pricing rule type category are eligible for aggregate stop-loss.

Now, the system enables you to indicate the following:

- Whether the line items in a particular pricing rule, which is created using a pricing rule type where the pricing rule type category is set to **Claim**, are eligible for aggregate stop-loss.

OR

Whether the line items which are associated with the **Aggregate Stop-Loss** pricing rule type category are eligible for aggregate stop-loss

- Whether the billable charge line types in a particular pricing rule, which is created using a pricing rule type where the pricing rule type category is set to **Ancillary**, are eligible for aggregate stop-loss.

OR

Whether the billable charge line types where the **Pricing Rule Type Category** characteristic is set to **Ancillary** are eligible for aggregate stop-loss

- Whether a particular pricing rule, which is created using a pricing rule type where the pricing rule type category is set to **Discount Arrangement**, is eligible for aggregate stop-loss

You can add aggregate stop-loss pricing information for multiple claim, ancillary, and discount arrangement pricing rules. However, note that these pricing rules should not belong to the same pricing rule type.

To implement the above change, the following new sections are added in the **Aggregate Stop-Loss (ASL) Pricing Rule** screen which appears at the bill group level:

- Pricing Information for rule type category : Claim
- Pricing Information for rule type category : Ancillary
- Pricing Information for rule type category : Discount

## Customer 360° View




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

- A zone named **Pricing Rule Approval Transactions** is added in the **Pricing** tab of the **Customer 360° Information** screen. If you are viewing the 360° information of a parent customer, the **Pricing Rule Approval Transactions** zone lists the approval transactions which are created while defining, editing, and deleting pricing rules of the parent customer and its bill groups. However, if you are viewing the 360° information of a bill group, the **Pricing Rule Approval Transactions** zone lists the approval transactions which are created while defining, editing, and deleting pricing rules of the bill group.
- On clicking the link in the **Pricing Rule Information** column corresponding to a pricing rule in the **Parent Customer Pricing Rules** or **Bill Group Policy Pricing Rules** zone, you can view the details of the pricing rule in the **Pricing Rule** screen.



## User Interface (UI) Level Changes

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

Screen Name (in 2.7.0.0.0)	Changes
Price Item Pricing	<p>The following changes are made to this screen:</p> <ul style="list-style-type: none"> <li>• The <b>Rate Components, Price Components, Tiering Criteria, and Pricing Eligibility Criteria</b> zones are removed from this screen.</li> <li>• The <b>Action</b> column is added in the <b>Rate and Price Component Summary</b> zone.</li> <li>• The <b>Add</b> () icon is added in the <b>Action</b> column corresponding to each rate component.</li> <li>• The <b>Edit</b> () icon is added corresponding to each price component information string.</li> <li>• The <b>Delete</b> () icon is added in the <b>Action</b> column corresponding to each price component.</li> </ul>
Accrual (Used for Viewing)	<p>The following changes are made to this screen:</p> <ul style="list-style-type: none"> <li>• The <b>Accrual Calculation Lines</b> zone is added in the <b>Main</b> tab.</li> <li>• The <b>Accrual Detail Sequence</b> column is added in the <b>Characteristics</b> section.</li> </ul>
Delinquency Central	<p>The following changes are made to this screen:</p> <ul style="list-style-type: none"> <li>• The <b>Create Payment Agreement</b> button is added in this screen.</li> </ul>
Policy (Used for Renewal)	<p>The following changes are made to this screen:</p> <ul style="list-style-type: none"> <li>• The <b>Copy Pricing Rules</b> option is added in this screen.</li> </ul>
Distribution Hierarchy	<p>The following changes are made to this screen:</p> <ul style="list-style-type: none"> <li>• The <b>IGA Member Accounts Same Division</b> option is removed from the <b>Hierarchy</b> list.</li> <li>• The <b>Invoice Account to Constructs' Linked Accounts, Linked Account to Construct's Invoice Accounts, and Sibling Accounts of Main Customer</b> options are added in the <b>Hierarchy</b> list.</li> </ul>
Earnings Credit Rate Eligibility	<p>The following changes are made to this screen:</p> <ul style="list-style-type: none"> <li>• The <b>FT Distribution Object BO</b> and <b>FT Distribution Object</b> fields are added in this screen.</li> </ul>

Screen Name (in 2.7.0.0.0)	Changes
Claim Pricing Rule Type (Used for Adding)	<p>The following changes are made to this screen:</p> <ul style="list-style-type: none"> <li>• The <b>Ancillary Pricing Rule, Discount Arrangement Pricing Rule, Flat Fee Pricing Rule, and Level Funded (LF) Pricing Rule</b> options are added in the <b>Pricing Rule Business Object</b> list.</li> <li>• The <b>Ancillary, Discount Arrangement, Flat Fees, and Level Funded</b> options are added in the <b>Pricing Rule Type Category</b> list.</li> <li>• The <b>Eligibility Rule Type</b> column is added in the <b>Related Pricing Rule Types</b> section.</li> <li>• The <b>Third Party Identifier, Network Indicator, Covered Charge Amount, Discount Savings Amount, Accumulation Only Identifier, and Transaction Upload Date</b> fields are in the <b>Transaction Field Mapping</b> section.</li> <li>• The <b>Accumulation Billable Charge Post Proc, Accumulation Billable Charge Pre Proc, Accumulation Post Processing, and Accumulation Pre Processing</b> options are added in the <b>System Event</b> list.</li> <li>• The <b>Eligible for Level Funding, Third Party Identifier Value, Accumulation Only Identifier Value, Eligible for Write-Off in Post Runout, Rule Based Price Item Eligibility Field, Rule Based Related Pricing Rule Type Eligibility Field, and Rule Based Eligibility Value</b> fields are added in the <b>Additional Data</b> section.</li> <li>• The <b>Eligibility Rule Type</b> column is added in the <b>Price Items</b> section.</li> <li>• The <b>Eligible for Level Funding</b> column is added in the <b>Price Item Parameters</b> section.</li> </ul>
Specific Stop-Loss Pricing Rule Type (Used for Adding)	<p>The following changes are made to this screen:</p> <ul style="list-style-type: none"> <li>• The <b>Ancillary Pricing Rule, Discount Arrangement Pricing Rule, Flat Fee Pricing Rule, and Level Funded (LF) Pricing Rule</b> options are added in the <b>Pricing Rule Business Object</b> list.</li> <li>• The <b>Ancillary, Discount Arrangement, Flat Fees, and Level Funded</b> options are added in the <b>Pricing Rule Type Category</b> list.</li> <li>• The <b>Accumulation Billable Charge Post Proc, Accumulation Billable Charge Pre Proc, Accumulation Post Processing, and Accumulation Pre Processing</b> options are added in the <b>System Event</b> list.</li> </ul>

Screen Name (in 2.7.0.0.0)	Changes
	<ul style="list-style-type: none"> <li>• The <b>Third Party Identifier Value, Accumulation Only Identifier Value, Eligible for Write-Off in Post Runout, Rule Based Price Item Eligibility Field, and Rule Based Eligibility Value</b> fields are added in the <b>Additional Data</b> section.</li> <li>• The <b>Eligibility Rule Type</b> column is added in the <b>Price Items</b> section.</li> <li>• The <b>GL Only Contract Type</b> field is added in the <b>SSL-Specific Additional Data</b> section.</li> <li>• The <b>Domestic Provider Claim Billable Charge Line Type</b> field is renamed to <b>Domestic Provider Billable Charge Line Type</b>.</li> </ul>
Aggregate Stop-Loss Pricing Rule Type (Used for Adding)	<p>The following changes are made to this screen:</p> <ul style="list-style-type: none"> <li>• The <b>Ancillary Pricing Rule, Discount Arrangement Pricing Rule, Flat Fee Pricing Rule, and Level Funded (LF) Pricing Rule</b> options are added in the <b>Pricing Rule Business Object</b> list.</li> <li>• The <b>Ancillary, Discount Arrangement, Flat Fees, and Level Funded</b> options are added in the <b>Pricing Rule Type Category</b> list.</li> <li>• The <b>Accumulation Billable Charge Post Proc, Accumulation Billable Charge Pre Proc, Accumulation Post Processing, and Accumulation Pre Processing</b> options are added in the <b>System Event</b> list.</li> <li>• The <b>Third Party Identifier Value, Accumulation Only Identifier Value, Eligible for Write-Off in Post Runout, Rule Based Price Item Eligibility Field, and Rule Based Eligibility Value</b> fields are added in the <b>Additional Data</b> section.</li> <li>• The <b>Eligibility Rule Type</b> column is added in the <b>Price Items</b> section.</li> <li>• The <b>GL Only Contract Type</b> field is added in the <b>ASL-Specific Additional Data</b> section.</li> <li>• The <b>Domestic Provider Claim Billable Charge Line Type</b> field is renamed to <b>Domestic Provider Billable Charge Line Type</b>.</li> </ul>
Retention Type Claim Based Pricing Rule Type (Used for Adding)	<p>The following changes are made to this screen:</p> <ul style="list-style-type: none"> <li>• The <b>Ancillary Pricing Rule, Discount Arrangement Pricing Rule, Flat Fee Pricing Rule, and Level Funded (LF) Pricing Rule</b> options are added in the <b>Pricing Rule Business Object</b> list.</li> <li>• The <b>Ancillary, Discount Arrangement, Flat Fees, and</b></li> </ul>

Screen Name (in 2.7.0.0.0)	Changes
	<p><b>Level Funded</b> options are added in the <b>Pricing Rule Type Category</b> list.</p> <ul style="list-style-type: none"> <li>• The <b>Accumulation Billable Charge Post Proc, Accumulation Billable Charge Pre Proc, Accumulation Post Processing, and Accumulation Pre Processing</b> options are added in the <b>System Event</b> list.</li> <li>• The <b>Eligible for Level Funding, Third Party Identifier Value, Accumulation Only Identifier Value, Eligible for Write-Off in Post Runout, Rule Based Price Item Eligibility Field, and Rule Based Eligibility Value</b> fields are added in the <b>Additional Data</b> section.</li> <li>• The <b>Eligibility Rule Type</b> column is added in the <b>Price Items</b> section.</li> <li>• The <b>Eligible for Level Funding</b> column is added in the <b>Price Item Parameters</b> section.</li> </ul>
Retention Type Enrollment Based Pricing Rule Type (Used for Adding)	<p>The following changes are made to this screen:</p> <ul style="list-style-type: none"> <li>• The <b>Ancillary Pricing Rule, Discount Arrangement Pricing Rule, Flat Fee Pricing Rule, and Level Funded (LF) Pricing Rule</b> options are added in the <b>Pricing Rule Business Object</b> list.</li> <li>• The <b>Ancillary, Discount Arrangement, Flat Fees, and Level Funded</b> options are added in the <b>Pricing Rule Type Category</b> list.</li> <li>• The <b>Eligibility Rule Type</b> column is added in the <b>Related Pricing Rule Types</b> section.</li> <li>• The <b>Third Party Identifier, Network Indicator, Covered Charge Amount, Discount Savings Amount, Accumulation Only Identifier, and Transaction Upload Date</b> fields are in the <b>Transaction Field Mapping</b> section.</li> <li>• The <b>Accumulation Billable Charge Post Proc, Accumulation Billable Charge Pre Proc, Accumulation Post Processing, and Accumulation Pre Processing</b> options are added in the <b>System Event</b> list.</li> <li>• The <b>Eligible for Level Funding, Third Party Identifier Value, Accumulation Only Identifier Value, Eligible for Write-Off in Post Runout, Rule Based Price Item Eligibility Field, Rule Based Related Pricing Rule Type Eligibility Field, and Rule Based Eligibility Value</b> fields are added in the <b>Additional Data</b> section.</li> <li>• The <b>Eligibility Rule Type</b> column is added in the <b>Price Items</b> section.</li> <li>• The <b>Eligible for Level Funding</b> column is added in the</li> </ul>

Screen Name (in 2.7.0.0.0)	Changes
	<p align="center"><b>Price Item Parameters</b> section.</p>
Specific Stop-Loss (SSL) Pricing Rule (for Parent Customer)	<p>The following changes are made to this screen:</p> <ul style="list-style-type: none"> <li>• The <b>Accumulation Option</b> field is renamed to <b>Accumulation Level</b>.</li> <li>• The <b>Settlement Frequency Flag</b> field is renamed to <b>Settlement Frequency</b>.</li> <li>• The <b>ASSL Limit</b> field is renamed to <b>Aggregate Specific Stop-Loss Limit</b>.</li> <li>• The <b>Accumulation Parameters, Run-In Parameters, and Lasering and Exclusion</b> sections appear when you select a price item.</li> </ul>
Specific Stop-Loss (SSL) Pricing Rule (for Bill Group)	<p>The following changes are made to this screen:</p> <ul style="list-style-type: none"> <li>• The <b>Pricing Information</b> section is removed from this screen. Instead the following sections are added in this screen: <ul style="list-style-type: none"> <li>○ Pricing Information for rule type category : Claim</li> <li>○ Pricing Information for rule type category : Ancillary</li> <li>○ Pricing Information for rule type category : Discount</li> </ul> </li> </ul>
Aggregate Stop-Loss (ASL) Pricing Rule (for Bill Group)	<p>The following changes are made to this screen:</p> <ul style="list-style-type: none"> <li>• The <b>Pricing Information</b> section is removed from this screen. Instead the following sections are added in this screen: <ul style="list-style-type: none"> <li>○ Pricing Information for rule type category : Claim</li> <li>○ Pricing Information for rule type category : Ancillary</li> <li>○ Pricing Information for rule type category : Discount</li> </ul> </li> </ul>
Customer 360° Information	<p>The following changes are made to this screen:</p> <ul style="list-style-type: none"> <li>• The <b>Pricing Rule Approval Transactions</b> zone is added in the <b>Pricing</b> tab.</li> </ul>
Approval Profile	<p>The following changes are made to this screen:</p> <ul style="list-style-type: none"> <li>• The <b>Currency Conversion Required</b> option is added in this screen.</li> </ul>
Funding Request Type	<p>The following changes are made to this screen:</p>

Screen Name (in 2.7.0.0.0)	Changes
	<ul style="list-style-type: none"> <li>• The <b>Account Funding Currency Characteristic Type</b>, <b>Currency Conversion Adjustment Algorithm</b>, and <b>Currency Conversion Payment Algorithm</b> fields are added in the <b>Funding Request Type</b> zone.</li> </ul>
Funding Request Type (Used for Adding, Editing, and Copying)	<p>The following changes are made to this screen:</p> <ul style="list-style-type: none"> <li>• The <b>Account Funding Currency Characteristic Type</b>, <b>Currency Conversion Adjustment Algorithm</b>, and <b>Currency Conversion Payment Algorithm</b> fields are added in this screen.</li> </ul>
Funding Request (Used for Searching)	<p>The following changes are made to this screen:</p> <ul style="list-style-type: none"> <li>• The following additional fields are available when the <b>Request Details</b> option is selected from the <b>Search By</b> list: <ul style="list-style-type: none"> <li>○ Person Name</li> <li>○ Creation Mode</li> </ul> </li> <li>• The <b>OraSearch</b> icon is available for the <b>User ID</b> field.</li> <li>• The following additional field is available when the <b>Bill Details</b> option is selected from the <b>Search By</b> list: <ul style="list-style-type: none"> <li>○ Division</li> </ul> </li> </ul>
Funding Request (Used for Viewing)	<p>The following changes are made to this screen:</p> <ul style="list-style-type: none"> <li>• The <b>Creation Mode</b> field is added in the <b>Main</b> section of the <b>Funding Request</b> zone.</li> <li>• The following two buttons are added in the <b>Record Actions</b> section of the <b>Funding Request</b> zone: <ul style="list-style-type: none"> <li>○ Cancel</li> <li>○ Withdraw</li> </ul> </li> <li>• A tab named <b>Bills</b> is added in this screen.</li> <li>• The <b>Selected Bills</b>, <b>Funding Payment Details</b>, and <b>Funding Adjustments</b> zones are moved from the <b>Main</b> tab to the <b>Bills</b> tab.</li> <li>• A new zone named <b>Currency Statistics</b> is added in the <b>Bills</b> tab.</li> <li>• The following two buttons are added in the <b>Selected Bills</b> zone: <ul style="list-style-type: none"> <li>○ <b>Hold</b> – Enables you to create a hold request for the selected bill.</li> <li>○ <b>Offset</b> – Enables you to create an offset request for the selected bill.</li> </ul> </li> </ul>

Screen Name (in 2.7.0.0.0)	Changes
	<ul style="list-style-type: none"> <li>• In the <b>Search Bill</b> zone, the following additional fields are available when the <b>Bill Details</b> option is selected from the <b>Search By</b> list: <ul style="list-style-type: none"> <li>○ Bill Due Date From</li> <li>○ Bill Due Date To</li> <li>○ Division</li> </ul> </li> <li>• In the <b>Search Bill</b> zone, the following additional fields are available when the <b>Person Details</b> option is selected from the <b>Search By</b> list: <ul style="list-style-type: none"> <li>○ Person Name</li> <li>○ Country</li> </ul> </li> <li>• The following fields are added in the <b>Filter</b> area of the <b>Selected Bills</b> zone: <ul style="list-style-type: none"> <li>○ Alternate Bill ID</li> <li>○ Funding Amount From</li> <li>○ Funding Amount To</li> <li>○ Funding Amount Threshold Range</li> <li>○ Person ID</li> <li>○ Currency</li> <li>○ Country</li> </ul> </li> <li>• The following columns are added in the <b>Selected Bills</b> zone: <ul style="list-style-type: none"> <li>○ Bill Date</li> <li>○ Person Identifier</li> <li>○ Person Country</li> <li>○ Invoice Account Identifier</li> <li>○ Currency Code</li> <li>○ Offset Amount</li> <li>○ Open Bills</li> <li>○ Person Name</li> <li>○ Split Banking</li> <li>○ Funding Currency Amount</li> <li>○ Original Outstanding Amount</li> </ul> </li> </ul>
Disaggregation Request (Used for Searching)	<p>The following changes are made to this screen:</p> <ul style="list-style-type: none"> <li>• The <b>Accumulation Group</b> option is added in the <b>Search By</b> list.</li> </ul>

Screen Name (in 2.7.0.0.0)	Changes
Add Disaggregation Request	<p>The following changes are made to this screen:</p> <ul style="list-style-type: none"><li>• This screen is completely redesigned. The <b>Request Type</b> list is added in this screen. It contains the following two options - <b>Parent Accumulation Group</b> and <b>Person/Account</b>.</li><li>• The <b>Accumulation Type</b> and <b>Parent Accumulation Group ID</b> fields appear when the request type is set to <b>Parent Accumulation Group</b>. The <b>Accumulation Type</b> list contains the following two options – <b>Stop Loss</b> and <b>Discount Arrangement</b>.</li><li>• The <b>Disaggregate All Account</b> option appears when the request type is set to <b>Parent Accumulation Group</b> and the accumulation type is set to <b>Stop Loss</b>.</li></ul>



## Database Level Changes

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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 2.7.0.1.0, refer to the Appendix A : New Objects in the Oracle Revenue Management and Billing V2.7.0.1.0 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 2.7.0.1.0 is supported:

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

**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.

<sup>1</sup> Here, x is the vendor supported version.

<sup>2</sup> 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.

# Oracle Utilities Application Framework 4.3.0.6.0 Enhancements

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This section lists enhancements made in Oracle Utilities Application Framework Version 4.3.0.6.0:

- System Wide Enhancements
- File Access Enhancements
- Batch Enhancements
- DBMS Scheduler Integration Enhancements
- To Do Enhancements
- Configuration Tool Enhancements
- Analytics Configuration Enhancements
- Web Services Enhancements
- Configuration Migration Assistant (CMA) Enhancements
- Mobile Framework Enhancements
- Security Enhancements
- Miscellaneous Enhancements

## System Wide Enhancements

This section lists and describes the following enhancements that are made system wide:

- Change to the About Box for Cloud Implementations
- Required Indicator Added to Fixed Pages

### Change to the About Box for Cloud Implementations

In this release, the About Box has been enhanced to simplify the product information displayed for Cloud implementations. The About Box will show the Cloud product name and the Cloud version. It will not display all the products in the "stack". This information is still visible in the Installation Options - Installed Products page.

### Required Indicator Added to Fixed Pages

In a previous release, portal based pages were enhanced to automatically display an asterisk adjacent to fields that are required as defined in either the table / field metadata or in the BO schema.

In this release, the fixed pages in the system have been enhanced to display an asterisk adjacent to fields that are required as defined in the table / field metadata. (Business objects are not considered for these types of pages).

## File Access Enhancements

This section lists and describes the following enhancements related to file access:

- Support Defining File Alias Using Extendable Lookup
- Introduce Support for Cloud Storage Access

### Support Defining File Alias Using Extendable Lookup

In a previous release, we provided the ability to define substitution variables for a file location definition using a properties file. This allowed users configuring file locations in the application in places like Batch Control "File Path" parameters and in various master configuration options to reference a "token" rather than the full file path.

In this release an alternate option has been provided that allows for defining native file storage locations using an extendable lookup. The extendable lookup F1-FileStorage (File Storage Configuration) has been provided. Using this extendable lookup, a value may be defined referencing the "Native File Storage" file adapter option and then defining the file path that this value represents. The file path field follows the same rules as any other file path. For example, it can reference "@SPLOUTPUT@" or any other value defined in the Substitution Variables properties file. In addition, if the system has been configured to validate the value against a whitelist, this is also enforced.

A new syntax has been defined for referencing file locations during configuration, for example in "File Path" parameters for a batch control: `file-storage://{ExtendableLookupValue}`. Refer to the online help for more information about the supported syntax.

**Note:** Any code that references file paths for reading or writing must be updated to reference a new API in order to support this functionality. Contact customer support for more information.

### Introduce Support for Cloud Storage Access

For cloud product releases, the system has been enhanced to allow code that reads or writes files to reference an Oracle Cloud Storage location rather than the native file system. The extendable lookup **F1-FileStorage** (File Storage Configuration) has been provided to support this. Using this extendable lookup, a value may be defined referencing the "Oracle Cloud Object Storage" file adapter option, which allows for the details on how to connect to cloud storage to be entered.

Using this configuration, the same syntax described above may then be used when defining a File Path in the application, for example a parameter for a batch control.

```
file-storage://{ExtendableLookupValue}/{bucket name}
```

Refer to the online help for more information about the supported syntax.

**Note:** Any code that references file paths for reading or writing must be updated to reference a new API in order to support this functionality. (This is the same API mentioned above for supporting defining a Native File Storage location using the F1-FileStorage extendable lookup.) Contact customer support for more information.

## Batch Enhancements

This section lists and describes the following batch enhancements:

- Enhanced Bind Variable Support for Plug-in Driven Batch
- Monitor Batch Programs Supports Restricting By Date
- Add Start and End Date / Time to Batch Run
- Enhanced Level of Service Support

### Enhanced Bind Variable Support for Plug-in Driven Batch

The Plug-in Driven Batch functionality in the system supports product specified bind variables for known batch related attributes like batch business date and batch run number. In previous releases, the mnemonic used to specify the bind variables used a prefix of "f1.". This causes an issue in certain system configurations. In this release, the system has been enhanced to support the prefix "f1\_" and is the recommended prefix to use going forward. The prefix "f1." continues to be supported for backward compatibility.

Refer to the online help for plug-in driven batch programs for more information.

### Monitor Batch Programs Supports Restricting By Date

In this release, the monitor batch program has been enhanced to support a Restrict by Date parameter. Populating this parameter with the name of a date field on the primary table of the MO limits the records selected to those whose date value is on or before the current date. This is to support business objects that have a business rule where a given state transition should only occur many weeks, months or even years in the future. If the record supports a date to mark the future event, the BO can be configured to monitor only the records whose date has arrived. This ensures that when the monitor is run, it is not constantly picking up records that aren't ready, just to check the date and move on.

Optionally, the parameter may include + / - a number of days, to support "all records whose DATE is on or before 3 days from now" or "all records whose DATE is on or before yesterday".

### Add Start and End Date / Time to Batch Run

In previous releases, the system did not capture the start and end date and time for a batch run. Rather, the start and end of each thread is captured, through messages linked to the thread.

More and more use cases are requiring information about the start and end of the whole batch run. To aid in this effort, Start Date / Time and End Date / Time has been added to the batch run table. From now on, the system will stamp this information onto newly create batch runs.

## Backward Compatibility

Note that due to the sheer volume of batch runs that would exist for upgrading clients, an upgrade script to populate the new start date / time and end date / time has not been provided. Rather the system includes a business service and java methods to retrieve the start / end date / time for a batch run. This code will first check the columns on the batch run and use those, if populated. Otherwise, it will derive the information using earliest thread's start date / time and the latest thread's end date / time. Note that the business service provided is F1-GetBatchRunStartEnd.

## Enhanced Level of Service Support

In this release, the batch control - level of service plug-in spot has been enhanced to support multiple algorithms. The various user interfaces and services that support retrieving level of service information have been enhanced accordingly. In all cases, if the batch control has a single algorithm, the existing behavior continues where the results from that algorithm are returned. If multiple algorithms are found, an overall response is set based on the detailed responses from each algorithm. In addition, the detailed responses are available.

The overall response is set to Error if any of the algorithms returned an error. Otherwise, it is set to Warning if any of the algorithms returned a warning. Otherwise, it is set to Normal.

The following functionality has been enhanced accordingly:

- The Health Check business service (F1-HealthCheck). The BS schema still includes a single overall response. In addition a new collection of detailed responses are included.
- The Health Check portal has been enhanced to show the overall response when multiple algorithms exist along with the message "See results for details". An icon is also provided to expand the section to see the details.
- The Batch Control main page has been enhanced to show the overall response for Level of Service when multiple algorithms exist along with the message "See results for details". An icon is also provided to expand the section to see the details.

## DBMS Scheduler Integration Enhancements

This section lists and describes the following integration enhancements made to the DBMS Scheduler:

- Job Details Service Includes Error Details
- Separate Business Services Provided for Adding / Changing Entries
- Support a Job Scope for Defining Options
- Additional Configuration Options for Job List Service

### Job Details Service Includes Error Details

The business service F1-DBMSGetJobDetails DBMS Scheduler Job Details has been enhanced to return an additional element in the Steps collection: error details. This is populated with the information about the error if the step's status is Error.

## Separate Business Services Provided for Adding / Changing Entries

In a previous release, 'maintenance' business services were provided to support maintaining the various objects in the DBMS data model: Program, Chain and Schedule. In this release, additional business services have been provided for maintaining Program, Chain and Schedule where the required elements have been configured appropriately. The new business services are recommended for use when adding or changing a given object. The existing business services are still appropriate for using to read or to delete an object.

## Support a Job Scope for Defining Options

In previous releases, the DBMS integration supported setting options globally or setting options for a specific program (batch code). In this release, options may now also be set for a Job. The option will apply to all the programs in the chain for that job.

A use case for this new feature is the ability to set a Batch Business Date for all programs in the chain for a given job.

## Additional Configuration Options for Job List Service

The business service F1-DBMSGetJobs DBMS Scheduler Job List returns information about running or completed runs (based on an input parameter) for a job stream. In previous releases, requesting completed jobs, the service returned the most recent completed run for each distinct job stream for the input date range.

In this release additional input parameters have been added to allow for tailoring the information returned about running or completed jobs.

- Return Type indicator - This is only applicable for completed runs. Using this indicator you can specify if the most recent run of each job stream should be returned or if all completed jobs should be returned for the date range.
- Job Name - If a job name is supplied only the details for that Job Name are returned. This is applicable for both running or completed jobs and works in conjunction with the new Return Type indicator.

## To Do Enhancements

This section lists and describes the following to do enhancements:

- Recalculate To Do Priority
- Monitor a To Do Entry
- Expand Ability to Add Logs and Enter Comments on To Do

### Recalculate To Do Priority

The system supports an algorithm to calculate a To Do Entry's priority allowing for factors related to a specific To Do entry to be considered. The Calculate Priority algorithms are executed when the To Do entry is created and any time after that that a To Do entry is updated. In this release, To Do priority calculation logic has been enhanced as follows:

- A new batch control has been provided to execute the Calculate Priority algorithms for non-closed To Do Entries (F1-TDCLP). This allows for an implementation to implement priority algorithms that use factors that may change over time.
- A log entry is created when the To Do Entry has been updated as a result of a Calculate Priority algorithm. It uses a new log entry type: "Calculated Priority". (This is distinct from the log entry type that indicates a user has overridden the priority).

### Monitor a To Do Entry

In this release, a new system event has been added to To Do Type: To Do Monitor. To Do Monitor algorithms may be used to periodically review information related to a To Do entry and take action, if appropriate. For example, To Do Monitor algorithms may be used to detect if the situation that caused the To Do Entry to be generated has been remedied in the meantime, allowing for the To Do Entry to be completed. Along with the new plug-in spot, a batch process has also been provided (F1-TDMON) that selects non-final To Do entries whose To Do type is configured with at least one monitor algorithm and executes the monitor algorithms.

In addition, a new base algorithm type has been provided to close a To Do entry if more than X days have passed since its creation, where X is a configurable parameter. This algorithm may be used for To Do Types that create entries that may become obsolete if some number of day have passed with no action.



## Expand Ability to Add Logs and Enter Comments on the To Do

In the application, the ability to update To Do Entries is limited to users that are either assigned to the To Do Entry (for 'being worked on' records) or are in a role for a record in 'open' status.

In this release, the validation has been relaxed to allow users to add comments or to add a User Log entry for any To Do Entry that is in Open or Being Worked On status. For example, if a call center user is speaking to a customer about an issue and the user finds a To Do that is related to the issue, the call center user can add information to the To Do Entry from the conversation with the customer even if the user is not authorized to work on the To Do.

## Configuration Tools Enhancements

This section lists and describes the following enhancements made to the configuration tools:

- New Schema Editor
- Process Flow
- Terminology Change in Add Element Dialogue
- Optional Display of State Transition UI Map

### New Schema Editor

In this release the schema editor on schema based objects (Business Object, Business Service, Service Scripts / BPA Scripts, UI Maps and Data Area) has been enhanced in this release.

The following points highlight some of the features:

- The default view of the schema editor is a Tree view of the elements on the leftmost column and a tabular view of some of the most common attributes of each element.
- A user can toggle to a Label view, which shows field labels or referenced objects' descriptions. For example, for any included business objects, data areas, UI maps, etc, toggling to the Label view shows the description of these objects.
- The edit button shows a more detailed panel to configure all the attributes of the element. This is the same panel used in previous releases.
- The user can toggle to the Text view. This view has been enhanced to use colors to distinguish element names from attribute labels from attribute values.

**Note:** This was also added to 4.3.0.5.0 as a hot fix. (Bug 27077859)

## Process Flow

A process flow is a user interface guiding a user through a series of actions in order to accomplish a specific task. The task can be as simple as the collection of information in order to update business data or involve more complex logic such as submitting and tracking batch processes, exchanging messages with an external system, etc. Implementing such user interface is made simpler by the new Process Flow configuration tool introduced in this release. A process flow type defines the entire metadata needed to control the behavior of process flows of a given type. This includes the sequence of steps, the panel and rules associated with each step and more.

## Terminology Change in Add Element Dialogue

When adding a new element in the schema editor, in previous releases the option for including a Map in the schema via UI Hints was called '**Embedded HTML**' in the Add dialogue. When viewing the configuration details, the section heading was '**Embedded HTML Attributes**'. However, the schema element generated (and visible in the Tree view of the schema editor) is "uiHint:includeMap". In this release, the text in the Add dialogue has been changed to '**Include Map Fragment**'. When viewing the configuration details, the section heading is now '**Included Map Fragment Attributes**'.

## Optional Display of State Transition UI Map

There may be circumstances in which the status pre-processing logic can determine the value of the elements to be captured in the state transition map and it is not necessary for the map to be invoked. In this release, a new data area (F1-StateTransitionCommon) has been provided that can be included in your pre-processing script. The data area contains a Boolean element called skipStateTransitionMap which can be set by your script logic. If this element is set to 'true', F1-MainProc will bypass the state transition map processing step.

## Analytics Configuration Enhancements

This section lists and describes the following enhancements made to the analytics configuration functionality:

- Cube Views

### Cube Views

This release introduces functionality designed to support data analysis using cube views. Data cubes are multi-dimensional representations of data sets that can be 'sliced' using various filters. The Cube View enhancement includes the following features:

- A new Cube Type maintenance object to capture the configuration of a cube view, including a data explorer zone and corresponding business service that retrieve the data set for a specific cube view type.
- A new Cube View maintenance object and business object that captures various attributes of a cube view instance.

- A generic UI Map and supporting service script for displaying a cube view.
- A portal for viewing and maintaining cube view instances.

## Web Services Enhancements

This section lists and describes the following enhancements made to the web services functionality:

- Support Configuration for REST Web Services
- Explicitly Define Owner in Service Catalog Configuration
- Improve Performance for Outbound Messages
- Steps to Configure

### Support Configuration for REST Web Services

In this release, the system has been enhanced to support configuration of REST web services. The existing inbound web service (IWS) metadata is leveraged for this. A new field - web service class, with values of REST and SOAP - has been added to IWS. The existing inbound web service functionality is now referred to as inbound SOAP web services, or SOAP IWS. Inbound web service deployment is specific to SOAP functionality. The following points highlight some of the features:

- In this release only the POST HTTP method is supported.
- Inbound REST web services reference a resource category. The categories are defined using an extendable lookup. The resource category is a type of grouping attribute, allowing an implementation to associate multiple IWS records with a common resource.
- The REST IWS may define one or more operations. Each operation defines the BO, BS or SS that is invoked when the REST service is invoked. For each operation, you configure a Resource URI, which along with the IWS name is used to compose the URL for the REST service.
- REST IWS records, like SOAP IWS records may be associated with a Web Service Category, which is used to describe the functionality that uses the web service.
- The product uses OpenAPI Specification (formerly Swagger Specification) for viewing the REST API.
- A new REST servlet is provided that supports a new URI format that includes the IWS name and resource URI.

The web service catalog functionality used for the integration with Oracle Integration Cloud supports a REST catalog in addition to the existing SOAP catalog.

### Backward Compatibility

In previous releases, the product supported a REST servlet that allowed for a business service or service script to be referenced in the URI. This servlet is still supported, however, it now does a check that the BS or SS is referenced in operation for an IWS record. This provides an extra layer of security, allowing the product to limit the BS or SS records that are exposed via REST. For backward compatibility, the product provides IWS records out of the box for each BS and SS that is part of an existing integration that uses the existing REST servlet. New integrations should use the new REST servlet functionality specified using IWS metadata.

## Explicitly Define Owner in Service Catalog Configuration

The integration with the Oracle Integration Cloud includes an owner flag for each web service using the owner flag of the main installed product. That way, in the catalog you can distinguish, for example, web services from Oracle Utilities Customer Care & Billing from web services from Oracle Utilities Work and Asset Management. In previous releases, the owner flag was taken from the Installed Products collection using the product marked to "display". However, there are implementations where multiple installed products are marked for "display" causing the integration to choose one, which may not be the desired one.

In this release, the Service Catalog master configuration has been enhanced to include Owner as an attribute, allowing an implementation to explicitly choose the owner value to include in the catalog for web services from this installation.

## Improve Performance for Outbound Messages

In previous releases, implementations were required to use the Outbound Message Dispatcher business services to send an outbound message without instantiating it but where the outbound message BO pre-processing algorithms need to be executed. This business service orchestrated a creation and deletion of the outbound message, which is not desired for performance reasons.

The alternate business service Outbound Message Mediator routes a message without instantiating anything so this BS is preferred when the outbound message should not be instantiated. However, this BS did not execute the BO pre-processing algorithms. In this release the Mediator business service has been enhanced to also execute the BO pre-processing algorithms.

## Steps to Configure

No steps are required to configure this feature.

## Configuration Migration Assistant Enhancements

This section lists and describes the following enhancements made to the configuration migration assistant functionality:

- Algorithm to Purge Unchanged Transactions

### Algorithm to Purge Unchanged Transactions

In this release, a new BO exit algorithm has been provided to purge 'unchanged' migration objects for a migration data set. This algorithm is meant to be used on the Migration Data Set Import business object (F1-MigrDataSetImport), on the Ready To Compare state. The algorithm is not plugged in out of the box. Implementations may choose to plug this algorithm in if desired.

## Mobile Framework Enhancements

This section lists and describes the following enhancements made to the mobile framework functionality:

- Support to Activate Deployment Upon Creation
- Restrict Mobile Image Attachment File Size

### Support to Activate Deployment Upon Creation

In this release, a new parameter has been added to the Create Deployment background process (F1-DPLOY) that indicates if the deployment should be activated after creation. Setting this parameter to 'Y' saves the extra step of manually activating the deployment after the background process finishes.

### Restrict Mobile Image Attachment File Size

As of this release, customers may restrict the size of image attachments captured by the mobile application by specifying an image attachment size restriction on their MDT type records. Different size limits may be configured for different types of mobile devices. If such limit is not specified on the MDT type, the mobile application does not restrict the size of images captured in the field.

## Security Enhancements

This section lists and describes the following enhancements made to the application security functionality:

- Introduce Cryptography Key Support
- Introduce Object Erasure
- Change in OIM Integration Configuration

### Introduce Cryptography Key Support

In this release, the product has been enhanced to provide a framework to manage erasure of personally identifiable information (PII). A person's right to erasure of their information is an important data privacy issue.

This release of the Object Erasure functionality will support the following:

- The ability to mark a maintenance object as eligible for erasure and define the retention period for the data.
- A new Object Erasure Schedule maintenance object to capture the key fields and erasure date for records whose PII must be removed.
- Support for creating and monitoring the erasure schedule, including the method to be used for erasure.
- A portal for viewing erasure configuration and a context-sensitive zone to view erasure status for an object.

- Support for erasing an object by purging its records and for erasing User PII through obfuscation.

Refer to the online help for data privacy and object erasure for more information.

## Change in OIM Integration Configuration

In this release, the configuration required to enable OIM configuration has changed. Instead of configuring settings in the properties file, settings in Feature Configuration are required.

Find your feature name using the External Messages feature type. If one does not already exist, add one for that type. Configure the following options.

- Set the value for option type Support SPML Deployment in IWS to true.
- Set the value for option type Default SPML service security policy to an appropriate value per your implementation rules.

## Miscellaneous Enhancements

This section lists and describes the following miscellaneous enhancements:

- Country Enhancements
- Attachment Enhancements
- Customization Setting for Extended Data Area Removed
- Master Configuration List Usability Enhancement
- Business Service F1-RetrieveCharValDescription Updated
- New ILM Algorithms - Proactively Update ILM Switch
- Support Including Column Headers in Sync Request Extract
- Return All Errors On COBOL SQL Updates
- Removal Of Product Specific Domain Templates

### Country Enhancements

In this release, the Boolean check-boxes used to indicate that a particular address component is enabled have been changed to dropdowns with values of Optional and Not Allowed. This allows edge products to introduce additional values, if desired. For example, if an edge product wants to support marking an address component as Required, that value can be added to the list of valid values.

For backward compatibility, the Boolean values are still maintained so that any code relying on those values will still work as before. The user interface has been updated to display the dropdown instead of the checkbox.

## Attachment Enhancements

In this release, the Attachment table has been enhanced to include two new columns:

- External Reference ID - this is available when attachments are added from another system where the other system may have another ID. The system supports capturing this value in the record and it is displayed in the user interface when populated.
- Comments - this is available for users to add additional information when creating an attachment.

The system has also introduced a setting to limit the size of the attachment. A new option - Maximum Attachment Size - has been added to the General System Configuration feature type. Define a value here to issue an error if an attachment greater than this size is uploaded.

## Customization Setting for Extended Data Area Removed

The Extended Data Area field on the Data Area table was incorrectly defined as customizable (or "CMable"). This was not correct and has been fixed in this release. If your implementation has populated the Extended Data Area column on any base owned data area, that information will be overwritten when this field is corrected. (Note that the same functionality can be achieved by simply including the base owned data area in the custom data area's schema.)

## Master Configuration List Usability Enhancement

In this release the master configuration list has been enhanced as follows:

- Users are only shown the master configuration business objects that they have appropriate security rights for.
- A filter by Description has been added to support the ability to limit the rows based on the input value. The filter area is collapsed by default.

## Business Service F1-RetrieveCharValDescription Updated

In previous releases, the business service to Retrieve Characteristic Value Description was 'wrapping' the online characteristic value search, which supports a "likeable" search on the characteristic value. This is not correct behavior for a business service, which is usually used by code that expects one and only one result. In this release, the business service has been updated to use logic that does an exact match on the input characteristic type and characteristic value.

## New ILM Algorithms - Proactively Update ILM Switch

The ILM Eligibility algorithm on a maintenance object, invoked by the ILM crawler batch control has the responsibility of reviewing records whose ILM Date has arrived and marking the ILM Archive switch to "Y" based on criteria. A common criterion for marking the ILM Archive switch to "Y" is that the record is in a final status. In this release, the system has provided two BO level plug-ins:

- A BO Enter Status plug-in to set the ILM Archive switch to "Y". It may be used by records that are configured for ILM and have a business object with a lifecycle. It may be plugged into the final state(s) to proactively set the switch to Y. This will reduce the number of records to be reviewed by the ILM Eligibility algorithm when the crawler is run.
- A BO Exit Status plug-in to set the switch back to "N". This is provided for those final states where the record may transition back to a non-final state and where the above Enter status has been plugged in.

## Support Including Column Headers in Sync Request Extract

In this release, a new parameter has been added to the Sync Request Extract batch process (F1-SYNEF): Add Column Header. Indicating "Y" in the parameter value includes a header record with the column names taken from the data area referenced in the snapshotDA element of the Sync record.

**Note:** This was also added to 4.3.0.5.0 as a hot fix. (Bug 27472229)

## Return All Errors On COBOL SQL Updates

In previous releases, only the duplicate error was handled and returned a duplicate error during a COBOL update. All other errors were ignored and returned OK.

In this release, all errors encountered during a COBOL update will be returned as error. The hot fix was done in 4.3 SP1.

## Removal Of Product Specific Domain Templates

In past releases Oracle Utilities Application Framework domain templates were shipped with the product to allow for a standard installation experience using Oracle WebLogic Configuration Wizard. The use of the domain template with the wizard automates the creation of the WebLogic domain used to house the Oracle Utilities products. Given the standardization efforts between Oracle Utilities Application Framework and the Oracle WebLogic team, it is now possible to use the standard Oracle WebLogic domain templates supplied with Oracle WebLogic with Oracle Utilities Application Framework products. Therefore product specific templates are no longer necessary and are no longer shipped with the product. Customers can use the standard templates with a few minor post installation steps.

This enhancement allows greater flexibility when creating the domain for the product in terms of the domain setup as well when in the installation process the domain creation can occur. Details of the new process are documented in the Installation Guide and a new whitepaper covering optimization of the Oracle WebLogic domain for Oracle WebLogic 12.2.x.

Customers can continue to use the WebLogic Domain Builder as in previous releases, post installation to create custom domains, if necessary.



## Deprecated Notices for OUAF Version 4.3.0.6.0

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This section describes items that are deprecated in this release or planned for deprecation in a future release of Oracle Utilities Application Framework. It contains the following topics:

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

### Deprecated Functionality in This Release

The following functionality is deprecated in this release:

- XML Application Integration (XAI) and Multi-Purpose Listener MPL
- Batch on WebLogic
- Ability to Add Child Rows for Several Maintenance Objects

#### XML Application Integration (XAI) and Multi-Purpose Listener MPL

The XML Application Integration (XAI) Servlet and Multi-Purpose Listener (MPL) have been removed in this release. Customer migrating to this release should migrate to the recommended alternatives as recommended in the Oracle Service Bus Integration (Doc Id: 1558279.1) and Migrating from XAI to IWS (Doc Id: 1644914.1) whitepapers available from My Oracle Support.

As part of this effort, the user documentation has been updated to remove all the topics related to the XAI servlet and MPL.

#### Batch on WebLogic

Batch on WebLogic node is no longer supported. Note that this was an implementation that was possibly usable for GBUCS; however, the implementation is no longer viable used in the new OCI (Oracle Cloud Infrastructure - aka BMC).

#### Ability to Add Child Rows for Several Maintenance Objects

There are several maintenance objects where base delivered entries are supplied by the product. In some use cases, implementations can extend the base functionality by adding child rows to the base delivered configuration. For example, implementations may add algorithms to a base delivered business object. However, there are some use cases where implementations are not able to extend base functionality by adding child rows. For example, implementations are not able to add additional algorithm type parameters to a base delivered algorithm type. For several use cases, there was validation missing and has been added in this release.

If your implementation has added child rows for the maintenance objects in this list, they will be removed at upgrade time.

- Algorithm Type - Parameters
- App Service - Access Mode
- Maintenance Object - Table.
- Navigation Option - Context Fields.
- Script - Step Prompt
- Table - Field
- Table - Constraint / Field
- To Do Type - Sort Keys
- To Do Type - Drill Keys
- Zone Type - Parameters

## Deprecated Objects in This Release

The following object is to be deprecated in this release:

- The table **F1\_IWS\_SVC\_OPER\_L** is dropped in this release.

## Deprecation Planned for Future Releases

The following features or items are scheduled to be removed in a future release of Oracle Utilities Application Framework:

- Process Flow Terminology Considerations
- Context Menu Navigation When Field Doesn't Match Context Field

### Process Flow Terminology Considerations

The new process manager functionality introduces the terms Process Flow and Process Flow Type. In PSRM, there is already an MO pair for Process Flow and Process Flow Type. These are generic MOs provided for clients to use for implementing functionality that we didn't supply the MOs out of the box. This was created to overcome the limitations in-case (which was COBOL and not using the new BO driven standards) and Fact (which doesn't supply a "type" object).

PSRM will need to consider whether or not existing clients would use both the PSRM Process Flow AND would also want to adopt this new FW feature. It seems unlikely. Hopefully you can tackle the problem when it arises.

In the short term, maybe PSRM should plan to add a simple note to the documentation to say "The process flow described here should not be confused with the process flow object provided in the FW product..." etc. Note that, like Service Task, the plan is not to put the transactional Process Flow on any FW owned menu so that edge products can choose where it goes. This should help avoid confusion for PSRM clients.

## Context Menu Navigation when Field Doesn't Match Context Field

In new style pages, when a context menu is configured, the system tries to find the right data to pass by making a match on the Context Field of the nav option with the mapField name or mdField name of the element you are clicking. If it doesn't match, it tries to find it other ways.

- One attempt is to see if the element's field (in mapField or mdField) refers to a Base Field and if that field matches.
- Another attempt is to try to find another element in the schema that has a mapField or mdField that matches.

This is different from straight FK ref hyperlink navigation because context menu navigation supports bringing additional data - not just the PK. We found that the above two attempts were in the reverse order. As a result there was an issue in the following situation:

```
<bo suppress="true" fkRef="F1-BUSOB" mapField="BUS_OBJ_CD"
  dataType="string"/>
<snapshotBo fkRef="F1-BUSOB" mapField="SNAPSHOT_BO_CD"
  uiHint:select="ss:F1-RetBOs" uiHint:selectIn="selectBO/mo:'F1-
  STSSNPSHT';"
  uiHint:selectOut="valuePath:selectBO/results/bo;descPath:selectBO/re
  sults/description" dataType="string"/>
```

The above is a common situation for our 'type' objects. The type has its own BO and it also references a snapshot BO. When clicking on the context menu for the snapshot BO, it didn't make a match on the SNAPSHOT\_BO\_CD. So it would look for another schema element with a match on the field name before checking the base field name of the SNAPSHOT\_BO\_CD was checked. The code has been fixed to check the element's base field before looking for another element in the schema with a matching name. As part of this, it was found that several FW owned fields that represent a BO were not properly referring to BUS\_OBJ\_CD as its Base Field. Edge products may have this same situation.

## Technical Recommendations

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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

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At present, we support upgrade from Oracle Revenue Management and Billing Version 2.7.0.0.0 to 2.7.0.1.0. For more information on how to upgrade, refer to the following documents which are available on OTN:

- *Oracle Revenue Management and Billing Version 2.7.0.1.0 Upgrade Guide*
- *Oracle Revenue Management and Billing Version 2.7.0.1.0 Upgrade Path Guide*

For upgrading from any other version of Oracle Revenue Management and Billing other than 2.7.0.0.0, consult with Oracle Support, Oracle Partner, or Oracle Consulting that may be supporting your implementation and upgrade process.

# Deprecation Notices for ORMB Version 2.7.0.1.0

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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 charges**. 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](#).

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

Object Type	Object Name								
Algorithm Type	C1_CURALG, C1-MDOV-BILL, C1-MDOV-BSEG, C1-MDOV-ONSA, SA_DERV_POPC								
Feature Configuration	C1_EX_ROUND								
Option Types	Currency Conversion Algorithm and Payment Distribution To-Do (from the <b>C1_MLTCURACC</b> feature configuration)								
Table Columns	<p>The following table lists the columns which will be deprecated in the next release:</p> <table border="1"> <thead> <tr> <th>Table Name</th> <th>Column Name</th> </tr> </thead> <tbody> <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> </tbody> </table>	Table Name	Column Name	CI_ACCT_PER	BILL_RTE_TYPE_CD, RECEIVE_COPY_SW, BILL_FORMAT_FLG, NBR_BILL_COPIES, CUST_PO_ID, NOTIFY_SW, and BILL_ADDR_SRCE_FLG				
Table Name	Column Name								
CI_ACCT_PER	BILL_RTE_TYPE_CD, RECEIVE_COPY_SW, BILL_FORMAT_FLG, NBR_BILL_COPIES, CUST_PO_ID, NOTIFY_SW, and BILL_ADDR_SRCE_FLG								
Batch Control	<p>GLASSIGN, GLASSGN1, GLASSGN2, C1-IAENT, C1-DARSU</p> <p>The following table lists the new batch controls that you must use instead of the above batches:</p> <table border="1"> <thead> <tr> <th>Batch Control (Planned for Deprecation)</th> <th>New Batch Control</th> </tr> </thead> <tbody> <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> </tbody> </table>	Batch Control (Planned for Deprecation)	New Batch Control	GLASSIGN, GLASSGN1, GLASSGN2	C1-GLASN	C1-IAENT	C1-IDENT	C1-DARSU	C1-DRSUA
Batch Control (Planned for Deprecation)	New Batch Control								
GLASSIGN, GLASSGN1, GLASSGN2	C1-GLASN								
C1-IAENT	C1-IDENT								
C1-DARSU	C1-DRSUA								
View	CI_EFF_ACCT_PRICING_VW, CI_EFF_PER_PRICING_VW								
Business Service	<p>C1-EffectivePricing, C1_PriceParmBS</p> <p><b>Note:</b> Instead of using the <b>C1-EffectivePricing</b> business service, use the <b>C1-GetEffectivePricing</b> business service to view the data on the <b>Pricing (Account)</b> and <b>Pricing (Person)</b> screens. Similarly, instead of using the <b>C1_PriceParmBS</b> business service, use the <b>C1_PRICE_PARM</b> business object to add, edit, copy, and delete a parameter.</p>								
Service Program	EFFPRCSERVICE, C1_PRICEPARM								

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

## Product Documentation

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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 2.7.X.X.X Documentation Library) using the following URL:

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



# Media Pack Download

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Oracle Financial Services Revenue Management and Billing Version 2.7.0.1.0 and Oracle Insurance Revenue Management and Billing Version 2.7.0.1.0 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 2.7.0.1.0 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 2.7.0.1.0** or **Oracle Insurance Revenue Management and Billing 2.7.0.1.0** option. The **Selected Software** link appears next to the **Download History** button.
6. Click the **Selected Software** link. A page appears.
7. Select the required platform from the **Platforms/Languages** list.
8. Click **Continue**. A page appears with the license agreement.
9. Scroll and read the full license agreement and then click the **I have reviewed and accept the terms of the Commercial License, Special Programs License, and/or Trial License** option.
10. Click **Continue**. The **File Download** page appears.
11. Select the required package that you want to download from the media pack and then click **Download**. The **Save As** dialog box appears.
12. 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
<a href="#">29008355</a>	<a href="#">28240716</a>	PAYMENT EVENT SUMMARY RESULTS SHOULD BE SORTED BY PAYMENT DATE
<a href="#">29007980</a>	<a href="#">28912287</a>	PRICING GROUP SETUP DISPLAYS MULTIPLES OF THE SAME RECORD AND LINE ITEMS ELIGIBLE FOR STOP LOSS
<a href="#">29003605</a>	<a href="#">28578620</a>	EXCHANGE RATE UI -SEARCHING WITH 'EFFECTIVE START DATE' DOES NOT FILTER RESULTS
<a href="#">28974652</a>	<a href="#">28485947</a>	APPROVAL WORKFLOW COMPARISON SCREEN IS SHOWING WRONG FIELDS HIGHLIGHTED
<a href="#">28956026</a>	<a href="#">28895043</a>	REFUND REQUEST UPLOAD PERFORMANCE ISSUES
<a href="#">28955950</a>	<a href="#">28878101</a>	PATCH 28743727 - OFFSET REQUEST PERFORMANCE ISSUES - DID NOT RESOLVE ISSUE
<a href="#">28923459</a>	-	CONTACT INFORMATION MISSING IN PERSON INFORMATION SCREEN AND AMPERSAND CHARACTER IS NOT ALLOWED
<a href="#">28883753</a>	<a href="#">28860893</a>	ERROR IN BILL SEGMENT GENERATION FOR ECR CONTRACT WHEN THE PERSON HIERARCHY CONTAINS CYCLIC DATA
<a href="#">28855164</a>	<a href="#">28853712</a>	UNABLE TO EXPORT DIVISION USING CMA TOOL
<a href="#">28854521</a>	-	STOP LOSS ACCUMULATION IS NOT INDEPENDENT BY PRICING RULE TYPE.
<a href="#">28799917</a>	<a href="#">28568232</a>	INCORRECT REFUND ELIGIBLE AMT FOR BX THAT HAS OPEN MATCH EVENT WITH ANOTHER ADJ
<a href="#">28799797</a>	<a href="#">28720149</a>	WRONG TRANSACTION VOLUMES SHOWN ON FEED MANAGEMENT DASHBOARD SCREEN
<a href="#">28799350</a>	<a href="#">28518711</a>	SERVER CRASHES WHEN USER TRIES TO DO PRICE LIST PRICING.
<a href="#">28784925</a>	<a href="#">28406714</a>	POSTPROC PERFORMANCE ISSUE DUE TO SEARCHING POST PROCESSING PRICE ASSIGNMENT FOR ALL ELIGIBLE PRICE ITEMS
<a href="#">28784836</a>	<a href="#">28608634</a>	MULTIPLE PRE-COMPL REVIEW ALGO CAUSING SQL ERROR DURING BILL CREATION
<a href="#">28784715</a>	<a href="#">28151514</a>	OVERDUE PERF DEGRADE DUE TO ACCT UPDATING BO_DATA_AREA WITH 9999 SPACE CHARS
<a href="#">28727408</a>	<a href="#">28727385</a>	FORWARD PORT : BUG 28727385-UNABLE TO MAP DIVISION IN DIVISION PRICE ITEM NODE(DIVPRICEITEM) IN PRICE ITEM B
<a href="#">28711431</a>	<a href="#">28683674</a>	FORWARD PORT : BUG 28683674-FILE UPLOAD FOR APPROVAL TRANSACTION WITH LARGE SIZE
<a href="#">28676249</a>	<a href="#">28676214</a>	FORWARD PORT : BUG 28676214-MAXIMUM OPEN CURSORS ERROR IN BILLINGWRAPPERSERVICE

Bug Number	Copy of (Base Bug)	Description
<a href="#">28456432</a>	<a href="#">28409641</a>	PRICE COMPUTATION OF POSTPROC TYPE PRICE ASSIGNMENT NOT CONSIDERING CURRENCY CON
<a href="#">28442467</a>	<a href="#">28350825</a>	PREBILLCOMPLETIONREVIEW ALGO ISSUE OF INVOKING, SERVERMSG AND NULLPOINTEREXCEP
<a href="#">28431187</a>	<a href="#">28268611</a>	ALGORITHM-C1-APPTXNBAS(APPROVAL WORKFLOW FOR BASESCREENS)THROWS NULLPOINTEREXCEP
<a href="#">28422653</a>	<a href="#">28414594</a>	FORWARD PORT : BUG 28414594-FILE UPLOAD FAIL FOR SPECIAL CHAR IN FILE, BUT ORMB UI ALLOWS SAME SPECIAL CHAR
<a href="#">28400455</a>	<a href="#">27953374</a>	DEAGG IS DIS AGGREGATING THE TXN'S THAT ARE LINKED TO CANCELED BILLABLE CHARGES
<a href="#">28400320</a>	<a href="#">28145323</a>	C1-TXCNC PERFORMANCE ISSUE
<a href="#">28326953</a>	-	{INFO}ADDITIONAL ATTRIBUTES REQUIRED AT ACCRUAL DETAIL LEVEL FOR BILL SEG ACCRUA
<a href="#">28253759</a>	<a href="#">27842108</a>	C1-IDENT RUN TOOK THREE HOURS TO COMPLETE
<a href="#">28047525</a>	<a href="#">28004831</a>	ERR DURING ACCOUNT CREATION WHEN ACCOUNTPERSONROUTING_CHANDLER IS PRESENT
<a href="#">28026787</a>	<a href="#">27972278</a>	LTRPRT JOB FAILED
<a href="#">28026518</a>	<a href="#">26968806</a>	OVERLAPPING OF SECTIONS IN FUNDING REQUEST UI ON CHANGING RESOLUTION
<a href="#">27918738</a>	-	ACCRUAL DETAIL RECORDS CANNOT BE TRACED TO THE TRIAL BILL SEGMENT
<a href="#">27877650</a>	-	EXPORT TO EXCEL - PRICEITEM ASSIGNED TO PRICELIST NOT AVAILABLE
<a href="#">26938315</a>	<a href="#">25969672</a>	BILLING BATCH PERFORMANCE ISSUE DUE TO HIBERNATE JOIN-FETCH SQLS
<a href="#">19288129</a>	-	OVERDUE PROCESS (ADMOV) SHOULD BE PARAMETERIZED BY DIVISION
<a href="#">29041011</a>	<a href="#">28982190</a>	DUPLICATE BILL SEGMENT CREATED FOR SPLIT COVERAGE PERIOD
<a href="#">29003568</a>	<a href="#">28357328</a>	EXPORT TO EXCEL - PRICEITEM ASSIGNED TO PRICELIST NOT AVAILABLE
<a href="#">28977132</a>	<a href="#">28676722</a>	PREMIUM HOLIDAY - UNABLE TO APPLY
<a href="#">28977084</a>	<a href="#">28528860</a>	INVALID BIND VALUE ROW FOR THE 'ALL BILLABLE CHARGE' SELECTION TEMPLATE
<a href="#">28977062</a>	<a href="#">28285259</a>	PAYOR ACCOUNT NOT DEFAULTING WHEN PAYMENT EVENT SUMMARY ACCESSED VIA ACCOUNT CON
<a href="#">28977032</a>	<a href="#">28177256</a>	COMPARE UI FOR APPROVE PRICE ASSIGNMENT IS NOT DISPLAYING PROPERLY
<a href="#">28974280</a>	<a href="#">28823367</a>	ACCOUNT BILL/PAYMENT HISTORY SCREEN NOT HIGHLIGHTING THE UNPAID INVOICE
<a href="#">28974220</a>	<a href="#">28226405</a>	NO WARNING/ERROR IF ENTERED STEP TIERS/ THRESHOLD RANGES ARE WITH GAPS /OVERLAPP

Bug Number	Copy of (Base Bug)	Description
<a href="#">28974156</a>	<a href="#">28569202</a>	QUERY TIMEOUT ISSUE DURING ELIGIBLE ACCOUNTS/PERSONS SEARCH ON PRICELIST UI
<a href="#">28974135</a>	<a href="#">28534694</a>	C1-TXNIP AND C1-TXNEX TFM BATCHES RUN LONG WHEN TXN_DETAIL_IDS HAVE WIDE GAP IN
<a href="#">28970745</a>	<a href="#">28393001</a>	APPROVE PRICE ASSIGNMENT : APPROVAL SCREEN DOES NOT SHOW EXISTING PRICING DETAIL
<a href="#">28970652</a>	<a href="#">28182139</a>	BILL SEGMENT GENERATED ERROR AFTER APPLYING PATCH ABOUT BILL SEGMENT ERROR FOR RECURRING BILLABLE CHARGES
<a href="#">28922839</a>	<a href="#">28889353</a>	AR CENTRAL THROWING ERROR -
<a href="#">28920649</a>	<a href="#">28644354</a>	UNINTENDED ADDRESS OBJECT IS CREATED WITH CREATION OF NEW PERSON.
<a href="#">28865071</a>	<a href="#">28860150</a>	WHEN CREATING PRICING RULE, START DATE SHOULD BE BLANK
<a href="#">28840250</a>	<a href="#">28782812</a>	TRANSACTION RECORD TYPE AND DESCRIPTION NOT SHOWING ON TRANSACTION RECORD TYPE UI ON EDIT SCREEN
<a href="#">28828234</a>	<a href="#">28828496</a>	USER SHOULD BE ABLE TO ENTER A NEGATIVE VALUE IN PRICING RULE FEES
<a href="#">28819916</a>	<a href="#">28743848</a>	JOIN ON FT PARENT ID AND ADJUSTMENT TYPE CODE SLOWS DOWN BILLING
<a href="#">28819910</a>	<a href="#">28589433</a>	DIVISION OPERATOR NOT WORKING FOR NEGATIVE NUMBER - C1-RATECALC
<a href="#">28817264</a>	<a href="#">28809222</a>	BSGENREG THREW EXCEPTION WHEN THERE IS NO BILLABLE CHARGES FOR THE BILLING CYCLE
<a href="#">28817169</a>	<a href="#">28506864</a>	REQUEST SEARCH RESULTS NOT FILTERED BY USER ID VALUE - SHOWS 0 RESULT
<a href="#">28784799</a>	<a href="#">28512250</a>	BILL INFORMATION (HEALTHCARE) INCOMPLETE, INCONSISTENT AND INCORRECT DATA
<a href="#">28784323</a>	<a href="#">28644640</a>	ERROR IN ACCRUAL REVERSAL BATCH JOB WHILE PROCESSING ZERO AMOUNT ACCRUAL DETAIL
<a href="#">28778359</a>	<a href="#">28626521</a>	BILLING/FT BILLING AMOUNT ROUNDING ISSUE
<a href="#">28773408</a>	<a href="#">28368132</a>	ADHOC BILLING BATCHES NOT PICKING UP RECORDS WHEN NON-MANDATORY FIELDS NOT ADDED
<a href="#">28773338</a>	<a href="#">28254944</a>	FROM CURRENCY FIELD IS DISPLAYING BLANK ON 'FX RATE' APPROVAL UI
<a href="#">28767901</a>	<a href="#">28275352</a>	PAYMENT PORTAL ZONE C1-PAYPTL QUERY NEEDS PERFORMANCE TUNING
<a href="#">28767869</a>	<a href="#">28379255</a>	UNABLE TO DELETE THE USER FROM ORMB APPLICATION
<a href="#">28767839</a>	<a href="#">28578670</a>	'EFFECTIVE START DATE' FIELD IS APPEARING TWICE IN EXCHANGE RATE UI
<a href="#">28705748</a>	<a href="#">28705196</a>	AVAILABILITY OF FUTURE BILLING GROUPS IN BILL SORT UI
<a href="#">28693104</a>	<a href="#">28140164</a>	C1-BLGEN TRYING TO DELETE & RE-GENERATE FROZEN BILL SEGMENTS

Bug Number	Copy of (Base Bug)	Description
<a href="#">28683833</a>	<a href="#">28605790</a>	ELIGIBILITY CRITERIA APPLIED ON RATE COMPONENT IS NOT WORKING AS EXPECTED.
<a href="#">28664626</a>	<a href="#">28447864</a>	MULTIPLE RECORDS FOR SAME ACCRUAL ID IS DISPLAYED ON ACCRUAL UI
<a href="#">28664584</a>	<a href="#">26301304</a>	INVOICE CREATED BY BILLING BATCH EVEN THOUGH THERE WAS AN EXISTING INVOICE IN PE
<a href="#">28664524</a>	<a href="#">28284444</a>	C1-BSEGD TAKING LONG TIME IN RMB2.6.0.1 ENVIRONMENT.
<a href="#">28664472</a>	<a href="#">28321880</a>	ERROR IN ACCRUAL ADJUSTMENT CREATION DUE TO CURRENCY CONVERSION
<a href="#">28664403</a>	<a href="#">28295664</a>	OVERRIDE EXCHANGE RATE ALGORITHM SPOT ISSUES
<a href="#">28664274</a>	<a href="#">27914883</a>	C1-PNDBL NOT INVOKING ALGORITHM PLUGGED INTO CUSTOMERCLASS-BILL PROCESS ALGORITHM
<a href="#">28636871</a>	<a href="#">28067255</a>	BASE CODE CIPBXLB USED ON CUSTOM BATCH CONTROL IS CREATING ISSUE
<a href="#">28600280</a>	<a href="#">28066485</a>	TFM BILLABLE CHARGE CREATION DATE IS STAMPED AS TXN_DTTM INSTEAD OF SYSTEM DATE.
<a href="#">28600131</a>	<a href="#">28503197</a>	BILL COMPLETION BATCH (C1-BLCMP) FAILED - OUTFMEMORYERROR: GC OVERHEAD LIMIT.
<a href="#">28556536</a>	<a href="#">28107051</a>	C1-PNDBL ISSUE AFTER ACCOUNT BILL CYCLE CHANGE
<a href="#">28524557</a>	<a href="#">25143741</a>	PROBLEM IN AUDIT FUNCTIONALITY
<a href="#">28492251</a>	<a href="#">28467357</a>	ECR DISTRIBUTION SEQUENCE SHOULD BE PRE-DETERMINED - DEBIT FIRST THEN CREDIT
<a href="#">28473567</a>	<a href="#">28334557</a>	BILLING _ INIT-SQ IS NOT NUMERIC
<a href="#">28448263</a>	<a href="#">28415772</a>	USER CAN SEARCH PRICE ITEM OF ANOTHER DIVISION WITH NO ACCESS
<a href="#">28448073</a>	<a href="#">28441829</a>	NEW INDEX ON TABLE CI_APAY_CLR_STG NEEDED FOR PERFORMANCE PURPOSES
<a href="#">28355967</a>	<a href="#">27900493</a>	MATCH TYPE 4 MATCH BY BILL ID, PAY TARGET BILL DOES NOT CREATE SMALL WRITE DOWN
<a href="#">28289221</a>	<a href="#">28278586</a>	IN APPROVE TRANSACTION SCREEN USER NOT ABLE TO SEARCH WITH APPROVAL TRANSACTION
<a href="#">28255082</a>	<a href="#">27059814</a>	CHANGES TO BILL CANCEL BATCH MASSCNCL
<a href="#">28247174</a>	<a href="#">28220808</a>	SYSTEM VALIDATES PRESENCE OF RATE ON 'APPROVE' ACTION
<a href="#">28152967</a>	<a href="#">28120196</a>	ERROR "ENCOUNTERED EXCEPTION, SESSION MARKED FOR ROLLBACK" ON RESOLVE TRANSAC UI
<a href="#">28112760</a>	<a href="#">27628967</a>	USER LOGIN TIME NOT POPULATED WHEN USING SSO
<a href="#">28053233</a>	<a href="#">27873935</a>	RATE SCHEDULE'S RATE COMPONENT TYPE APPLY IS NOT WORKING.
<a href="#">28053227</a>	<a href="#">27846689</a>	EFFECTIVE PRICING TIER ALLOW OVERLAY WITHOUT ERROR MESSAGE.

## Known Issues

This section lists the known issues in Oracle Revenue Management and Billing Version 2.7.0.1.0 along with workarounds available to handle these issues. The known issues are grouped into the following categories:

- Banking
- Insurance
- Documentation

### Banking

Issue	<b>SEARCH RESULT FOR EXCHANGE RATE NOT DISPLAYED CORRECTLY</b>
Description	Searching for the lowest precision rate (0.000000000000000001/0.000000000000000011/0.000000000000000023) from the <b>Search Exchange Rate</b> zone results in displaying the rate in exponential format "IE -18".
Workaround	None

Issue	<b>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</b>
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 <b>Manage Products, Manage Price Lists, Add Product Pricing, Override Product Pricing,</b> and the <b>Edit Assigned Pricing</b> screens.
Workaround	None

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

Issue	<b>LOCALIZATION ISSUE WHEN MAKER AND CHECKER CHOOSE DIFFERENT LANGUAGES</b>
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	<b>PRE-VALIDATION ERROR MSG FOR INVOICING GROUP EVEN IF PRE-VALIDATION IS OFF</b>
Description	If you set the <b>Pre-validation</b> flag for both the groups (that is, <b>C1IGADD</b> and <b>C1IGUPD</b> ) to <b>N</b> , the validation will still be triggered before the approval workflow request is created.
Workaround	None

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

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

Issue	<b>VIEW RULE TYPE SCREEN - PERFORMANCE ISSUE</b>
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 <b>View Rule Type</b> screen.
Workaround	None

Issue	<b>C1-TXCNC BATCH GETS EXECUTED SUCCESSFULLY EVEN IF C1-TXNCU BATCH FAILS</b>
Description	<p>When you execute the C1-TXNCU batch with either of the following parameters during the cancellation process, an error occurs:</p> <ul style="list-style-type: none"> <li>• Transaction Source</li> <li>• Division</li> </ul> <p>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.</p>
Workaround	None

Issue	<b>ERRONEOUS RESULTS WHEN BILLABLE CHARGES ARE VOLUMINOUS &amp; SESSION TIMEOUT IS LOW</b>
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 <b>Bill</b> screen.



Issue	<b>CONDITIONAL APPROVAL WORKFLOW CANNOT BE USED WHILE COPYING A PRICE LIST</b>
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	<b>BILLS GENERATED FOR THE MEMBER ACCOUNT AND NOT FOR THE MASTER ACCOUNT</b>
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	<b>INCORRECT RESULTS IF DISAGGREGATION BATCHES NOT EXECUTED IN SEQUENCE</b>
Description	<p>During the transaction disaggregation process, you must execute the following batches in the specified order:</p> <ol style="list-style-type: none"> <li>1. Identify Affected Transactions (C1-IAENT)</li> <li>2. Process Non Aggregated Transactions (C1-PDTEXN)</li> <li>3. Clean Up (C1-TXNCU)</li> <li>4. Update Disaggregation Request Status (C1-DARSU)</li> </ol> <p>Otherwise, erroneous results might occur.</p>
Workaround	None

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

Issue	<b>AGGREGATION DOESN'T WORK IF DISAGG, ROLLBACK, &amp; CANCELLATION EXECUTED IN BETWEEN</b>
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	<b>POST PROCESSING SEGMENT NOT GENERATED IF THE PP MAX VALUE IS SET TO ZERO (0)</b>
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	<b>TWO CONCURRENT RUNS WHICH DERIVE SAME DIVISION FOR TRANSACTIONS DOES NOT WORK</b>
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	<b>ERROR OCCURS WHEN YOU DISPLAY BILL FOR A PRODUCT THAT BELONGS TWO RELATIONSHIPS</b>
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	<b>ERROR OCCURS IN CASE OF AN IGA SCENARIO WHILE EXECUTING THE C1-PNDBL BATCH</b>
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	<b>ACTIVE CONSTRUCTS DETERMINED ON CUT-OFF DATE INSTEAD OF CHARGES START &amp; END DATE</b>
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	<b>BILL SEGMENTS CREATED BUT FTS NOT CREATED WHEN ACCOUNTING CALENDAR NOT DEFINED</b>
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 <b>Bill</b> screen.
Workaround	None

Issue	<b>STATUS OF ALL LEGS CHANGED TO ERROR IF EXCHANGE RATE NOT AVAILABLE FOR ONE LEG</b>
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 <b>Error</b> .
Workaround	None

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

Issue	<b>MULTIPLE ISSUES ON SCREENS AND ZONES WHERE PAGINATION IS USED</b>
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	<p>To resolve these pagination related issues, you need to apply framework single fixes which are available for the following bugs:</p> <ul style="list-style-type: none"> <li>• 20302717 - PAGINATION PANEL SHOWING INCORRECT VALUE FOR TOTAL PAGES AND CUSTOM ICONS DO NOT</li> <li>• 20261532 - PAGINATION PANEL IS BEING DISPLAYED ON ORASEARCH OPERATION</li> <li>• 20113520 - BUTTON AND ICON DOESN'T APPEAR FOR PAGINATION IN F1-DE-MULQRY ZONES</li> <li>• 19941127 - PAGINATION FEATURE NOT WORKING FOR SUBQUERIES USED IN ZONE SQL</li> <li>• 19163528 - PAGINATION : PAGING KEY GETS TRIMMED AND RETURNS NO RESULTS</li> <li>• 18965501 - PAGINATION : ALL THE PAGES DISPLAY SAME SET RECORDS WHEN EQUAL OPERATOR IS USED</li> <li>• 18953690 - PAGINATION: ROW SERIAL NUMBERS RESET WHEN WE SORT COLUMN, AFTER "NEXT" CLICK</li> <li>• 18887503 - PAGINATION DOCUMENTATION NEEDS MORE DETAIL</li> <li>• 18639253 - PAGINATION - MISSING ICON, PAGE LABEL AND PAGE SIZE</li> <li>• 18491431 - DATA EXPLORER PAGINATION IS NOT CONSIDERING THE SQL COUNT LIMIT ZONE PARAMETER</li> <li>• 18399979 - PAGINATION - CRASHING IF PAGING COLUMN IS NOT DISPLAYED</li> <li>• 18399934 - PAGINATION - NOT WORKING FOR DESCENDING SORT</li> <li>• 20864137 - PAGINATION DOES NOT WORK PROPERLY WHEN PORTAL HAS MULTIPLE BROADCAST ZONES</li> </ul>

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

Issue	<b>ERROR OCCURS WHEN BIND VARIABLES USED IN IN AND NOT IN CLAUSES WITHOUT BRACKETS</b>
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	<b>C1-ADUP1 BATCH DOES NOT SUPPORT MULTI-CURRENCY ACCOUNTS FEATURE</b>
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	<b>ABLE TO CREATE BILLABLE CHARGES FOR AN INVOICE ACCOUNT</b>
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	<b>PARTIAL DATA UPLOADED WHEN USAGE RECORD HAS MORE THAN FIVE PASS THROUGH CHARGES</b>
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	<b>LENGTH OF UDF_CHAR_X IS 50 IN THE TFM ODI PACKAGE AND 60 IN THE DATABASE</b>
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	<b>ADJUSTMENT CREATED WHEN CONTRACT ID IS VALID, BUT ACCOUNT IDENTIFIER IS INVALID</b>
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	<b>ABLE TO GENERATE A BILL FOR A SETTLEMENT ACCOUNT FROM THE BILL SCREEN</b>
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 <b>Bill</b> screen.
Workaround	None

Issue	<b>ADJUSTMENT CREATED AGAINST PREVIOUS BILL IS NOT CONSIDERED DURING TRIAL BILLING</b>
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	<b>REOPEN BUTTON DISABLED WHEN C1-BILLSETT ALGORITHM ATTACHED ON CUSTOMER CLASS</b>
Description	If you attach an algorithm of the C1-BILLSETT algorithm type on the <b>Bill Completion</b> system event of the account's customer class, at present, you will not be able to reopen a bill.
Workaround	None



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

Issue	<b>UNABLE TO SAVE MULTIPLE CHARACTERISTICS FOR A PRICE ASSIGNMENT</b>
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	<b>UNABLE TO SCROLL LEFT TO VIEW TABS ON THE LEFT IN THE DIVISION SCREEN</b>
Description	The <b>Scroll Left</b> icon is not available in the <b>Division</b> screen. Therefore, you will not be able to scroll left if you are on the extreme right tab in the screen.
Workaround	None

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

Issue	<b>QUERY ZONE - HORIZONTAL SCROLL BAR SCROLLS THE SEARCH CRITERIA FIELDS</b>
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	<b>PERFORMANCE ISSUE ON CHANGING THE SEARCH BY FILTER OPTION</b>
Description	If you change the filter option from the <b>Search By</b> 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	<b>EFFECTIVE PRICING NOT VISIBLE IF C1_PER_REL HAS INVALID PERSON RELATIONSHIP TYPE</b>
Description	If you set the <b>Check on Feature Configuration</b> parameter in an algorithm which is created using the <b>C1-CUSRLALGT</b> algorithm type to <b>A</b> and add an invalid person relationship type in the <b>C1_PER_REL</b> feature configuration, the effective pricing is not inherited properly as expected.
Workaround	None

Issue	<b>RECORDS IN THE ADJUSTMENT DATA FILE NOT UPLOADED IN THE SPECIFIED SEQUENCE</b>
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	<b>PAYMENT/TENDER SEARCH- COLUMN HEADERS INCORRECT WHEN SEARCH FILTER IS CHANGED</b>
Description	If you search using a particular filter option in the <b>Payment/Tender Search</b> 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	<b>ERROR LOG FILES GENERATED ON EXECUTING BILLING AND C1-BLPPR BATCHES</b>
Description	In ORMB 2.7.0.1.0, the error log file is generated even when the following batches are executed successfully and bills are completed: <ul style="list-style-type: none"> <li>• BILLING</li> <li>• C1-BLPPR</li> </ul>
Workaround	None

Issue	<b>FIELD ALIGNMENT ISSUE ON BUSINESS OBJECT BASED GENERATED UI MAPS</b>
Description	You may observe that the algorithm description is not properly aligned corresponding to the <b>Algorithm</b> field in the following screens: <ul style="list-style-type: none"> <li>• Upload Request Type</li> <li>• Upload Adjustment Data File</li> </ul>
Workaround	None

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

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

Issue	<b>ELIGIBILITY CRITERIA ROW IS SKIPPED IF LEFT HAND SIDE PARAMETER IS NOT SPECIFIED</b>
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	<b>POST-PROCESSING BILL SEGMENT NOT REGENERATED WHEN YOU CLICK THE GENERATE BUTTON</b>
Description	An error occurs when you click the <b>Generate</b> button in the <b>Bill Segment</b> screen while regenerating the post-processing bill segment which is present on the pending bill.
Workaround	None

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

Issue	<b>RATE CALCULATED INCORRECTLY WHEN EXCHANGE RATE IS CHANGED DURING PRICING PERIOD</b>
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 <b>Pricing (Account)</b> screen might be incorrect when the exchange rate is different on the date when the results are fetched on the <b>Pricing (Account)</b> screen.
Workaround	None

Issue	<b>ENTRY NOT CREATED IN THE CI_REPRC_ENTITY_DTL TABLE ON EDITING A PRICE LIST</b>
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	<b>UNABLE TO DEFINE PARAMETER FOR FIELDS WHICH BELONG TO CHILD TABLES</b>
Description	At present, the system does not list the fields of child tables in the <b>Source Type Code</b> 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	<b>RATE NOT PERSISTED ON PRICE ASSIGNMENT DATE WHEN C1-PRICEACCOUNT INVOKED MANUALLY</b>
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	<b>PERSISTED DATA NOT GETTING REFRESHED ON EDITING PRICE ASSIGNMENT</b>
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	<b>CALENDAR (START DATE AND END DATE) POP-UP NOT ALIGNED PROPERLY</b>
Description	Calendar pop-up for start date and end date of Hold Request screen is displayed partially outside the screen.
Workaround	None

Issue	<b>PRICELIST EDIT VALIDATIONS NOT DEPENDENT ON ASSIGNMENT DATE OR ASSIGNMENT STATUS</b>
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	<b>STACKING IS NOT SUPPORTED FOR PRICE SIMULATION</b>
Description	Stacking is supported for bill generated through an Account. Pricing Simulation does not support stacking.
Workaround	None

Issue	<b>ADJUSTMENT AMOUNT IS NOT PICKED UP FOR PAYMENT IN NEXT BILL</b>
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	<b>IF USAGE ACCOUNT IS NOT PART OF ANY INVOICE CONSTRUCT, BILL IS NOT GENERATED.</b>
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	<b>SPLIT AUTO PAY NOT AVAILABLE ON SETTLEMENT CONSTRUCT ACCOUNT CREATION SCREEN.</b>
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	<b>SQL ERROR ON PRICE ASSIGNMENT SCREEN WITH ADHOC VALUE PASSED IN QUOTES.</b>
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	<b>BS ARE NOT GETTING PICKED FOR BATCH DATE AFTER BILLABLE CHARGE END DATE</b>
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	<b>RSDETAILS UPDATED INCORRECTLY WHEN PRICE COMPONENT FEES/RATE) PERSISTENCE EDITED</b>
Description	At present, rate schedule details after modification are displayed and not the details before editing.
Workaround	None

Issue	<b>FEES RATE CALCULATION PRE-PROCESSING ALGORITHM ISSUE</b>
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	<b>C1-ACFEES BATCH RUN WITH PRICE ITEM CODE AS THE ONLY PARAMETER.</b>
Description	C1-ACFEES batch should consider records of price assignment where FEES for same should persist.
Workaround	None

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

Issue	<b>C1-ACCOUNTFEES SERVICE ISSUE</b>
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	<b>PAYMENT STATUS REMAINS INCOMPLETE AND NO PAYMENT SEGMENT IS GENERATED EVEN WHEN TENDER CONTROL ID IS GENERATED</b>
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	<b>CHANGES MADE TO ACCOUNT ARE NOT UPDATED WHEN APPROVAL WORKFLOW IS ACTIVE FOR ACC</b>
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	<b>INBOUND WEB SERVICE DOES NOT TRIM LEADING &amp; TRAILING SPACES FROM INPUT PARAMETER</b>
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	<b>IF USER ADDED DEFER AUTO PAY DATE ON ACCOUNT THEN AUTO PAY WILL NOT WORK</b>
Description	If you manually add the date in the <b>Defer Auto Pay Date</b> field, the automatic payment functionality will not work for the account.
Workaround	None

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

Issue	<b>SEASONAL ADDRESS ID DOES NOT APPEAR IN THE BILL ROUTINGS TAB OF THE BILL SCREEN</b>
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 <b>Bill Routings</b> tab of the <b>Bill</b> screen. However, the seasonal address ID does not appear corresponding to the <b>Address ID</b> field.
Workaround	None

Issue	<b>ACCOUNT OVERRIDE ADDRESS IS NOT DELETED WHEN THE BILL ROUTING RECORD IS DELETED</b>
Description	Once you delete a bill routing record for a person from the <b>Account</b> screen where the <b>Address Source</b> field is set to <b>Account Override</b> , 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	<b>OVERRIDE DUE DATE NOT CALCULATED CORRECTLY IN CASE OF REINSTATEMENT</b>
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 <b>Days Until Due</b> parameter in the <b>C1-DUEDTFTCV</b> 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 <b>Days Until Due</b> parameter. It reflects the due date which is the next coverage period start date.
Workaround	None

Issue	<b>ERROR OCCURS ON USING A VALUE WITH HYPEN FOR A CHARACTERISTIC TYPE</b>
Description	At present, an error occurs on a screen where a characteristic value with hypen (-) is defined for a characteristic type.
Workaround	None

Issue	<b>AN ERROR OCCURS ON THE TEMPLATE SEARCH WINDOW</b>
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 <b>Search</b> icon corresponding to the respective field, the <b>Template Search</b> 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 <b>Template Search</b> window.
Workaround	None

Issue	<b>DISPUTE AMT AT BILL LEVEL INCORRECT WHEN BILL SEGMENT OF PREVIOUS BILL CANCELED</b>
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 <b>Dispute Details</b> zone is incorrect.
Workaround	None

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

Issue	<b>APAYCRET BATCH DOES NOT CONSIDER ECR ADJUSTMENTS CREATED ON PENDING BILL</b>
Description	You can only use an adjustment type where the <b>Print by Default</b> and <b>Impact Next Bill Balance</b> 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 <b>Automatic Payment Creation (APAYCRET)</b> batch creates automatic payment for the bill without considering the ECR adjustment.
Workaround	None

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

Issue	<b>SINGLE MATCH EVENT CREATED WHEN MULTIPLE BILL SEGMENTS OF A CONTRACT ARE NETTED</b>
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	<b>RECOGNITION SCHEDULE NOT GENERATED FOR BX/AX WHEN DRR FOR BS/AD DOES NOT EXIST</b>
Description	There might be situations when you have attached the <b>C1-REVRECSCH</b> 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	<b>AUTO PAY ID IS NOT UPDATED WHEN A REOPENED BILL IS COMPLETED</b>
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 <b>C1_FT_EXT</b> table. In addition, the entries in the <b>CI_BILL_ACH</b> table are not updated.
Workaround	None

## Insurance

Issue	<b>OLD INSURANCE FEATURES ARE NOT TESTED AND VERIFIED IN ORMB VERSION 2.7.0.1.0</b>
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	<b>PERFORMANCE ISSUE WHILE CREATING DEFERRED REVENUE RECOGNITION SCHEDULE</b>
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	<b>VALIDATION FOR FIDUCIARY CONTRACT MISSING DURING RECONCILIATION</b>
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	<b>TWO BILL SEGMENTS GENERATED WHEN REASON CODE EFFECTIVE DATE IS SAME AS BILL SEGMENT START DATE</b>
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	<b>UNABLE TO DISTRIBUTE THE REMAINING PAYMENT MANUALLY</b>
Description	If you have distributed partial payment automatically through the <b>Payment by Transaction</b> screen, the system does not allow you to distribute the remaining payment manually.
Workaround	None

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

Issue	<b>CHARACTERISTIC TYPES ARE NOT FILTERED BASED ON THE REASON CODE</b>
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 <b>Reason Code</b> .
Workaround	None



Issue	<b>RECONCILIATION DOESN'T WORK PROPERLY FOR PASS THROUGH BILLABLE CHARGES</b>
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 <b>WD-Match</b> . However, at present, in case of pass through billable charges, the system changes the status of the reconciliation object line to <b>Manual</b> instead of <b>WD-Match</b> .
Workaround	None

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

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

## Documentation

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

Issue	<b>ONLINE HELP NOT AVAILABLE FOR SOME SCREENS OR TABS</b>
Description	<p>At present, the online help is not available for the following screens:</p> <ul style="list-style-type: none"> <li>• Collection Type</li> <li>• Loan</li> <li>• Request</li> </ul> <p>In addition, the online help is not available for the following tabs:</p> <ul style="list-style-type: none"> <li>• Rate Schedule – SQ Rule Tab</li> </ul>
Workaround	None

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

Issue	<b>CONTENT ADDED IN STEPRESULT AND INFO TAGS IS DISPLAYED IN BOLD</b>
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	<b>COMMENTS NOT COPIED IN MAIL WHILE SUBMITTING FEEDBACK TO THE DOCUMENTATION TEAM</b>
Description	The feedback entered in the <b>Comments</b> 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

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