

# Oracle Fusion Cloud Subscription Management

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## **Implementing Subscription Management**



Oracle Fusion Cloud Subscription Management  
Implementing Subscription Management

F77891-08

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# Get Help

There are a number of ways to learn more about your product and interact with Oracle and other users.

## Get Help in the Applications

Some application pages have help icons  to give you access to contextual help. If you don't see any help icons on your page, click your user image or name in the global header and select Show Help Icons. If the page has contextual help, help icons will appear.

## Get Support

You can get support at [My Oracle Support](#). For accessible support, visit [Oracle Accessibility Learning and Support](#).

## Get Training

Increase your knowledge of Oracle Cloud by taking courses at [Oracle University](#).

## Join Our Community

Use [Cloud Customer Connect](#) to get information from industry experts at Oracle and in the partner community. You can join forums to connect with other customers, post questions, suggest [ideas](#) for product enhancements, and watch events.

## Learn About Accessibility

For information about Oracle's commitment to accessibility, visit the [Oracle Accessibility Program](#). Videos included in this guide are provided as a media alternative for text-based topics also available in this guide.

## Share Your Feedback

We welcome your feedback about Oracle Applications user assistance. If you need clarification, find an error, or just want to tell us what you found helpful, we'd like to hear from you.

You can email your feedback to [oracle\\_fusion\\_applications\\_help\\_ww\\_grp@oracle.com](mailto:oracle_fusion_applications_help_ww_grp@oracle.com).

Thanks for helping us improve our user assistance!





# 1 About This Guide

## Audience and Scope

Welcome to the Oracle Fusion Cloud: Implementing Subscription Management guide. If you're reading this guide, you're likely an implementor or administrator looking for information on how to implement Oracle Subscription Management.

This guide outlines the implementation and configuration steps required to configure, manage, and administer Oracle Subscription Management. It's also designed as a reference for configuring required Oracle Applications Cloud common features at a high level.

Keep in mind that this guide doesn't describe:

- The initial tasks to set up your cloud service. See the *Implementing Sales* guide for these tasks. Oracle assumes you have used this guide to complete your initial setup before performing the tasks in this implementation guide. You may also need to refer to the sales *Implementation Reference* guide for certain procedures and information.
- Tasks typically performed in the cloud service by Subscription Management users, such as sales representatives and subscription specialists. For those tasks, see the *Oracle Fusion Cloud: Using Subscription Management* guide.
- Most configuration tasks, such as adding fields, changing field labels, and the like. For these tasks, see the *Oracle Fusion Cloud Applications: Configuring Applications Using Application Composer* guide.

## Related Guides

In addition to this guide, you may want to consult other guides when setting up, configuring, and managing Oracle Subscription Management. Here are other guides that can help you understand more about the setups and functionality mentioned in this guide.

Guide	Description
<i>Oracle Fusion Cloud Subscription Management: Using Subscription Management</i>	Provides overviews of the product and subscription life cycle and details procedures for subscription users in the application.
<i>Oracle Fusion Cloud Sales Automation: Implementing Sales</i>	Explains how to implement a sales force automation solution using Digital Sales (Next Gen Sales) and CX Sales.
<i>Oracle Fusion Cloud Applications: Using Functional Setup Manager</i>	Describes how to use the Setup and Maintenance work area when implementing and configuring Oracle CX Sales.
<i>Oracle Fusion Cloud Sales Automation: Implementation Reference</i>	Provides a reference to conceptual information and procedures required to implement components and features of Oracle CX Sales.

Guide	Description
<i>Oracle Fusion Cloud Sales Automation: Using Sales</i>	Contains information to help sales managers, salespeople, and other sales end users when using Oracle CX Sales to perform their day-to-day tasks.
<i>Oracle Fusion Cloud Applications: Configuring Applications Using Application Composer</i>	Describes how to create and enhance objects and configure the user interfaces and navigation menus.
<i>Oracle Fusion Cloud Customer Experience: Securing Sales and B2B Service</i>	Contains information to help setup users and sales administrators configure access to Oracle CX Sales functionality and data.

## 2 Implementation Overview

### Start Implementing Subscriptions

To start an implementation of Oracle Subscription Management, create a user with the Application Implementation Consultant role (ORA\_ASM\_APPLICATION\_IMPLEMENTATION\_CONSULTANT\_JOB) and opt in to the offerings applicable to your business requirements.

Refer to the *Using Functional Setup Manager* guide to manage the opt-in and setup of your offerings.

See the *Implementing Sales guide topics* on setup users for more information on creating setup users.

### Subscriptions Functional Area

Use the Subscriptions functional area in the Sales offering to configure Oracle Subscription Management.

Here are the functional areas you must set up to enable the offering. For a full list of functional areas and features in this offering, use the Associated Features report that you review when you plan the implementation of your offering.

Functional Area	Description
Company Profile	Define and manage information about legal structure, financial reporting, common CRM business unit profile options, geographies, and currencies in which the company conducts business.
Users and Security	Set up your initial implementation setup users, sales users and hierarchy, and enable users to perform functions related to their roles.
Sales Foundation	Set up public unique identifier profile options.
Subscriptions	Manage configuration settings for the creation and management of Oracle Subscription Management.
Integrations	Configure integrations for extending Oracle Subscription Management.

#### Related Topics

- [Plan Your Implementation](#)
- [Using Functional Setup Manager](#)

### Where You Perform Subscriptions Setup Tasks

You mainly access two work areas to set up, configure, and manage Oracle Subscription Management: the Setup and Maintenance and Subscription Configuration work area.

## Setup and Maintenance Work Area

For most setup tasks, you use the Setup and Maintenance work area to access the setup pages associated with the component or feature. The Setup and Maintenance work area is also known as the Functional Setup Manager.

Here's the procedure to access the Setup and Maintenance work area:

1. Sign in as a user with access to the setup areas, such as the initial user, another setup user, or the administrator.

**CAUTION:** The administrator doesn't have the same setup permissions as a setup user. See the *Implementing Sales guide topics* on setup users for more information on creating setup users.

2. Navigate to **Setup and Maintenance**. The Setup page appears with an offering selected.
3. In the Setup and Maintenance work area, select the Sales offering. The Setup: Sales page appears with a list of functional areas.
4. In the list of functional areas, click the functional area that has the tasks you need to access.
5. In the list of tasks, find the task you want and select it.

**Tip:** If the task you want isn't in the list, click **Show > All Tasks** in the tasks filter.

6. Make your changes in the setup page for the task.

For more information about Functional Setup Manager, see the Oracle Applications Cloud Using Functional Setup Manager guide and the related topics.

## Subscription Configuration Work Area

Once you have done the setups in the Setup and Maintenance work area, go to the Subscription Configuration work area to configure these rules:

- Subscription Rules
- Event Models
- Entitlement Availability and Coverage
- Dynamic Matrix Configuration
- Asset Lifecycle Management
- Subscription Preview

You must have the **Subscription Specialist** role to access Subscription Management.

### Related Topics

- [Create Subscription Rules](#)
- [Create and Manage Subscription Profiles](#)
- [How do I create and manage subscription renewal templates?](#)
- [Create Standard Coverage](#)

# Oracle Fusion Cloud Applications System Requirements

Before using Fusion Applications in browsers and on your mobile devices, check the operating systems, supported browsers, and other computer requirements.

Here are the minimum versions you need for your browsers.

Browser	Minimum Version
Apple Safari	17
Google Chrome	117
Microsoft Edge	117
Mozilla Firefox	118

Oracle supports all the platforms that the browser vendor supports, as indicated in this table. For mobile device operating systems, Oracle supports only the most recent browser.

Operating System	Apple Safari	Google Chrome	Microsoft Edge	Mozilla Firefox
Android	Not applicable	Supported (Chrome for Android only, not native Android browser)	Not applicable	Not supported
iOS/iPadOS	Supported	Not supported	Not supported	Not supported
Mac OS X	Supported	Supported	Not applicable	Supported
Windows	Not supported	Supported	Supported	Supported

## Other Requirements

To use the Oracle ADF Desktop Integration add-in for Excel, you need the appropriate Windows and Excel versions. See: [Supported Platforms for ADF Desktop Integration](#) (Doc ID 2242428.1).

# Considerations for Migrating Data Between Environments

When you implement and maintain your Oracle Cloud applications, you almost always need to migrate data from one environment to another during the application life cycle.

For example, one typical use case in any enterprise application implementation is to first implement the applications in a development or test application environment and then deploy it to a production application instance after thorough testing. You use various methods or tools to accomplish the migration of data.

**Note:** When you migrate data to a new environment, the application doesn't retain all user-set values for various parameters. You need to add these values manually. For example, you need to set some profile option values again, even if they were previously set.

For more information on migrating data between environments, see the *Overview of Setup Data Export and Import* topic in the *Oracle Applications Cloud Using Functional Setup Manager* guide.

## Related Topics

- [Implementation Process](#)
- [How Copying Setup Configuration Helps](#)

# 3 Subscription Setup Checklist

## Create a Subscriptions Implementation Project

Create an implementation project to configure Subscription Management.

1. Navigate to My Enterprise and select **Offerings**.
2. On the Offerings page, select the Sales offering and click **Opt In Features**.
3. On the Opt In: Sales page, enable Subscriptions and click **Done**.
4. Go to the Setup and Maintenance work area.
5. Open the Tasks side panel and click **Manage Implementation Projects**.
6. On the Implementation Projects page, click **Create** to begin creating a project.
7. Enter your project name and click **Next**.
8. Expand Sales, include **Sales** and **Subscriptions**.
9. Click **Save and Open Project**.

Once you open the project, you can configure all the appropriate tasks.

## Define Legal Entities for Subscriptions

Define legal entities for use with subscriptions.

To define legal entities for use with subscriptions:

1. In your implementation project, go to the **Manage Legal Addresses** task.
2. Select a country from the Country drop-down list, as well as a new location.
3. On the Location Create page, enter the new location information.
4. Click **Save and Close**.
5. In your implementation project, search for the **Define Legal Entities for Sales** task list and open the **Manage Legal Entity** task.
6. On the Select Scope page, select **Manage Legal Entity**.
7. Select the **Create New** option from the Legal Entity drop-down list.
8. Click **Apply and Go to Task**.
9. Click **Create**.
10. On the Create Legal Entity page, select your country.
11. Enter the name of the legal entity and the identifier.
12. Optionally, select **Start Date**. When the start date is blank, the legal entity is effective from the creation date.
13. Optionally, select **End Date**.
14. Optionally, if your legal entity should be registered to report payroll tax and social insurance, select **Payroll statutory unit**.
15. Optionally, if your legal entity has employees, select **Legal employer**.
16. Optionally, if this legal entity isn't a payroll statutory unit, select an existing payroll statutory unit to report payroll tax and social insurance on behalf of this legal entity.
17. In the Registration Information section, select a legal address and enter **Legal Reporting Unit Registration Number**.
18. Enter the **EIN or TIN**.
19. Click **Save and Close**.

20. In your implementation project, select **Define Legal Entities for Sales** from the task list.
21. Click **Select and Add**. Search for and add these tasks to the Define Legal Entities for Sales folder: Manage Legislative Data Groups and Manage Legal Entity HCM Information.
22. Use the **Manage Legislative Data Groups** task to define at least one legislative data group for each country or territory where your enterprise operates. See the *Implementing Global Payroll* guide for more information. Select your legal entity and proceed.
23. On the Manage Legislative Data Groups page, click **Create**.
24. Enter the name of the legislative data group.
25. Select the country and currency.  

**Note:** You must enable the subscription currency conversion in the Subscription Details Layout section in Application Composer to use a currency different from the ledger currency.
26. Optionally, select the cost allocation structure.
27. Click **Submit** and then **Done**.
28. Use the Manage Legal Entity HCM Information task to verify information related to the payroll statutory units and the legal employer. See the *Implementing Enterprise Structure and General Ledgers* guide.
29. Click **Done**.

## Define Business Units and Assign Business Function, Ledger, and Legal Entity for Subscriptions

A business unit can perform many business functions. A business function represents a business process or an activity that can be performed by people working within a business unit and describes how to use a business unit.

A business unit can process transactions on behalf of many legal entities. For example, a payable invoice has an explicit legal entity field. Your accounts payable department can process supplier invoices on behalf of one or many business units. In some cases, your legal entity is inferred from your business unit that's processing the transaction.

1. In your implementation project, navigate to **Define Company Profile for Sales** and **Define Business Units for Sales**, and open the **Manage Business Unit** task
  - a. Click the create icon.
  - b. On the Create Business Unit page, enter the required information. In the **Default Set** field, select **Create**
  - c. Create a reference data set and click **OK**.
  - d. Select the reference data set created from the **Default Set** field and click **Save and Close**.
2. Navigate to **Define Company Profile for Sales** and **Define Business Units for Sales**. Click **Select** for the **Assign Business Unit Business Function** task to select the business unit you created as the task list scope.
  - a. Click **Select and Add** to set the BU you created as the task list scope.
  - b. Click the **Assign Business Unit Business Function** task.
  - c. Enter the required information and click **Save and Close**. Click the up arrow and select Subscriptions to go to the main folder structure.
3. Navigate to **Define Company Profile for Sales**, **Define Business Units for Sales**, and open the **Manage Business Unit Set Assignment** task. You can update or override the reference data set code for a particular reference data object.

### Related Topics

- [Overview of Multiple Business Units in Sales](#)



# Create and Manage Customers

You create customers to properly record and account for sales transactions, as well as to identify other attributes of the selling relationship.

Recording a sales transaction requires that a customer, stored as a party in Oracle Customer Data Management, has both a customer account and customer site with a bill-to business purpose.

To understand the role of a customer in the context of Customer Data Management, it's helpful to understand a few related concepts. Here are the key concepts related to customers and customer activities:

- Party
- Customer
- Customer Account
- Site
- Relationship

## Party

A party is an entity that can enter into a business relationship with another party, such as buying and selling goods or offering services. A party can be either an organization or a person. A party exists separately from any business relationship that it enters into with another party.

## Customer

A customer is a party, either an organization or a person, with whom you have a selling relationship. This selling relationship can result, for example, from the purchase of products and services or from the negotiation of terms and conditions that provide the basis for future purchases.

## Customer Account

A customer account represents the attributes of the business relationship that a party can enter into with another party. The customer account has information about the terms and conditions of doing business with the party.

For example, you can create a commercial account for purchases made by a company for internal use, and a reseller accounts for the purchases made by the same company for sales of your products to end users.

You can create multiple customer accounts for a party to maintain information about different categories of business activities. For example, to track invoices for different types of purchases, you can maintain an account for purchasing office supplies and another account for purchasing furniture.

You can also maintain multiple customer accounts for a customer that transacts business with more than one line of business in your organization.

You can share information about a party, such as profile information, creditworthiness, addresses, and contacts, across the customer accounts of the party. In addition, you can also maintain separate profiles and contacts, along with contact addresses and contact points, for each customer account.

## Site

A site is a point in space described by an address. A party site is the place where a party is physically located.

A customer site is a party site that's used in the context of a customer account. A single customer account can have multiple sites.

A customer address is a site that's used for billing, shipping, or other purposes that are part of the selling relationship. An identifying address is the party site address that identifies the location of the party. Every party has only one identifying address, but a party can have multiple party sites.

## Relationship

A party relationship is the role of the party in the context of another party. Examples include affiliate, subsidiary, partner, employee, or contact.

An account relationship between different customer accounts of a party allows for the sharing of billing, shipping, and payment information.

Here are the steps to define Organization Name, Accounts, and Sites:

1. Navigate to the **Setup and Maintenance** work area.
2. Search and select the Manage Customers task.
3. On the Manage Customers page, click **Create**.
4. On the Create Organization Customer page, enter the required information in the Account Address section.  
**Note:** The information in the Account Address section must match the information defined for Customer Account Site in the Manage Set Assignments for the Business Unit section.
5. Click **Save and Close**.
6. To enter additional accounts for a customer, click **Create** in the Account section and enter the required information on the Create Account page.
7. Click **Save and Close**.
8. To add sites associated with the account have created, click **Create** in the Sites section and enter the required information on the Create Account Sites page.
9. Ensure that there's at least one site with the **Purpose** set as **Bill to** or **Bill to and Ship to**.
10. Click **Save and Close**.

### Related Topics

- [How You Use Party Relationships](#)

## Define Party Roles and Contact Roles for Subscriptions

Party roles provide a way of specifying the roles of different parties in the subscription.

For example, a sales contract may include the customer, a partner, and the internal business unit selling the product or service. The application comes with predefined party roles, but you can create additional roles to suit your needs.

To define party roles, contact roles, and role sources:

1. In your implementation project, navigate to **Define Subscriptions** and open the **Manage Subscription Party Roles** task

2. Create new party roles as needed.
3. Navigate to **Define Subscriptions** and open the **Manage Subscription Contact Roles** task.
4. Create new contact roles as needed.
5. For each party role set up in the previous step, enter the required information for the associated contact roles.
6. Click **Save and Close**

## Define User as Resource

You can associate a user as a resource.

To associate a user as a resource:

1. Sign in to the application as an administrator or a setup user.
2. In the Navigator, select **Resource Directory**.
3. On the Resource Directory page, click the **Tasks** panel tab and select **Identify Resources**.
4. Search for the user you want to include as a resource.
5. Click **Add as Resource**.
6. Click **Done**.

### Related Topics

- [How do I enable desktop pages for Resource Directory?](#)
- [Overview of Managing Resources](#)

## Set Up User Statuses and User Transitions for Subscriptions

A subscription has predefined statuses that characterize its life cycle. In addition, you can define user statuses and their transitions.

For example, as a subscription specialist, you may want to pass the subscription for a more thorough review by the appropriate team, such as Legal, Financial, and Accounts. You can do this using the user statuses and transitions that you define.

To define user and status transitions:

1. Define user statuses and their transitions using the **Manage Subscription User Statuses and Transitions** task.  
**Note:** While defining user statuses, ensure that you select **Allow Assignment** for each of the user transitions. This enables you to assign the subscription to named assignees during a user transition.
2. Use the Event Models tasks from the Subscription Configuration work area to create new events and actions for the business object `oracle.apps.subscriptionManagementsubscriptionService.view.Subscriptionsvo`. You need to be in active sandbox to edit an existing event model.
  - a. Add a new state associated with the new user status, to the appropriate event model. The action associated with the Entry event of the new state is then set to update the user status code to the new user status.

- b. Add any other possible events for this new state.
  - c. Link to the existing state by adding a new event for the Draft state, so that your new status is available for a subscription in the Draft status.
3. Set these events up for each To and From state of the user transition. For predefined states, you can select from available events and actions. An example of an action could be a Groovy script.
4. Save this new state-based event model and specify the condition that can use it. For subscriptions of the specified condition, the user statuses and transitions that you create are available as Actions menu items. You can use these action menu items to pass a subscription between teams for review, before submitting the subscription for approval.

User statuses and transitions apply only to subscriptions that fulfill the conditions defined in the Event Model.

## Manage Subscription Profile Options

The Manage Subscription Profile Options task groups the profile options required for Subscription Management.

You can use this task to configure:

- `RCS_DEFAULT_UOM_CLASS_CODE_FOR_SVC_DURATION`: Specify the default UOM class for service duration units, and enable other applications to show the units of time assigned with this class.
- `OSS_COPY_SUBCR_MAP`: Specify the mapping file name to use when copying a subscription. The file is used to copy attributes and child objects when creating a copy of an existing subscription.
- `OSS_COPY_SUBCR_PRODUCT_MAP`: Specify the mapping file name to use when copying a subscription.
- `OSS_COPY_SUBCR_PRODUCT_SUSP_MAP`: Specify the mapping file name to use when copying a subscription. Specify the mapping file name to use when copying a subscription product during suspension. The file is used to copy attributes and child objects.
- `OSS_ENABLE_UI_ACTIONS`
- `OSS_PRICING_APPLICATION`: Specifies the pricing application that is used to price subscriptions.
- `OSS_USAGE_CHARGE_IDENTIFIER`: Identifies if a charge definition is of type: usage.

Here are the steps to access the **Manage Subscription Profile Options** task:

1. Sign in as a user with access to the setup areas.
2. Navigate to Setup and Maintenance work area.
3. Open the Tasks side panel and click **Search**.
4. Search and select the **Manage Subscription Profile Options** task.
5. Select a profile option you want edit.

## Manage Business Unit Access for Subscriptions

You can enable multiple business units (BU) for subscriptions based on your business needs.

The `HZ_DEFAULT_BU_CRM` and `HZ_ENABLE_MULTIPLE_BU_CRM` profile options can be used to manage business unit access.

- `HZ_DEFAULT_BU_CRM`: This profile option is used to set the name of the default business unit.

- **HZ\_ENABLE\_MULTIPLE\_BU\_CRM**: This profile option is used to enable or disable multiple business units. If you set the value to No, the business unit set in **HZ\_DEFAULT\_BU\_CRM** is the only business unit available for your organization. You can set the value of this profile option to Yes to ensure that all the BUs mapped to your organization, in addition to the default business unit, are available.

To enable multiple business unit access:

1. Sign in as a user with access to the setup areas.
2. Navigate to the Setup and Maintenance work area.
3. Search and select the **Manage Common CRM Business Unit Profile Options** task.
4. Select the **HZ\_DEFAULT\_BU\_CRM** profile option.
5. Click **Add** to set up the default business unit for your organization.
6. Click **Save and Close** to navigate back to the Manage Common CRM Business Unit Profile Options task.
7. Select **HZ\_ENABLE\_MULTIPLE\_BU\_CRM**.
8. Set the profile option value to **Yes**.
9. Click **Save and Close**.

#### Related Topics

- [Define Business Units and Assign Business Function, Ledger, and Legal Entity for Subscriptions](#)
- [Associate Business Units with Resource Organizations](#)

## Set Up Unit of Measure and Time Unit Mappings

### Overview of Unit of Measure and Time Unit Mappings

Subscription Management and Oracle Pricing refer to a common duration UOM class when pricing and charging subscription items.

You must create such a Duration UOM class and associate it with a profile option. You must also define the conversions between the various duration UOMs and base UOMs to have the subscription items charged and priced.

#### Related Topics

- [Define Unit of Measure Class](#)
- [Define Units of Measure for Subscriptions](#)
- [Define Subscription Time Unit Mappings](#)
- [Associate UOM Class with Duration Profile Option](#)

### Define Unit of Measure Class

To define the unit of measure class:

1. Sign in as a setup user and navigate to the Setup and Maintenance work area.
2. Open the **Manage Units of Measure** task.
3. Go to **Manage UOM Classes**.
4. Add a new row and create a new duration UOM class (for example, Time).

5. In **Base UOM Name** field, enter **day**.

## Define Unit of Measure

To define units of measure:

1. Sign in as a setup user and navigate to the Setup and Maintenance work area.
2. Open the **Manage Units of Measure** task.
3. Create new duration UOMs (for example, Day, Month, Year, Quarter, Bi-annual, etc.) with the duration UOM class Time.

**Note:** You don't need to set up UOM standard conversions.

## Associate UOM Class with Duration Profile Option

To associate the UOM class with the duration profile option:

1. Sign in as a setup user and navigate to the Setup and Maintenance work area.
2. Open **Manage Subscription Profile Options** task.
3. Navigate to the `RCS_DEFAULT_UOM_CLASS_CODE_FOR_SVC_DURATION` profile option and choose the **Time** duration UOM class.

**Note:** You must set up `RCS_DEFAULT_UOM_CLASS_CODE_FOR_SVC_DURATION` profile option for subscriptions to work.

## Define Subscription Time Unit Mappings

To define time unit mappings for the Manage Subscription Time Unit Mappings task:

1. In the Setup and Maintenance work area, open the **Manage Subscription Time Unit Mappings** task .
2. Enter UOM conversions between the User Unit (Duration UOMs – Day, Month, Year, Quarter, Bi-annual, etc., defined earlier) and Base Unit (Day, Month, or Year).
3. Click **Save and Close**.

### Things to Keep in Mind

- You can only use Day, Month, and Year as Base Unit values. You can't add new values to this list of values.
- Day is the lowest frequency, or periodicity, supported by Subscription Management.
- The conversion factor must be a whole number.
- Don't delete the User UOM after it's been used the same in Time Unit Mapping. This has to be done on the inventory Units of Measure side, not from the subscriptions side.

Consider the following example:

As a subscriptions setup user, you want to define Quarter as a time unit in duration and billing frequency. To do this:

1. Navigate to **Manage Unit of Measures** task to create a UOM class: Time, with two UOMs: Day and Quarter. Day is defined as a Base UOM here.
2. Navigate to the **Manage Subscription Time Unit Mappings** task to map Quarter from the User Unit to 3 months. Select **Month** from the Base Unit list, with 3 as a value for conversion. Map Day in User Unit to 1 day in the Base Unit. Select the **Active** check box.
3. As a result:
  - When you navigate to a subscription, you can see Quarter as a time unit in the duration and billing frequency.
  - If you enter a start date and select 3 months in duration, you can see the duration changes to 1 Quarter.

**Note:** Similarly, due to pricing dependencies on contracts, you must also define the time unit mappings using the Manage Contract Time Unit Mappings task. See [Define Contract Time Unit Mappings](#) for more information.

## Define Order Management Parameters

Specify the item validation organization to validate and display item for the subscription that the user enters for a business unit.

For example, let's assume that you create a record in the Item Validation Organization list, you set the Business Unit for this record to Vision Operations, and you set the Organization to Vision America. In this situation, only the items that are associated with Vision America are displayed when the user creates an order for Vision Operations.

**Note:**

- You must specify an item validation organization for each business unit. If you don't do this, then Subscription Management disables search for the item in each subscription that references a business unit that you don't specify. As an alternative, if you use the same master organization for every business unit, you can specify this organization in the Item Validation Organization parameter, and then set the Business Unit for this parameter to All Business Units.
- You can set the Item Validation Organization only for business units that Subscription Management associates with your login responsibility. If it associates your login responsibility with only one business unit, then it uses this business unit as the item validation organization.

To define Order Management Parameters:

1. In your implementation project, navigate to **Define Subscriptions** and open the **Manage Order Management Parameters** task.
2. Click **Item Validation Organization** in the General tab and select a business unit and organization from the drop-down lists. Add or remove rows, if necessary.
3. Click **Save and Close**.

## Manage Items

Use the Product Management application to create and manage included warranty, coverage, and subscription items.

### Create Subscription Items

To create a subscription item:

1. Go to **Product Management > Product Information Management**.
2. Expand the Tasks region and select **Create Items**.
3. On the Create Item page, select the organization, enter the number of items, and select the item class. Ensure that the selected list doesn't contain any template.
4. Click **Ok**.
5. Enter the item name and description.
6. Select the item status and lifecycle phase.
7. Ensure that the primary unit of measure is Each.
8. Select **Sales and Order Management**.
9. Set Customer Ordered to Yes.
10. Set Customer Orders Enabled to Yes.
11. Set Sales Product Type to Subscription.

## Define Pricing

You must first set up the pricing strategy for the subscription. The pricing strategy of the subscription is then retrieved when the Business Unit, Legal Entity, Contract Type, Number and Primary Party are entered during subscription creation.

When you add subscription lines, the pricing information is retrieved automatically.

Oracle Subscription Management supports:

- One-time charges, such as activation fees.
- Recurring charges, such as monthly membership charges.
- Usage-based charges, such as monthly cloud storage consumption fee.

The application identifies all the usage-based charges that you define using the charge prefix. You can configure this prefix using the profile option `OSS_USAGE_CHARGE_IDENTIFIER`.

Use this high-level procedure for quick setup of pricing lines, after your full pricing setups are done in Oracle Supply Chain Management (SCM) Cloud. See the related topics for additional details.

1. Sign in to the application with access to pricing administration.
2. Navigate to the **Pricing Administration** work area.
3. In the Pricing Rules tab, open the price list to which this item is associated.
4. Create a price list line for a coverage item. Click **Associated Items** to define unit price and percent price based on covered items.
5. Enter the recurring price details of the item.



6. Create a price list line for a subscription item.

7. Create different charges such as a one-time setup fee, recurring flat monthly fee, or recurring usage-based fee.

Here's a summary of the steps that you need to perform to set up pricing.

Setup	Where you find more information
Create a customer.	The Create and Manage Customers topic in the Subscription Management Setup Checklist chapter
Set up pricing charge definition, charge types, and charge subtypes.	The Manage Pricing Charge Definitions topic in Administering Pricing guide.
Create pricing segment.	The Manage Pricing Segments topic in Administering Pricing guide.
Create customer pricing profile.	The Manage Pricing Profiles topic in Administering Pricing guide.
Create subscription, coverage, and covered asset items.	The Pricing for Covered Items topic in Administering Pricing guide.
Create and approve price lists.	The Manage Price Lists topic in Administering Pricing guide.
Add items to price lists and add one-time, recurring, and usage charges.	
Create a pricing strategy. Add price lists with items and charges. Approve pricing strategy.	Manage Pricing Guidelines topic in Administering Pricing guide.
Assign a pricing segment and pricing profile to a relevant pricing strategy.	The Strategies topic in Administering Pricing guide.
For auto adjustments, go to Manage Discount Lists and create a new Discount List, add items with auto adjustment rules and approve. Add Discount List to pricing strategy that's being used.	The Manage Discount Lists topic in Administering Pricing guide.

For details, refer to the Oracle Supply Chain Management Cloud, Administering Pricing guide.

#### Related Topics

- [How To Use Multi-Currency Pricing In Oracle Subscription Management \(Doc ID 2679478.1\)](#)
- [Overview of Subscription Pricing](#)
- [Manage Pricing Charge Definitions](#)
- [Manage Pricing Segments](#)
- [Manage Pricing Profiles](#)
- [Pricing for Covered Items](#)
- [Currency Conversion Lists](#)

# Define Customer Billing Configuration

To define the customer billing configuration, you:

- Define payment terms
- Define business unit rules for accounting
- Manage transaction sources

Here's the high-level procedure for quick billing setup:

1. Go to the **Define Customer Billing Configuration for Subscription Management** task in **Define Subscriptions**.
2. Click each task within Define Customer Billing Configuration for Subscription Management.

- On the Manage Receivables Payment Terms page, define payment terms.

For details about payment terms, see the *Define Payment Terms* section in the Oracle Financials Cloud, Implementing Receivables Credit to Cash guide.

- On the Manage AutoAccounting Rules page, define rules based on your Business Unit.

For details about AutoAccounting, see the *Define AutoAccounting* section in the Oracle Financials Cloud, Implementing Receivables Credit to Cash guide.

- On the Manage Transaction Sources page, ensure that the predefined transaction source `ORA_Subscriptions` is present. You must use this transaction source when you run your program.
- On the Manage Transaction Types page, ensure that the predefined transaction types of `ORA_OSS_Credit Memo` and `ORA_OSS_Invoice` are available.

**Note:** Credit memos from Subscription Management are interfaced to Accounts Receivable only after populating the invoice details in subscription billing using the Fetch Subscription Invoice Information from Receivables process.

To change the credit memo type, change the value of Credit Memo Type by going to **Setup and Maintenance > Manage Transaction Types > Transaction Type Name**.

3. Click **Save and Close**.

To define subscription usage-based billing:

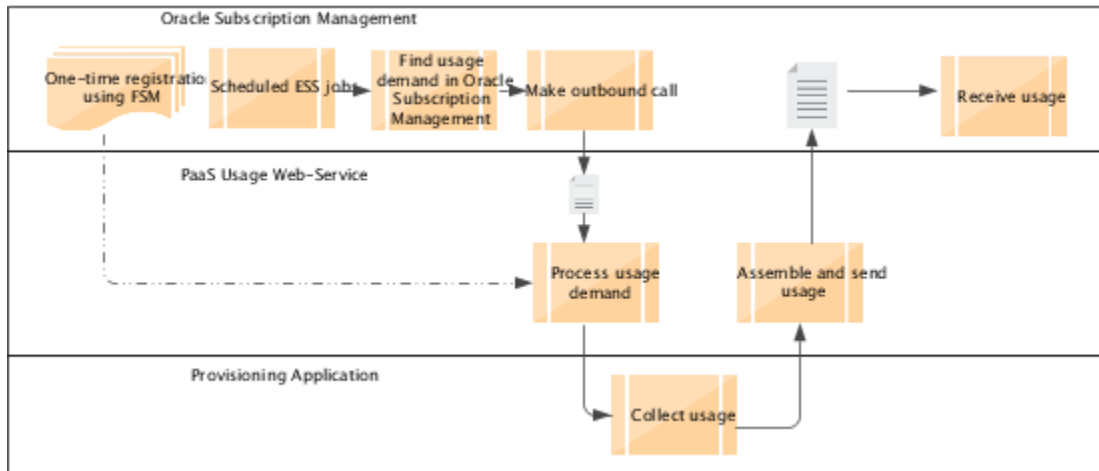
1. Go to the **Define Subscriptions** task and click **Register Third Party Applications for Subscription**.
2. Enter **Endpoint URL**, **User Name**, and **Password**.
3. Click **Save and Close**.

For details about managing auto-invoices, see the *Manage Auto-Invoice* section in the Oracle Financials Using Receivables Credit to Cash guide.

## Usage-Based Billing

Oracle Subscription Management supports a flexible usage rating model comprised of flat rate and tiered pricing. Complex usage rating models can be implemented using algorithm extensions. Usage is always billed in arrears.

This graphic describes usage acquisition and rating.



## Define AutoInvoice Line Ordering Rules

Define an AutoInvoice line ordering rule to organize the transaction lines belonging to a transaction created by the grouping rule in a specific order.

1. In your implementation project, navigate to **Define Subscriptions > Define Customer Billing Configuration for Subscription Management** and open the **Manage AutoInvoice Line Ordering Rules** task.
2. Click **Create**.
3. On the Create AutoInvoice Line Ordering Rule page, enter the rule name and effective date.
4. Click **Add Row** to create an ordering rule. In the ordering rule, enter the transaction attribute and its sequence.
5. Click **Done**.

## Define AutoInvoice Grouping Rules

Define an AutoInvoice grouping rule to identify the transaction attributes that must be identical in order to group transaction lines on the same transaction.

1. In your implementation project, navigate to **Define Subscriptions > Define Customer Billing Configuration for Subscription Management** and open the **Manage AutoInvoice Grouping Rules** task.
2. Click **Create** to create a grouping rule. Optionally, select ordering rule.
3. Enter name and effective date.
4. Click **Add Row** in the Transaction Classes section and select an appropriate transaction class.
5. Optionally, enter grouping characteristics for each transactional class.

### Related Topics

## Define Receivables Payment Terms

Use payment terms to identify due dates and discount dates on your customer transactions.

1. In your implementation project, navigate to **Define Subscriptions > Define Customer Billing Configuration for Subscription Management** and open the **Manage Receivables Payment Terms** task.
2. Click **Create**.
3. Select the payment term set.
4. Enter the name of your payment set.
5. Select the discount basis and effective date.
6. Select the installment option.
7. Enter the base amount.
8. Enter payment schedule and the discount for each payment schedule.

### Related Topics

## Define AutoAccounting Rules

Define AutoAccounting to specify how to determine the default general ledger accounts for transactions that you enter manually or import using AutoInvoice.

You must define AutoAccounting before you can enter transactions in Receivables. When you enter or update transactions, you can override the default general ledger accounts that AutoAccounting creates.

1. In your implementation project, navigate to **Define Subscriptions > Define Customer Billing Configuration for Subscription Management** and open the **Manage AutoAccounting Rules** task.
2. Click the **Create** icon.
3. Select your business unit and account type.
4. Click **Done**.
5. Select the business unit. In the Segments region, select the appropriate value source and constant value.

### Related Topics

## Subscription Copy Maps

The Subscription Management copy maps let you create a new subscription by copying attributes from an existing subscription.

The application comes with predefined copy maps to use when copying subscriptions and subscription products. You can also create your own maps to suit your business needs.

1. Sign in as a user with Application Composer access and activate a sandbox.

2. Go to: **Navigator > Configuration > Application Composer**.
3. In the Advanced Setup section, select **Copy Maps**.
4. Select **Copy Subscription** and click **Actions > Add**.
5. Enter the name of the map and click **Ok**.
6. In the Application Module Mapping section, enter the appropriate information, as shown in this table:

Field	What to Select
Map Group	Copy Subscription
To	SubscriptionManagementAM
From	SubscriptionManagementAM

7. In the Entity Mappings section, add a record for each view object that you're copying by completing the fields shown in this table:

Field	Description
To	Select the new view object that you're copying to.
From	Select the existing view object that you're copying from.
Query Name	Select one of the three query types: Unique Identifier, Join, or All Records.  If you select All Records, then don't enter any information in the remaining fields.
Query Attribute	If you selected either Unique Identifier or Join in the Query Type field, then select an attribute to use during runtime. The attribute is used to filter the records that are copied to the new object. For example, if you select Account Number, then during runtime, only the records matching the account number passed to the copy map engine are copied.
Joined View Object and Joined Attribute	If you selected Join in the Query Type field, then use these two fields to specify the following: <ul style="list-style-type: none"> <li>○ The view object to which this object is joined</li> <li>○ The attribute used as the basis of the join</li> </ul>

8. Select each line in the Entity Mappings section, and add records to the Attribute Mappings section for each of the attributes by completing the fields shown in this table:

Field	Description
To	Select the attribute to which the selected entity is copied.

Field	Description
Referenced View Object	If this attribute is a foreign key, select the view object joined by this foreign key. The application generates new foreign keys that keep the reference intact.
Primary Key	If this attribute is a primary key, select this check box. Instead of copying the value in the From object, the application generates a unique value for this key field in each record in the To object.
From	Select the attribute from which the selected entity is copied.
From Expression	Optionally, you can enter a Groovy expression to change the value in this attribute. For example, you want to change the value of the From object to some new value in the attribute of the To object. You can also enter a constant to fill this attribute with a constant value in every record of the To object.

9. Click **Save and Close**.

10. Specify the map in the OSS\_COPY\_SUBCR\_MAP profile option.

Similarly, you can create maps to copy subscription products. Use the default Copy Subscription Product map to create your map. After you've created your map, use the OSS\_COPY\_SUBCR\_PRODUCT\_MAP profile option to specify your map.

## Copy Map Entities

This table shows all the entities you can copy, along with the view object names for each one you want to map:

Entity to Copy	View Object Name
Subscription	Subscriptions
Product	SubscriptionProduct
Covered Levels	SubscriptionProductAssociations
Parties	Parties
Contacts	SubscriptionContacts
Product Charge	SubscriptionProductCharge
Product Charge Adjustment	SubscriptionProductChargeAdjustment
Product Charge Component	SubscriptionProductChargeComponent
Product Charge Tiers	SubscriptionProductChargeTiers
Product Bill Lines	SubscriptionProductBillLine
Product Bill Line Adjustment	SubscriptionProductBillLineAdjustments
Covered Levels Charge	SubscriptionProductAssociationCharges

Entity to Copy	View Object Name
Covered Levels Charge Adjustment	SubscriptionProductAssociationChargeAdjustments
Covered Levels Charge Component	SubscriptionProductAssociationChargeComponents
Covered Levels Charge Tiers	SubscriptionProductAssociationChargeTiers
Covered Levels Bill Lines	SubscriptionProductAssociationBillLines
Covered Levels Bill Lines Adjustment	SubscriptionProductAssociationBillLineAdjustments

See the Subscriptions areas in the *REST API for Sales and Fusion Service in Oracle Fusion Cloud Customer Experience* guide for more details on the attributes.

## Register Application Integration for Subscriptions

To retrieve usage-related data for billing, you need to register a third-party application in your subscription.

1. In your implementation project, navigate to the **Define Subscriptions** task and click **Register Application Integration for Subscriptions..**
2. Click **New**.
3. Enter the application name, integration type, endpoint URL, user name, and password.

## Define Subscription Cancellation Reasons

To define cancellation reason for your subscriptions:

1. In your implementation project, navigate to the **Define Subscriptions** task and click **Manage Subscription Cancellation Reasons**.  
The default cancellation reasons are available in the Subscription Cancellation Reasons lookup.
2. To add a lookup code, click **New** in the lookup codes region.
3. Enter the lookup code, display sequence, start and end dates, meaning, and description.
4. Click **Save**.

## Define Subscription Close Reasons

To define close reasons for subscriptions:

1. In your implementation project, navigate to the **Define Subscriptions** task and click **Manage Subscription Close Reasons**.  
The default close reasons are available in the Subscription Close Reasons lookup.
2. To add a lookup code, click **New** in the lookup codes region.
3. Enter the lookup code, display sequence, start and end dates, meaning, and description.

4. Click **Save**.

## Set Up Audit

You can set up audit to maintain a history of changes to your important data: what changed, who changed it, and when. You can use the audit tracking functionality on a subscription or subscription product to see the history of changes.

You can view the audit history to determine how a subscription or subscription product obtained its current value and to compare old and new values.

Auditing involves recording and retrieving information about the creation, modification, and removal of subscription attributes or subscription product attributes. So, if you want an attribute to be audited, you must add it to the list. The audit information is stored without any intervention of the user or any explicit user action. Along with the supported subscription attributes or subscription product attributes, you can also enable this feature for any custom attribute.

To set up the track audit feature:

1. Sign in as a setup user.
2. Navigate to the Setup and Maintenance work area.
3. Search and select the **Manage Audit Policies** task.
4. On the Manage Audit Policies page, in the **Audit Level** field, select **Auditing** and click **Configure Business Object Attributes** from the Oracle Fusion Applications option.
5. On the Configure Business Object Attributes page, in the **Product** field, select **Subscription Management**.
6. In the object hierarchy, select **Subscription** and **Subscription Product**.
7. In the Audited Attributes panel, click the **Create** icon to search and select subscription attributes or subscription product attributes. See the table later in this topic for a list of supported attributes.

**Note:** To enable and manage audit, ensure that you have a role with the assigned privilege Manage Audit Policies (FND\_MANAGE\_AUDIT\_POLICIES\_PRIV). For appropriate assignment of roles and privileges, check with your security administrator.

8. Click **Save and Close**.

Here are the subscription attributes and subscription product attributes that support auditing:

Subscription Attributes	Subscription Product Attributes
<ul style="list-style-type: none"> <li>Automate subscription line numbering</li> <li>Bill Service</li> <li>Billing Account</li> <li>Bill-to Site</li> <li>Communication Channel</li> <li>Contact Name</li> <li>Contract Layout Template</li> <li>Copy To</li> <li>Customer Acceptance</li> <li>Description</li> </ul>	<ul style="list-style-type: none"> <li>Accounting Rule</li> <li>Display Sequence</li> <li>Invoice Text</li> <li>Payment Method Code</li> <li>Payment Terms</li> <li>PO Number</li> <li>Renewal Type</li> <li>Ship-to Party</li> <li>Ship-to Site</li> <li>Transaction Type</li> </ul>



Subscription Attributes	Subscription Product Attributes
<ul style="list-style-type: none"> <li>• Enable Electronic Signature</li> <li>• Enable Renewal Reminders</li> <li>• Exemption Reason Code</li> <li>• Internal Approval</li> <li>• Language</li> <li>• Primary Salesperson</li> <li>• Renewal Process</li> <li>• Ship-to Party</li> <li>• Ship-to Site</li> <li>• Short Description</li> <li>• Tax Exemption Certificate Number</li> </ul>	<ul style="list-style-type: none"> <li>• Wire Number</li> </ul>

If you don't want to audit Subscription Management, stop the audit process by setting the Audit Level field to **None**.

#### Related Topics

- [Audit Policies](#)
- [Audit Reports](#)

## Set Up Subscription Reports Using Analytics Subtab

You can use the Analytics subtab to access the subscription reports directly within Subscription Management. This subtab is accessible from:

- Subscriptions landing page
- Subscription details page
- Product details page

The Analytics subtab is hidden by default, but you can make it available through the Page Composer and Application Composer.

Analytics give your team critical insights into your organization's business operations. For Subscription Management, you can get analytics on MRR, Subscriptions by Status, Number of Active Subscriptions with TVC, Top Subscriptions Product by Revenue, and much more.

### Enable the Analytics Subtab on the Subscriptions Landing Page

Here are the steps to enable the Analytics subtab on the Subscriptions landing page:

1. Sign in to the application as a setup user.
2. Ensure you're working in an active sandbox with the Structure and Page Composer tools enabled.
3. Click **Navigator** > **Configuration** > **Structures**.
4. On the Navigation Configuration page, select **Subscription Management** > **Subscription Management**.
5. On the Edit Page Entry: Subscription Management page, select **Tabs**.
6. In the **Name** column, select **Analytics**. In the **Visible** column, select **Yes** from the drop-down list.

**Note:** You can configure up to three analytics tab.

7. Go to the Subscription Configuration work area.
8. On the Subscriptions landing page, click the **Analytics** tab.
9. Click **Tools** > **Page Composer**.
10. Click the **Select** tab. A pane is displayed on the right side of the page.
11. Use this pane to add the required transactional or analytical business reports to the **Analytics** tab.
12. Publish the sandbox according to your company's business practices.

## Enable the Analytics Subtab on the Subscription Details Page

Here are the steps to enable the Analytics subtab on the Subscription details page:

1. Sign in to the application as a setup user.
2. Ensure you're working in an active sandbox with the Structure and Page Composer tools enabled.
3. Click **Navigator** > **Configuration** > **Application Composer**.
4. On the Application Composer page, select **Objects** > **Standard Objects** > **Subscription** > **Pages**.
5. In the Details Page Layouts section, click **Actions** > **Duplicate**.
  - a. Enter the name in the **New Layout Name** field.
  - b. In the **Source Layout** field, select **Standard Layout**.
  - c. Click **Save and Close**.
6. Click the **Hide, Show, or Reorder Subtabs** icon.
  - a. In the Configure Subtabs dialog box, move **Analytics** from the Available Subtabs section to the Selected Subtabs section.

**Note:** You can add up to three analytics tabs

- b. Click **OK**.
7. On the Details Layout page, click **Done**.
8. Make sure that the layout status for your layout is set to **Active**.
9. Go to the Subscription Configuration work area.
10. Open a subscription and click the **Analytics** tab.
11. Click **Tools** > **Page Composer**.
12. Click the **Select** tab. A pane is displayed on the right side of the page.
13. Use this panel to add the required transactional or analytical business reports into the **Analytics** tab.
14. Publish the sandbox according to your company's business practices.

You can follow these steps and select **Objects** > **Standard Objects** > **Subscription Products** > **Pages** to enable the Analytics subtab on the subscription product details page.

## Add Drill-Down Between Subscription and Object

You can use the Choice List (Dynamic) field in Application Composer to drill-down from the available objects, such as Activities, Opportunities, and so on, to a subscription.

Similarly, you can also drill down from a subscription to a selected object. Each drill-down link enables you to view and edit the object or subscription details based on the user's permission.

Here are the steps to demonstrate how you can add a link to navigate to a subscription from the Activities page:

1. Sign in to the application as a setup user.
2. Ensure you're working in an active sandbox with the Application Composer tool enabled.
3. Click **Navigator > Configuration > Application Composer**.
4. On the Application Composer page, click **Objects > Standard Objects > Activity > Fields**.
  - a. In the **Custom** tab, click **Action > Create**.
  - b. On the Select Field Type dialog box, select **Choice List (Dynamic)**.
  - c. Enter the required information and click **Next**.
  - d. From the List Data Source section, select **Subscription** in the Related Object field and **Subscription Number** in the List Selection Display Value field.
  - e. Click **Submit**.
5. On the Application Composer page, click **Objects > Standard Objects > Activity > Pages**.
6. In Creation Page Layouts, from Appointment Create section and Landing Page Layouts, select Appointment Create section and perform these steps for both sections:
  - a. Click **Actions > Duplicate**.
  - b. Enter the name in the **New Layout Name** field.
  - c. In the Source Layout field, select **Standard layout**.
  - d. Click **Save and Edit**.
  - e. In the Layout section, click the **Edit** icon.
  - f. In the Configure Detail Form section, move the choice list field created earlier from the **Available Fields** section to the **Selected Fields** section.
  - g. Click **Save And Close**.
  - h. Click **Done**.
7. Sign out and sign in to the application as a subscription specialist.
8. Click **Navigation > Services > Activities**.
9. Click the **Activities** tab.
10. On the Activities page, click **Create Appointment**.
11. On the Create Appointment page, from the Choice List (Dynamic) field created above, select a **subscription**.
12. Click **Save and Close**.
13. On the Activities page, click the subscription name link to navigate to the selected subscription page.
14. After testing these changes, publish the sandbox according to your company's business practices.

Similarly, you can add a navigation link to the required object or subscription to set up the navigation as per your requirements.

## Scheduled Processes for Subscriptions

Here are the scheduled processes for Subscription Management:

- Fetch and Rate Usage (optional if you don't have usage data):
  - Acquire Subscription Usage Data from an External Web Service
  - Fetch Pricing Information for Subscriptions and Generate Billing Schedule
- Interface Invoices to AR and Post Invoice Details in Subscriptions

- Send Subscription Billing Information to Receivables
- Import AutoInvoice (with transaction source as ORA\_Subscriptions). This job needs to be run in Account Receivables.
- Fetch Subscription Invoice Information from Receivables

**Note:** Credit memos from Subscription Management are interfaced to Accounts Receivable only after populating the invoice details in subscription billing using this process.

- Interface Subscriptions to Revenue Management Cloud
  - Send Subscription Revenue Information to Oracle Revenue Management Cloud
  - Validate Customer Contract Source Data
  - Identify Customer Contracts
- Update Subscription Status
  - Updates the status of subscriptions that are dependent on time. For example, when the end date is reached, this process updates the status of the subscriptions to expired.
  - Run this process daily or as needed.

## Bill Subscriptions

### Impact of Subscription Profile Attributes on Billing Summary

Different subscription profile attributes can have an impact on the Billing Summary.

#### Billing Frequency

Billing Frequency is the periodic interval at which a customer is billed at a time for the subscription. You can define the time units for billing frequency in Subscription Time Unit Mappings. You can find the Billing Frequency field on the subscription profile. The value entered in the subscription profile is defaulted to the subscription header and product and can be overwritten if required.

Consider the example of a 1-year subscription. Here's how the billing dates are impacted by different billing frequencies:

#### Billing Frequency – Month

Subscription	Start Date	End Date	Invoicing Rule	Period Start	Billing Frequency	Period Type	Billing Date	Billing Interface offset Date
Sub 01	01-Jan-2022	31-Dec-2022	Advance	Service Start	Month	Actual	Period Start	<no entry>

#### Billing Summary:

Period	Charge Name	Charge Periodicity	Interface date	Bill from date	Bill to date	Amount
1	Charge 01	Month	01-Jan-2022	01-Jan-2022	31-Jan-2022	\$10

2	Charge 01	Month	01-Feb-2022	01-Feb-2022	28-Feb-2022	\$10
3	Charge 01	Month	01-Mar-2022	01-Mar-2022	31-Mar-2022	\$10
4	Charge 01	Month	01-Apr-2022	01-Apr-2022	30-Apr-2022	\$10
5	Charge 01	Month	01-May-2022	01-May-2022	31-May-2022	\$10
6	Charge 01	Month	01-Jun-2022	01-Jun-2022	30-Jun-2022	\$10
7	Charge 01	Month	01-Jul-2022	01-Jul-2022	31-Jul-2022	\$10
8	Charge 01	Month	01-Aug-2022	01-Aug-2022	31-Aug-2022	\$10
9	Charge 01	Month	01-Sep-2022	01-Sep-2022	30-Sep-2022	\$10
10	Charge 01	Month	01-Oct-2022	01-Oct-2022	31-Oct-2022	\$10
11	Charge 01	Month	01-Nov-2022	01-Nov-2022	30-Nov-2022	\$10
12	Charge 01	Month	01-Dec-2022	01-Dec-2022	31-Dec-2022	\$10

### Billing Frequency – Quarter

Subscription	Start Date	End Date	Invoicing Rule	Period Start	Billing Frequency	Period Type	Billing Date	Billing Interface offset Date
Sub 01	01-Jan-2022	31-Dec-2022	Advance	Service Start	Quarter	Actual	Period Start	<no entry>

### Billing Summary:

Period	Charge Name	Charge Periodicity	Interface date	Bill from date	Bill to date	Amount
1	Charge 02	Quarter	01-Jan-2022	01-Jan-2022	31-Mar-2022	\$30
2	Charge 02	Quarter	01-Apr-2022	01-Apr-2022	30-Jun-2022	\$30
3	Charge 02	Quarter	01-Jul-2022	01-Jul-2022	30-Sep-2022	\$30
4	Charge 02	Quarter	01-Oct-2022	01-Oct-2022	31-Dec-2022	\$30

**Note:** Here the Charge periodicity is the same as billing frequency. To see the impact of billing summary for different Billing frequencies and Charge periodicity, see Impact of Charge Periodicity and Billing Frequency on Billing Summary

## Invoice Rule

The Invoice rule determines when an invoice should be issued for a billing period. It determines both the invoice date of billing sent to AR as well as the date when it is interfaced to Receivables. The two invoice options available are:

- Advance Invoice - Advance Invoice indicates that the customer is billed before the start of the billing period
- Arrears Invoice - Arrears invoice indicates that the customer is billed after the billing period

Based on the invoice rule, if the calculated interface date is in the past compared to the system date, then the system date becomes the interface date and the invoice date for all those billing periods.

The interface date of one-time charges follows the same logic as that of recurring charges.

The invoicing rule for usage charges is always arrears because you can't bill in advance for usage charges.

Let's consider the example of a 1-year subscription.

Here's how the interface date varies for advance and arrears invoices.

Invoicing Rule: Advance Invoice

Subscription	Start Date	End Date	Invoicing Rule	Period Start	Billing Frequency	Period Type	Billing Date	Billing Interface offset Date
Sub 01	01-Jan-2022	31-Dec-2022	Advance	Service Start	Month	Actual	Period Start	<no entry>

Billing Summary:

Period	Charge Name	Charge Periodicity	Interface date	Bill from date	Bill to date	Amount
1	Charge 01	Month	01-Jan-2022	01-Jan-2022	31-Jan-2022	\$10
2	Charge 01	Month	01-Feb-2022	01-Feb-2022	28-Feb-2022	\$10
3	Charge 01	Month	01-Mar-2022	01-Mar-2022	31-Mar-2022	\$10
4	Charge 01	Month	01-Apr-2022	01-Apr-2022	30-Apr-2022	\$10
5	Charge 01	Month	01-May-2022	01-May-2022	31-May-2022	\$10
6	Charge 01	Month	01-Jun-2022	01-Jun-2022	30-Jun-2022	\$10
7	Charge 01	Month	01-Jul-2022	01-Jul-2022	31-Jul-2022	\$10
8	Charge 01	Month	01-Aug-2022	01-Aug-2022	31-Aug-2022	\$10
9	Charge 01	Month	01-Sep-2022	01-Sep-2022	30-Sep-2022	\$10
10	Charge 01	Month	01-Oct-2022	01-Oct-2022	31-Oct-2022	\$10
11	Charge 01	Month	01-Nov-2022	01-Nov-2022	30-Nov-2022	\$10
12	Charge 01	Month	01-Dec-2022	01-Dec-2022	31-Dec-2022	\$10

Invoicing Rule: Arrears Invoice

Subscription	Start Date	End Date	Invoicing Rule	Period Start	Billing Frequency	Period Type	Billing Date	Billing Interface offset Date
Sub 01	01-Jan-2022	31-Dec-2022	Arrears	Service Start	Month	Actual	Period Start	<no entry>

Billing Summary:

Period	Charge Name	Charge Periodicity	Interface date	Bill from date	Bill to date	Amount
1	Charge 01	Month	01-Feb-2022	01-Jan-2022	31-Jan-2022	\$10
2	Charge 01	Month	01-Mar-2022	01-Feb-2022	28-Feb-2022	\$10
3	Charge 01	Month	01-Apr-2022	01-Mar-2022	31-Mar-2022	\$10
4	Charge 01	Month	01-May-2022	01-Apr-2022	30-Apr-2022	\$10
5	Charge 01	Month	01-Jun-2022	01-May-2022	31-May-2022	\$10
6	Charge 01	Month	01-Jul-2022	01-Jun-2022	30-Jun-2022	\$10
7	Charge 01	Month	01-Aug-2022	01-Jul-2022	31-Jul-2022	\$10
8	Charge 01	Month	01-Sep-2022	01-Aug-2022	31-Aug-2022	\$10
9	Charge 01	Month	01-Oct-2022	01-Sep-2022	30-Sep-2022	\$10
10	Charge 01	Month	01-Nov-2022	01-Oct-2022	31-Oct-2022	\$10
11	Charge 01	Month	01-Dec-2022	01-Nov-2022	30-Nov-2022	\$10
12	Charge 01	Month	01-Jan-2023	01-Dec-2022	31-Dec-2022	\$10

## Billing Interface Offset Date

You can offset the interface date by a number of days using the Billing Interface Offset Date field on the Subscription Profile page. You can postpone the interface date by entering a positive value in the field or advance the interface date with a negative value. If the Billing Interface Offset Date is either zero or blank, then the interface date will not be updated.

Let's consider an example of a 1-year Subscription. Here's how the interface date varies based on the value in Billing Interface offset Date field.

Billing Interface offset Date = 12

Subscription	Start Date	End Date	Invoicing Rule	Period Start	Billing Frequency	Period Type	Billing Date	Billing Interface offset Date
Sub 01	01-Jan-2022	31-Dec-2022	Advance	Service Start	Month	Actual	Period Start	12

The updated Billing Interface Date is the sum of Interface date and the Billing Interface offset Date value.

Here's what the Billing Summary will look like:

Period	Charge Name	Charge Periodicity	Interface date	Bill from date	Bill to date	Amount
1	Charge 01	Month	13-Jan-2022	01-Jan-2022	31-Jan-2022	\$10
2	Charge 01	Month	13-Feb-2022	01-Feb-2022	28-Feb-2022	\$10
3	Charge 01	Month	13-Mar-2022	01-Mar-2022	31-Mar-2022	\$10
4	Charge 01	Month	13-Apr-2022	01-Apr-2022	30-Apr-2022	\$10

5	Charge 01	Month	13-May-2022	01-May-2022	31-May-2022	\$10
6	Charge 01	Month	13-Jun-2022	01-Jun-2022	30-Jun-2022	\$10
7	Charge 01	Month	13-Jul-2022	01-Jul-2022	31-Jul-2022	\$10
8	Charge 01	Month	13-Aug-2022	01-Aug-2022	31-Aug-2022	\$10
9	Charge 01	Month	13-Sep-2022	01-Sep-2022	30-Sep-2022	\$10
10	Charge 01	Month	13-Oct-2022	01-Oct-2022	31-Oct-2022	\$10
11	Charge 01	Month	13-Nov-2022	01-Nov-2022	30-Nov-2022	\$10
12	Charge 01	Month	13-Dec-2022	01-Dec-2022	31-Dec-2022	\$10

Billing Interface offset Date = - 8

Subscription	Start Date	End Date	Invoicing Rule	Period Start	Billing Frequency	Period Type	Billing Date	Billing Interface offset Date
Sub 01	01-Jan-2022	31-Dec-2022	Advance	Service Start	Month	Actual	Period Start	-8

Updated Billing Interface Date = Interface date - Billing Interface offset Date

### Billing Summary

Period	Charge Name	Charge Periodicity	Interface date	Bill from date	Bill to date	Amount
1	Charge 01	Month	24-Dec-2021	01-Jan-2022	31-Jan-2022	\$10
2	Charge 01	Month	24-Jan-2022	01-Feb-2022	28-Feb-2022	\$10
3	Charge 01	Month	24-Feb-2022	01-Mar-2022	31-Mar-2022	\$10
4	Charge 01	Month	24-Mar-2022	01-Apr-2022	30-Apr-2022	\$10
5	Charge 01	Month	24-Apr-2022	01-May-2022	31-May-2022	\$10
6	Charge 01	Month	24-May-2022	01-Jun-2022	30-Jun-2022	\$10
7	Charge 01	Month	24-Jun-2022	01-Jul-2022	31-Jul-2022	\$10
8	Charge 01	Month	24-Jul-2022	01-Aug-2022	31-Aug-2022	\$10
9	Charge 01	Month	24-Aug-2022	01-Sep-2022	30-Sep-2022	\$10
10	Charge 01	Month	24-Sep-2022	01-Oct-2022	31-Oct-2022	\$10
11	Charge 01	Month	24-Oct-2022	01-Mar-2022	30-Nov-2022	\$10
12	Charge 01	Month	23-Nov-2022	01-Dec-2022	31-Dec-2022	\$10

## Billing Date

The impact of the Billing date on the Interface date depends upon the Billing Date value you select – Period Start, Period End, Day, and Offset. This table describes the relationship between Billing date and Interface Date:



Billing Date Value	Interface Date
Period Start	Start date of the billing period
Period End	End date of the billing period
Day	The day in the billing period
Offset	Interface date is postponed or advanced by the offset value

Let's consider the example of the same 1-year subscription as before:

If the invoicing rule is advance invoice and billing date is Period start:

Subscription	Start Date	End Date	Invoicing Rule	Period Start	Billing Frequency	Period Type	Billing Date	Billing Interface offset Date
Sub 01	10-Jan-2022	09-Jan-2023	Advance	Service Start	Month	Actual	Period Start	<no entry>

Here's the Billing Summary when billing date is Period Start:

The invoicing rule is Advance Invoice, when billing date is period start, the same billing period's start date will become the interface date.

Period	Charge Name	Charge Periodicity	Interface date	Bill from date	Bill to date	Amount
1	Charge 01	Month	10-Jan-2022	10-Jan-2022	09-Feb-2022	\$10
2	Charge 01	Month	10-Feb-2022	10-Feb-2022	09-Mar-2022	\$10
3	Charge 01	Month	10-Mar-2022	10-Mar-2022	09-Apr-2022	\$10
4	Charge 01	Month	10-Apr-2022	10-Apr-2022	09-May-2022	\$10
5	Charge 01	Month	10-May-2022	10-May-2022	09-Jun-2022	\$10
6	Charge 01	Month	10-Jun-2022	10-Jun-2022	09-Jul-2022	\$10
7	Charge 01	Month	10-Jul-2022	10-Jul-2022	09-Aug-2022	\$10
8	Charge 01	Month	10-Aug-2022	10-Aug-2022	09-Sep-2022	\$10
9	Charge 01	Month	10-Sep-2022	10-Sep-2022	09-Oct-2022	\$10
10	Charge 01	Month	10-Oct-2022	10-Oct-2022	09-Nov-2022	\$10
11	Charge 01	Month	10-Nov-2022	10-Nov-2022	09-Dec-2022	\$10
12	Charge 01	Month	10-Dec-2022	10-Dec-2022	09-Jan-2023	\$10

If the invoicing rule is arrears invoice and billing date is Period Start:

Subscription	Start Date	End Date	Invoicing Rule	Period Start	Billing Frequency	Period Type	Billing Date	Billing Interface offset Date
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Sub 01	10-Jan-2022	09-Jan-2023	Arrears	Service Start	Month	Actual	Period Start	<no entry>
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Here' the Billing Summary when billing date is Period Start:

The invoicing rule is Arrears Invoice, when billing date is period start, the next billing period's start date will become the interface date.

Period	Charge Name	Charge Periodicity	Interface date	Bill from date	Bill to date	Amount
1	Charge 01	Month	10-Feb-2022	10-Jan-2022	09-Feb-2022	\$10
2	Charge 01	Month	10-Mar-2022	10-Feb-2022	09-Mar-2022	\$10
3	Charge 01	Month	10-Apr-2022	10-Mar-2022	09-Apr-2022	\$10
4	Charge 01	Month	10-May-2022	10-Apr-2022	09-May-2022	\$10
5	Charge 01	Month	10-Jun-2022	10-May-2022	09-Jun-2022	\$10
6	Charge 01	Month	10-Jul-2022	10-Jun-2022	09-Jul-2022	\$10
7	Charge 01	Month	10-Aug-2022	10-Jul-2022	09-Aug-2022	\$10
8	Charge 01	Month	10-Sep-2022	10-Aug-2022	09-Sep-2022	\$10
9	Charge 01	Month	10-Oct-2022	10-Sep-2022	09-Oct-2022	\$10
10	Charge 01	Month	10-Nov-2022	10-Oct-2022	09-Nov-2022	\$10
11	Charge 01	Month	10-Dec-2022	10-Nov-2022	09-Dec-2022	\$10
12	Charge 01	Month	10-Jan-2023	10-Dec-2022	09-Jan-2023	\$10

If the invoicing rule is advance invoice and billing date is Period End

Subscription	Start Date	End Date	Invoicing Rule	Period Start	Billing Frequency	Period Type	Billing Date	Billing Interface offset Date
Sub 01	10-Jan-2022	09-Jan-2023	Advance	Service Start	Month	Actual	Period End	<no entry>

Here, the invoicing rule is Advance Invoice, when billing date is period end, previous billing period's end date will become the interface date.

Period	Charge Name	Charge Periodicity	Interface date	Bill from date	Bill to date	Amount
1	Charge 01	Month	09-Jan-2022	10-Jan-2022	09-Feb-2022	\$10
2	Charge 01	Month	09-Feb-2022	10-Feb-2022	09-Mar-2022	\$10
3	Charge 01	Month	09-Mar-2022	10-Mar-2022	09-Apr-2022	\$10
4	Charge 01	Month	09-Apr-2022	10-Apr-2022	09-May-2022	\$10
5	Charge 01	Month	09-May-2022	10-May-2022	09-Jun-2022	\$10
6	Charge 01	Month	09-Jun-2022	10-Jun-2022	09-Jul-2022	\$10

7	Charge 01	Month	09-Jul-2022	10-Jul-2022	09-Aug-2022	\$10
8	Charge 01	Month	09-Aug-2022	10-Aug-2022	09-Sep-2022	\$10
9	Charge 01	Month	09-Sep-2022	10-Sep-2022	09-Oct-2022	\$10
10	Charge 01	Month	09-Oct-2022	10-Oct-2022	09-Nov-2022	\$10
11	Charge 01	Month	09-Nov-2022	10-Nov-2022	09-Dec-2022	\$10
12	Charge 01	Month	09-Dec-2022	10-Dec-2022	09-Jan-2023	\$10

If the invoicing rule is arrears invoice and billing date is Period End

Subscription	Start Date	End Date	Invoicing Rule	Period Start	Billing Frequency	Period Type	Billing Date	Billing Interface offset Date
Sub 01	10-Jan-2022	09-Jan-2023	Arrears	Service Start	Month	Actual	Period End	<no entry>

Billing Summary when invoicing rule is arrears invoice and billing date is Period End

Please note that, since the invoicing rule is arrears Invoice, when billing date is period end, the same billing period's end date will become the interface date.

Period	Charge Name	Charge Periodicity	Interface date	Bill from date	Bill to date	Amount
1	Charge 01	Month	09-Feb-2022	10-Jan-2022	09-Feb-2022	\$10
2	Charge 01	Month	09-Mar-2022	10-Feb-2022	09-Mar-2022	\$10
3	Charge 01	Month	09-Apr-2022	10-Mar-2022	09-Apr-2022	\$10
4	Charge 01	Month	09-May-2022	10-Apr-2022	09-May-2022	\$10
5	Charge 01	Month	09-Jun-2022	10-May-2022	09-Jun-2022	\$10
6	Charge 01	Month	09-Jul-2022	10-Jun-2022	09-Jul-2022	\$10
7	Charge 01	Month	09-Aug-2022	10-Jul-2022	09-Aug-2022	\$10
8	Charge 01	Month	09-Sep-2022	10-Aug-2022	09-Sep-2022	\$10
9	Charge 01	Month	09-Oct-2022	10-Sep-2022	09-Oct-2022	\$10
10	Charge 01	Month	09-Nov-2022	10-Oct-2022	09-Nov-2022	\$10
11	Charge 01	Month	09-Dec-2022	10-Nov-2022	09-Dec-2022	\$10
12	Charge 01	Month	09-Jan-2023	10-Dec-2022	09-Jan-2023	\$10

If the invoicing rule is advance invoice and billing date is Day:

Subscription	Start Date	End Date	Invoicing Rule	Period Start	Billing Frequency	Period Type	Billing Date	Billing Interface offset Date
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Sub 01	10-Jan-2022	09-Jan-2023	Advance	Service Start	Month	Actual	Day = 13	<no entry>
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Here, the invoicing rule is advance the interface date will be before the billing period. Since the day is 13, the 13<sup>th</sup> day of the month in the previous billing period will be the interface date in the billing summary.

Period	Charge Name	Charge Periodicity	Interface date	Bill from date	Bill to date	Amount
1	Charge 01	Month	13-Dec-2021	10-Jan-2022	09-Feb-2022	\$10
2	Charge 01	Month	13-Jan-2022	10-Feb-2022	09-Mar-2022	\$10
3	Charge 01	Month	13-Feb-2022	10-Mar-2022	09-Apr-2022	\$10
4	Charge 01	Month	13-Mar-2022	10-Apr-2022	09-May-2022	\$10
5	Charge 01	Month	13-Apr-2022	10-May-2022	09-Jun-2022	\$10
6	Charge 01	Month	13-May-2022	10-Jun-2022	09-Jul-2022	\$10
7	Charge 01	Month	13-Jun-2022	10-Jul-2022	09-Aug-2022	\$10
8	Charge 01	Month	13-Jul-2022	10-Aug-2022	09-Sep-2022	\$10
9	Charge 01	Month	13-Aug-2022	10-Sep-2022	09-Oct-2022	\$10
10	Charge 01	Month	13-Sep-2022	10-Oct-2022	09-Nov-2022	\$10
11	Charge 01	Month	13-Oct-2022	10-Nov-2022	09-Dec-2022	\$10
12	Charge 01	Month	13-Nov-2022	10-Dec-2022	09-Jan-2023	\$10

If the invoicing rule is arrears invoice and billing date is Day:

Subscription	Start Date	End Date	Invoicing Rule	Period Start	Billing Frequency	Period Type	Billing Date	Billing Interface offset Date
Sub 01	10-Jan-2022	09-Jan-2023	Arrears	Service Start	Month	Actual	Day = 3	<no entry>

Here, the invoicing rule is arrears so the interface date will be in the next billing period. Since the day is 3, the 3<sup>rd</sup> day of the month in the next billing period will be the interface date in the billing summary.

Period	Charge Name	Charge Periodicity	Interface date	Bill from date	Bill to date	Amount
1	Charge 01	Month	03-Mar-2022	10-Jan-2022	09-Feb-2022	\$10
2	Charge 01	Month	03-Apr-2022	10-Feb-2022	09-Mar-2022	\$10
3	Charge 01	Month	03-May-2022	10-Mar-2022	09-Apr-2022	
4	Charge 01	Month	03-Jun-2022	10-Apr-2022	09-May-2022	
5	Charge 01	Month	03-Jul-2022	10-May-2022	09-Jun-2022	\$10
6	Charge 01	Month	03-Aug-2022	10-Jun-2022	09-Jul-2022	\$10
7	Charge 01	Month	03-Sep-2022	10-Jul-2022	09-Aug-2022	\$10

8	Charge 01	Month	03-Oct-2022	10-Aug-2022	09-Sep-2022	\$10
9	Charge 01	Month	03-Nov-2022	10-Sep-2022	09-Oct-2022	\$10
10	Charge 01	Month	03-Dec-2022	10-Oct-2022	09-Nov-2022	\$10
11	Charge 01	Month	03-Jan-2023	10-Nov-2022	09-Dec-2022	\$10
12	Charge 01	Month	03-Feb-2023	10-Dec-2022	09-Jan-2023	\$10

If offset is selected, the offset postpones or advances the interface date based on the value given in the field. This behavior is like that of Billing Interface offset Date where it accepts positive number of days or negative number of days.

If the invoicing rule is advance and the offset indicated is 12 days:

Subscription	Start Date	End Date	Invoicing Rule	Period Start	Billing Frequency	Period Type	Billing Date	Billing Interface offset Date
Sub 01	10-Jan-2022	09-Jan-2023	Advance	Service Start	Month	Actual	Offset = 12	<no entry>

Billing Summary:

Period	Charge Name	Charge Periodicity	Interface date	Bill from date	Bill to date	Amount
1	Charge 01	Month	22-Jan-2022	10-Jan-2022	09-Feb-2022	\$10
2	Charge 01	Month	22-Feb-2022	10-Feb-2022	09-Mar-2022	\$10
3	Charge 01	Month	22-Mar-2022	10-Mar-2022	09-Apr-2022	\$10
4	Charge 01	Month	22-Apr-2022	10-Apr-2022	09-May-2022	\$10
5	Charge 01	Month	22-May-2022	10-May-2022	09-Jun-2022	\$10
6	Charge 01	Month	22-Jun-2022	10-Jun-2022	09-Jul-2022	\$10
7	Charge 01	Month	22-Jul-2022	10-Jul-2022	09-Aug-2022	\$10
8	Charge 01	Month	22-Aug-2022	10-Aug-2022	09-Sep-2022	\$10
9	Charge 01	Month	22-Sep-2022	10-Sep-2022	09-Oct-2022	\$10
10	Charge 01	Month	22-Oct-2022	10-Oct-2022	09-Nov-2022	\$10
11	Charge 01	Month	22-Nov-2022	10-Nov-2022	09-Dec-2022	\$10
12	Charge 01	Month	22-Dec-2022	10-Dec-2022	09-Jan-2023	\$10

If the invoicing rule is arrears and the offset indicated is -8 days:

Subscription	Start Date	End Date	Invoicing Rule	Period Start	Billing Frequency	Period Type	Billing Date	Billing Interface offset Date
Sub 01	10-Jan-2022	09-Jan-2023	Arrears	Service Start	Month	Actual	Offset = -8	<no entry>

Updated Billing Interface Date = Interface date - Offset Days indicated in Billing Date Code

Period	Charge Name	Charge Periodicity	Interface date	Bill from date	Bill to date	Amount
1	Charge 01	Month	02-Feb-2022	10-Jan-2022	09-Feb-2022	\$10
2	Charge 01	Month	02-Mar-2022	10-Feb-2022	09-Mar-2022	\$10
3	Charge 01	Month	02-Apr-2022	10-Mar-2022	09-Apr-2022	\$10
4	Charge 01	Month	02-May-2022	10-Apr-2022	09-May-2022	\$10
5	Charge 01	Month	02-Jun-2022	10-May-2022	09-Jun-2022	\$10
6	Charge 01	Month	02-Jul-2022	10-Jun-2022	09-Jul-2022	\$10
7	Charge 01	Month	02-Aug-2022	10-Jul-2022	09-Aug-2022	\$10
8	Charge 01	Month	02-Sep-2022	10-Aug-2022	09-Sep-2022	\$10
9	Charge 01	Month	02-Oct-2022	10-Sep-2022	09-Oct-2022	\$10
10	Charge 01	Month	02-Nov-2022	10-Oct-2022	09-Nov-2022	\$10
11	Charge 01	Month	02-Dec-2022	10-Nov-2022	09-Dec-2022	\$10
12	Charge 01	Month	02-Jan-2023	10-Dec-2022	09-Jan-2023	\$10

Note: Similarly, you can calculate the interface date if the invoicing rule is Advance, and the Offset days are negative, and invoicing rule is Arrears and Offset date is positive.

If the invoicing rule is Advance and offset days are zero, the interface date is same as advance invoicing rule & period start.

If invoicing rule is Arrears and offset days are zero, the interface date is same as arrears invoicing rule & period start.

#### Related Topics

- [Impact of Charge Periodicity and Billing Frequency on Billing Summary](#)

## Bill Partial Periods

You can implement rules, wherein, the billing engine calculates a partial period within the service duration driven by your business.

You can tie the period start date to the service start date or the calendar start date. For service start date, the period starts from the service start date. For the calendar start date, the period starts from the calendar start date, which can be the first day of the month.

The period type determines whether the partial period duration is based on fixed number of days or actual days in the period. If the period type is actual, the period duration is the actual number of days in the period. If the period type is fixed, the number of days in the period are fixed.

## How Period Start Impacts Duration

Let's take an example, where a service starts on 15th January 2019 and ends on 10th April 2019 and the period type is actual.

If the period start is service start, here's how the application calculates the duration:

Date	Duration
15th January 2019 - 14th March 2019	2 months (2 full periods)
15th March 2019 - 10th April 2019	0.871 months (27/31)

The total duration is calculated as 2.871 months.

Let's consider the partial period calculations when Period Start is Service Start:

Subscription details when Billing Frequency is Month:

Subscription Product	Charge Name	Periodicity	Amount
Sub 01	One time	NA	\$1000
Sub 01	Recurring	Monthly	\$100

Subscription	Start Date	End Date	Invoicing Rule	Period Start	Billing Frequency	Period Type	Billing Date	Billing Interface offset Date
Sub 01	14-Jan-2022	05-Dec-2022	Advance	Service Start	Month	Actual	Period Start	<no entry>

Here, the partial period is 14-Nov-2020 to 05-Dec-2020. The partial period amount will be calculated as follows:

(No of days in Partial period / Today number of days ) \* charge

$(22/30) * 100 = 73.33$

Here's the Billing Summary for this subscription:

Period	Charge Name	Sequence	Interface Date	Bill-from Date	Bill-to Date	Amount
0	One Time Charge	0	14-Jan-2022	14-Jan-2022	05-Dec-2022	\$1000
1	Recurring Charge	1	14-Jan-2022	14-Jan-2022	13-Feb-2022	100
2	Recurring Charge	2	14-Feb-2022	14-Feb-2022	13-Mar-2022	100
3	Recurring Charge	3	14-Mar-2022	14-Mar-2022	13-Apr-2022	100
4	Recurring Charge	4	14-Apr-2022	14-Apr-2022	13-May-2022	100
5	Recurring Charge	5	14-May-2022	14-May-2022	13-Jun-2022	100
6	Recurring Charge	6	14-Jun-2022	14-Jun-2022	13-Jul-2022	100

7	Recurring Charge	7	14-Jul-2022	14-Jul-2022	13-Aug-2022	100
8	Recurring Charge	8	14-Aug-2022	14-Aug-2022	13-Sep-2022	100
9	Recurring Charge	9	14-Sep-2022	14-Sep-2022	13-Oct-2022	100
10	Recurring Charge	10	14-Oct-2022	14-Oct-2022	13-Nov-2022	100
11	Recurring Charge	11	14-Nov-2022	14-Nov-2022	13-Dec-2022	100
12	Recurring Charge	12	14-Dec-2022	14-Dec-2022	05-Dec-2022	73.33

Billing details if the Billing Frequency is Quarter:

Subscription Product	Charge Name	Periodicity	Amount
Sub 02	One time	NA	\$1000
Sub 02	Recurring	Quarterly	\$300

Subscription	Start Date	End Date	Invoicing Rule	Period Start	Billing Frequency	Period Type	Billing Date	Billing Interface offset Date
Sub 02	14 -Jan-2022	05-Dec-2022	Advance	Service Start	Quarter	Actual	Period Start	<no entry>

Here the partial period is in the last quarter. It will be calculated as follows:

14-Oct-2020 to 13-Nov-2020 = 100

14-Nov-2020 to 05-Dec-2020 =  $(22/30)*100 = 73.33$

Total amount for partial period  $100 + 73.33 = 173.33$

Here's the Billing Summary for this subscription:

Period	Charge Name	Sequence	Interface Date	Bill-from Date	Bill-to Date	Amount
0	One Time Charge	0	14-Jan-2022	14-Jan-2022	05-Dec-2022	\$1000
1	Recurring Charge	1	14-Jan-2022	14-Jan-2022	13-Apr-2022	300
2	Recurring Charge	2	14-Apr-2022	14-Apr-2022	13-Jul-2022	300
3	Recurring Charge	3	14-Jul-2022	14-Jul-2022	13-Oct-2022	300
4	Recurring Charge	4	14-Oct-2022	14-Oct-2022	05-Dec-2022	173.33

Subscription Details if Billing frequency is Year:

Subscription Product	Charge Name	Periodicity	Amount
Sub 03	One time	NA	\$1000
Sub 03	Recurring	Yearly	\$1200



Subscription	Start Date	End Date	Invoicing Rule	Period Start	Billing Frequency	Period Type	Billing Date	Billing Interface offset Date
Sub 03	14 -Jan-2022	05-Dec-2022	Advance	Service Start	Year	Actual	Period Start	<no entry>

Here the partial period will be calculated as follows:

14-Jan-2020 to 13-Nov-2020 = 10 months \* \$100 = 1000

14-Nov-2020 to 05-Dec-2020 = 73.33

(No of days in Partial period / total number of days ) \* charge

(22/30)\*100

Total amount for partial period 1000 + 73.33 =1073.33

Here's the billing summary for this subscription:

Period	Charge Name	Sequence	Interface Date	Bill-from Date	Bill-to Date	Amount
0	One Time Charge	0	14-Jan-2022	14-Jan-2022	05-Dec-2022	\$1000
1	Recurring Charge	1	14-Jan-2022	14-Jan-2022	05-Dec -2022	1073.33

If the period start is a calendar month, here's how the application calculates the duration:

Date	Duration
15th January 2019 - 31st January 2019	0.548 months (17/31) - First partial period
1st February 2019 - 31st March 2019	2 months - 2 full periods tied to calendar months
1st April 2019 - 10th April 2019	0.333 (10/30) - Second partial period

The total duration is calculated as 2.881 months.

Let's consider the partial period calculations when Period Start is Calendar Month:

If Billing Frequency is Month:

Subscription Product	Charge Name	Periodicity	Amount
Sub 01	One time	NA	\$1000
Sub 01	Recurring	Monthly	\$100

Subscription	Start Date	End Date	Invoicing Rule	Period Start	Billing Frequency	Period Type	Billing Date	Billing Interface offset Date
Sub 01	14 -Jan-2022	05-Dec-2022	Advance	Calendar	Month	Actual	Period Start	<no entry>

				Month				
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Here, the first partial period will be from 14-Jan-2020 to 31-Jan-2020 and the next partial period will be from 01-Dec-2020 to 05-Dec-2020

The partial periods will be calculated as follows:

14-Jan to 31-Jan-2020 =  $(18/31) \times 100 = 58.064$

01-Dec to 05-Dec-2020 =  $(5/31) \times 100 = 16.129$

Here's the billing summary for this subscription:

Period	Charge Name	Sequence	Interface Date	Bill-from Date	Bill-to Date	Amount
0	One Time Charge	0	14-Jan-2022	14-Jan-2022	05-Dec-2022	\$1000
1	Recurring Charge	1	14-Jan-2022	14-Jan-2022	31-Jan-2022	58.06
2	Recurring Charge	2	01-Feb-2022	01-Feb-2022	28-Feb-2022	100
3	Recurring Charge	3	01-Mar-2022	01-Mar-2022	31-Mar-2022	100
4	Recurring Charge	4	01-Apr-2022	01-Apr-2022	30-Apr-2022	100
5	Recurring Charge	5	01-May-2022	01-May-2022	31-May-2022	100
6	Recurring Charge	6	01-Jun-2022	01-Jun-2022	30-Jun-2022	100
7	Recurring Charge	7	01-Jul-2022	01-Jul-2022	31-Aug-2022	100
8	Recurring Charge	8	01-Aug-2022	01-Aug-2022	31-Aug-2022	100
9	Recurring Charge	9	01-Sep-2022	01-Sep-2022	30-Sep-2022	100
10	Recurring Charge	10	01-Oct-2022	01-Oct-2022	31-Oct-2022	100
11	Recurring Charge	11	01-Nov-2022	01-Nov-2022	30-Nov-2022	100
12	Recurring Charge	12	01-Dec-2022	01-Dec-2022	05-Dec-2022	16/13

If Billing Frequency is Quarter:

Subscription Product	Charge Name	Periodicity	Amount
Sub 02	One time	NA	\$1000
Sub 02	Recurring	Quarterly	\$300

Subscription	Start Date	End Date	Invoicing Rule	Period Start	Billing Frequency	Period Type	Billing Date	Billing Interface offset Date
Sub 02	14-Jan-2022	05-Dec-2022	Advance	Calendar Month	Quarter	Actual	Period Start	<no entry>

There will be 2 partial periods:

14-Jan-2022 to 31-Jan-2022

(No of days in Partial period / Today number of days ) \* charge

$(18/31) * 100 = 58.064$

01-Nov-2022 to 30-Nov-2022 = 100

01-Dec-2022 to 05-Dec-2022 =  $(5/31) * 100 = 16.129$

(No of days in Partial period / Today number of days ) \* charge

$100 + 16.129 = 116.13$

Here's the Billing Summary for this subscription:

Period	Charge Name	Sequence	Interface Date	Bill-from Date	Bill-to Date	Amount
0	One Time Charge	0	14-Jan-2022	14-Jan-2022	05-Dec-2022	\$1000
1	Recurring Charge	1	14-Jan-2022	14-Jan-2022	31-Jan-2022	58.06
2	Recurring Charge	2	01-Feb-2022	01-Feb-2022	30-Apr-2022	300
3	Recurring Charge	3	01-May-2022	01-May-2022	31-Jul-2022	300
4	Recurring Charge	4	01-Aug-2022	01-Aug-2022	31-Oct-2022	300
5	Recurring Charge	5	01-Nov-2022	01-Nov-2022	05-Dec-2022	113.13

Subscription details if Billing Frequency is Year:

Subscription Product	Charge Name	Periodicity	Amount
Sub 03	One time	NA	\$1000
Sub 03	Recurring	Yearly	\$1200

Subscription	Start Date	End Date	Invoicing Rule	Period Start	Billing Frequency	Period Type	Billing Date	Billing Interface offset Date
Sub 03	14-Jan-2022	05-Dec-2022	Advance	Calendar Month	Year	Actual	Period Start	<no entry>

Here the Partial period will be calculated as follows:

14-Jan-2022 to 31-Jan-2022 =  $(18/31) * 100 = 58.064$

01-Feb-2022 to 30-Nov-2022 =  $100 * 10 = 1000$

01-Dec-2022 to 05-Dec-2022 =  $(5/31) * 100 = 16.129$

$1000 + 16.129 = 1016.13$

Here's the billing Summary for this subscription:

Period	Charge Name	Sequence	Interface Date	Bill-from Date	Bill-to Date	Amount
0	One Time Charge	0	14-Jan-2022	14-Jan-2022	05-Dec-2022	\$1000
1	Recurring Charge	1	14-Jan-2022	14-Jan-2022	31-Jan-2022	58.06
2	Recurring Charge	2	01-Feb-2022	01-Feb-2022	05-Dec-2022	1016.13

## How Period Type Impacts Duration

Let's take an example where a service starts on 1st March 2019 and ends on 10th February 2020, and the period start date is tied to the service start date.

If the period type is actual, here's how the application calculates duration:

Date	Duration
1st March 2019 - 31st January 2020	11 months
1st February 2020 - 10th February 2020	0.357 months (10/28)

Note that since February has 28 days, the partial period is calculated based on 28 days. The total duration is calculated as 11.357 months.

Let's consider the following partial period calculations when the Period Type is Actual:

Subscription details when Billing Frequency is Month:

Subscription Product	Charge Name	Periodicity	Amount
Sub 01	One time	NA	\$1000
Sub 01	Recurring	Monthly	\$100

Subscription	Start Date	End Date	Invoicing Rule	Period Start	Billing Frequency	Period Type	Billing Date
Sub 01	10-Jan-2020	22-Dec-2020	Advance	Service Start	Month	Actual	Period Start

Here, the period start is Service start. Therefore, 10-Jan-2020 to 10-Dec-2020 will be complete periods and the 10-Dec-2020 to 22-Dec-2020 will be the partial period.

The partial period will be calculated as follows:

$(\text{No of days in Partial period} / \text{Total number of days}) * \text{charge}$

$$(13/31)*100 = \$41.935$$

Here's the billing summary for this subscription:

Period	Charge Name	Sequence	Interface Date	Bill-from Date	Bill-to Date	Amount
0	One Time Charge	0	10-Jan-2020	10-Jan-2020	22-Dec-2020	\$1000
1	Recurring Charge	1	10-Jan-2020	10-Jan-2020	09-Feb-2020	100
2	Recurring Charge	2	10-Feb-2020	10-Feb-2020	09-Mar-2020	100
3	Recurring Charge	3	10-Mar-2020	10-Mar-2020	09-Apr-2020	100
4	Recurring Charge	4	10-Apr-2020	10-Apr-2020	09-May-2020	100
5	Recurring Charge	5	10-May-2020	10-May-2020	09-Jun-2020	100
6	Recurring Charge	6	10-Jun-2020	10-Jun-2020	09-Jul-2020	100
7	Recurring Charge	7	10-Jul-2020	10-Jul-2020	09-Aug-2020	100
8	Recurring Charge	8	10-Aug-2020	10-Aug-2020	09-Sep-2020	100
9	Recurring Charge	9	10-Sep-2020	10-Sep-2020	09-Oct-2020	100
10	Recurring Charge	10	10-Oct-2020	10-Oct-2020	09-Nov-2020	100
11	Recurring Charge	11	10-Nov-2020	10-Nov-2020	09-Dec-2020	100
12	Recurring Charge	12	10-Dec-2020	10-Dec-2020	22-Dec-2020	\$41.94

Subscription details when you can enable Prorate :

Subscription Product	Charge Name	Periodicity	Amount
Sub 02	One time	NA	\$1000
Sub 02	Recurring	Quarterly	\$300

Subscription	Start Date	End Date	Invoicing Rule	Period Start	Billing Frequency	Period Type	Billing Date	Billing Interface offset Date
Sub 01	10-Jan-2020	22-Dec-2020	Advance	Service Start	Quarter	Actual	Period Start	<no entry>

Here the partial period will be from 10-Oct-2020 to 22-Dec-2020. Applying the same formula as before, the partial period will be billed as follows:

$$10\text{-Oct-2020} - 09\text{-Nov-2020} = \$100$$

$$10\text{-Nov-2020} - 09\text{-Dec-2020} = \$100$$

$$10\text{-Dec-2020} - 22\text{-Dec-2020} = (13/31)*100 = \$41.935$$

$$\text{Partial Period Amount} = \$241.94$$

Here's the Billing Summary for this subscription:

Period	Charge Name	Sequence	Interface Date	Bill-from Date	Bill-to Date	Amount
0	One Time Charge	0	10-Jan-2020	10-Jan-2020	22-Dec-2020	\$1000
1	Recurring Charge	1	10-Jan-2020	10-Jan-2020	09-Apr-2020	300
2	Recurring Charge	2	10-Apr-2020	10-Apr-2020	09-Jul-2020	300
3	Recurring Charge	3	10-Jul-2020	10-Jul-2020	09-Oct-2020	300
4	Recurring Charge	4	10-Oct-2020	10-Oct-2020	22-Dec-2020	241.94

Subscription details if the Billing Frequency is Yearly:

Subscription Product	Charge Name	Periodicity	Amount
Sub 03	One time	NA	\$1000
Sub 03	Recurring	Yearly	\$1200

Subscription	Start Date	End Date	Invoicing Rule	Period Start	Billing Frequency	Period Type	Billing Date	Billing Interface offset Date
Sub 01	10-Jan-2020	22-Dec-2020	Advance	Service Start	Year	Actual	Period Start	<no entry>

Here the partial period will be calculated as follows:

10-Jan-2020 – 09-Dec-2020 (11 Months) =  $100 \times 11 = 1100$

10-Dec-2020 – 22-Dec-2020 =  $(13/31) \times 100$

= 41.935

Total Amount for the partial Period =  $1100 + 41.94 = 1141.94$

Period	Charge Name	Sequence	Interface Date	Bill-from Date	Bill-to Date	Amount
0	One Time Charge	0	10-Jan-2020	10-Jan-2020	22-Dec-2020	\$1000
1	Recurring Charge	1	10-Jan-2020	10-Jan-2020	22-Dec-2020	1141.94

If the period type is fixed, here's how the application calculates the duration:

Date	Duration
1st March 2019 - 31st January 2020	11 months
1st February 2020- 10th February 2020	0.333 months (10/30)

Note that a month is set as 30 days, hence the partial period is calculated based on 30 days. The total duration is calculated as 11.333 months.

Let's consider the following partial period calculations when the Period Type is Fixed:

Subscription Details when Billing Frequency is Month:

Subscription Product	Charge Name	Periodicity	Amount
Sub 01	One time	NA	\$1000
Sub 01	Recurring	Monthly	\$100

Subscription	Start Date	End Date	Invoicing Rule	Period Start	Billing Frequency	Period Type	Billing Date	Billing Interface offset Date
Sub 01	10-Jan-2020	22-Dec-2020	Advance	Service Start	Month	Fixed	Period Start	<no entry>

Here the partial period is from 10-Dec-2020 to 22-Dec-2020. The partial period amount calculation will be as follows:

(No of days in Partial period / Fixed number of days)\* charge

(13/30) \*100

Total amount for partial period = 43.333

Here's the Billing Summary for this subscription:

Period	Charge Name	Sequence	Interface Date	Bill-from Date	Bill-to Date	Amount
0	One Time Charge	0	10-Jan-2020	10-Jan-2020	22-Dec-2020	\$1000
1	Recurring Charge	1	10-Jan-2020	10-Jan-2020	09-Feb-2020	100
2	Recurring Charge	2	10-Feb-2020	10-Feb-2020	09-Mar-2020	100
3	Recurring Charge	3	10-Mar-2020	10-Mar-2020	09-Apr-2020	100
4	Recurring Charge	4	10-Apr-2020	10-Apr-2020	09-May-2020	100
5	Recurring Charge	5	10-May-2020	10-May-2020	09-Jun-2020	100
6	Recurring Charge	6	10-Jun-2020	10-Jun-2020	09-Jul-2020	100
7	Recurring Charge	7	10-Jul-2020	10-Jul-2020	09-Aug-2020	100
8	Recurring Charge	8	10-Aug-2020	10-Aug-2020	09-Sep-2020	100
9	Recurring Charge	9	10-Sep-2020	10-Sep-2020	09-Oct-2020	100
10	Recurring Charge	10	10-Oct-2020	10-Oct-2020	09-Nov-2020	100
11	Recurring Charge	11	10-Nov-2020	10-Nov-2020	09-Dec-2020	100
12	Recurring Charge	12	10-Dec-2020	10-Dec-2020	22-Dec-2020	43.33

Subscription details if the Billing Frequency is Quarter:

Subscription Product	Charge Name	Periodicity	Amount
Sub 02	One time	NA	\$1000
Sub 02	Recurring	Quarterly	\$300

Subscription	Start Date	End Date	Invoicing Rule	Period Start	Billing Frequency	Period Type	Billing Date	Billing Interface offset Date
Sub 02	10-Jan-2020	22-Dec-2020	Advance	Service Start	Quarter	Fixed	Period Start	<no entry>

The last quarter has the partial period and it will be billed as follows:

10-Oct-2020 to 09-Dec-2020 = 200

10-Dec-2020 to 22-Dec-2020 =  $(13/30) \times 100 = 43.333$

Last partial period, 243.333

Here's the Billing Summary for this subscription:

Period	Charge Name	Sequence	Interface Date	Bill-from Date	Bill-to Date	Amount
0	One Time Charge	0	10-Jan-2020	10-Jan-2020	22-Dec-2020	\$1000
1	Recurring Charge	1	10-Jan-2020	10-Jan-2020	09-Apr-2020	300
2	Recurring Charge	2	10-Apr-2020	10-Apr-2020	09-Jul-2020	300
3	Recurring Charge	3	10-Jul-2020	10-Jul-2020	09-Oct-2020	300
4	Recurring Charge	4	10-Oct-2020	10-Oct-2020	22-Dec-2020	243.33

Subscription Details if the Billing frequency is Year:

Subscription Product	Charge Name	Periodicity	Amount
Sub 03	One time	NA	\$1000
Sub 03	Recurring	Yearly	\$1200

Subscription	Start Date	End Date	Invoicing Rule	Period Start	Billing Frequency	Period Type	Billing Date	Billing Interface offset Date
Sub 03	10-Jan-2020	22-Dec-2020	Advance	Service Start	Year	Fixed	Period Start	<no entry>

Here the partial period will be calculated as follows:

10-Jan-2020 to 09-Dec-2020, 11 months = 1100



$10\text{-Dec-2020 to } 22\text{-Dec-2020} = (13/30) * 100 = 43.333$

Total = \$1143.33

Here's the billing summary for this subscription:

Period	Charge Name	Sequence	Interface Date	Bill-from Date	Bill-to Date	Amount
0	One Time Charge	0	10-Jan-2020	10-Jan-2020	22-Dec-2020	\$1000
1	Recurring Charge	1	10-Jan-2020	10-Jan-2020	22-Dec-2020	1143.33

## Prorate by Day

You can enable Prorate by day from the Subscription Profile or the Subscription Product to prorate partial periods greater than a month.

This lets you calculate the price for a charge per day and multiply it by the number of days in the partial period. Consider the following example of a 1 year 14 days subscription with a yearly charge of \$12,000.

By default, the prorate by day checkbox is unchecked. In this scenario, the partial period will be calculated by prorating by month.

Monthly rate is calculated Yearly charge divided by 12.

Monthly rate =  $12000/12 = 1000$  per month.

This amount is prorated on the monthly rate and a partial period of 14 days:

$1000 * 14/31 = 451.61$

When you enable Prorate by day, a daily rate is computed based on the yearly charge divided by the number of days in a year.

Daily rate =  $12000/365 = 32.88$

Then the partial period amount is calculated by multiplying the 14-day partial period by the daily rate.

$14 * 32.88 = 460.27$

Note: If the Period Type is Actual, the application divides by 365/366 days. If the Period Type is Fixed, daily rates are calculated by dividing by 360.

Consider the following example of a subscription with yearly billing and the following details:

Product	Quantity	Start Date	End Date	Duration	Period	Billing Frequency	Invoicing Rule	Period Start	Prorate by day
P1	1	01-Jan-2021	12-May-2021	132	Days	Year	Advance	Service Start	Yes

Charge	Periodicity	Unit Price
Recurring	Year	12000

Here, the billing amount will be calculated by multiplying the daily rate by the number of days in the partial period.

$$(12000/365)*132 = 4339.75$$

Here's the billing summary for this subscription:

Period	Charge	Sequence	Interface Date	Bill-from Date	Bill-to Date	Amount	End of Full Period	Days in partial period	Total days in the period
1	Recurring Charge	1	01-Jan-2021	01-Jan-2021	12-May-2021	4339.75	31-Dec-2021	132	365

Similarly, consider the example of another subscription with quarterly billing and an align billing date:

Product	Quantity	Start Date	End Date	Duration	Period	Alignment Date	Billing Frequency	Invoicing Rule	Period Start	Prorate by day
P2	1	28-Jan-2020	27-Jan-2021	1	Year	01-Jan-2020	Quarter	Advance	Service Start	Yes

Charge	Periodicity	Unit Price
Recurring	Year	4000

Here, since there's an alignment date of 01-Jan-2020, the first partial period will be from 28-Jan-2020 to 31-Mar-2020.

This partial period amount will be calculated as follows:

$$(\text{Quarterly Charge} * \text{Number of days in this quarter}) / \text{Number of days in the partial period} = (4000/91)*64 = 2813.2$$

The remaining quarters will be charged the quarterly amount \$4000

The last partial period from 01-Jan-2021 to 27-Jan-2021 will be calculated similarly as follows:

$$(4000/90)*27 = 1200$$

Here's the billing summary for this subscription:

Period	Charge	Sequence	Interface Date	Bill-from Date	Bill-to Date	Amount	End of Full Period	Days in partial period	Total days in the period
1	Recurring Charge	1	28-Jan-2020	28-Jan-2020	31-Mar-2020	2813.19	27-Apr-2020	64	91
2	Recurring Charge	2	01-Apr-2020	01-Apr-2020	30-Jun-2020	4000			
3	Recurring Charge	3	01-Jul-2020	1-Jul-2020	30-Sep-2020	4000			
4	Recurring Charge	4	01-Oct-2020	01-Oct-2020	31-Dec-2020	4000			

5	Recurring Charge	5	01-Jan-2021	01-Jan-2021	27-Jan-2021	1200	31-Mar-2021	27	90
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#### Related Topics

- [Partial Period Billing](#)

## Align Billing Dates

You can align billing dates using the **Align Billing From** field in the Billing section on the Edit Product page.

You may want to align billing periods of your subscription products bill lines for various reasons, such as:

- To align billing periods across different subscription products
- To align your billing periods from the start of your fiscal quarters

The Align Billing From field is supported only for the subscription type of Products. When you select a date in the Align Billing From field, the application creates a partial period ending on the day before the alignment date. The billing summary is also updated with the selected alignment date as the start of the next billing period.

**Note:** The application doesn't copy the billing alignment date when you suspend, amendment, duplicate, or renew a subscription product.

For example, let's consider a 5-year subscription product with a \$54,000 annual charge starting on 1 July 2020 and the subscription product with these billing configurations:

Product	Quantity	Start Date	End Date	Bill Frequency	Invoicing Rule	Billing Date
Product 1	1	1-Jul-20	30-Jun-25	Year	Advance	Period Start

Here's the billing summary for the above subscription product line:

Period	Charge	Sequence	Interface Date	Bill-from Date	Bill-to Date	Amount
1	Annual charge	1	1-Jul-20	1-Jul-20	30-Jun-21	54000
2	Annual charge	2	1-Jul-21	1-Jul-21	30-Jun-22	54000
3	Annual charge	3	1-Jul-22	1-Jul-22	30-Jun-23	54000
4	Annual charge	4	1-Jul-23	1-Jul-23	30-Jun-24	54000
5	Annual charge	5	1-Jul-24	1-Jul-24	30-Jun-25	54000

In this scenario, when you select 27 July 2020 as the date in the Align Billing From date field for your subscription product, a partial period is created, which ends on the day before the align billing from date. Also, bill lines are aligned to your set date. Here's how the billing summary is generated:

Period	Charge	Sequence	Interface Date	Bill-from Date	Bill-to Date	Amount
1	Annual charge	1	1-Jul-20	1-Jul-20	26-July-20	3774.19
2	Annual charge	2	27-Jul-20	27-Jul-20	26-July-21	54000
3	Annual charge	3	27-Jul-21	27-Jul-21	26-July-22	54000
4	Annual charge	4	27-Jul-22	27-Jul-22	26-July-23	54000
5	Annual charge	5	27-Jul-23	27-Jul-23	26-July-24	54000
6	Annual charge	6	27-Jul-24	27-Jul-24	30-July-25	50225.81

Alternatively, consider a scenario where you select 27 May 2020, which is before the start date of the line, in the Align Billing From field. In this scenario, a partial period is created, which ends before the set align date in the next year. The bill lines are then aligned to the set bill date from the next billing cycle. Here's how the billing summary is generated:

Period	Charge	Sequence	Interface Date	Bill-from Date	Bill-to Date	Amount
1	Annual charge	1	1-Jul-20	1-Jul-20	26-May-21	48919.35
2	Annual charge	2	27-May-21	27-May-21	26-May-22	54000
3	Annual charge	3	21-May-22	27-May-22	26-May-23	54000
4	Annual charge	4	27-May-23	27-May-23	26-May-24	54000
5	Annual charge	5	27-May-24	27-May-24	26-May-25	54000
6	Annual charge	6	27-May-25	27-May-25	30-Jun-25	5080.65

#### Related Topics

- [Bill Evergreen Subscriptions](#)
- [Evergreen Subscriptions and Pricing Terms](#)
- [Evergreen Subscriptions](#)

## Manage Credit Memo and Bill Adjustment Reasons

You can capture the reason for creating a credit memo and bill adjustment on the Billing Summary tab. The reasons for the credit memo and bill adjustment are sourced from these user-defined lookups:

- The ORA\_OSS\_CREDIT\_MEMO\_REASON lookup type for the credit memo
- The ORA\_OSS\_BILL\_ADJ\_REASON lookup type for the bill adjustment

You can easily track the reasons for creating credit memos and bill adjustments under a specific category. With this feature, you can now build more meaningful reports.

Here are the steps to create the lookup codes for ORA\_OSS\_CREDIT\_MEMO\_REASON lookup type:

1. Sign in to the application as a setup user.
2. Navigate to **Setup and Maintenance** > **Manage Standard Lookups**.
3. In the Lookup Type field, enter the values as ORA\_OSS\_CREDIT\_MEMO\_REASON and click **Search**.
4. Add the required lookup codes, display sequence, meaning, and description.
5. Click **Save and Close**.

Here are the steps to create the lookup codes for ORA\_OSS\_BILL\_ADJ\_REASON lookup type:

1. Sign in to the application as a setup user.
2. Navigate to **Setup and Maintenance** > **Manage Standard Lookups**.
3. In the Lookup Type field, enter the values as ORA\_OSS\_BILL\_ADJ\_REASON and click **Search**.
4. Add the required lookup codes, display sequence, meaning, and description.
5. Click **Save and Close**.

## Restrict Send Bill Lines to Receivables Option

You can directly interface the bill lines from Subscription Management to Oracle Account Receivables using the Send Bill Lines to Receivables action. The Send Bill Lines to Receivables action on the subscription or subscription products page is enabled by default.

However, you can disable this action. Here are the steps to disable the **Send Bill Lines to Receivables** action on the Subscription page:

1. Sign in to the application as a setup user.
2. Ensure you're working in an active sandbox with the Application Composer enabled.
3. Click **Navigator** > **Configuration** > **Application Composer**.
4. On the Application Composer page, select **Objects** > **Standard Objects** > **Subscription** > **Pages**.
5. In the Details Page Layouts section, click **Actions** > **Duplicate** and click **Save and Close**.
6. On the Details Layout: Default custom layout page, click the **Edit** icon beside the Actions, Save, Save and Close, and Cancel fields.
7. On the Details Layout: Default custom layout: Buttons and Actions page, move the **Send Bill Lines to Receivables** field from the **Selected Actions** section to the **Available Actions** section.
8. Click **Save and Close**.
9. Click **Done**.

Similarly, you can also disable the **Send Bill Lines to Receivables** action from the Subscription Product page.

#### Related Topics

- [Interface Bill Lines to Accounts Receivable](#)

## Enable Sent Date in Billing Summary

You can enable the Sent Date field on the Billing Summary tab using the Application Composer. Here are the steps to enable the Sent Date field:

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1. Sign in to the application as a setup user.
2. Ensure you're working in an active sandbox with the Application Composer enabled.
3. Click **Navigator** > **Configuration** > **Application Composer**.
4. On the Application Composer page, select **Objects** > **Standard Objects** > **Subscription Product** > **Pages**.
5. In the Details Page Layouts section, click **Actions** > **Duplicate** and click **Save and Edit**.
6. On the Details Layout: Default custom layout page, select the **Billing Summary** subtab, and click the **Edit** icon in the Subtabs Region section.
7. On Details Layout: Default custom layout: Subtab: Billing Summary page, move the **Sent Date** field from the **Available Fields** section to the **Selected Fields** section.
8. Click **Save and Close**.
9. Click **Done**.

#### Related Topics

- [Interface Bill Lines to Accounts Receivable](#)

## Impact of Charge Periodicity and Billing Frequency on Billing Summary

Charge Periodicity, or Subscription Product Duration, is the number of Periods in a Billing Summary. For example, if charge periodicity is quarter, a subscription for a duration of 1 year would have 4 periods.

You can use different combinations of charge periodicity and billing frequency to build billing summary. Consider the following instances:

- If the charge periodicity and billing frequency are different, then the number of bill lines will be based on whichever is the shortest period. For example:
  - If billing frequency is quarter and charge periodicity is year, 4 bill lines are generated.
  - If billing frequency is year and charge periodicity is month, 12 bill lines are generated.
- Interface Date depends on Billing Frequency. To generate the bill every quarter, interface date will be the same for all the bill lines generated in that quarter.

Here's an example of a subscription with products with different charge periodicity:

Subscription Information:

Subscription Header	Start Date	End Date	Invoicing Rule	Billing Date	Period Type
Subscription S1	Jan 1 <sup>st</sup>	Dec 31 <sup>st</sup>	Arrears	Calendar Month	Actual

Effectivity: Start Date is in future

Product Information:

Products	Charge Periodicity	Recurring Charge	Total amount for full duration of 1 year	Total Amount
Product 1 – P1	Month	\$ 100	12 months * \$ 100 per month	\$ 1200
Product 2 – P2	Quarter	\$ 300	4 quarters * \$ 300 per quarter	\$ 1200
Product 3 – P3	Year	\$1200	1 year * \$ 1200 per year	\$ 1200

Now consider the following example of products with three Charge Periodicities - Month, Quarter and Year, and three Billing Frequencies - Month, Quarter and Year. You can see the nine available combinations and how each bill line will in different billing summaries for all the combinations:

Products	Charge periodicity	Billing Frequency	# Periods	# Bill lines	Interface date	Bill from date	Bill to date	Amount per bill line
P1	Month	Month	12	12	Changes every Month	Month Start	Month end	\$ 100
P1	Month	Quarter	12	12	Changes every Quarter	Month Start	Month end	\$ 100
P1	Month	Year	12	12	Changes every Year	Month Start	Month end	\$ 100
P2	Quarter	Month	4	12	Changes every Month	Month Start	Month end	\$ 100
P2	Quarter	Quarter	4	4	Changes every Quarter	Quarter Start	Quarter End	\$ 300
P2	Quarter	Year	4	4	Changes every Year	Quarter Start	Quarter End	\$ 300
P3	Year	Month	1	12	Changes every Month	Month Start	Month end	\$ 100
P3	Year	Quarter	1	4	Changes every Quarter	Quarter Start	Quarter End	\$ 300

P3	Year	Year	1	1	Changes every Year	Year Start	Year End	\$ 1200
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## Calculate Total Contract Value and Monthly Recurring Revenue

This topic describes how to calculate total contract value and monthly recurring revenue.

Monthly Recurring Revenue (MRR) is a key metric for subscription businesses. It denotes the amount of revenue that a company might expect to receive monthly. Total Contract Value (TCV) is the sum of all recurring and one-time charges that a company will receive from a subscription. Usage charge though a recurring charge isn't considered.

When you add a product to a subscription, Subscription Management Cloud application calculates the MRR and TCV for the product based on the applicable term and any discounts that may have been applied.

**Note:** Subscription Management Cloud application calculates MRR and TCV after excluding any discounts that you might have applied as charge adjustments. MRR and TCV will not be calculated for evergreen subscriptions

Subscription Management Cloud application uses the following equation to calculate MRR:

$MRR = \text{Total Recurring Charge Amount} / \text{No of months in subscription term}$

Here are some examples of how MRR and TCV are calculated in Subscription Management:

Example 1:

Consider a product called Analytics Subscription is added to a subscription for a term of 1 year. The product has a monthly charge of \$1000 and a charge adjustment has been applied which gives a 50% discount for the first three months

Total number of months =  $1 \times 12 = 12$  months

Total recurring charges collected =  $0.5 \times 1000 \times 3 + 1000 \times 9 = 10500$

$MRR = 10500 / 12 = 875$

$TCV = \$10500$

Example 2:

Consider a product called CX Subscription is added to a subscription for a term of 10 months. The product has a quarterly charge of \$5000

Total number of months = 10 months

Total recurring charges collected =  $5000 \times 3 + 5000 / 3 = 16667.67$

$MRR = 16667.67 / 10 = 1666.67$

$TCV = \$16667.67$



**Example 3:**

Now let's consider that a product called HCM Subscription is added to a subscription for a term of 1 year and 23 days. The product has a yearly charge of \$20000

Total Number of Months:  $12 \times 1 + 23/31 = 12.742$

Total Recurring charges collected:  $20000 + 20000/12 \times 23/31 = 21236.56$

MRR:  $21236.56/12.742 = 1666.67$

TCV: \$21236.56

## Generate Pricing Terms and Billing Summary

You can select specific pricing behavior for a subscription using the Pricing Term functionality. Pricing terms can help when customers want to increase the price for evergreen subscriptions, ramp pricing for termed subscriptions, or want to reprice subscriptions periodically through the subscription term.

You can apply a pricing term to an evergreen subscription and termed lines in draft status. The pricing term option is available on the Create Subscription page and when adding products. By default, the pricing term is disabled. When you enable a pricing term, you must enter the pricing method and the term.

When you enable the pricing term, the subscription regenerates the billing schedule during the pricing term, for both evergreen and termed lines. For example, a 1-year pricing term results in a 1-year billing schedule for an evergreen line, instead of one billing period. Similarly, for a termed line with 3 years' duration, the billing schedule is generated for 1 year. The billing schedule doesn't exceed the end date of the line. For example, a termed line valid for 6 months that has a pricing term of one year, generates a billing schedule of only 6 months.

When you change the pricing method, pricing term, or the start date, the subscription regenerates the billing schedule when you save that subscription. These are the attributes of the pricing term:

Pricing Term Attribute	Description
Enable pricing term	Applies a pricing method to the product for the specified duration.
Pricing Method	Markup: Select this option to increase the list price. For example, if the list price is \$100 and you apply a markup of 10%, the calculated price becomes \$110. Markdown: Select this option to decrease the list price. For example, if the list price is \$100 and you apply a markdown of 10%, the calculated price becomes \$90.  Reprice: Recalculates the latest price. This doesn't change the charges; only the latest charges are retrieved.  Markup and markdown apply to all recurring charges.
Pricing Term	On evergreen lines, the subscription generates the billing schedule for the number of periods specified in the pricing term. On termed lines, the subscription generates the billing frequency, for example, reprice the line every month.
Starting On	Select the date when the pricing term becomes effective. If you keep this blank, the start date of the line is assumed to be the effective date of the pricing term.

Pricing Term Attribute	Description
Generate billing schedule for the full period	Select this option to generate billing schedules for the entire subscription product duration. You can't use this option with evergreen subscriptions and reprice method.

Here's an example for pricing terms with and without a Starting On date:

Product	Quantity	Start Date	End Date	Bill Frequency	Invoicing Rule	Billing Date	Period Start	Period Type
Subscription Product1	1	01-Jan-21	31-Dec-21	Month	Advance	Period Start	Service Start	Actual

Charge details with pricing terms:

Charge	Amount	Markup Percentage	Pricing Term	Starting On Value	Today's Date
Monthly Recurring	\$ 100	10	1 Month	Leave blank	02-Dec-21

Billing summary after considering pricing terms:

Period	Charge	Sequence	Interface Date	Bill-from Date	Bill-to Date	Amount (USD)
1	Monthly Recurring	1	02-Dec-21	1-Jan-21	31-Jan-21	100
2	Monthly Recurring	2	02-Dec-21	1-Feb-21	28-Feb-21	110
3	Monthly Recurring	3	02-Dec-21	1-Mar-21	31-Mar-21	121
4	Monthly Recurring	4	02-Dec-21	1-Apr-21	30-Apr-21	133.1

Charge details with pricing terms and starting on dates:

Charge	Amount	Markup Percentage	Pricing Term	Starting On Value	Today's Date
Monthly Recurring	\$ 100	10	1 Month	01-Mar-21	02-Dec-21

Billing summary after considering pricing term and starting on date as 01-Mar-21:

Period	Charge	Sequence	Interface Date	Bill-from Date	Bill-to Date	Amount (USD)
1	Monthly Recurring	1	02-Dec-21	1-Jan-21	31-Jan-21	100
2	Monthly Recurring	2	02-Dec-21	1-Feb-21	28-Feb-21	100
3	Monthly Recurring	3	02-Dec-21	1-Mar-21	31-Mar-21	110
4	Monthly Recurring	4	02-Dec-21	1-Apr-21	30-Apr-21	121

## Bill Evergreen Subscriptions

Evergreen subscriptions let you create subscription lines that don't have end dates. Such lines and subscriptions are called perpetual, or open-ended.

Subscription headers may or may not have an end date. By default, the subscription lines inherit the subscription header end date. You can remove the end date at the line level. This creates an evergreen product line. You can add evergreen products to any subscriptions, including termed subscriptions with end dates. If you add an evergreen product to a termed subscription, then the subscription term end date is removed from the subscription. You can add or remove the end date on an already existing draft line. This action causes the subscription to regenerate the billing schedule.

### Evergreen Pricing and Billing

Evergreen charges are displayed like termed lines. The billing schedule is generated only for the subsequent billing cycle. You can't find the Total Contract Value for an evergreen subscription. For an evergreen subscription without an end date, the application generates the billing schedule for billing periods based on the billing frequency. You must run the Fetch Pricing Information for Subscriptions and Generate Billing Schedule scheduled process to generate the billing schedule for the next term.

Billing summaries vary for evergreen subscriptions started in the past, starting today and starting in the future. Evergreen subscription with calendar billing generates billing summary that adheres to the calendar month billing

For example, consider these subscription details:

Charges

Charge	Periodicity	Unit Price
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Recurring	Monthly	\$100

## Product

Product	Quantity	Start Date	EndDate	Bill Frequency	Invoicing Rule	BillingDate	Period Start	Period Type
Subscription Product1	1	12-Nov-21		Month	Advance	Period Start	Calendar Month	Actual

Here's the billing summary if the subscription start date is 12-Nov-2021 and system date is 20-Jan-2022:

Period	Charge Name	Sequence	Interface date	Bill from date	Bill to date	Amount
1	Recurring	1	20-Jan-2022	12-Nov-2021	30-Nov-2021	\$63.33
2	Recurring	2	20-Jan-2022	01-Dec-2021	31-Dec-2021	\$100
3	Recurring	3	20-Jan-2022	01-Jan-2021	31-Jan-2022	\$100

To generate the billing summary for the next term, activate the subscription and run the Fetch Pricing Information for Subscriptions and Generate Billing Schedule ESS jobs.

Period	Charge Name	Sequence	Interface date	Bill from date	Bill to date	Amount
1	Recurring	1	20-Jan-2022	12-Nov-2021	30-Nov-2021	\$63.33
2	Recurring	2	20-Jan-2022	01-Dec-2021	31-Dec-2021	\$100
3	Recurring	3	20-Jan-2022	01-Jan-2021	31-Jan-2022	\$100
<b>4</b>	<b>Recurring</b>	<b>4</b>	<b>01-Feb-2022</b>	<b>01-Feb-2022</b>	<b>28-Feb-2022</b>	<b>\$100</b>

Here's the Billing Summary if the subscription start date is 20-Jan-2022 and system date is 20-Jan-2022:

Period	Charge Name	Sequence	Interface date	Bill from date	Bill to date	Amount
1	Recurring	1	20-Jan-2022	20-Jan-2022	31-Jan-2022	\$38.71

To generate the billing summary for the next term, activate the subscription and run the Fetch Pricing Information for Subscriptions and Generate Billing Schedule ESS jobs.

Period	Charge Name	Sequence	Interface date	Bill from date	Bill to date	Amount
1	Recurring	1	20-Jan-2022	20-Jan-2022	31-Jan-2022	\$38.71
2	<b>Recurring</b>	2	<b>01-Feb-2022</b>	<b>01-Feb-2022</b>	<b>28-Feb-2022</b>	<b>\$100</b>

Here's the Billing Summary if the subscription start date is 10-Feb-2022 and system date is 20-Jan-2022:

Period	Charge Name	Sequence	Interface date	Bill from date	Bill to date	Amount
1	Recurring	1	10-Feb-2022	10-Feb-2022	28-Feb-2022	\$67.86

Since the subscription start date is in future, the Fetch Pricing Information for Subscriptions and Generate Billing Schedule ESS jobs will not generate the billing summary for the next term.

Billing summaries vary for evergreen subscription if billing frequency is month, quarter and year for a subscription started in the past.

Let's consider the same charges and product information as before.

Here's Billing Summary if the subscription start date is 12-Nov-2021, system date is 20-Jan-2022 and billing frequency is Quarter

Period	Charge Name	Sequence	Interface date	Bill from date	Bill to date	Amount
1	Recurring	1	20-Jan-2022	12-Nov-2021	30-Nov-2021	\$63.33
2	Recurring	2	20-Jan-2022	01-Dec-2021	28-Feb-2022	\$300

To generate the billing summary for the next term, activate the subscription and run the Fetch Pricing Information for Subscriptions and Generate Billing Schedule ESS jobs.

Period	Charge Name	Sequence	Interface date	Bill from date	Bill to date	Amount
1	Recurring	1	20-Jan-2022	12-Nov-2021	30-Nov-2021	\$63.33
2	Recurring	2	20-Jan-2022	01-Dec-2021	28-Feb-2022	\$300
3	<b>Recurring</b>	3	<b>01-Mar-2022</b>	<b>01-Mar-2022</b>	<b>31-May-2022</b>	<b>\$300</b>

Here's the Billing Summary if the subscription start date is 12-Nov-2021, system date is 20-Jan-2022 and billing frequency is Year

Period	Charge Name	Sequence	Interface date	Bill from date	Bill to date	Amount
1	Recurring	1	20-Jan-2022	12-Nov-2021	30-Nov-2021	\$63.33
2	Recurring	2	20-Jan-2022	01-Dec-2021	30-Nov-2022	\$1200

To generate the billing summary for the next term, activate the subscription and run the Fetch Pricing Information for Subscriptions and Generate Billing Schedule ESS jobs.

Period	Charge Name	Sequence	Interface date	Bill from date	Bill to date	Amount
1	Recurring	1	20-Jan-2022	12-Nov-2021	30-Nov-2021	\$63.33
2	Recurring	2	20-Jan-2022	01-Dec-2021	30-Nov-2022	\$1200
<b>3</b>	<b>Recurring</b>	<b>3</b>	<b>01-Dec-2022</b>	<b>01-Dec-2022</b>	<b>30-Nov-2023</b>	<b>\$1200</b>

## Set Up Summarized Billing

When you add a coverage product to your subscription, you have the option to view the summarized charges of each line item from multiple covered levels or separate line items for each charge.

For summarized bills, bill lines across all covered lines are grouped by the charge definition for specific periods and displayed at the coverage product level. You can enable this by opting for Summarized billing while adding a coverage product.

Let's see an example of detailed and summarized billing. Here's a setup of a coverage product and its covered levels.

### Coverage Product

Product	Quantity	Start Date	End Date	Billing Frequency	Invoicing Rule	Billing Date	Period Start	Period Type
Coverage Product 1	1	01-Jul-2021	30-Jun-2022	Quarter	Advance	Period Start	Service Start	Actual

Charges – the charges would be the same for both the assets because they are defined in the coverage product.

Charge Name	Periodicity	Unit Price
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Activation Fee	NA	\$5000
Recurring Fee	Quarter	\$600

### Coverage Line

Covered Level Type	Covered Level Name	Pricing UOM	Covered Level Start Date	Covered Level End Date	Bill to date	Amount
Asset	Asset_01	Quarter	01-Jul-2021	30-Jun-2022	30-Nov-2021	\$7,400
Asset	Asset_02	Quarter	01-Jul-2021	30-Jun-2022	28-Feb-2022	\$7,400

You can enable Summarized billing while adding a coverage product to view the summarized charges of each line item. Here's the billing summary at coverage product level:

### Summarized Billing

Period	Charge Name	Sequence	Interface date	Bill from date	Bill to date	Amount
0	Activation Fee	0	20-Jan-2022	01-Jul-2021	30-Jun-2022	\$10,000
1	Recurring Fee	1	20-Jan-2022	01-Jul-2021	30-Sep-2021	\$1,200
2	Recurring Fee	2	20-Jan-2022	01-Oct-2021	31-Dec-2021	\$1,200
3	Recurring Fee	3	20-Jan-2022	01-Jan-2022	31-Mar-2022	\$1,200
4	Recurring Fee	4	01-Apr-2022	01-Apr-2022	30-Jun-2022	\$1,200

### Detailed billing

If you don't opt for summarized billing, it is represented as follows in the billing summary page of the coverage product:

Period	Charge Name	Sequence	Interface date	Bill from date	Bill to date	Amount
0	Activation Fee	0	20-Jan-2022	01-Jul-2021	30-Jun-2022	\$5,000
0	Activation Fee	0	20-Jan-2022	01-Jul-2021	30-Jun-2022	\$5,000
1	Recurring Fee	1	20-Jan-2022	01-Jul-2021	30-Sep-2021	\$600
1	Recurring Fee	1	20-Jan-2022	01-Jul-2021	30-Sep-2021	\$600
2	Recurring Fee	2	20-Jan-2022	01-Oct-2021	31-Dec-2021	\$600
2	Recurring Fee	2	20-Jan-2022	01-Oct-2021	31-Dec-2021	\$600
3	Recurring Fee	3	20-Jan-2022	01-Jan-2022	31-Mar-2022	\$600
3	Recurring Fee	3	20-Jan-2022	01-Jan-2022	31-Mar-2022	\$600
4	Recurring Fee	4	01-Apr-2022	01-Apr-2022	30-Jun-2022	\$600

4	Recurring Fee	4	01-Apr-2022	01-Apr-2022	30-Jun-2022	\$600
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## Use Milestone Billing

### Overview of Billing Using Milestones

Milestone billing lets you bill customers as an event happens or using an ad-hoc date. At the same time, you can also recognize revenue based on ad-hoc dates or milestones that your finance department prescribes.

#### How it Works

Each bill line amount on a subscription corresponds to a billing milestone. The percentage of the charge amount is the bill line amount of the milestone. The interface date of the bill line is the completion date of the milestone.

The application creates a revenue line for the charge. The completion date of the milestone is the satisfaction date. Every satisfaction event corresponds to recognizing a percentage of the allocated revenue.

The milestones are billed by identifying those that are complete, updating the completion date for them, and then interfacing the bill lines to Accounts Receivable.

**Note:** Milestone-based billing is only for subscription products where sales product type equals Subscription. It's not for coverage/warranty products.

### Setup Overview

This table shows the high-level setup steps for milestone billing and where to find more information on each:

Step	Where to Find More Information
Define milestone names and Milestones sources in two lookup types.	<a href="#">Define Milestones</a>
Define milestone templates.	<a href="#">Define Milestone Templates</a>
Create a subscription and select a subscription product (not a coverage) with a one-time charge.	<a href="#">Use Milestone Billing</a>
Assign the MBBRR template to the one-time charge and update the milestones as required. Then generate the bill lines for the milestones.	<a href="#">Use Milestone Billing</a>
Activate the subscription and then send the bill lines to Oracle Accounts Receivable and revenue information to Oracle Revenue Management Cloud.	<a href="#">Use Milestone Billing</a>



## Tips and Considerations

Here are some tips and considerations to keep in mind when using milestone billing:

- The MBBRR template can only be associated with a one-time charge of a subscription product in a subscription.
- A one-time charge of a coverage type of subscription product can't have an MBBRR template.
- It's recommended that if milestones are going to be used for billing or revenue recognition, that a separate subscription with only a one-time charge be used. This is because, in case of amendment, a one-time charge with an MBBRR template instance isn't copied over to the new subscription product line.
- Since the interface date of the bill lines is entirely determined by the completion date entered in the template instance, you can bill on an ad-hoc basis. This means that you can enable milestone-based billing, even if you don't bill strictly based on milestones, but instead use this feature to bill on an ad-hoc basis. For example, if there's a one-time charge that has to be billed monthly for the first year and quarterly for second year, then you can create 12 milestones with completion dates spaced a month apart and then 4 more milestones spaced a quarter apart.
- If the bill schedule line is created from an MBBRR template instance, then the line amount can be adjusted in the bill line actions.
- Duplicating a subscription doesn't copy the MBBRR template.
- Renewing (both manual and automatic), a subscription doesn't copy the MBBRR template to the subscription created upon renewal.
- Milestones can be imported and assigned to a subscription product's one-time charge.
- The suspend action isn't available for a subscription product that has a one-time charge with an MBBRR template assigned.
- During amendment, the one-time charge with an MBBRR template isn't copied over to the new subscription product line. Therefore, the bill schedule lines (interfaced to Accounts Receivable and not yet interfaced to AR) from the amended subscription product line aren't copied to the new subscription product line. Those bill lines remain in the subscription product lines in Under Amendment status. Even after activation of the new product line, when the previous subscription product line becomes Closed, those Bill lines (both interfaced and non-interfaced) remain in the Closed line. You can continue to complete the unbilled milestones and recognize revenue for the revenue milestones when they're completed.
- If you're importing or creating the milestone template instance through REST APIs, then you can avoid passing a template name. Passing the attributes MilestoneBillingFlag = Y and MilestoneRevenueFlag = Y enables the billing milestones and revenue recognition milestones sections, respectively, in the UI. Additionally, if you pass milestones for billing or revenue recognition and also an MBBRR template ID or name then the aforementioned flags in import or REST API, payload will prevail over the value of these flags in the MBBRR template. So, you may see that though an MBBRR template doesn't have revenue recognition milestones or billing milestones, yet in the subscription product, these sections are enabled.
- Evergreen subscriptions can't have one-time charges with an MBBRR template. You will see a validation error.
- Pricing terms don't have any impact on one-time charges with MBBRR template.
- If a subscription is in on On Hold status, the bill lines aren't interfaced to Accounts Receivables irrespective of the completion date of the milestones.
- If periodic recognition of revenue or periodic billing is enabled for a one-time charge, then you can't attach an MBBRR template to the one-time charge. The charge level attributes for billing and revenue recognition take precedence over the MBBRR template.

## Define Milestones

To use milestone billing, you must define milestone names and milestones sources in two lookup types.

Your business needs dictate your setups of the lookup types. Since milestones can be tracked in other applications, you may want to define the sources for milestones, along with the names. The lookup type, `ORA_OSS_MILESTONE_NAME` (Name of the Milestone), holds the names, and `ORA_OSS_MILESTONE_SRC` (Source of the Milestone) holds the sources.

Use the **Manage Standard Lookups** task in the Setup and Maintenance work area to access the lookup types.

## Define Milestone Templates

You need to define milestone templates for milestone billing.

You define the templates in the Subscription Configuration area. The template you create in the configuration area is called the MBBRR (Milestone Based Billing and Revenue Recognition Template) template.

### Begin Creating a Milestone Template

1. Navigate to **Subscription Configuration > Subscription Rules**.
2. Select the **Billing and Revenue Recognition Milestone Templates** link. You'll see the existing MBBRR template.

**Note:** If you try to open an existing MBBRR template that's in use in a subscription, then a warning message displays indicating that the template is already in use. However, you can still go ahead and modify the template. Any changes you make won't cascade to the subscriptions that are already using this template.

3. To begin creating a new template, click **Create** in the global header.

**Note:** The MBBRR template is comprised of billing and revenue recognition milestones or neither of these. You can create an empty template and then later modify it after it's associated with a subscription.

4. Click **Add Row** and add milestones in the respective sections.
5. See the next section, Enter Fields for a Milestone Billing Template, for details about how to enter the fields for the template.

### Enter Fields for a Milestone Billing Template

This table shows the fields and additional information:

Field	Additional Information
Template Name	Required field
Description	Optional.
Enable milestone based billing	Enables the Billing Milestones section
Enable milestone based revenue recognition	Enables the Revenue Recognition Milestones section

Field	Additional Information
Name	Required field. Name of the milestone
Source	Application that's tracking the milestone. For example: The milestones are defined and tracked in a project management application, whereas Subscription Management is used only for billing. Thus, if you want to know which application tracks the milestones use this lookup type to define those.
Source Reference	Use to capture the reference number of a transaction or entity that's tracking the milestones. Example: A project number of the project management application tracking the milestones.
Percentage	Required field. Values should be between 0 and 100. If the percentage is outside of this range, then an error message is shown. For the Revenue Recognition milestones section it can be -100 to 100. However, it's not expected that you would enter negative percentage values.

**Note:** For Revenue Milestones, the percentage of revenue allocation corresponds to percentage of the Allocated Amount in the Revenue Management Cloud contract and **not** the Charge Amount.

## Use Milestone Billing

Use a milestone billing template when you want to bill customers when an event happens or when using an ad-hoc date.

You can only associate an MBBRR template with a one-time charge of a subscription product in a subscription. You can select the template and edit it, according to the requirements of the subscription. The MBBRR template assigned to a one-time charge in a subscription product is called an "MBBRR template instance" or a "milestone template instance". Any changes to an MBBRR instance won't modify the MBBRR template that's been established in the Subscription Configuration screens. If you have multiple one-time charges, then you can assign the same or a different MBBRR template to each of them.

### Steps to Use Milestone Billing in a Subscription

1. Create a subscription and select a subscription product (not a coverage) with a one-time charge. See [Create Subscriptions](#).
2. In the **Template** field, select a milestone billing template.

The check boxes **Enable milestone based billing** and **Enable milestone based revenue recognition** reflect the values of the MBBRR template selected. These values are set by your administrator.

3. In the **Comments** field, capture any comments as you update an event or enter a completion date. For instance, you can capture who approved the milestone or add document references.
4. Delete lines as needed.

**Note:** The **Delete** icon is enabled only when the subscription is in Draft status.

5. In the **Expected Completion Date** field, enter the date of the milestone. The date should be within the subscription product start and end dates.
6. Enter a **Completion Date** for the milestone, which also should be within the subscription product start and end dates.
  - The completion date for revenue recognition becomes satisfaction date for the revenue event. This is date the completion of a specific event, when the completion date is captured. At this point, the milestone row is made non-editable. For example, if you have created that row by mistake and don't want

it, then you have to enter another row with the same completion date and a negative percentage and save it. This will nullify the impact in Revenue Management.

- The completion date for a billing milestone date, plus the billing offset value in days, is the interface date in the billing schedule lines. You can't change the completion date after it's entered and saved.
- 7. Enter a **Billing Offset** for billing milestones. Use the billing offset to indicate the number of days before or after the completion date on which the interface date lies.
- 8. You can alter **Percentages** and add new events when an MBBRR template is used. The total of the percentages should be 100. You can use percentages to reverse revenue (see the example later in this topic). See the next section, Considerations When Using Percentage, for concepts around using percentage.
- 9. You can update **Source Reference**, as needed, with subscriptions in any status.
- 10. Save and activate the subscription.

If you change the milestone template while working on that milestone template instance, then the data of the previous milestone template is discarded.

**Note:** You can't reverse revenue for more than what has been recognized, until that milestone completes.

## Considerations When Using Percentage

Keep in mind these considerations when using percentage:

- The percentage for reversing a completed revenue milestone is always a negative value. The new line that reverses the event should have the same event name, completion date, and negative percentage. It should also have the same absolute value as the positive percentage entered earlier. You then need to enter new rows with new events and completion dates, and ensure that the total percentage is 100.
- Percentage is the field that's used to split a charge amount after the charge discounts corresponding to the milestone event.
- Percentage values should be between 0 and 100 for billing milestones.
- Percentage values should be between -100 and 100 for revenue milestones.

## Examples of Reversing Revenue

Here's an example of reversing revenue using a percentage:

Let's say you have a subscription product with a start date of 1-Jan-2021 and an end date of 30-Oct-2022. The line has three milestones: SIT, UAT, and GOLIVE. You can't enter a negative percentage of 70 on 1-Jul-2021 as  $ABS(-70) > 33 + 34$ .

For all rows, the type is Revenue and the source is Manual.

This table shows more details of this example:

Name	Percentage	Completion Date
SIT	33	10-Jan-21
UAT	34	30-Jun-21
GOLIVE	33	
UAT	-70	1-Jul-21
UAT1	70	

In this example, the revenue reversal is allowed on 1-Jul-2021:

Name	Percentage	Completion Date
SIT	33	10-Jan-21
UAT	34	30-Jun-21
GOLIVE	33	
UAT	-60	1-Jul-21
UAT1	60	

In this example, the revenue reversal isn't allowed on 10-Jul-2021, since as ABS  $(-60) > 33+34-20+10$ :

Name	Percentage	Completion Date
SIT	33	10-Jan-21
UAT	34	30-Jun-21
GOLIVE	33	
UAT	-20	1-Jul-21
UAT1	10	2-Jul-21
UAT2	10	30-Jul-21
UAT1	-60	10-Jul-21
CUTOVER	60	

## Product Statuses and Milestone Templates

When you're using an instance of the supplied MBBRR template, you can only edit certain fields, based on what status the subscription product is in.

This table can help you understand which fields are editable:

Field	Subscription Product Statuses							
	Active	Draft	Closed	Suspend	On Hold	Canceled	Under Amendment	Expired
Type	N	N	N	NA	N	N	N	N
Source	Y	Y	Y	NA	Y	N	Y	Y
Source Reference	Y	Y	Y	NA	Y	N	Y	Y

Field	Subscription Product Statuses							
	Active	Draft	Closed	Suspend	On Hold	Canceled	Under Amendment	Expired
Name	N	Y	N	NA	N	N	N	N
Percentage	N	Y	N	NA	N	N	N	N
Comments	Y	Y	Y	NA	Y	N	Y	Y
Expected Completion Date	Y	Y	Y	NA	Y	N	Y	Y
Completion Date (Billing)	Y	Y	Y	NA	Y	N	Y	Y
Completion Date (Rev Recognition)	Y	N	Y	NA	Y	N	Y	Y
Billing Offset	Y	Y	Y	NA	Y	N	Y	Y
Template	N	Y	N	NA	N	N	N	N

You can create milestones based on the statuses mentioned in this table:

Subscription Product Statuses	Billing Milestones	Revenue Recognition Milestones
Active	N	Y
Draft	Y	Y
Closed	N	Y
Suspended	NA	NA
On Hold	N	Y
Canceled	N	NA
Under Amendment	N	Y
Expired	N	Y

You can delete milestone template instances based on these statuses:

Subscription Product Statuses	Billing Milestones	Revenue Recognition Milestones
Active	N	N
Draft	Y	Y
Closed	N	N
Suspended	NA	NA

Subscription Product Statuses	Billing Milestones	Revenue Recognition Milestones
On Hold	N	N
Canceled	N	N
Under Amendment	N	N
Expired	N	N

## Close Credit Method and Revenue Recognition

Milestone billing follows certain rules with credit allocations:

- When a subscription is being closed, the application doesn't automatically calculate credit, except when the close credit method is Full. Thus, to give credit, you have to prorate the amount manually. You prorate manually by either making manual adjustments to the bill lines that aren't yet interfaced or by creating a manual credit memo, if bill lines are already interfaced to Accounts Receivable.
- When you give a credit to a bill line, the milestone name from the bill line is copied to the credit memo line.

Following are two scenarios with credit allocation on closure of subscriptions. Note that all values are based on the standalone selling price in Revenue Management.

### Use Case: No Credit Given on Close

Let's see how the allocation of revenue changes when a subscription with an MBBRR template is closed with no credit.

In this table, consider an MBBRR template instance for a one-time charge: Professional Fee of \$1,000:

Type	Source	Milestone Name	Percentage	Completion Date	Allocated Amount in Revenue Management
Revenue	Manual	CRP	40	1-Mar-20	400
Revenue	Manual	UAT1	30	20-Oct-20	300
Revenue	Manual	UAT2	20		
Revenue	Manual	GOLIVE	10		

The subscription is closed after 20-Oct-2020, say 10-Nov-2020. By 10-Nov-2020, only \$700 is recognized, with two satisfaction events that have been interfaced to Revenue Management.

The contract value was \$1,000. However, after termination, the revised contract value in the revenue contract is \$700. This revision will be a Material revision.

Two more revenue milestones in the MBBRR template instance are not yet complete. The completion date of the milestones, UAT2 and GOLIVE, is set to the close date, 10-Nov-2020. The template will now look as shown in this table:

Type	Source	Milestone Name	Percentage	Completion Date	Allocated Amount in Revenue Management*
Revenue	Manual	CRP	40	1-Mar-20	280
Revenue	Manual	UAT1	30	20-Oct-20	210
Revenue	Manual	UAT2	20	10-Nov-20	140
Revenue	Manual	GOLIVE	10	10-Nov-20	70
				Total	700

The two milestones, UAT2 and GOLIVE, are passed to Revenue Management with satisfaction dates of 10-Nov-2020, and with satisfaction percentages of 20% and 10%, respectively.

## Use Case: Full Credit Given on Close

Now let's see how the allocation of revenue changes when a subscription with an MBBRR template, is closed with Full credit.

In this table, consider an MBBRR template instance for a one-time charge: Professional Fee of \$1,000:

Type	Source	Milestone Name	Percentage	Completion Date	Allocated Amount in Revenue Management*
Revenue	Manual	CRP	40	1-MAR-20	400
Revenue	Manual	UAT1	30	20-OCT-20	300
Revenue	Manual	UAT2	20		
Revenue	Manual	GOLIVE	10		

The subscription is closed after 20-Oct-2020, say 10-Nov-2020, with Full credit as the credit method. By 10-Nov-2020, only \$700 is recognized, and this has to be revised to 0.

The contract value was \$1,000. However, after termination, the revised contract value in the revenue contract is 0. This revision will be a Material revision.

Two more revenue milestones in the MBBRR template instance are not yet complete. The completion date of the milestones, UAT2 and GOLIVE, is set to the close date, 10-Nov-2020. The template will now look as shown below:

Type	Source	Milestone Name	Percentage	Completion Date	Allocated Amount in Revenue Management*
Revenue	Manual	CRP	40	1-Mar-20	0
Revenue	Manual	UAT1	30	20-Oct-20	0
Revenue	Manual	UAT2	20	10-Nov-20	0
Revenue	Manual	GOLIVE	10	10-Nov-20	0



Type	Source	Milestone Name	Percentage	Completion Date	Allocated Amount in Revenue Management*
				Total	0

The two milestones, UAT2 and GOLIVE, are passed with satisfaction dates of 10-Nov-2020 to Revenue Management with satisfaction percentages of 20% and 10%, respectively.

**Note:** If you create a manual credit memo or manual adjust bill line amount towards giving a partial credit, then the revenue contract value is revised based on the revised sum of the charge bill lines.

## Recognize Revenue with Milestone Billing

Consider some points around revenue recognition:

- The revenue recognition of milestone-based charges follows a "percentage satisfied" satisfaction measurement model. When a milestone is considered to be complete, a satisfaction event line is interfaced to Revenue Management. The completion of a milestone is captured as the completion date in the MBBRR template instance. This date becomes the satisfaction date in the revenue contract, and the percentage becomes the satisfaction percentage in the revenue contract for that satisfaction event.
- A negative percentage indicates that the revenue is being reversed. However, as we have seen above, there are certain validations performed when a negative percentage is entered.
- If there's a revenue recognition reversal (for example, a change in the percentage value), then you must reverse the complete event and then create additional events with different percentages.

## Close Subscriptions with Milestone Billing

Keep these points in mind when closing subscriptions that use milestone billing:

- As a subscription is closed, the application doesn't automatically calculate credit, unless the close credit method is Full. So, if you need to give credit, you have to prorate manually by either making manual adjustments to the bill lines that aren't yet interfaced or by creating a manual credit memo, if bill lines are already interfaced to Accounts Receivable
- Any bill lines for incomplete milestones are interfaced to Accounts Receivable even after the subscription is closed. In genuine business scenarios, the parties to the contract may decide to honor a part of the unbilled milestones, thereby entering a completion date for them and manually changing the line amount on the bill line.

To close a subscription product with a milestone-based charge:

1. Decide on the close date of the subscription product.
2. Decide what happens to the bill lines that pertain to milestones that are after the termination date, or within the termination date and not yet billed.
3. Make the bill line adjustments for the unbilled milestones. Make them 0. Or, if a partial bill needs to be generated, then manually change the bill line amount. This is "manual proration" of a bill line.
4. Close the subscription.

If you do bill the billing lines after closing, then the invoice results in an invoice dispute as part of normal business practices (this is not in scope of Subscription Management). In this case, the billed amount can differ from the amount recognized in Revenue Management.

# 4 Common Application Setup Concepts

## Users and Security

### Overview of Users and Security Setup

Since you followed the *Implementing Sales* guide steps to set up your initial set of users, then you already know that Oracle applications use a role-based access control security model to secure access to functionality and data.

In a role-based access control security model, users are assigned roles, and roles are assigned access privileges to protected system resources.

Sales and Service users who access the transactional UI, for example sales representatives or service representatives working in leads or service requests, are created as resources and are known as resources.

### Default Preferences

To set up default preferences for users and roles, access the Security Console as a setup user or other user with the IT Security Manager job role. Only setup users, or other users with the IT Security Manager job role, can access the Security Console. See the *Securing Fusion Sales and Service* guide for more information.

### User Identity Store

The Lightweight Directory Access Protocol (LDAP) identity store is a repository of user identity data. Your LDAP directory stores definitions of LDAP user accounts. In general, changes you make to user accounts are automatically synchronized between the sales application and your LDAP directory server. However, you must also run processes on a daily basis to manage the information exchange between your application and the LDAP directory server. For information, see the chapter about setting up application security in the *Securing Fusion Sales and Service* guide.

### Setup Tasks in the UI and Other Setup Options

As a setup user, you use multiple different tasks in Setup and Maintenance to create and maintain users. You also have more setup options to consider. The following table describes these tasks and setup options.

Setup Task or Option and Navigation	Description
Manage Job Roles Task  Navigation: Setup and Maintenance > Sales Offering > Users and Security functional area	Oracle provides many predefined job roles. The relevant sales roles are listed in the <i>Implementing Sales</i> guide.  You perform the Manage Job Roles task to: <ul style="list-style-type: none"><li>• Review the role hierarchy of a job or abstract role.</li><li>• Create custom job and abstract roles.</li><li>• View the roles assigned to a user and list the users who have a specific role.</li></ul> This task opens the Roles tab of the Security Console.
Manage Duties Task	You perform the Manage Duties task to:

Setup Task or Option and Navigation	Description
<p>Manage Sales and Service Access Management Task</p> <p>Navigation: Setup and Maintenance &gt; Sales Offering &gt; Users and Security functional area</p>	<ul style="list-style-type: none"> <li>Review the duties of a job or abstract role.</li> <li>Manage the duties of a custom job or abstract role.</li> <li>Create custom duty roles.</li> </ul> <p>This task opens the Roles tab of the Security Console.</p>
<p>Manage Data Security Policies Task</p> <p>Manage Sales and Service Access Task</p> <p>Navigation: Setup and Maintenance &gt; Sales Offering &gt; Users and Security functional area</p>	<p>You use the Manage Data Security Policies task to manage the data security policies that determine grants of entitlement to a user or role on an object or attribute group. This task opens the Roles tab of the Security Console.</p> <p>You can also use the Manage Sales and Service Access task to review and configure data security. This task opens the Sales and Service Access Management work area. For information, see the <a href="#">Securing Fusion Sales and Service</a> guide.</p>
<p>Manage Users Task</p> <p>Navigation: Navigator &gt; Users and Roles item or Setup and Maintenance &gt; Sales Offering &gt; Users and Security functional area</p>	<p>You create application users in the UI using the Manage Users task. A user with the IT Security Manager job role performs the Manage Users tasks.</p> <p><b>Note:</b> You can also create sales users by importing users. For information on the user import options available, see the <a href="#">Understanding Import and Export Management for Fusion Sales and Service</a> and <a href="#">Implementing Sales</a> guides.</p>
<p>Manage HCM Role Provisioning Rules Task</p> <p>Navigation: Setup and Maintenance Sales Offering &gt; Users and Security functional area</p>	<p>Oracle provides predefined role mapping rules for provisioning many of the standard job roles included with the application. However, using the Manage HCM Role Provisioning Rules task, you can create any additional role mappings you need to, to control the provisioning of roles to application users. For example, you can create a role mapping to provision the Channel Sales Manager role automatically to specific sales managers.</p>
<p>Import and Export Management</p>	<p>You can import users in bulk using data files. For information on the user import options available, see the <a href="#">Understanding Import and Export Management for Fusion Sales and Service</a> and <a href="#">Implementing Sales</a> guides.</p>
<p>Import Partner Users Task</p>	<p>You can also import partner contact data using the Import Partner Users task. For more information, see the <a href="#">Getting Started with Your Partner Relationship Management Implementation</a> guide.</p>
<p>Single Sign-On Authentication</p>	<p>Single sign-on authentication is optionally available for user authentication. If your enterprise has moved from a traditional on-premises environment to an Oracle Cloud implementation, you might want to use your existing identity management solution for authenticating your employees, and you might also want to provide a single sign-on experience. Implementing federated single sign-on lets you provide users with single sign-on access to applications and systems located across organizational boundaries. For additional information, see Oracle Applications Cloud Service Entitlements (Doc ID 2004494.1) on <a href="#">My Oracle Support</a> at <a href="https://support.oracle.com">https://support.oracle.com</a>.</p>
<p>Resetting User Passwords</p>	<p>Setup users provisioned with the IT Security Manager job role can use the Users tab in the Security Console work area to reset passwords for all application users. Users who can't access the Security Console can reset only their own passwords using the Set Preferences link in the Settings and Actions menu available by clicking their user name in the application or by using the Forgot Password link on the sign-in page. See the <a href="#">Implementing Sales</a> guide for more information.</p>
<p>Updating Email Addresses</p>	<p>Use the Users tab in the Security Console work area to change user email addresses. You can use the procedure described in this topic to update addresses of both setup users and sales users. If you're</p>

Setup Task or Option and Navigation	Description
	updating the email addresses of sales users, then you can also use the same import process you use to create them. See the <i>Implementing Sales</i> guide for more information.

**Note:** Other data security tasks listed in the Users and Security functional area task list don't apply to the sales applications. Follow the guidance in the *Implementing Sales* and *Securing Fusion Sales and Service* guides.

#### Related Topics

- [Set General Preferences for All Users](#)
- [Subject Areas for Adoption and Usage Reporting](#)

## Define Setup Users

One of your first tasks when setting up the application is the creation of users who can perform setup tasks.

Oracle creates an initial user for you when your environment is provisioned. This initial user is configured to perform security tasks, such as creating other users and granting additional privileges. As an initial user you can create users, known as setup users, to help with application setup. The setup user performs the tasks in implementation projects, sets up enterprise structures, creates application users, and administers security.

Use the Manage Users task in the Setup and Maintenance work area to create setup users. You can access this task in the Setup and Maintenance work area by selecting these options:

- Offering: Customer Data Management
- Functional Area: Users and Security
- Task: Manage Users

For information about creating setup users, see the *Implementing Sales* guide.

## Enterprise Structures

### Overview of Legal Entities

A legal entity is a recognized party with rights and responsibilities given by legislation.

Legal entities have the following rights and responsibilities to:

- Own property
- Trade
- Repay debt
- Account for themselves to regulators, taxation authorities, and owners according to rules specified in the relevant legislation

Their rights and responsibilities may be enforced through the judicial system. Define a legal entity for each registered company or other entity recognized in law for which you want to record assets, liabilities, expenses and income, pay transaction taxes, or perform intercompany trading.

A legal entity has responsibility for elements of your enterprise for the following reasons:

- Facilitating local compliance
- Minimizing the enterprise's tax liability
- Preparing for acquisitions or disposals of parts of the enterprise
- Isolating one area of the business from risks in another area. For example, your enterprise develops property and also leases properties. You could operate the property development business as a separate legal entity to limit risk to your leasing business.

## The Role of Your Legal Entities

In configuring your enterprise structure in Oracle Fusion Cloud Applications, the contracting party on any transaction is always the legal entity. Individual legal entities:

- Own the assets of the enterprise
- Record sales and pay taxes on those sales
- Make purchases and incur expenses
- Perform other transactions

Legal entities must comply with the regulations of jurisdictions, in which they register. Europe now allows for companies to register in one member country and do business in all member countries, and the US allows for companies to register in one state and do business in all states. To support local reporting requirements, legal reporting units are created and registered.

You are required to publish specific and periodic disclosures of your legal entities' operations based on different jurisdictions' requirements. Certain annual or more frequent accounting reports are referred to as statutory or external reporting. These reports must be filed with specified national and regulatory authorities. For example, in the United States (US), your publicly owned entities (corporations) are required to file quarterly and annual reports, as well as other periodic reports, with the Securities and Exchange Commission (SEC), which enforces statutory reporting requirements for public corporations.

Individual entities privately held or held by public companies don't have to file separately. In other countries, your individual entities do have to file in their own name, as well as at the public group level. Disclosure requirements are diverse. For example, your local entities may have to file locally to comply with local regulations in a local currency, as well as being included in your enterprise's reporting requirements in different currency.

A legal entity can represent all or part of your enterprise's management framework. For example, if you operate in a large country such as the United Kingdom or Germany, you might incorporate each division in the country as a separate legal entity. In a smaller country, for example Austria, you might use a single legal entity to host all of your business operations across divisions.

## Overview of Business Units

A business unit is a unit of an enterprise that performs one or many business functions that can be rolled up in a management hierarchy. A business unit can process transactions on behalf of many legal entities.

Normally, it has a manager, strategic objectives, a level of autonomy, and responsibility for its profit and loss. Roll business units up into divisions if you structure your chart of accounts with this type of hierarchy.

Though there's no direct relationship between business units and legal employers, it's recommended that you either maintain a 1:1 relationship between the two or have many business units within a legal employer. Typically, a business unit is used to roll up financial transactions within a legal entity. So, if you set up business units at a higher level than legal entities, your financial transactions may fail.

In Oracle Fusion Cloud Applications you do the following:

- Assign your business units to one primary ledger. For example, if a business unit is processing payables invoices, then it must post to a particular ledger. This assignment is required for your business units with business functions that produce financial transactions.
- Use a business unit as a securing mechanism for transactions. For example, if you run your export business separately from your domestic sales business, then secure the export business data to prevent access by the domestic sales employees. To accomplish this security, set up the export business and domestic sales business as two separate business units.

The Oracle Fusion Applications business unit model provides the following advantages:

- Enables flexible implementation
- Provides consistent entity that controls and reports on transactions
- Shares sets of reference data across applications

Business units process transactions using reference data sets that reflect your business rules and policies and can differ from country to country. With Oracle Fusion Application functionality, you can share reference data, such as payment terms and transaction types, across business units, or you can have each business unit manage its own set depending on the level at which you want to enforce common policies.

In summary, use business units for:

- Management reporting
- Transaction processing
- Transactional data security
- Reference data sharing and definition

## Brief Overview of Business Unit Security

A number of Oracle Fusion Applications use business units to implement data security. You assign roles like Accounts Payable Manager to users to permit them to perform specific functions, and you assign business units for each role to users to give them access to data in those business units. For example, users who have been assigned a Payables role for a particular business unit, can perform the function of payables invoicing on the data in that business unit. Roles can be assigned to users manually using the Security Console, or automatically using provisioning rules. Business Units can be assigned to users using the Manage Data Access for Users task found in Setup and Maintenance.

### *Related Topics*

- [Reference Data Sets and Sharing Methods](#)

# Profile Options, Lookups, and Scheduled Processes Overview

## What are Profile Options, Lookups, and Scheduled Processes?

Profile options, lookup types, and scheduled processes let you configure application behavior and process data.

Briefly, here's what profile options, lookup types, and scheduled processes do:

- Profile options: Let you configure the application behavior.
- Lookup types: Provide the lists of values in applications. Many lookup types can be modified to fit your business needs.
- Scheduled processes: Act on data in the applications.

Get additional information on profile options, lookup types, and scheduled processes in this chapter and in the related topics.

### Related Topics

- [How can I access predefined profile options?](#)
- [How can I access predefined lookups?](#)
- [What are scheduled processes?](#)

## Profile Options

### Overview of Profile Options

Profile options let you configure and control application data centrally. Administrators and setup users manage profile options in the Setup and Maintenance work area.

Profile options store various kinds of information. This table lists some examples:

Type of Information	Profile Option Setting Example
User preferences	Set preferences at the user level
Installation information	Identify the location of a portal
Configuration choices	Change UI skins and actions
Processing options	Determine how much information to log
Enabling the Activity Stream	Enable agents to see the Activity Stream



## Profile Option Hierarchy Levels

Profile options can be set at different levels, such as site level or user level. The application gives precedence to certain levels over others, when multiple levels are set. The levels that are allowed to be set are preconfigured with the application.

In the predefined profile option levels, the hierarchy levels and their precedence are:

1. **Site:** This level affects all applications for a given implementation. The application gives it the lowest precedence when other levels are set. If no other levels are set, however, it's the highest level.
2. **Product:** This level affects a product or product family. The application gives it priority over Site level. However, if the user level is set, the user level takes precedence.
3. **User:** This level affects only the current user. It has the highest precedence, over Site and Product.

As a best practice, set site-level profile option values before specifying values at any other level (where available). The profile option values specified at the site-level work as the default until profile option values are specified at the other levels.

This table shows an example of the predefined profile option hierarchy levels and their priorities.

Level	Priority	Example
Site	Lowest	Currency for a site is set to Euros.
Product	Supersedes Site	Currency for the product or set of products is set to UK pound sterling.
User	Highest, supersedes Product	Currency for a user is set to US dollars.

You can find additional information about profile options in the related topics.

### Related Topics

- [How can I access predefined profile options?](#)
- [Set Profile Option Values](#)

## How can I access predefined profile options?

Search for predefined profile options using the Manage Profile Options task.

1. In the Setup and Maintenance work area, go to the **Manage Profile Options** task.
2. On the page, enter any of the search parameters and click **Search**. Search functionality is case-sensitive.

**Tip:** If you don't know the profile option code or the display name, use the **Application** or **Module** fields to filter search results.

3. In the results, click a profile option to view its details.

## Import Profile Values

Use the Import option on the Manage Administrator Profile Values page to import profile values in bulk and associate them with a profile option.

Before you begin, make sure that the file containing the profile values is available in the document repository of Oracle WebCenter Content.

1. In the Setup and Maintenance work area, go to the **Manage Administrator Profile Values** task.
2. In the Search: Profile Options section, search for the profile option for which you want to import the values.
3. In the Search Results: Profile Options section, select the profile option.
4. In the <Profile Option>: Profile Values section, click **Actions > Import**.
5. On the Import User Profile Values window, select the WebCenter Content account to which the file was uploaded.
6. Enter the name of the file containing the profile values. The name here must match with the name of the file uploaded to the selected account.
7. Click **Upload**. The profile values are imported.

**Note:** If the import fails, click the link to the log file on the confirmation dialog box and examine the cause of failure.

#### Related Topics

- [File Format for Importing Profile Values](#)
- [Import Flexfields, Lookups, or Profile Values Using Web Services](#)
- [How can I bulk update user preferences?](#)
- [Overview of Files for Import and Export](#)

## File Format for Importing Profile Values

You can import profile option values to your application by creating separate text files containing values. You can then upload these files to the Oracle WebCenter Content document repository.

Here are a few things that you need to keep in mind while creating these files:

- Use a vertical bar or pipe ( | ) as a delimiter between fields for both the header and the value rows.
- According to the Oracle WebCenter Content specification, set the file encoding to UTF-8 without the Byte Order Mark (BOM).
- The first line in the file must be a header line, and the files must look exactly the same as shown in the sample file.

To create a file containing the profile values, include the headers specified in this table:

Header	Description
<b>ProfileOptionCode</b>	This value displays the profile option code.
<b>LevelName</b>	This value displays the level name of the profile. It must be one of these level names: <ul style="list-style-type: none"><li>• <b>Site</b></li><li>• <b>Product</b></li><li>• <b>User</b></li></ul>
<b>UserName</b>	This value must correspond to the registered user name in the application. Don't provide any other shortened or coded name of the user.
<b>ProfileOptionValue</b>	This value displays the profile value that you can import.

Here's a sample file with the header values at the beginning of the file, followed by line entries of the two profile values. For importing several profile values, add more line entries in a similar format.

```
ProfileOptionCode|LevelName|UserName|ProfileOptionValue
AFLOG_BUFFER_MODE|USER|APP_IMPL_CONSULTANT|TEST
AFLOG_LEVEL|USER|APPLICATION_DEVELOPER|FINEST
```

#### Related Topics

- [Import Profile Values](#)
- [Overview of Files for Import and Export](#)
- [Guidelines for File Import and Export](#)
- [Overview of Profile Options](#)

## Scheduled Processes

### What are scheduled processes?

Scheduled processes do tasks that are too complex or time-consuming to do manually, for example importing data or updating many records. You can run scheduled processes on a recurring schedule and send notifications based on how the process ends.

Some scheduled processes give you printable output. Those processes might have **Report** in their name.

Use the Scheduled Processes work area to run all the processes you've access to and to manage submissions. If you need access to this work area, ask your security administrator to assign you a role that gives you access, for example a custom role with the the Manage Scheduled Processes (FND\_MANAGE\_SCHEDULED\_PROCESSES\_PRIV) privilege. Other than the Scheduled Processes work area, you might be also able to run certain processes from other work areas.

### Jobs and Job Definitions

Each scheduled process that you run is based on a job. The job is the executable that controls what the process does. Each job needs a job definition, which, for example, identifies the parameters and other options you've set for the process. You or your administrator can create job definitions for Oracle Analytics Publisher reports so that users can run the reports as scheduled processes.

### Process Sets

A process set is a scheduled process that contains multiple processes or even other process sets. So, when you submit a process set, you're running more than process.

**Note:** When you submit certain scheduled processes, the job logic causes other processes to automatically run. But in this case, you're not submitting a process set that includes those other processes.

### Submission

When you submit a scheduled process, you can use its parameters to control how, and which records are processed. For example, a process includes only the transactions that were edited by the person you select for a Last Updated By parameter. Some scheduled processes don't have parameters.

As part of the submission, you can also set up a schedule for the process, for example to run once a week for two months. Every time a process runs, there's a unique process ID.

## Output

Some scheduled processes provide output in PDF, HTML, and other formats. For example, a process can import records and also produce output with details about those records. There are many types of output, for example a tax document or a list of transactions.

## View Details About Predefined Scheduled Processes

To use web services to run predefined scheduled processes, you require details about the processes. View job definitions that the processes are based on, for example to get information about parameters.

You might also need to find security requirements for running the scheduled process.

## Job Definitions

A job definition contains the metadata that determines how a scheduled process works and what options are available during submission.

To view job definitions:

1. Go to the Setup and Maintenance work area.
2. From the Application Extensions functional area, open any of these tasks as appropriate:
  - o Manage Enterprise Scheduler Job Definitions and Job Sets for Financial, Supply Chain Management, and Related Applications
  - o Manage Enterprise Scheduler Job Definitions and Job Sets for Human Capital Management and Related Applications
  - o Manage Enterprise Scheduler Job Definitions and Job Sets for Customer Relationship Management and Related Applications
3. In the Manage Job Definitions tab, select your job definition and click **Edit**.

**Note:** Predefined job definitions are marked with an asterisk.

4. Cancel after you get the information you need.

## Security

Privileges provide the access required to run specific scheduled processes. Privileges are granted to duty roles, which are granted to job roles. To see which job roles inherit the required privileges, use the Security Console or the security reference manuals for the appropriate product family.

# Lookup Types

## Overview of Lookup Types

Lookup types in the applications provide the lists of values in application fields that are drop-down lists.

For example, when closing an opportunity, salespeople can pick a reason that an opportunity was won or lost from the Win/Loss Reason field, which is a drop-down list. The values in that list are derived from the lookup type,

MOO\_WIN\_LOSS\_REASON, which has several potential values known as lookups, each with its own unique lookup code and a meaning that displays in the UI.

## Configuring Lookup Types

You can configure many lookup types to fit your business needs. The level at which a lookup type is extensible determines whether the lookups in that lookup type can be edited. The levels are: User, Extensible, and System.

This table shows which lookup management tasks are allowed at each level:

Allowed Task	User	Extensible	System
Deleting a lookup type	Yes	No	No
Inserting new codes	Yes	Yes	No
Changing the wording that displays on the page (Meaning field)	Yes	Yes	Yes
Updating start date, end date, and enabled fields	Yes	Yes, only if the code isn't predefined data	No
Deleting codes	Yes	Yes, only if the code isn't predefined data	No
Updating tags	Yes	No	No
Updating module	Yes	No	No

If a product depends on a lookup type, the configuration level must be System or Extensible to prevent deletion. After the configuration level is set for a lookup type, it can't be modified. The configuration level for lookup types created using the Define Lookups page is by default set at User level.

## Sales Lookup Types

You find lookup types by accessing the associated task in the Sales offering in the Setup and Maintenance work area. Here are some of the common sales lookup tasks or task lists:

To access sales lookup types:

1. Sign in as a setup user and navigate to the Setup and Maintenance work area.
2. In Setup and Maintenance, go to the Sales offering.
3. In the list of functional areas, click the area where the lookup appears. See the list at the end of this procedure for more information.

A list of tasks for the area is displayed.

4. In the list of tasks, click the lookups task.
5. In the lookup types page, modify the lookup type as needed.

Here are the Sales lookup type tasks and the functional areas where they appear:

- Sales Foundation functional area:
  - Manage Geography Lookups
  - Manage Applications Core Standard Lookups
  - Manage Activity Standard Lookups
- Users and Security functional area:
  - Manage Resource Role Lookups
  - Manage Resource Lookups
- Accounts and Contracts functional area
  - Manage Group Lookups
  - Manage Source System Lookups
  - Manage Hierarchy Lookups
  - Manage Trading Community Common Lookups
  - Manage Party Usage Lookups
  - Manage Relationship Lookups
  - Manage Contact Point Lookups
  - Manage Trading Community Organization Lookups
  - Manage Trading Community Location Lookups
  - Manage Trading Community Person Lookups
  - Manage Contact Lookups
  - Manage Customer Account Lookups
  - Manage Customer Center Lookups
- Sales Catalog and Products functional area:
  - Manage Product Group Lookups
- 
- Leads functional area:
  - Manage Sales Lead Standard Lookups
  - Manage Set Enabled Lookups
- Opportunities functional area:
  - Manage Set Enabled Lookups
- Territories functional area:
  - Manage Territory Management Non-extensible Lookups

- Business Plans functional area:
  - Manage Business Plan Non-extensible Lookups
  - Manage Objectives Non-extensible Lookups
- Partners functional area:
  - Manage Partner Lookups

## Set-Enabled Lookup Types

Several applications support lookup types at the reference set level, allowing you to present different lists of values for different business units. You can find these in the Manage Set Enabled Lookups task within the functional area that supports these lookup types.

### Related Topics

- [How can I access predefined lookups?](#)
- [Why can't I see my lookup types?](#)
- [Reference Data Sets](#)

## How can I access predefined lookups?

Search for predefined lookups using any of the manage lookups tasks.

1. In the Setup and Maintenance work area, go to any of the following tasks that contains the lookups you're looking for:
  - Manage Standard Lookups
  - Manage Common Lookups
  - Manage Set-enabled Lookups
2. Enter any of the search parameters and click **Search**. If you don't know the lookup type or the meaning, use the **Module** field to filter search results.
3. Click a lookup type to view its lookup codes.

**Tip:** Click the Query By Example icon to filter the lookup codes.

### Related Topics

- [Use Query By Example](#)
- [How do I update existing setup data?](#)

## How can I edit lookups?

On any of the Manage Lookups pages, you can edit the existing lookup codes of a lookup type or add new lookup codes. You can edit lookups using the following tasks in the Setup and Maintenance work area:

- Manage Standard Lookups
- Manage Common Lookups
- Manage Set Enabled Lookups

Each task contains a predefined set of lookup types that are classified and stored. Open a task to search and edit the required lookup. However, you may not be able to edit a lookup if its configuration level doesn't support editing.

## Why can't I see my lookup types?

Lookup types are classified using tasks that involve a group of related lookups, such as Manage Geography Lookups. Each task gives you access only to certain lookup types.

However, the generic tasks provide access to all lookup types of a kind, such as common lookups associated with the Manage Common Lookups task. If the lookup types in an application are available in the standard, common, or set-enabled lookups view, they're central to an application. However, lookup types defined for a specific application are managed using the task for that application.

## Import Lookups

On each page pertaining to the tasks of managing the Standard, Common, and Set Enabled lookups, use the Import option to import the lookup type and lookup code information.

### Prerequisite

The separate files containing the lookup types and lookup codes are already available in the document repository of Oracle WebCenter Content.

### Importing Lookups

To import lookups:

1. In the Setup and Maintenance work area, go to the Manage Standard Lookups task. Depending on the lookup you want to import, you may select the other lookup tasks.
2. In Search Results, from the Actions menu, select **Import**.

The Import Lookups dialog box appears.

3. Select the WebCenter Content account to which the files were uploaded.
4. Enter the names of the separate files containing the lookup type and lookup code information. The names here must match with the names of the files uploaded to the selected account.
5. Click **Upload**. The lookup details are imported.

**Note:** If the import fails, click the link to the log file on the confirmation dialog box and examine the cause of failure.

### Related Topics

- [File Format for Importing Lookups](#)
- [Import Flexfields, Lookups, or Profile Values Using Web Services](#)

## File Format for Importing Lookups

You can import lookups to your application by creating separate text files containing lookup types and lookup codes. You can then upload these files to the Oracle WebCenter Content document repository.

Here are a few things that you need to keep in mind while creating these files:

- Use a vertical bar or pipe ( | ) as a delimiter between fields for both the header and the value rows.



- According to the Oracle WebCenter Content specification, set the file encoding to UTF-8 without the Byte Order Mark (BOM).
- The first line in the file must be a header line, and the files must look exactly the same as shown in the sample file.

The following sections contain details about the specific lookup types and codes.

## Prerequisite

You must have worked with lookups in Oracle Fusion Cloud applications.

## Standard and Common Lookups

The lookup types and codes are similar for standard and common lookups. To create a file containing the lookup types, include the following headers:

Header	Description	Required or Optional
<b>LookupType</b>	This value displays the lookup type.	Required
<b>Meaning</b>	This value displays the name of the lookup type.	Required
<b>Description</b>	This value displays the description of the lookup type.	Optional
<b>ModuleType</b>	This value displays the module associated with the lookup type.	Required
<b>ModuleKey</b>	This value displays the module code.	Required

Here's a sample file with the header values at the beginning of the file, followed by line entries of the two lookup types. For importing several lookup types, add more line entries in a similar format.

```
LookupType|Meaning|Description|ModuleType|ModuleKey
AFLOG_22APR_1|Log1|AFLOG_desc_1|APPLICATION|FND
PROD_22APR_2|Product1|PROD_desc_2|APPLICATION|FND
```

To create a file containing the lookup codes, include the headers specified in this table:

Header	Description	Required or Optional
<b>LookupType</b>	This value displays the lookup type.	Required
<b>LookupCode</b>	This value displays the lookup code associated with the lookup type.	Required
<b>DisplaySequence</b>	This value displays the sequence in which the lookup code appears in the list of values.	Required
<b>EnabledFlag</b>	This value lets you enable or disable the display status of the lookup code: <ul style="list-style-type: none"><li>• Y: Enable the display status of the lookup code</li><li>• N: Disable the display status of the lookup code</li></ul>	Required

Header	Description	Required or Optional
Meaning	This value displays the name of the lookup code.	Required
StartDateActive	This value displays the beginning of the date range during which the lookup code is active and visible on the page. The format is dd/MM/yyyy.	Optional
EndDateActive	This value displays the end of the date range during which the lookup code is active and visible on the page. The format is dd/MM/yyyy.	Optional
Description	This value displays the description of the lookup code.	Optional
Tag	This value indicates any tag associated with the lookup code that you can use for a quick reference or retrieval of information.	Optional
Seg	This value displays the API name used for a global segment that you can define for the descriptive flexfield associated with the lookup.	Optional
CONTEXT_ATTRIBUTE	This value displays the context value specified in the CSV file for a particular descriptive flexfield.	Optional
ctxSeg	This value displays the name of the API for a context-sensitive segment defined for a context attribute.	Optional

Here's a sample file that contains two lookup codes:

```
LookupType|LookupCode|DisplaySequence|EnabledFlag|StartDateActive|EndDateActive|Meaning|Description|Tag|Seg|
CONTEXT_ATTRIBUTE|ctxSeg
TASK_22APR_1|Code1_1|1|Y|25/12/2014|25/5/2015|TASK_22apr_1|Task_desc_1|Tag1_1|testSeg1|TEST_CTX1|ctx1Seg1
TASK_22APR_1|Code1_2|2|N|25/1/2014|25/11/2015|TASK_22apr_2|Task_desc_2|Tag1_2|testSeg1|TEST_CTX1|ctx1Seg1
TASK_22APR_2|code2_1|3|N|25/12/2012|25/7/2015|TASK_22qpr_2_1|Task_desc_2|tag2_1|testSeg2|TEST_CTX2|ctx2Seg2
TASK_22APR_2|code2_2|3|Y|25/12/2012|25/7/2015|TASK_22qpr_2_2|Task_desc_2_2|tag2_2|testSeg2|TEST_CTX2|
ctx2Seg2
```

## Set Enabled Lookups

To create a file containing the set enabled lookup types, include the headers specified in this table:

Header	Description	Required or Optional
LookupType	This value displays the lookup type.	Required
Meaning	This value displays the name of the lookup type.	Required
Description	This value displays the description of the lookup type.	Optional
ModuleType	This value displays the module associated with the lookup type.	Required
ModuleKey	This value displays the module code.	Required
ReferenceGroupName	This value displays the name of the reference group that contains the reference data set.	Required

Here's a sample that contains two set enabled lookup types:

```
LookupType|Meaning|Description|ModuleType|ModuleKey|ReferenceGroupName
CODE_22APR_1|CODE_22apr_1|Code_desc_1|APPLICATION|FND|BU_APAC
CODE_22APR_2|CODE_22qpr_2|Code_desc_2|APPLICATION|FND|BU_APAC
```

To create a file containing the set enabled lookup codes, include the headers specified in this table:

Header	Description	Required or Optional
<b>LookupType</b>	This value displays the lookup type.	Required
<b>LookupCode</b>	This value displays the lookup code associated with the lookup type.	Required
<b>DisplaySequence</b>	This value displays the sequence position at which the lookup code appears in the list of values.	Required
<b>EnabledFlag</b>	This value lets you enable or disable the option to view the display: <ul style="list-style-type: none"> <li>Y: Enable the option to view the display</li> <li>N: Disable the option to not view the display</li> </ul>	Required
<b>Meaning</b>	This value displays the name of the lookup code.	Required
<b>SetName</b>	This value displays the name of the reference data set.	Required
<b>StartDateActive</b>	This value displays the beginning of the date range during which the lookup code is active and visible on the page. The format is dd/MM/yyyy.	Optional
<b>EndDateActive</b>	This value displays the end of the date range during which the lookup code is active and visible on the page. The format is dd/MM/yyyy.	Optional
<b>Description</b>	This value displays the description of the lookup code.	Optional
<b>Tag</b>	This value indicates any tag associated with the lookup code that you can use for a quick reference or retrieval of information.	Optional

Here's a sample file with the header values at the beginning and lists four set enabled lookup codes. For importing several lookup codes, add more entries in the same format.

```
LookupType|LookupCode|DisplaySequence|EnabledFlag|StartDateActive|EndDateActive|Meaning|Description|Tag|
SetName
DATA_22APR_1|Code1_1|1|Y|25/12/2014|25/5/2015|DATA_22apr_1|Data_desc_1|Tag1_1|TEST SET CODE 2
DATA_22APR_1|Code1_2|2|N|25/1/2014|25/11/2015|DATA_22apr_2|Data_desc_2|Tag1_2|TEST SET CODE 3
DATA_22APR_2|code2_1|3|N|25/12/2012|25/7/2015|DATA_22qpr_2_1|Data_desc_2|tag2_1|TEST SET CODE 2
DATA_22APR_2|code2_2|3|Y|25/12/2012|25/7/2015|DATA_22qpr_2_2|Data_desc_2_2|tag2_2|TEST SET_ERR_CODE_Z
```

*Related Topics*

- [Import Lookups](#)
- [Overview of Files for Import and Export](#)
- [Guidelines for File Import and Export](#)
- [Overview of Lookups](#)

# 5 Configure Subscriptions

## Create and Manage Subscription Profiles

A subscription profile consists of its pricing and billing strategy and a layout template.

Subscription profiles have unique attributes, which upon selection determine the billing schedules of the subscription. As a setup user, you can create subscription profiles that salespeople can use during subscription creation. For example, if you select **Advance Invoice** as the invoicing rule, it guarantees that the billing takes place before the period begins. You can change your billing attributes when the subscription is in the Draft status.

**Note:** Subscription profile displays only transaction types which are created as common set in Accounts Receivables. Transaction types created in specific business unit reference data set aren't displayed in subscription profiles as you can't associate a subscription profile with a business unit.

To create a subscription profile:

1. Sign in as a setup user.
2. Navigate to the **Subscription Management** work area.
3. On the Subscription Configuration page, click the **Subscription Configuration** tab.
4. Click **Manage Subscription Rules**.
5. Click the **Subscription Profiles** subtab.
6. Click **Create**.
7. On the Create Subscription Profile page, enter the profile name.
8. Enter pricing and billing information. This section consists of attributes that specify the subscription's billing schedule and pricing details.

This table describes the pricing and billing parameters:

Parameter	Description
Bill Service	<p>The options are Bill, Don't bill, and Bill on renewal.</p> <p><b>Note:</b> Bill services only apply at the subscription header level and you can't select this option at product level.</p> <p>In a scenario where you want legacy subscription billing to happen using Oracle Account Receivables, you can initially select <b>Don't bill</b> until contract renewal. Upon renewal, you can select <b>Bill on renewal</b>. In a scenario where you don't want legacy subscription billing to happen using Oracle Account Receivables, you can select <b>Don't bill</b>.</p>
Invoicing Rule	You can select between bill payments in the form of Advance Invoice and Arrears Invoice.

Parameter	Description
Billing Frequency	You can select the following billing periods: Month, Year, Quarter, and Year.
Billing Date	<p>You can select from Period Start, Period End, Day, and Offset. For example, if you select Period Start, the billing happens at the start of the defined period. If you select Offset, then the billing starts after the number of days defined in offset.</p> <p>The invoice date is controlled by the Billing Date. For example, you can set Billing Date as Period Start so that the invoice date is always at the beginning of the billing period. In some situations, you may want to send invoices to Account Receivables 3 days prior so that invoices can be prepared and sent out to customers on or before the invoice date.</p>
Accounting Rule	You can select this to determine the rule for revenue recognition.
Transaction Type	<p>You can select this to determine if the billing is going to be an Invoice or a Credit Memo.</p> <p>You can't control the credit memo amount using the <b>Overapplication</b> field in Account Receivables.</p>
Payment Terms	<p>You can select to have various types of payment methods, such as Immediate, Last Day Month, Due 10th, and so on. This indicates the period within which the customer must pay.</p> <p>Note that the Subscription Profile supports only the payment terms defined under the Common set. However, as an alternate solution, at the subscription level, you can select a payment term that's not in the Common set. You can enable the Payment terms field in the UI by adding the field in Page Layout from Application Composer.</p>
Billing System	<p>The billing system can have a valuer of either <b>Oracle Fusion</b> or <b>Third Party</b>.</p> <ul style="list-style-type: none"> <li>○ If the billing system is <b>Oracle Fusion</b>, then the billing interface errors are written in the appropriate schedule process log file. A mapping exists between Oracle Subscription Management and Oracle Account Receivables.</li> <li>○ If the billing system is <b>Third Party</b>, then the billing interface errors are written on the bill lines. These errors can then be shown BI reports.</li> </ul> <p>Here's the information you can send to Oracle Account Receivables: line formation, header information, covered level attributes, and bill line attributes.</p>
Period Start	You can select your billing period to begin either on the date on which the service began: Service Start, or Calendar month.
Period Type	You must select between Actual and Fixed to determine if the billing period is based on the number of days in the month, or a fixed duration, such as 30 days.
Close Credit Method	You can select from Prorate with credit, Prorate without credit, and Full to determine whether or not partial or full charges are waived as a refund upon termination.

Parameter	Description
Invoice Text	To process the descriptions of the invoice by an accounts receivables application, you must add attributes for the subscription invoice text. This includes Charge name, Item name, Bill to date, Bill from date, and so on.
Coverage Invoice Text	To process the descriptions of the invoice by an accounts receivables application, you must add attributes for the coverage invoice text. This includes Asset number, Item name, Bill to date, Bill from date, and so on.
Automate subscription line numbering	You can select this field so that the application automatically generates line numbers for subscription products.

The combination of the Invoicing Rule, Billing Frequency, and Billing Date determine the billing schedule of the subscription.

9. In the Contract Layout Template section, select a layout template and language.
10. Click **Save and Close**.

## Enable the Default Payment Term from Customer Data

To speed data entry, enable capturing default the payment terms from the customer master.

Payment terms are used by Oracle Receivables to generate invoices. You can specify a payment term on the customer account and customer account site. When you want to generate an invoice for a subscription, you can either accept the default value or override it with a different payment term for the customer. If you want to accept the default value from the customer data, you should enable the check box, **Default payment term from customer master**, in the subscription profile.

Here's how:

1. Sign in as a setup user.
2. Navigate to the **Subscription Configuration** work area.
3. On the Subscription Configuration page, click the **Subscription Configuration** tab.
4. Click **Manage Subscription Rules**.
5. Click the **Subscription Profiles** subtab and edit or create a subscription profile.
6. In the Pricing and Billing section, enable the check box, **Default payment term from customer master**.
7. Save your changes.

If you don't check this attribute, the payment terms in the subscription profile is considered.

The payment term associated in the customer account site is preferred over the payment term in customer account. If there's no payment term information in the customer account site and customer account, or if the check box is not enabled, the payment term in the subscription profile is considered. You can override the payment term from customer data in the subscription or in the product.

## How do I create and manage subscription renewal templates?

Subscriptions can be renewed either manually or automatically. A subscription user can manually renew subscriptions using the Renew action, or you can configure the application to automatically renew subscriptions. Renewal rules determine the default renewal actions.

The application uses the renewal rules template associated with a subscription to get this information:

- Renewal process
- Customer acceptance criteria
- Internal approval criteria

When you renew a subscription, the application makes a copy of the existing source subscription. The source subscription can be Active or Expired. The application changes the effective and pricing details on the renewal subscription based on the default setup.

The life cycle of a renewal subscription is similar to a newly authored subscription. However, you can configure a different life cycle for a renewal subscription using the Event Model configuration. You can configure an event model to route the renewal subscription to the customer for acceptance, or to the subscription administrator for internal approval. You can also activate the subscription without either Customer Acceptance or Internal Approval.

Here's how to create a new template:

1. Sign in as a setup user and navigate to Subscription Management.
2. On the Subscription Configuration page, click the **Subscription Configuration** tab.
3. Click **Manage Subscription Rules**.
4. Click the **Renewal Rules Template** subtab.
5. In the Renewal Templates page, click **Create**.
6. On the Create Renewal Rules Template page, enter the details of the template.
7. Enter a name for the template.
8. Select the renewal level. All lines include all the lines from the subscriptions that might also include other lines. Eligible lines include only eligible lines from subscriptions.
9. Optionally, select **Consolidate subscriptions**. This option decides whether to consolidate subscriptions during the renewal process or not. The consolidation process applies to automatic renewals. If you select this option, then all subscriptions to be renewed over a given period are consolidated into a single subscription.
10. Select the **Price Adjustment Type**.  
If you select Reprice, then the application calculates the latest price of the item at the time of renewal. If you select Markdown or Markup, then you must enter **Price Adjustment Basis** and **Price Adjustment Value** to adjust the list price of the product. Markup increase the price by the adjustment basis and value. Alternatively, markdown decreases the price by the adjustment basis and value.
11. If there's no price at the time of the renewal, the renewed subscription has no price. In this scenario, the subscription renewal rule should be:
  - Price Adjustment Type: Markup
  - Basis: Net Price
  - Value: 0
12. Enter a value in **Days Before Expiration**. This is the number of days prior to expiration before the renew eligible subscriptions process picks the subscription for renewal.



13. Enter the minimum renewal duration. This is the minimum number of days for which the subscription is renewed.
14. Select the **Renewal Period**. The renewal is based on the renewal duration and period.
15. Select the **Use renewal term for automatic renewal** check box to automatically renew subscriptions based on the values defined in the **Renewal Duration** and **Period** field. This field provides you with additional flexibility in deciding the duration of your automatically renewed subscriptions.
16. Select the **Renewal Process**.

The three options to configure the renewal process at the time of subscription creation are:

- Automatic: The application automatically renews and activates the subscription.
- Manual: The renewed subscription is created and placed in draft status.
- Do not renew: This option prevents the application from automatically renewing the subscription. If you select this option, the application removes the Renewal Type column from the dashboard for all lines and covered assets of the subscription. The subscription specialist can manually renew and email active and expired subscriptions.

The application renews all subscriptions that you identify for automatic or manual renewal.

17. Select the **Customer Acceptance Required** and **Internal Approval** criteria.

This table describes the combinations of Renewal Process, Customer Acceptance, and Internal Approval criteria:

Renewal Process	Customer Acceptance Required	Internal Approval Required	Description
Automatic	No	No	The application renews and activates the subscription.
Automatic	No	Yes	The application renews and submits the subscription for approval.
Automatic	Yes	N/A	The application renews the subscription and leaves it in the subscription administrator's queue for further action. You can configure event notification rules to automatically send the subscription to the customer for acceptance.
Manual	N/A	N/A	The application renews the subscription and leaves it in the subscription administrator's queue for further action.
Do not renew	N/A	N/A	The application doesn't renew the subscription.

Renewal Process	Customer Acceptance Required	Internal Approval Required	Description

18. Select the **Subscription Profile**.
19. Select the communication channel. This determines how you want to communicate and engage with your customers.
20. In the Renewed Subscription Number field, you have three options:
  - Leave blank: Leave this option blank if you want to enter your own subscription number upon renewal.
  - Autogenerated: Select this option to use an application-generated number for the renewed subscription.
  - Retain number: Select this option to keep the same subscription number.
21. Optionally select **Enable Reminders**. This option indicates whether or not your customer receives reminders.
22. Select the applicable **Cotermminate** option.  
If you select **Latest end date**, the all target lines are aligned to the latest target end date. The target subscription header is also adjusted according to the target lines.
23. In the Renewal Consolidation Grouping section, select the required consolidation criteria. The application performs subscription consolidation based on the default grouping rules and the rules selected by you. For more information about the available consolidation criteria, see the Automated Renewal Consolidation section in the Renew Subscriptions topic.
24. Click **Save and Close**.

#### Related Topics

- [How do subscriptions automatically or manually renew?](#)

## Create and Manage Subscription Event Notification Rules and Template Sets

Configure templates that your users can use as notifications. You can also set up rules to trigger notifications.

**Note:** The notification events are sourced from the Customer Notification Event (ORA\_OSS\_CUST\_NOTIF\_EVENTS) lookup.

To create an event notification rules and template set:

1. Sign in as a setup user.
2. Go to the Subscription Management work area.
3. On the Subscriptions landing page, click the **Subscription Configuration** tab.
4. Click **Manage Subscription Rules**.
5. Click the **Event Notification Rules and Template Set** subtab.
6. Click **Create**.
7. On the Create Event Notification Rules and Template Set page, enter the necessary details: Template Name, Start Date, and Sender Email Address.
8. In the Condition region, click **Create**.  
Set up the conditions:

Condition	Description
Event	A specific event in the subscription life cycle. The values are sourced from the event model.
Days before the subscription start date	The number of days before the renewal start date to send the notification.
Notification Type	There are three types of notifications: <ul style="list-style-type: none"><li>○ Quote</li><li>○ Reminder</li><li>○ Any User Defined Type</li></ul>
Customer Acceptance	Select between Required and Not Required. Use the indicator to skip the notification for an auto-renew subscription where customer acceptance isn't required for the renewal subscription activation.
Communication Channel	The channel on which the notification is delivered. If you select email, the application sends an email to the customer. If you select custom, it includes third-party portals. The application then raises a business event with a message and attachment details.

9. In the Message region, click **Create**. Select the Language, Message Template, and Message Subject along with the Start and End date.
10. Click **Save and Close**.

#### Related Topics

- [Renewal Reminder Email Notification for Subscriptions White Paper \(Doc ID 2731244.1\)](#)

## Create Subscription Rules

You must select an appropriate subscription profile, renewal template, and event notifications for every rule. This enables the application to support customer-specific and business unit-specific billing, renewal, and notification rules.

To manage subscription rules:

1. Sign in as a setup user.
2. Navigate to the **Subscription Configuration** work area.
3. On the Subscription Configuration page, click the **Subscription Configuration** tab.
4. Click **Manage Subscription Rules**.
5. In the Manage Subscription Rules page, add a row to the table.
6. Select the **Renewal Rules Template** and **Business Unit**.
7. Optionally, select the Subscription Profile and Event Notification Rules and Template Set.
8. Enter the Precedence value.
9. Save your changes.

## Set Up Subscription Numbering

You can configure subscription numbering to assign numbering sequences at the global, ledger, legal entity, and business unit levels. This feature is disabled by default. When this feature is disabled, the application generates subscription numbering using a PUID-based sequence.

To use this feature, you must:

- Enable the Document Sequence Numbering Enabled profile option.
- Define document sequences in the Manage Document Sequences task.

**Note:** You must create a Document Sequence Category before configuring Document Sequences. To create document sequence categories, see [Guidelines for Managing Document Sequences](#).

- Configure subscription numbering using the subscription profile.

### Enable the Document Sequence Numbering Enabled Profile Option

Here's how you can enable this feature:

1. Sign in as a user with access to the setup areas.
2. Navigate to Setup and Maintenance work area.
3. Open the Tasks side panel and click **Search**.
4. Search and select the **Manage Administrator Profile Values** task.
5. Search for the ORA\_OSS\_ENABLE\_DOC\_SEQ\_NUM profile option code.
6. In the Profile Values section, set the **Profile Value** to Yes.
7. Click **Save and Close**.

### Configure Document Sequences

Here's how you can configure document sequences in the Manage Document Sequences task:

1. Sign in as a user with access to the setup areas.
2. Navigate to Setup and Maintenance work area.
3. Search and select the **Manage Document Sequences** task.
4. On the Manage Document Sequences page, select **Application** as **Subscription Management** and enter the required information in the search section.
5. In the Search Results section, click the **New** icon and create document sequences by selecting the **Determinant Type** field value as a ledger, legal entity, and business unit.
6. Select a ledger, legal entity, and business unit row in the Search Results section.
7. In the Assignments section, click the **New** icon and create a document sequence category name by entering the ledger value, legal entity value, and business unit value.
8. Click **Save and Close**.

### Configure Subscription Numbering

Here's how you can configure subscription numbering to assign numbering sequences at the global, ledger, legal entity, and business unit level:

1. Sign in as a setup user.

2. Go to the Subscription Management work area.
3. On the Subscriptions landing page, click the **Subscription Configuration** tab.
4. Click **Manage Subscription Rules**.
5. Click the **Subscription Profiles** subtab and edit or create a subscription profile.
6. In the Subscription Numbering section, perform these tasks:
  - a. To base your numbering sequence based on a business unit, ledger, or legal entity, select **Document based sequence** in the **Numbering Method** field.
  - b. Select the **Determinant Type** value as a ledger, legal entity, or business unit.
  - c. Enter a prefix and suffix value.
7. Click **Save and Close**.

**Note:** The Subscription Numbering section is displayed only when the **Document Sequence Numbering Enabled** profile option is enabled.

When you enable this feature, the application hides the **Subscription Number** field on the Create Subscription page. After entering all the details on the Create Subscription page, once you create the subscription, the application uses your assigned numbering sequences to generate the subscription number on the Subscription Number page.

The application uses automatic numbering based on business unit, ledger, or legal entity while duplicating or manually renewing a subscription. When automatically renewing subscriptions, if the application can't find a proper document sequence setup, the subscription numbers are generated based on the PUID based sequence.

Let's consider an example where an insurance company wants to offer Covid insurance as an additional value add service to existing customers. The customers should subscribe to Covid insurance policy and pay additional premium to avail the service. The company wants to track the number of customers opting for covid insurances so that it can serve their customers better. The company wants to track the number of subscriptions at a Business Unit level for the year 2021.

You would like to generate subscription numbers automatically for the business unit, Global Operations (GO). You want to start the subscription with the code GO and end with the year 2021, start the subscription number from 10001, and have a subscription number sequence starting from GO-10001-2021

To do this, you must:

1. Enable the Document Sequence Numbering Enabled Profile Option: Enable the profile option code, ORA\_OSS\_ENABLE\_DOC\_SEQ\_NUM to YES. This will make the **Subscription Numbering** section visible in the Subscription profile
2. Configure Document Sequences: By default, Subscription Management ships the document sequence category with category name as **Subscription Category** and category code as ORA\_OSS\_SUBSCRIPTION\_SEQ\_CAT. The same document sequence category should be assigned for all the document sequences that would be created for subscription numbering. You must follow the steps mentioned in Configure Document Sequences. By default, you'll find ORA\_OSS\_SUBSCRIPTION\_SEQ as document sequence name.  
To do this:
  - a. End date the document sequence, ORA\_OSS\_SUBSCRIPTION\_SEQ to 12/31/20
  - b. Click the '+' icon to create a new document sequence with the following values
    - Document Sequence Name: C19\_INSURE\_DOC\_SEQ\_BU
    - Application: Subscription Management
    - Module: Subscription Management
    - Type: Automatic

- Determinant Type: Business Unit
- Start Date: 1/1/21 and End Date: 12/31/21
- c. Click **Save**
- d. Expand the icon beside C19\_ INSURE \_DOC\_SEQ\_BU, and enter the initial value 10001
- e. Navigate to the assignment pane, **C19\_ INSURE \_DOC\_SEQ\_BU: Assignment** and click the '+' icon to create a new document sequence with the following values
  - Document Sequence Category Name: Subscription Category
  - Method: Automatic
  - Start Date: 1/1/21 and End Date: 12/31/21
  - Business Unit Value: Global Operations
- f. Click **Save and Close**

Note: The dates must not overlap.

### 3. Configure Subscription Numbering:

You can now configure the rules on how you want to generate the subscription number. Follow the steps mentioned in Configure Subscription Numbering.

- a. Navigate to the Subscription Numbering section in the subscription profile. You can see this section only after enabling the profile option ORA\_OSS\_ENABLE\_DOC\_SEQ\_NUM to Yes.
- b. Change the Numbering Method to Determinant-based sequence.
- c. Select the Determinant Type as Business Unit.
- d. Enter the Prefix as GO, the code for the Business Unit, Global Operations.
- e. Enter the Suffix as 2021, indicating the year in which the Covid insurance is offered.
- f. Click Save and Close.
- g. Navigate to Subscription home page, click Create Subscription. You won't see the Subscription Number in the create page. Enter all the fields applicable
- h. Click Save and Continue.
- i. You can see the subscription number in the Summary page. The subscription number will be GO-10001-2021.

#### Related Topics

- [Document Sequences](#)
- [Guidelines for Managing Document Sequences](#)

## Enable Entitlements Support for All Covered Levels

Subscription Management supports providing entitlement details for the asset and product by default. Here are the steps to also provide entitlement information about party, customer account, party site, asset group, and product group from Subscription Management:

1. Sign in as a setup user.
2. Go to the Subscription Management work area.
3. On the Subscriptions landing page, click the **Subscription Configuration** tab.
4. Click **Manage Algorithms**.
5. Select the **Get Subscription Entitlements** algorithm and click **Actions** > **Create Version** to create a new version of the base algorithm.

6. Click the **Get Subscription Entitlements** link to edit the algorithm.
7. On the Edit Algorithms: Get Subscription Entitlements page, select the **Variables** tab.
8. Change the default value of **EnableManualPricedCoveredLevel** from **false** to **true**.
9. Click **Save and Close**.
10. From the Manage Algorithms page, click **Actions** > **Publish**.

## Filter Entitlements Using Custom Attributes

You can create custom attributes and use them in coverage templates to filter entitlements as per your business needs.

Let's consider an example where multiple coverages are applied to the same customer asset. If you want to select a pricing adjustment from a specific coverage, you can identify that coverage using a custom attribute.

You can create and enable a custom attribute in the coverage template to identify which template should be used at the time of pricing the debrief charges in Oracle Service Logistics.

You can select the custom attributes in the Subscription Entitlements service mapper and then customize the Get Subscription Entitlements Algorithm to filter entitlements that are deemed not applicable as per business rules.

### Related Topics

- [Coverage Entitlements](#)

## Integrate Service Logistics

Standard coverage acts as a template that contains entitlement rules specifying when milestones are due and for what conditions. You can create multiple standard coverage templates for the different service levels that you want to provide to a customer.

The **Adjustment** tab in the **Standard Coverage** task lets you define coverage offerings to determine the entitlements available for a customer at the time of a repair. Labor rates and discounts for each business process can be defined in the coverage template. You can use this service logistics integration to accurately determine service entitlements at the time when a repair activity is completed.

1. Navigate to the Subscription Configuration work area.
2. Select **Standard Coverage** in the Entitlements Management section.
3. On the Manage Standard Coverage page, click **Create Standard Coverage**.
4. Click a template name you want to edit.
5. On the Edit Standard Coverage page, click the **Adjustments** tab.
6. Select a service activity type from the **Service Activity** drop-down list.
7. Select a value from the **Billing Type** drop-down list. The values in this field are displayed based on your selection in the **Service Activity** drop-down list.
8. Select a value from the **Adjustment Type** drop-down list to add the markup or discount for the service activity.
9. Enter a percentage value in the **Value** field.
10. Select a value from the **Adjustment Basis** drop-down list.
11. Select the **Allow custom adjustments** check box to indicate if custom adjustments are allowed for standard coverage.
12. Enter the start and end date.
13. Click **Save and Close**.

### Related Topics

- [Set Up Service Activities](#)

## Create Deep Links

Deep links are links that point to another page. Deep links come in handy when you want to enable direct navigation into Oracle applications.

You can use deep links to access subscription or subscription product without navigating through the subscription landing page. For example, you can create a deep link to a subscription, then copy and paste that link to an email message or notification. The recipient can use the link to directly access the subscription from the email or notification.

### Subscription parameters used in deep links

To directly access a subscription using deep links, you can use:

- Subscription Number
- Subscription ID

To directly access a subscription product using deep links, you can use:

- Subscription Product ID
- Subscription Product PUID

## Create Subscription Links

Here's the URL syntax you can use to construct a link to open a subscription:

```
https://{ServerURL}/fscmUI/faces/deepLink?objType=SUBSCRIPTION&objKey={ObjKey}%3D{ParameterID}&action=EDIT
```

1. Replace Server URL with the URL of your environment.
2. Replace ObjKey with either subscriptionNumber or subscriptionId.
3. Based on the selected ObjKey type, replace ParameterID with either subscription ID or number.

For Example:

- The URL for a link to open the subscription number Subs2401 might look like:

```
https://subscription.oracle.com/fscmUI/faces/deepLink?objType=SUBSCRIPTION&objKey=subscriptionNumber%3DSubs2401&action=EDIT
```

- The URL for a link to open subscription ID 700100177392474 might look like:

```
https://subscription.oracle.com/fscmUI/faces/deepLink?objType=SUBSCRIPTION&objKey=subscriptionId%3D700100177392474&action=EDIT
```

## Create Subscription Product Links

Here's the URL syntax you can use to construct a link to open a subscription product:



```
https://{ServerURL}/fscmUI/faces/deeplink?  
objType=SUBSCRIPTION_PRODUCT&objKey={ObjKey}%3D{ParameterID}&action=EDIT
```

1. Replace Server URL with the URL of your environment.
2. Replace ObjKey with either subscriptionProductId or subscriptionProductPuid.
3. Based on the selected ObjKey type, replace ParameterID with either subscription product Id or PUID.

For Example:

- The URL for a link to open the subscription product ID 00100177392480 might look like:

```
https://subscription.oracle.com/fscmUI/faces/deeplink?  
objType=SUBSCRIPTION_PRODUCT&objKey=subscriptionProductId%3D00100177392480&action=EDIT
```

- The URL for a link to open subscription product PUID 700100177392474 might look like:

```
https://subscription.oracle.com/fscmUI/faces/deeplink?  
objType=SUBSCRIPTION_Product&objKey=subscriptionProductPuid%3D700100177392474&action=EDIT
```

## Generate Data Model XML

Using Oracle BI Publisher, you can create custom layout templates by adding the subscription data model attributes supplied with the application. By default, there's only one template supplied: Subscription template.

To find the subscription data model attributes, use the **Generate Data Model XML** action to download the latest data model attributes as a static XML file.

In Subscription Management, when you open a subscription and you look at it in the Summary - Overview page, you can use the Actions menu and select Preview. This preview creates a printable PDF output that you can use to preview the subscription.

Here's the list of attribute types included in the downloaded data model XML file:

- Subscription
- Subscription additional parties
- Subscription team
- Subscription parties contacts
- Subscription product
- Subscription product charges
- Subscription product charge adjustments
- Subscription product charge tiers
- Subscription product bill lines
- Subscription product bill adjustments
- Subscription covered levels (all child entities)
- Subscription coverage line (coverage entitlement)
- Subscription product relationships
- Custom child attributes at subscription header and product level

## Download Data Model XML

Here's how to download the data model XML:

1. Sign in as a setup user.
2. Go to the **Subscription Configuration** work area.
3. On the Subscriptions landing page, click the **Subscription Configuration** tab.
4. Click **Generate Data Model XML** to download the OSSXMLDATA file in the XML format.

## Set Up Coverage Services

When you create an asset in Oracle Asset Lifecycle Management, the corresponding included warranty also gets created in Subscription Management to manage downstream customer asset transactions.

Subscription Management integrates with Asset Lifecycle Management and simplifies fixed asset accounting tasks. Standard asset management tasks -- such as reinstating, transferring, splitting, expiring, replacing, and upgrading assets -- can be streamlined with automated business flows.

To ensure that asset coverage statuses stay in sync, subscription specialists update coverage lines when a customer asset is updated in Asset Lifecycle Management or Installed Base.

Here's the summary of the common steps you must perform to set up coverage services:

Setup Steps	Details
Set up business units and assign business function, ledger, or legal entity for Subscriptions.	For more information, see Define Business Units, Assign Business Function, and Assign Ledger and Legal Entity in the Subscription Management Setup Checklist chapter.
Set up party, account, and account sites.	For more information, see Create and Manage Customers in the Subscription Management Setup Checklist chapter
Set up Order Management Parameters.	For more information, see Define Order Management Parameters in Subscriptions in the Subscription Management Setup Checklist chapter.
Set up profile option code for time unit mapping.	For more information, see Specify Time Unit Mapping Management Setup Checklist chapter.
Set up the manage subscription time unit mappings.	For more information, see Define Subscription Time Unit Mappings in the Subscription Management Setup Checklist chapter.
Set up included warranty items and coverage items.	For more information, see Manage Items in the Subscription Management Setup Checklist chapter.
Set up pricing strategy and charges.	For more information, see Define Pricing in the Subscription Management Setup Checklist chapter.

## Set Up Churn Prediction Model

Built on Oracle Data Mining, the churn prediction model uses current and historical indicators to predict the churn probability. The churn probability is the probability expressed in percentage for a customer to discontinue the service or subscription. The churn prediction model helps you:

- Add or remove custom and predefined attributes used for churn prediction.
- Gather available customer behavior and usage pattern.
- Build a robust predictive model by periodically training the model and calculating the prediction-based input data.
- Review the accuracy of predictions using the View Model Accuracy task.
- Use a predefined model to predict the churn probability on a subscription product.
- Calibrate the top drivers contributing to the churn.
- Identify how the churn probability has changed since the last time it was calculated.

Based on these factors, you can predict customers who are likely to churn and create opportunities to cross-sell and upsell.

The churn prediction model provides a flexible mechanism to identify the possible causes for churn probability so that the sales representatives can take corrective action. Here are the steps to set up the churn prediction model:

1. Set up the churn prediction model
2. Run the Populate Churn Prediction Features scheduled process
3. Run the Train with Historical data and Predict Churn Probability scheduled process
4. Review the accuracy of your churn prediction model

## Set Up Churn Prediction Model

You can use the Manage Churn Prediction Model page to control the accepted threshold level and attributes that contribute to the prediction of churn probability.

1. Sign in as a setup user.
2. Go to the Subscription Management work area.
3. On the Subscriptions landing page, click the **Subscription Configuration** tab.
4. Click **Manage Churn Prediction Model**.
5. Enter a value in the **Accuracy Threshold** field. By default, the threshold is set to 70%.
6. Enter a value in the **Account Level Threshold** field. By default, the threshold is set to 70%.
7. Enter the number of days in the **Training Data Duration** field. All active records with a future renewal date, expired records, and closed records are included in the data set if the close date or the end date is within the time frame. By default, the number of days is set to 1,000 days.
8. Click the **Add Row** icon to add new attributes.
9. Select the **Predictive Model** check box for each attribute that you want to add for calculating the churn probability.
10. Click the **Delete** icon to remove the attributes that are used for churn prediction.
11. Click **Save and Close**.

## Run Populate Churn Prediction Features Scheduled Process

The **Populate Churn Prediction Features** scheduled process aggregates the current values of subscription churn prediction objects such as subscription terms, past renewals, past amendments, and other supporting information such as invoices and service requests. You must run this scheduled process to transfer this aggregated data from Subscription Management to Oracle Data Mining.

1. Click **Navigate > Tools > Scheduled Process**.
2. On the Schedule Process window, click **Schedule New Process**.
3. On the Schedule New Process window, make sure the **Job** option is selected.
4. Enter Populate Churn Prediction Features in the **Name** field and click **OK**.
5. On the Process Details window, click **Submit**.
6. In the Confirmation window, click **OK**.

## Run Train with Historical Data and Predict Churn Probability Scheduled Process

Use the **Train with Historical Data and Predict Churn Probability** scheduled process to train the churn prediction model with historical data and predict the churn probability of a subscription product. The objective of this scheduled process is to:

- Rebuild the selected predictive models.
- Make predictions based on scores derived during the build process.

You must have at least 30 churned and 30 renewed subscriptions to use this feature. When there are fewer than 30 records of churned and renewed subscriptions, the **Train with Historical data and Predict Churn Probability** scheduled process still runs successfully, but with the message to add more subscriptions as the churned data is insufficient to train the churn prediction model.

A churned subscription means one that's closed or terminated before the end date or a subscription that expires without a renewal. When you renew a subscription, the original subscription record is set in the expired state. The application considers these renewed subscriptions and their corresponding parent subscriptions as not churned. When a subscription expires without renewal, the application considers it as churned.

You must run this scheduled process every time you add or removes attributes used for churn prediction on the Manage Churn Prediction Model page.

1. Click **Navigate > Tools > Scheduled Process**.
2. On the Schedule Process window, click **Schedule New Process**.
3. On the Schedule New Process window, make sure the **Job** option is selected.
4. Enter Train with Historical Data and Predict Churn Probability in the **Name** field and click **OK**.
5. In the Basic Options section, select a value in the Mode drop-down list. You can select:
  - a. **Train Data and Run Prediction:** Creates a new model based on selected attributes to train data and uses it to predict churn probability.
  - b. **Run Prediction:** Uses the model created in the previous run of this job to predict churn.
  - c. **Train Data:** Creates a new model to train data based on selected attributes.
6. On the Process Details window, click **Submit**.
7. In the Confirmation window, click **OK**.

You must repeat these steps each time you want to predict churn for new subscriptions.

## Review Churn Prediction Model Accuracy

Use the View Model Accuracy task to review the accuracy of predictions. If the prediction accuracy is less than the threshold set in the Manage Churn Prediction Model page, the model doesn't make predictions for the product data.

The **Model Attributes** field displays the total number of attributes being used by the churn prediction model. The **Predictive model Accuracy** field displays the accuracy of the last schedule process run in the percentage value. You can also use the graph to view the accuracy percentage over the process run duration.

## Enable Display Sequence for Subscription Products

You can use Application Composer to add the Display Sequence field to sort the subscription products based on your preference. By default, when the display sequence field is disabled, subscription products are sorted in the descending order based on the creation date.

To place a subscription product in between other subscription products, you can enter a decimal value in the Display Sequence field. For example, let's assume you have three subscription products added in your subscription and you have assigned display sequences 1 and 2 for two subscription products. To position the third subscription in the middle of other subscription products, you can add the display sequence number as 1.1.

Here are the steps to enable the display sequence field:

1. Sign in to the application as a setup user.
2. Ensure you're working in an active sandbox with the **Application Composer** enabled.
3. Click **Navigator > Configuration > Application Composer**.
4. On the Application Composer page, select **Objects > Standard Objects > Subscription Product > Pages**.
5. In the Details Page Layouts section, click **Actions > Duplicate** or edit your existing custom layout.
6. In the Subtabs Region section, click the **Edit** icon for Edit Subtab: Summary.
7. In the Configure Detail Form section, move the **Display Sequence** field from the **Available Fields** section to the **Selected Fields** section.
8. Click **Save and Close**.
9. Click **Done**.
10. Publish the sandbox according to your company's business practices.

Similarly, you can add the **Display Sequence** field to the Products Region section and Add Product page so that subscription specialist can access this field from these pages. Once you have enabled this field, you can assign the display sequence for an individual subscription product using the Add Product or Edit product page.

## Terminate Subscriptions

The close credit method determines the credit given to customers if they close a subscription in the middle of the term.

Different credit methods have different impacts on billing when you terminate a subscription. You can select them at line level or at header level while closing the subscription.

There are three accepted types of close credit methods:

- **Prorate with credit**

This is the default value of the close credit method at the header level. With this credit option, if the customer has been billed for the entire term in advance, they will receive credit upon closing a subscription midterm. For example, if a subscriber was billed for the month of December 2021, in advance on December 1, 2021, and they close the subscription on December 12, then the customer receives credit for the period of December 2-31.

- **Prorate without credit**

With this credit option, the customer doesn't receive credit if they close a subscription midterm, even if they have been billed for the entire term already. For example, if a subscriber was billed for the month of December 2021, in advance on December 1, 2021, and they close the subscription on December 2, then the customer doesn't receive credit for the period of December 2-31.

- **Full credit**

With this credit option, the customer receives full credit when they close a subscription midterm, even if they have been billed for the entire term already. For example, if a subscriber was billed for the month of December 2021, in advance on December 1, 2021, and they close the subscription on December 2, then the customer receives credit for the whole period of December 1-31.

**Note:** Early termination fee is a flat fee charged for closing the subscription early. It's optional and can be entered while closing the subscription.

Consider this example of a subscription product:

#### Product Details and Billing Profile Details

Product	Quantity	Start Date	End Date	Bill Frequency	Invoicing Rule	Billing Date	Period Start	Period Type
Subscription Product	1	01-Sep-21	31-Mar-22	Month	Advance	Period Start	Service Start	Actual

#### Charge Details

Charge	Amount	Interfaced?	Interface Date	Today's Date
Monthly Recurring	\$100	Yes	02-Dec-21	02-Dec-21

#### Billing Summary

Period	Charge	Sequence	Interface Date	Bill-from Date	Bill-to Date	Amount (USD)	Class	Interfaced?
1	Monthly Recurring	1	02-Dec-21	1-Sep-21	30-Sep-21	100	Invoice	Y

Period	Charge	Sequence	Interface Date	Bill-from Date	Bill-to Date	Amount (USD)	Class	Interfaced?
2	Monthly Recurring	2	02-Dec-21	1-Oct-21	31-Oct-21	100	Invoice	Y
3	Monthly Recurring	3	02-Dec-21	1-Nov-21	30-Nov-21	100	Invoice	Y
4	Monthly Recurring	4	02-Dec-21	1-Dec-21	31-Dec-21	100	Invoice	Y
5	Monthly Recurring	5	1-Jan-22	1-Jan-22	31-Jan-21	100	Invoice	N
6	Monthly Recurring	6	1-Feb-22	1-Feb-22	28-Feb-21	100	Invoice	N
7	Monthly Recurring	7	1-Mar-22	1-Mar-22	31-Mar-21	100	Invoice	N

Here's the billing summary when the close credit method used is Full:

Close Credit Method	Close Date	Today's Date	Early Termination Fee
Full	02-Dec-21	02-Dec-21	\$60

Credit memos are generated for all of the bill lines interfaced so far. The future bill lines for the months of January, February, and March are deleted.

### Billing Summary

Period	Charge	Sequence	Interface Date	Bill-from Date	Bill-to Date	Amount (USD)	Class	Interfaced?
0	Penalty Fee	0	02-Dec-21	02-Dec-21	02-Dec-21	60	Invoice	N
1	Monthly Recurring	1	02-Dec-21	1-Sep-21	30-Sep-21	100	Invoice	Y
1	Monthly Recurring	1	02-Dec-21	1-Sep-21	30-Sep-21	-100	Credit Memo	N
2	Monthly Recurring	2	02-Dec-21	1-Oct-21	31-Oct-21	100	Invoice	Y
2	Monthly Recurring	2	02-Dec-21	1-Oct-21	31-Oct-21	-100	Credit Memo	N

Period	Charge	Sequence	Interface Date	Bill-from Date	Bill-to Date	Amount (USD)	Class	Interfaced?
3	Monthly Recurring	3	02-Dec-21	1-Nov-21	30-Nov-21	100	Invoice	Y
3	Monthly Recurring	3	02-Dec-21	1-Nov-21	30-Nov-21	-100	Credit Memo	N
4	Monthly Recurring	4	02-Dec-21	1-Dec-21	31-Dec-21	100	Invoice	Y
4	Monthly Recurring	4	02-Dec-21	1-Dec-21	31-Dec-21	-100	Credit Memo	N

Here's the billing summary when the close credit method is "prorate without credit":

Close Credit Method	Close Date	Today's Date	Early Termination Fee
Prorate without credit	02-Dec-21	02-Dec-21	\$0

If the close credit method is "prorate without credit", then future bill lines are deleted and credit memos aren't generated.

### Billing Summary

Period	Charge	Sequence	Interface Date	Bill-from Date	Bill-to Date	Amount (USD)	Class	Interfaced?
1	Monthly Recurring	1	02-Dec-21	1-Sep-21	30-Sep-21	100	Invoice	Y
2	Monthly Recurring	2	02-Dec-21	1-Oct-21	31-Oct-21	100	Invoice	Y
3	Monthly Recurring	3	02-Dec-21	1-Nov-21	30-Nov-21	100	Invoice	Y
4	Monthly Recurring	4	02-Dec-21	1-Dec-21	31-Dec-21	100	Invoice	Y

Here's the billing summary when the close credit method is "prorate with credit":



Close Credit Method	Close Date	Today's Date	Early Termination Fee
Prorate with credit	02-Dec-21	02-Dec-21	\$0

If close credit method is "prorate with credit", then future bill lines are deleted and credit memos are generated for the remaining duration.

### Billing Summary

Period	Charge	Sequence	InterfaceDate	Bill-from Date	Bill-to Date	Amount (USD)	Class	Interfaced?
1	Monthly Recurring	1	02-Dec-21	1-Sep-21	30-Sep-21	100	Invoice	Y
2	Monthly Recurring	2	02-Dec-21	1-Oct-21	31-Oct-21	100	Invoice	Y
3	Monthly Recurring	3	02-Dec-21	1-Nov-21	30-Nov-21	100	Invoice	Y
4	Monthly Recurring	4	02-Dec-21	1-Dec-21	31-Dec-21	100	Invoice	Y
4	Monthly Recurring	4	02-Dec-21	02-Dec-21	31-Dec-21	-96.77	Credit Memo	N

## Purge Email to Comply with General Data Protection Regulations

You may have some customers in the European Union (EU). And this means they're governed by General Data Protection Regulation (GDPR) regulations.

The GDPR is a regulation in EU law. This law governs data protection and privacy for all individual citizens of the EU and the European Economic Area (EEA). One of the GDPR regulations is the right to erasure or the right to be forgotten. This means that your customer may want to request the deletion of their email from the subscription database.

Here's how you can enable purge an email:

1. Go to **Navigator > Tools > Scheduled Processes**.
2. On the Scheduled Processes page, click **Schedule New Process**.
3. On the Schedule New Process window, make sure the Job option is selected.
4. Enter **Delete Contact Email Address** in the **Name** field and click **Ok**.

5. Select a customer name from the **Customer** drop-down list.
6. Optionally, select a contact name from the **Contact Name** drop-down list.
7. Click **Submit**.

You can configure the **Delete Contact Email Address** scheduled process to purge your customer's email, either periodically or manually.

# 6 Coverage Services

## Overview of Standard Coverage Templates

You use Subscription Management coverage templates to manage the warranty contracts that you sell to your customers.

The application supports:

- Included and extended warranties
- The ability to create and manage warranties and track entitlements on tangible or intangible goods (for example, software or hardware)
- The ability to price and bill warranties using one-time and recurring charges
- Warranty renewals

In Oracle Product Information Management, a standard coverage template is associated with a Service item of sales product type: Extended Warranty/Included Warranty. The template provides key information on how the service should be carried out on products covered under the contract.

It defines:

- Times of coverage
- Days of coverage
- Reaction and resolution times for a service request
- Discounted rates applied when work is performed on covered products

**Note:** You must complete the steps mentioned in *Define Order Management Parameters* before you can set up included or extended warranties.

## Create Coverage Calendar Schedule and Exceptions

The coverage calendar schedule and exceptions represent the times that service work can be performed or not performed. You create multiple calendar schedules and use them in standard coverage templates. The coverage times are used to calculate reaction and response times for service requests.

**Note:** You must create a coverage calendar schedule before coverage templates will work.

Here's how to create a coverage schedule calendar:

1. Go to the **Subscription Configuration** work area.
2. On the Subscriptions page, click the **Subscription Configuration** icon.
3. Click **Entitlements Management** > **Manage Availability**.
4. On the **Schedules** tab, click the **Create** icon the Schedules pane to create a new coverage schedule. Or, select an existing entry and click **Duplicate** to copy and update it.

- a. Enter these details:
    - **Schedule Name:** Name of the coverage schedule.
    - **Time Zone:** Time zone for which you're creating the coverage schedule.
  - b. In the **Exceptions** field, select an exception to include exceptions in the coverage schedule.
5. To delete a schedule, click **Delete** in the Schedules pane.
6. Save your changes.
7. To add the holidays, nonworking times, or extended working hours that apply to the coverage schedule, click the **Exceptions** tab.
  - a. Click the **Create** icon in the Exceptions pane to create a new coverage schedule exception. Or, select an existing entry and click **Duplicate** to copy and update it.
  - b. In the Availability Exceptions section, click **Add event**.
  - c. Enter the name of the exception event, the date and times of the event, and the availability during the event.
  - d. To delete an exception, click **Delete** in the Exceptions pane.
8. Click **Save**.

## Create Standard Coverage

You can create multiple standard coverage templates for the different service levels that you want to provide to a customer.

Before creating standard coverage templates, be sure that you have defined these:

- **Business Processes:**  
Business processes are an aggregation of service activities applicable for Depot Repair, Field Service, and so on.
- **Service Activities:**  
Service Activities are the representation of the activities performed by a service technician, field service technician, the customer, or customer support executive, like labor activities, toll expense, parts return, and so on.
- **Time Zones**
- **Service Request Severity**
- **Billing Types:**  
All Service Activities must be associated with a Billing Type. The Billing Type indicates which type of activity is performed, for example, labor, material charge, or expense.
- **Price Lists**
- **Adjustment Type**
- **Adjustment Basis**
- **Entitlement Type**

To create billing types and business processes, see the [Getting Started with Service Logistics Cloud Implementation](#) guide.

1. Navigate to the **Subscription Configuration** work area.

2. Select **Standard Coverage** in the Entitlements Management section.
3. On the Manage Standard Coverage page, click **Create Standard Coverage**.
4. Enter template name, description, and start date.
5. Select an entitlement type.
6. Click **Save and Continue**.

To add entitlements:

1. On the Edit Standard Coverage page, select **Entitlement Rules**, and click **Actions > Add Row**.
2. Select the appropriate conditions from the Entitlement Rules section.
3. Select the appropriate result columns and click **Save**.

You can add more entitlement rules in the Entitlement Rules section.

The criteria in the Condition column are matched against the attributes of transactions, like a service request, and the application's Resolution Times and Reaction Times for the time zone are returned to the requesting application.

The requesting applications are Fusion Service (formerly B2B Service) and Service Logistics.

In the Entitlement Rules you can mention the following:

- Coverage Calendar: This is the Availability Calendar.
- Reaction Times: These define the amount of time by which an action must be initiated for a requested process. Reaction times are tied to severity.
- Resolution Times: These define a fixed time, according to the contract, by which normal operation should be restored. The Resolution Times are made available to other functions.

**Note:** You can edit the condition and result columns applicable for your entitlements by modifying the Subscriptions Entitlements Matrix Class.

The **Adjustments** tab in the Standard Coverage section lets you specify billing adjustments for work performed on covered products, for various business processes and service activities. The Subscription Management-Service Logistics integration uses these coverage adjustments to accurately determine service entitlements when a repair activity or field service activity is completed.

1. Navigate to the **Subscription Configuration** work area.
2. Select **Standard Coverage** in the Entitlements Management section.
3. On the Manage Standard Coverage page, click a template name you want to edit. Or, click **Create Standard Coverage** to create a new template.
4. On the edit or create page, click the **Adjustments** tab
5. Select a business process from the **Business Process** drop-down list.
6. Select a service activity type from the **Service Activity** drop-down list.
7. Select a value from the **Billing Type** drop-down list. The values in this field are displayed based on your selection in the **Service Activity** drop-down list.
8. Select a value from the **Adjustment Type** drop-down list to add the markup or discount for the service activity.
9. Enter a percentage value in the **Value** field.
10. Select a value from the **Adjustment Basis** drop-down list.
11. Select the **Allow custom adjustments** check box to indicate if custom adjustments are allowed for standard coverage.
12. Enter the start and end date.
13. Click **Save and Close**.

**Note:** To support custom requirements for your implementation, you can extend standard coverages using Application Composer. Standard Coverage also is a REST-supported object.

## Create Default Coverage

A default coverage applies a standard coverage template to specific customers, or globally for all customers.

1. Go to the **Subscription Configuration** work area.
2. On the Subscriptions landing page, click the **Subscription Configuration** tab.
3. Click **Entitlements Management > Default Coverage**.
4. Click **Create** to add a new coverage.
5. Select the **Default Level** for the coverage:
  - Select **Global** to assign the coverage to all customers.  
Then select the standard coverage in the **Coverage** column that you want to apply to all customers.
  - Select **Customer** to assign the coverage to a specific customer.  
Then select the customer in the **Default Level Value** column, and then select the standard coverage in the **Coverage** column that you want to apply to that customer.
6. Enter the start and end date for the coverage.
7. Click **Save**.

## Impact of Asset Lifecycle Changes on Included Warranties and Coverage Subscriptions

Assets that are part of included warranties can undergo lifecycle changes, such as when assets are returned, expired, or transferred.

Included warranties and coverage lines must reflect such changes. For example, there can't be an active included warranty for an asset that's been returned. By default, Subscription Management integrates with Oracle Asset Lifecycle Management to manage these changes. The applications start specific asset transactions that update the included warranties and coverage lines.

Subscription rule Asset Lifecycle Management settings determine how the applications change the impacted subscription contracts for installed base updates or asset transactions.

To set the rules:

1. Sign in as a setup user.
2. Navigate to the **Subscription Configuration** work area.
3. On the Subscription Configuration page, click the **Subscription Configuration** tab.
4. Click **Manage Subscription Rules**.
5. Click **Asset Lifecycle Management**.
6. Select the Common Rules:
  - The **Close Reason** is the default close reason when a covered asset line is closed.
  - The **Cancellation Reason** is the default cancellation reason when a covered asset line is canceled.

- The **Transfer** option specifies the covered asset line change that happens when an asset is transferred.
- The **Termination Credit Method** is the default credit method used when covered asset lines are terminated.

7. Select the covered asset line change for included warranties and coverage lines when an asset is transferred.

8. Save your changes.

This table explains the various asset lifecycle transactions, the asset transaction updates that they trigger, and the synchronization behavior with Subscription Management.

Asset Change	Asset Transaction Type	Impact on Asset Transaction Updates for Included Warranty/Coverage Line	Impact on Revenue Contract in Oracle Revenue Management Cloud
An asset is expired in Installed Base/Asset Lifecycle Management	Customer Asset Expiration	<p>Asset transactions are visible in Reprocess Installed Base Updates in Pending status.</p> <p>Covered asset lines are closed on the included warranty/coverage subscription line.</p> <p>Closed Date is the customer end date of the asset (expiration date), plus 1 day.</p> <p>Close credit, close, and cancel reasons are set according to the Manage Subscription Rules &gt; Asset Lifecycle Management tab settings.</p>	Material revision of the associated revenue contract is initiated.
An asset is reinstated in Installed Base	Customer Asset Reinstatement	<p>Asset transactions are visible in Reprocess Installed Base Updates in Pending status for Included Warranties only.</p> <p>Asset transactions update only included warranties. As a result of customer asset reinstatement, covered asset line status becomes Active or Expired, depending on whether the covered asset end date is in the future or past, respectively.</p> <p>Extended Warranties aren't reinstated.</p>	No impact
An asset is returned to the supplier	Customer asset return	<p>Asset transactions are visible in Reprocess Installed Base Updates in Pending status.</p> <p>Covered asset lines are closed for included warranties and coverage subscription lines.</p> <p>Closed Date will be the customer end date of asset (expiration date), plus 1 day</p> <p>Close credit, close, and cancel reasons are set according to the</p>	Material revision of the associated revenue contract will be initiated

		Manage Subscription Rules > Asset Lifecycle Management tab settings.	
An asset is transferred to another customer	Customer asset transfer	<p>Asset transactions are visible in Reprocess Installed Base Updates in Pending status.</p> <p>The impact of the asset transaction update on included warranties and coverage subscription lines is determined by the Transfer option selected in the Manage Subscription Rules &gt; Asset Lifecycle Management tab.</p> <p>If the transfer option is Transfer:</p> <p>The applicable covered asset lines are closed. New covered asset lines are created for the new customer for the remaining duration, starting from transfer date plus 1 day.</p> <p>If the transfer option is Terminal:</p> <p>The applicable covered asset line is closed as of asset transfer date plus 1 day.</p> <p>Close credit, close, and cancel reasons are set according to the Manage Subscription Rules &gt; Asset Lifecycle Management tab settings.</p> <p>If the transfer option is Do Not Change or if no transfer option is selected, included warranties and coverage lines are updated.</p>	<p>Material revision of the associated revenue contract is initiated for the terminated line.</p> <p>A new revenue contract is created for the new coverage subscription, covering the transferred covered asset.</p>
An asset under warranty is returned due to fault, and the supplier initiates a replacement by shipping a new asset	Customer Asset Replacement	<p>Asset transactions are visible in Reprocess Installed Base Updates in Pending status for Included Warranties only.</p> <p>The applicable covered assets are terminated on the replacement date plus 1 day.</p> <p>A new covered level is created for the replacement asset, starting the replacement date, plus 1 day, until till the original covered asset end date.</p> <p>Extended Warranties aren't replaced.</p>	No impact



## Analyze Coverage Entitlements and Adjustments

You can use Oracle Transaction Business Intelligence subject areas to report on various aspects of your coverage subscriptions:

- **Subscription Management - Covered Levels Real Time Subject Area:** You can analyze various covered levels by customer, product, status, and various dates.
- **Subscription Management - Coverage Entitlements and Adjustments Real Time:** You can analyze coverage templates based on various entitlements and adjustments.
- **Subscription Management - Subscription Billing Real Time:** You can analyze billing lines for covered levels by customer, product, status, and various dates.

Additionally, you can use these predefined dashboards available in `/shared/Subscription Management/Embedded Content/Subscription Specialist/`, in your Oracle Transaction Business Intelligence Catalog:

1. **Coverage Products:** You can view the list of coverage products and covered levels. Searching for fields like customer, business unit, dates, and so on. View coverage products and covered levels that are about to expire and see which ones have been terminated
2. **Subscriptions by Entitlements and Adjustments** You can view the list of coverage subscriptions that are covered by specific entitlements and adjustments. For example, you can view a list of coverage subscriptions that have a coverage that provides 10% discount for labor.



# 7 Set Up Coverage Items and Extended Warranties

## Overview of Coverage Items or Extended Warranties

Coverage items or extended warranties let you sell additional coverage services to your customers. Coverage items can be sold as separate items themselves, and you can set up pricing for these items as well.

**Note:** Before creating the coverage item, you must first set up the standard coverage you want to provide as a part of your coverage item. See [Create Standard Coverage](#).

## Create Coverage Items

To create a coverage item:

1. Sign in as a setup user.
2. Go to **Product Management > Product Information Management**.
3. Expand the Tasks region and select **Create Item**.
4. On the Create Item page, select the organization, enter the number of items, and select the item class.  
  
Ensure that the selected list doesn't contain any template.
5. Click **Ok**.
6. Enter the item name and description.
7. Select the item status and lifecycle phase.
8. Ensure that the primary unit of measure, in the Mandatory Attributes section, is part of the same Time Unit Class mapped in the profile option, RCS\_DEFAULT\_UOM\_CLASS\_CODE\_FOR\_SVC\_DURATION.
9. Go to the **Specifications** tab and select **Item Organization > Service**.
  - a. In the Asset section, select **Not Tracked** from the Enable Asset Tracking drop-down list.
  - b. In the Service Contracts section, select **Open Ended** from the **Service Duration Type** drop-down list.
  - c. In the Service Contracts section, Enter the **Service Start Delay** days. The Included Warranty Start Date is Asset Shipment Date + Service Start Delay days.
  - d. In the Service Contracts section, select an appropriate standard coverage.
10. Go to the Specifications tab and select **Item Organization > Sales and Order Management**.
  - a. In the Order Management section, set **Customer Ordered** to **Yes**.
  - b. In the Order Management section, set **Customer Orders Enabled** to **Yes**.
  - c. In the Order Management section, select **Extended Warranty, Service Level Agreements, or Software Maintenance** from the **Sales Product Type** drop-down list.
11. Click **Save**.

## Set Up Pricing for Coverage Items

Percentage-based pricing lets you price a coverage item as a percentage of the price of the item that it covers.

Set up pricing for the asset item:

1. Sign into the application with access to Pricing Administration.
2. Navigate to the **Pricing Administration** work area.
3. In the **Pricing Rules** tab, open the price list the item is associated with.
4. Create a price list line for a coverage item. Click **Associated Items** to define unit price and percentage price based on covered items.
5. You can add one-time and recurring charges, as needed, using unit price or percentage price calculation methods for various coverage UOMs.

## Create Coverage Subscriptions

You can create coverage subscriptions by adding coverage products to a subscription and defining the covered levels for the products.

1. Navigate to an existing subscription or create a new subscription with the required details.
2. Click **Add Product** and select the coverage product you want to add.
3. Navigate to the coverage product you created and go to **Covered Levels**.

**Note:** If the Covered Level subtab isn't showing, verify that the products you've added have the correct Subscription Type. For products with a subscription type of Subscription, this subtab doesn't appear.

4. Add the applicable covered levels that determine what is covered by your coverage subscription.

## What a Coverage Subscription Covers

A coverage subscription can cover assets on multiple levels. For example, you can have a coverage subscription covering a particular asset or all assets for a given customer.

This table lists the different levels of coverages that you can use to determine what's covered by a coverage subscription, along with pricing details:

Covered Level	What It Covers	Pricing Details
Party	Assets owned by all accounts belonging to a party	Requires manual pricing
Customer Account	All assets owned by the customer account	Requires manual pricing
Party Site	All assets installed at a specific party site stored by Asset Lifecycle Management.	Requires manual pricing

Covered Level	What It Covers	Pricing Details
Asset Group	Assets that belong to a specific group of assets created in Asset Lifecycle Management	Requires manual pricing
Product Group	All product groups in the Service Catalog Product Group	Requires manual pricing
Product	Serviceable inventory items	Uses the price defined in Oracle Fusion Pricing for your coverage item
Asset	Specific serialized or nonserialized assets in Oracle Installed Base.	Uses the price defined in Oracle Fusion Pricing for your coverage item
Custom Covered Levels	User-defined custom entities	Requires manual pricing

**Note:** Assets need to be associated with an item.

## Define Customer Covered Levels

You can use custom covered levels to define coverages for custom entities, beyond the covered levels supported by default.

1. Extend the existing lookup type, `ORA_OSS_COVERED_LEVEL`, and add new lookup values to define new custom covered levels.
2. Extend the lookup type, `ORA_OSS_CUSTOM_CHARGE`, and add values for charge names to be used for custom covered levels.
3. When you add a custom covered level to a coverage subscription, you must specify the total amount and quantity.
  - Based on the amount and quantity a recurring charge is created for the custom covered level.
  - The billing frequency and covered line duration determine the number of periods.

**Note:** You can only use recurring charges with custom covered levels.

## Edit Coverage for a Coverage Line

You can edit coverage on a standard coverage to a line, and the changes apply only to that line. When you do this, you're creating a nonstandard coverage for that line.

1. Navigate to the coverage subscription line that you want to modify.
2. Go to **Coverage**.
3. Click **Add Coverage**.
4. Add an existing standard coverage template.
5. Click **Edit**.

6. Make changes to coverage as needed.
7. Save your changes.

# 8 Set Up Included Warranties

## Overview of Included Warranties

You can use Subscription Management to manage included warranty contracts.

To create included warranty contracts automatically when an asset is created in Asset Lifecycle Management, you must first create an included warranty item and associate it with the customer asset item in Oracle Product Information Management.

Before creating the included warranty item, you must set up the standard coverage you want to provide as part of your included warranty.

## Create Included Warranty Items

To create an included warranty item:

1. Go to **Product Management > Product Information Management**.
2. Expand the Tasks region and select **Create Items**.
3. On the Create Item page, select the organization, enter the number of items, and select the item class.
4. Ensure that the selected list doesn't contain any template.
5. Click **Ok**.
6. Enter the item name and description.
7. Select the item status and lifecycle phase.
8. Click **Save**.
9. Select **Primary Unit of Measure** in the Unit of Measure section under the **Overview** Tab. Primary UOM should be from the UOM Class that has been set in the profile option, SCM Common: Default Service Duration Class.
10. Go to the **Specifications** tab and then the **Sales and Order Management** side navigation:
  - a. Select **No** for Customer Ordered and Customer Order Enabled fields, since included warranties can't be sold and priced.
  - b. Select **Included Warranty** as the Sales Product Type.
11. Go to the **Specifications** tab and then the **Service** side navigation:
  - a. Select **Fixed** as the Service Duration Type.
  - b. Select the desired **Service Duration** and Service **Period**.
  - c. Select **Milestone** as Service Start Type. This setting specifies that the start of the warranty is the customer asset shipment date.
  - d. Specify **Service Start Delay**, if needed, in No. of Days. The start date of the included warranty is calculated as Asset Shipment Date plus Service Start Delay.
  - e. Select a **Standard Coverage** to apply to this included warranty item.

## Associate an Included Warranty Item with an Asset

To associate an included warranty item with a customer asset item:

1. Go to **Product Management > Product Information Management**.
2. Search for and select the customer asset item that you want to add an included warranty for.
3. Go to the Specifications tab and select **Item Organization > Service**.
  - a. In the Asset section, ensure that **Customer Asset** from the Enable Asset Tracking drop-down list is selected.
  - b. In the Service section, set **Enable Contract Coverage** to Yes.
4. Go to the **Specifications** tab and select **Item Organization > Sales and Order Management**.
  - a. In the Order Management section, set **Customer Ordered** to Yes.
  - b. In the Order Management section, set **Customer Orders Enabled** to Yes.
  - c. For **Sales Product Type**, select any value except: Included Warranty, Extended Warranty, or Software Maintenance.
  - d. Set Returnable to Yes, if the customer asset item can be returned
5. Go to the **Relationship** tab and create a relationship between this customer asset item and the included warranty item. You must select **Warranty** as the relationship type.
  - a. You can also associate multiple included warranties with a customer asset item.
  - b. The effectivity dates of the relationship determine if an included warranty needs to be created for an asset based on the asset creation date
6. Click **Save**.

### Note:

- After you perform the above setups, the warranty is always included with the customer asset item sold.
- You can't create included warranties from the Subscription Management application directly, but you can use REST APIs and Import Management to create them

## Create Included Warranty Subscription

When a customer asset is created, it creates a pending customer asset creation transaction in Subscription Management. For the included warranty to be created, you must process such transactions. We will discuss asset transactions in more detail in Asset Transaction section.

1. Go to **Subscription Management > Subscription Configuration > Asset Lifecycle Management > Reprocess Installed Base Updates**.
2. Search asset transactions by selecting **Customer asset creation** for Asset Transaction Type and **Pending** for Status.
3. Click **Submit** to process the pending asset transactions.
4. If any asset transactions fail to proceed due to an error, you can select the transactions using the check box and then Submit them again.



5. Run the Process Installed Base Updates process, which processes the asset transactions to create included warranty subscriptions. You can also schedule this process to run regularly and create included warranties automatically.

The included warranty is created by default for the business unit associated with the asset. If the asset business unit isn't available, then the application uses the default business unit from the subscription rule Asset Lifecycle Management specifications.

You can change the business unit associated with the asset, if needed:

1. Go to **Subscription Configuration**.
2. Click **Manage Subscription Rules**.
3. Click **Asset Lifecycle Management**.
4. In the Included Warranty Section, select the business unit you want to be the default business unit for the asset.

The Process Installed Base Updates process creates included warranty subscriptions for new customer assets. This process uses specific consolidation rules to determine whether the new customer asset should be added as a covered level for an existing included warranty line or if a new included warranty should be created:

1. Included warranty selection rules:
  - a. Find an active included warranty whose source order and business unit match the order reference and business unit associated with the customer asset.
  - b. If (a) doesn't return a match, find an active included warranty whose customer matches the sold-to party associated with the customer asset.
  - c. If the application doesn't find the included warranty in (b), then create a new included warranty.
2. If an included warranty is found in (1), these rules determine the line-level consolidation:
  - a. Find an active included warranty line that has a bill-to account and ship-to party (or party site) similar to the one associated with the customer asset and the included warranty product related to the product associated with the customer asset.
  - b. If no active line is found in (a), create a new line, and add the asset as a covered level.

**Note:** Typically, invoices aren't generated for included warranty items.

## Set Up Included Warranty Renewal

When they want to renew an included warranty to be an extended warranty, salespeople use the Renew action available on the subscription. You must do some setups for this functionality to work:

1. Sign in as a setup user and navigate to the Setup and Maintenance work area.
2. Open the Tasks side panel and click **Search**.
3. Search for and select the **Manage Standard Lookups** task.
4. Search for the **EGP\_RELATIONSHIP\_TYPES** lookup.
5. In the Lookup Codes section, click the **Add** icon.
6. In the Lookup Code field, enter `oss_EXTENDED_WARRANTY`.
7. Click the **Enabled** check box.
8. In the Meaning field, enter `Extended Warranty`.
9. In the **Description** field, enter the **Extended warranty item**.
10. Click **Save and Close**.

After configuring the lookup value, you must associate an extended warranty item with a product in the included warranty item relationships. To associate an extended warranty item with a product:

1. Navigate to **Product Management > Product Information Management**.
2. Select the included warranty item related to your goods item.
3. In Relationship tab, select the Type as **Extended Warranty**.

To terminate included warranties, you must close the covered asset and do data updates:

1. In Asset Lifecycle Management, end date the asset related to the warranty.
2. Run the Reprocess Installed base Updates scheduled process.
3. Run the Process Customer Asset Updates scheduled process.
4. Run the Update Subscription Status scheduled process after two days of customer asset return or termination, in order to get the respective covered asset status updated to Closed.

**Note:** Included warranties take their end dates from the subscription end date and cannot be modified.

#### Related Topics

- [Renew Included Warranty](#)

## Update Warranty Effectivity Based on Asset Installation Date

You can update the warranty effectivity date of an asset in cases where the asset's shipment date and installation date are different. This lets you give the actual warranty time to the customer.

By default, the included warranty of an asset starts when the user starts using the asset. For some assets, like laptops, that don't need to be installed, the included warranty starts on the date of purchase. However, for other assets that need to be shipped from one location to another or that require installation by a field service engineer, the start date of the included warranty should factor in the transit time, and the time taken for the field service engineer to install the machine.

You can match the warranty start date to the shipment date or to the installed date by updating the install date.

Let's consider an example where an asset which requires installation is created along with its included warranty:

Shipment Date	Included Warranty	Warranty Start Date	Warranty End Date
January 14, 2022	1 year	January 14, 2022	January 13, 2023

In this example, a field service engineer completes the installation on February 1, 2022, so the installed date is updated to February 1, 2022.

Since the installed date has been changed, the warranty start date should reflect that change and get updated to February 01, 2022 through January 31, 2023.

Here's how to change the warranty date in this case:

1. Go to **Subscription Management** and click **Subscription Configuration**.
2. Navigate to **Asset Lifecycle Management** and click **Manage Assets**.

3. Search for the asset and navigate to the **Sales Order Details** tab.
4. Update the **Installed Date** field.
5. Click **Save and Close**.
6. Navigate to **Asset Lifecycle Management** and click **Reprocess Installed Base Updates**.
7. To search for asset transactions, select:
  - **Asset Transaction Type:** Customer asset warranty date synchronization
  - **Status:** Pending
8. Click **Submit**
  - Note:** If any asset transactions fail with error, select the transactions then submit them again.
9. After the process completes, navigate to **Manage Assets** and open the asset you updated.
10. Navigate to the **Subscription** tab and then to the included warranty subscription.
11. In the covered level of the subscription, you can see the updated start date and end date of the included warranty.
12. Schedule the Process Installed Base Updates process, which processes the asset transactions to update the effectivities of the included warranty subscriptions. You can also schedule this process to run regularly, so that the application automatically updates the warranty effectivity based on the asset install date.

**Note:** When an RMA is performed for an old asset and a shipment is performed on a new asset, the old asset is removed from Installed Base and new asset is added to Installed Base. In reprocess Installed base assets, only one transaction is shown. Only a replacement transaction is created for the paired transaction in Service Logistics.

#### *Related Topics*

- [Create Included Warranty Subscription](#)



# 9 Integrate Revenue Management

## Integration Overview

You can use Oracle Revenue Management to automate end-to-end revenue compliance and revenue recognition processes for your enterprise.

You can integrate Oracle Revenue Management with Oracle Subscription Management to ensure that the revenue schedule for a subscription is reflected accurately for revenue recognition. The integration also ensures that the revenue is recognized based on the new ASC 606 and IFRS 15 standards.

Here's what you can do with this integration:

- Automatically import subscription lines for subscription or usage-based products.
- Automatically import subscription changes as revisions from Subscription Management, which are treated as retrospective accounting contract revisions in Revenue Management.
- Import various performance events from Subscription Management to record initial performance events and satisfaction events in Revenue Management.
- Import subscription billing information from Oracle Account Receivables to Oracle Revenue Management to clear contract asset balances, record discounts or premiums, and record initial performance events.

To create customer contracts and performance obligations, you must import the subscription data into Revenue Management. Revenue is recognized for performance obligations as and when different subscription events occur. Here are the subscription events that initiate data transfer from Subscription Management to Revenue Management:

- Subscription activation
- Subscription amendment
- Subscription renewal
- Subscription termination
- Usage-based subscription billing
- Evergreen subscription billing
- Apply pricing term

This table explains how this integration handles different subscription scenarios:

Scenarios	Impact
Revenue contracts identification	Each subscription line is treated as a revenue contract. If the subscription line is part of a bundle, the complete bundle is treated as a revenue contract. You can modify this functionality by changing the Contract Identification rule.
Performance obligations and promised details identification	Each subscription product charge line is treated as a separate promised detail. By default, each subscription product is treated as an independent performance obligation. You can modify this functionality by changing the Performance Obligation Identification rule.

Scenarios	Impact
Revenue recognition for one-time, recurring, and usage charges	One-time charges are recognized on subscription activation. Recurring charges are recognized over the subscription duration. Usage charges are recognized as and when usage charges are billed. Usage charges result in a new revenue contract.
Subscription amendments, terminations, and renewals impact	Amendments and terminations result in a material modification or termination of the existing revenue contract. Renewals and amendments result in a new revenue contract.
Evergreen subscriptions impact on revenue	Evergreen subscriptions result in a new revenue contract for every billing cycle. Subscriptions with anniversary pricing result in a new revenue contract for every pricing term.
Standalone selling price calculation	The charge list price is used as the standalone selling price.
Additional charges and bill adjustments calculation	All additional adjustments and bill adjustments result in a material modification of the existing revenue contract.

## Integration Setup Steps

Here are the steps to enable the Revenue Management integration with Subscription Management:

1. In Setup and Maintenance, navigate to the Manage System Options for Revenue Management page:
  - o Offering: Financial
  - o Functional Area: Revenue Management
  - o Task: Manage System Options for Revenue Management
2. Click **Add** from the Integration section to add a row in the Source Document Types table.
3. In the Ledger field, select an appropriate ledger.
4. In the Source Document Type field, select **Oracle Subscription Management**.
5. In the Appropriate Revenue Clearing field, select a revenue clearing account.
6. Click **Save and Close**.

You can find some uses case around customizing the Revenue Management integration in the article, [Customizing Subscriptions- Oracle Receivables Integration \(Doc ID 2732008.1\)](#) on My Oracle Support.

## Interface Tables for the Integration

Three tables interface data from Subscription Management to Revenue Management:

1. OSS\_RMCS\_DOC\_T
2. OSS\_RMCS\_DOC\_LINES\_T
3. OSS\_RMCS\_DOC\_SUB\_LINES\_T

More details of these tables can be found in the guide [Oracle CX Tables and Views for CX Sales and B2B Service](#).

After the scheduled process, Send Subscription Revenue Information to Oracle Revenue Management Cloud, is executed, the data is interfaced to these VRM interface tables:

1. VRM\_SOURCE\_DOCUMENTS
2. VRM\_SOURCE\_DOC\_LINES
3. VRM\_SOURCE\_DOC\_SUB\_LINES

Here's a brief description of these VRM interface tables:

Interface Table	Description
VRM_SOURCE_DOCUMENTS	Stores the basic subscription header information, such as document date, document number, bill-to customer ID, bill-to site ID, subscription start date, subscription number, and so on
VRM_SOURCE_DOC_LINES	Stores information about the subscription lines, such as the quantity, unit selling price, and line amount
VRM_SOURCE_DOC_SUB_LINES	Stores the information about satisfaction events

## Attribute Mappings for VRM\_SOURCE\_DOCUMENT

A separate revenue document (VRM\_SOURCE\_DOCUMENT) is created per product line.

If multiple product lines within a subscription have the same external root asset key, those product lines are grouped into one revenue document.

This table shows the attribute mappings:

VRM_SOURCE_DOCUMENT Attribute (Target)	Value (Source)	Comments
APPLICATION_ID	10563	Hard Coded
BILL_TO_CUSTOMER_ID	OSS_SUBSCRIPTIONS.BILL_TO_ACCT_ID	Subscription Bill-To Account ID
BILL_TO_CUSTOMER_SITE_ID	customer account site ID for OSS_SUBSCRIPTIONS.BILL_TO_SITE_USE_ID	hz_cust_site_uses_all.cust_acct_site_id where site_use_id = OSS_SUBSCRIPTIONS.BILL_TO_SITE_USE_ID
CREATED_BY	fnd_global.user_name	Current User
CREATION_DATE	sysdate	Current System Date
CURRENCY_CODE	OSS_SUBSCRIPTIONS.CURRENCY	Subscription Currency
CUST_PO_NUMBER	OSS_SUBSCRIPTIONS.PO_NUMBER	Subscription PO Number
DATA_TRANSFORMATION_STATUS	'FUSION_INIT'	Hard Coded
DOC_ID_INT_1	OSS_SUBSCRIPTIONS.SUBSCRIPTION_ID	Subscription ID
DOC_ID_INT_2	VRM_SOURCE_DOCUMENTS_S.currval	Same value as DOCUMENT_ID
DOCUMENT_CREATION_DATE	sysdate	Current System Date
DOCUMENT_DATE	OSS_SUBSCRIPTIONS.START_DATE	Subscription Start Date

VRM_SOURCE_DOCUMENT Attribute (Target)	Value (Source)	Comments
DOCUMENT_ID	VRM_SOURCE_DOCUMENTS_S.nextval	Primary Key based on VRM Sequence
DOCUMENT_NUMBER	OSS_SUBSCRIPTIONS.SUBSCRIPTION_NUMBER	Subscription Number
DOCUMENT_TYPE	'FUSION_OSS'	Hard Coded
DOCUMENT_TYPE_ID	10	Hard Coded
DOCUMENT_UPDATE_DATE	sysdate	Current System Date
LAST_UPDATE_DATE	sysdate	Current System Date
LAST_UPDATE_LOGIN	fnd_global.session_ID	Current Session ID
LAST_UPDATED_BY	fnd_global.user_name	Current User
LEGAL_ENTITY_ID	OSS_SUBSCRIPTIONS.LEGAL_ENTITY_ID	Subscription Legal Entity ID
ORG_ID	OSS_SUBSCRIPTIONS.BUSINESS_UNIT_ID	Subscription Business Unit ID
SOURCE_SYSTEM	'FUSION'	Hard Coded
SRC_ATTRIBUTE_CHAR1	OSS_SUBSCRIPTIONS.SUBSCRIPTION_ID	Subscription Number, Same value as DOCUMENT_NUMBER
EXCHANGE_RATE	CURR_CONVERSION_RATE	Conversion rate
EXCHANGE_DATE	CURR_CONVERSION_RATE_DATE	Date considered for conversion rate
EXCHANGE_RATE_TYPE	CURR_CONVERSION_RATE_TYPE	Conversion rate type: Daily, Fixed;etc.

## Attribute Mappings for VRM\_SOURCE\_DOC\_LINES

All eligible bill lines for the subscription product line are grouped by charge ID. A separate record is created in VRM\_SOURCE\_DOC\_LINES for each charge ID.

This table shows the attribute mappings:

VRM_SOURCE_DOC_LINES Attribute (Target)	Value (Source)	Comments
DOCUMENT_LINE_ID	VRM_SOURCE_DOC_LINES_S.nextval	Primary Key based on VRM Sequence
DOCUMENT_DATE	OSS_PRODUCTS.START_DATE	Product Start Date
UOM_CODE	OSS_PRODUCTS.ITEM_UOM	Product Item Unit of Measure
QUANTITY	NVL(OSS_PRODUCTS.QUANTITY,1)	Product Quantity
UNIT_SELLING_PRICE	SUM(OSS_BILL_LINES.AMOUNT)/QUANTITY	Unit Price for the charge



VRM_SOURCE_DOC_LINES Attribute (Target)	Value (Source)	Comments
LINE_CREATION_DATE	sysdate	Current System Date
LINE_LAST_UPDATE_DATE	sysdate	Current System Date
DOCUMENT_TYPE_ID	10	Hard Coded
DOC_ID_INT_1	OSS_SUBSCRIPTION.ID	Subscription ID
DOC_ID_INT_2	VRM_SOURCE_DOCUMENTS.DOCUMENT_ID	Foreign Key to the parent table
SOURCE_SYSTEM	'FUSION'	Hard Coded
DOC_LINE_ID_CHAR_1	VRM_SOURCE_DOC_LINES.S.nextval	Same value as DOCUMENT_LINE_ID
LINE_NUM	OSS_PRODUCTS.PRODUCT_NUMBER	Product Line Number
LINE_AMOUNT	SUM(OSS_BILL_LINES.AMOUNT)	Total Bill Amount for the charge
UNIT_SSP	SUM(OSS_BILL_LINES.LIST_PRICE)/QUANTITY	Unit Standard Selling Price for the charge. List Price (excluding automatic and manual adjustments)
ITEM_ID	OSS_PRODUCTS.INVENTORY_ITEM_ID	Product Item Id
INVENTORY_ORG_ID	OSS_PRODUCTS.DEFINITION_ORG_ID	Product Definition Org ID
SATISFACTION_MEASUREMENT_MODEL	If One Time charge  then 'ORA_MEASURE_QUANTITY_SATISFIED'  else 'ORA_MEASURE_PERIOD_SATISFIED'	Hard coded based on charge price type.  ONE_TIME or ORA_ONE_TIME is considered One Time charge
RULE_START_DATE	If One Time charge  then NULL  else MIN(OSS_BILL_LINES.DATE_BILLED_FROM)	Accounting rule start date is the earliest bill from date for recurring charges.  No rule dates will be passed for one-time charges as it is not applicable for immediate accounting rule.
RULE_END_DATE	If One Time charge  then NULL  else MAX(OSS_BILL_LINES.DATE_BILLED_TO)	Accounting rule start date is the last bill to date for recurring charges.  No rule dates will be passed for one time charges as it is not applicable for immediate accounting rule.
CUST_PO_NUMBER	OSS_PRODUCTS.PO_NUMBER	Product po number
IMMATERIAL_CHANGE_CODE	NULL	Applicable only for revisions
VERSION_FLAG	'N'	Hard Coded
VERSION_NUMBER	1	Hard Coded
BILL_TO_CUSTOMER_ID	OSS_PRODUCTS.BILL_TO_ACCT_ID	Product Bill-To Account ID
BILL_TO_CUSTOMER_SITE_ID	customer account site ID for  OSS_PRODUCTS.BILL_TO_SITE_USE_ID	hz_cust_site_uses_all.cust_acct_site_id

VRM_SOURCE_DOC_LINES Attribute (Target)	Value (Source)	Comments
		where site_use_id = OSS_PRODUCTS.BILL_TO_SITE_USE_ID
REVISION_INTENT_TYPE_CODE	NULL	Applicable only for revisions
DATA_TRANSFORMATION_STATUS	'FUSION_INIT'	Hard Coded
SRC_ATTRIBUTE_CHAR1	OSS_CHARGES.CHARGE_NAME	Charge Name
SRC_ATTRIBUTE_CHAR2	OSS_CHARGES.PRICE_TYPE	ONE_TIME, RECURRING etc.
SRC_ATTRIBUTE_CHAR3	OSS_CHARGES.PRICE_PERIODICITY	Price Periodicity for Recurring Charges
SRC_ATTRIBUTE_CHAR4	OSS_PRODUCTS.EXTERNAL_ASSET_KEY	Product External Asset Key
SRC_ATTRIBUTE_CHAR5	OSS_PRODUCTS.SUBSCRIPTION_PRODUCT_PUID	Product PUID
CREATED_BY	fnd_global.user_name	Current User
CREATION_DATE	sysdate	Current System Date
LAST_UPDATED_BY	fnd_global.user_name	Current User
LAST_UPDATE_DATE	sysdate	Current System Date
LAST_UPDATE_LOGIN	fnd_global.session_id	Current Session ID
SERVICE_DURATION	Duration	Duration of contract line expressed in multiples of the charge UOM
SERVICE_UOM	Charge UOM	UOM of the Charge
UNIT_LIST_PRICE	UNIT_LIST_PRICE	Unit list price of charge

## Attribute Mappings for VRM\_SOURCE\_DOC\_SUB\_LINES

After a revenue document line is created for one-time charges, a satisfaction entry is created for it in VRM\_SOURCE\_DOC\_SUB\_LINES.

A revenue document line is created one-to-one for each revenue document line created (for one time charges), in other words, **Charge Type = ONE\_TIME or ORA\_ONE\_TIME**.

This table shows the attribute mappings:

VRM_SOURCE_DOC_SUB_LINES Attribute (Target)	Value (Source)	Comments
DOCUMENT_SUB_LINE_ID	VRM_SOURCE_DOC_SUB_LINES_S.NEXTVAL	Primary Key based on VRM Sequence
ORG_ID	OSS_SUBSCRIPTIONS.BUSINESS_UNIT_ID	Subscription Business Unit ID
DOC_SUB_LINE_LEVEL	'L'	Hard Coded

VRM_SOURCE_DOC_SUB_LINES Attribute (Target)	Value (Source)	Comments
SUB_LINE_CREATION_DATE	sysdate	Current System Date
SUB_LINE_LAST_UPDATE_DATE	sysdate	Current System Date
DOCUMENT_TYPE_ID	10	Hard Coded
DOC_SUB_LINE_TYPE	'ORA_SATIS_EVENT_SMM_QUANTITY'	Hard Coded
DOC_LINE_ID_CHAR_1	VRM_SOURCE_DOC_LINES.DOCUMENT_LINE_ID	Foreign Key to the parent table
DOC_SUB_LINE_ID_INT_1	VRM_SOURCE_DOC_SUB_LINES_S.CURRVAL	Same value as DOCUMENT_SUB_LINE_ID
SOURCE_SYSTEM	'FUSION'	Hard Coded
SATISFACTION_MEASUREMENT_DATE	OSS_PRODUCTS.START_DATE	Product Line Start Date
SATISFACTION_EVENT_QUANTITY	OSS_PRODUCTS.QUANTITY	Product Quantity
DATA_TRANSFORMATION_STATUS	'FUSION_INIT'	Hard Coded
CREATED_BY	fnd_global.user_name	Current User
CREATION_DATE	sysdate	Current System Date
LAST_UPDATED_BY	fnd_global.user_name	Current User
LAST_UPDATE_DATE	sysdate	Current System Date
LAST_UPDATE_LOGIN	fnd_global.session_id	Current Session ID

## Usage Charges

For usage charges, a new record is created in VRM\_SOURCE\_DOCUMENTS and VRM\_SOURCE\_DOC\_LINES tables for each usage bill line record.

There is no grouping of bill lines for usage charges. Since usage charges are recurring in nature, VRM\_SOURCE\_DOC\_SUB\_LINES is not populated for usage charges.

## Evergreen Subscriptions and Pricing Terms

A revenue contract is created for every billing period of an Evergreen subscription.

New entries are passed in the VRM DOCS and VRM DOC LINES tables every month if the subscription product is billed every month. The VRM DOC SUBLINES table is populated only for the one-time charge. For subscriptions with pricing terms, a revenue contract is created for each pricing term. New entries are passed in the VRM DOCS and VRM DOC LINES tables every quarter, if the pricing term is one quarter.

## Impact of Closing or Amending Subscriptions

When a subscription product or covered asset is closed or amended, causing any change to the billing schedule, the total bill amount for each charge in the product changes. The revenue contract must be revised accordingly.

This is also true for ad hoc bill adjustments or credit memos added to the billing schedule. All changes to billing schedule amounts are considered material changes for revenue revision purposes. Any change to bill amounts on an existing product charge cause a revision of the revenue document line (the revenue line ID is stored in `OSS_BILL_LINES.REVENUE_LINE_ID`). All bill lines for the same product charge will have the same revenue line ID (with the exception of the usage charges). When a credit memo is applied to a bill line, the new credit memo line in `OSS_BILL_LINES` will also have the same revenue line ID as the original invoice line. After the credit memo or adjustments are added, or unbilled lines are dropped from the schedule, the total bill amount of all the affected revenue lines are recomputed. This new amount is then used to revise the revenue line. A new record is inserted in `VRM_SOURCE_DOC_LINES` with the following values:

VRM_SOURCE_DOC_LINES Attribute (Target)	Value (Source)	Comments	Different from Original Revenue Line Record
DOCUMENT_LINE_ID	VRM_SOURCE_DOC_LINES_ S.nextval	Primary key based on VRM sequence	Yes
DOCUMENT_DATE	OSS_PRODUCTS.START_DATE	MIN(OSS_BILL_LINES.DATE_ BILLED_FROM)	No
UOM_CODE	OSS_PRODUCTS.ITEM_UOM	Product item unit of measure	No
QUANTITY	NVL(OSS_PRODUCTS.QUANTITY,1)	Product quantity	No
UNIT_SELLING_PRICE	SUM(OSS_BILL_LINES.AMOUNT)/ QUANTITY	Unit price for the charge (new value)	Yes
LINE_CREATION_DATE	Sysdate	Current system date	Yes
LINE_LAST_UPDATE_DATE	Sysdate	Current system date	Yes
DOCUMENT_TYPE_ID	10	Hard-coded	No
SOURCE_SYSTEM	FUSION	Hard-coded	No
DOC_LINE_ID_CHAR_1	Old Value	Original Revenue Line ID	No
LINE_NUM	OSS_PRODUCTS.PRODUCT_ NUMBER	Product line number	No
LINE_AMOUNT	SUM(OSS_BILL_LINES.AMOUNT)	Total bill amount for the charge (new value)	Yes
UNIT_SSP	SUM(OSS_BILL_LINES.LIST_ PRICE)/QUANTITY	Unit standard selling price for the charge	No
ITEM_ID	OSS_PRODUCTS.INVENTORY_ ITEM_ID	Product Item ID	No
INVENTORY_ORG_ID	OSS_PRODUCTS.DEFINITION_ ORG_ID	Product Definition Org ID	No

VRM_SOURCE_DOC_LINES Attribute (Target)	Value (Source)	Comments	Different from Original Revenue Line Record
SATISFACTION_MEASUREMENT_MODEL	If a one-time charge, then: ORA_MEASURE_QUANTITY_SATISF  otherwise: ORA_MEASURE_PERIOD_SATISFIED	Hard-coded based on charge price type.  ONE_TIME or ORA_ONE_TIME are considered a one-time charges.	No
RULE_START_DATE	If a one-time charge, then: NULL.  otherwise: MIN(OSS_BILL_LINES.DATE_BILLED_FROM)	The accounting rule start date is the earliest bill-from date for recurring charges.  No rule dates are passed for one-time charges, since they aren't applicable for the immediate accounting rule.	No
RULE_END_DATE	If a one-time charge, then: NULL.  otherwise: MAX(OSS_BILL_LINES.DATE_BILLED_TO)	Accounting rule start date is the last bill to date for recurring charges. (This may change for each revision, since some of the billing schedules may be dropped during termination.)  No rule dates are passed for one-time charges, since they aren't applicable for the immediate accounting rule.	Yes
CUST_PO_NUMBER	OSS_PRODUCTS.PO_NUMBER	Product purchase order number	No
IMMATERIAL_CHANGE_CODE	MATERIAL	Hard-coded (new value)	Yes
VERSION_FLAG	Y	Hard-coded (new value)	Yes
VERSION_NUMBER	Next version number	NVL(MAX(version_number),0)+1 FROM vrm_source_doc_lines WHERE doc_line_id_char_1 = <original revenue line ID>;	Yes
BILL_TO_CUSTOMER_ID	OSS_PRODUCTS.BILL_TO_ACCT_ID	Product bill-to Account ID	No
BILL_TO_CUSTOMER_SITE_ID	Customer account site ID for OSS_PRODUCTS.BILL_TO_SITE_USE_ID	hz_cust_site_uses_all.cust_acct_site_id  where site_use_id = OSS_PRODUCTS.BILL_TO_SITE_USE_ID	No
REVISION_INTENT_TYPE_CODE	CM	Hard-coded (new value)	Yes
DATA_TRANSFORMATION_STATUS	'FUSION_INIT'	Hard-coded	No
CREATED_BY	fnd_global.user_name	Current User	No
CREATION_DATE	sysdate	Current System Date	No
LAST_UPDATED_BY	fnd_global.user_name	Current User	No

VRM_SOURCE_DOC_LINES Attribute (Target)	Value (Source)	Comments	Different from Original Revenue Line Record
LAST_UPDATE_DATE	sysdate	Current System Date	No
LAST_UPDATE_LOGIN	fnd_global.session_id	Current Session ID	No

When a termination is done with full credit, one-time charges are also credited. Thus, the satisfaction event for one-time charges needs to be revised. This is done by creating an identical row in the VRM\_SOURCE\_DOC\_SUB\_LINES table as the original entry with the exception of the attribute SATISFACTION\_EVENT\_QUANTITY as 0.

## Use Service Mappings

Use service mappings to map data from a source to a destination and modify the data. Used with algorithm service mappings are a powerful tool to customize data sent to destination tables.

"Entities" are used to create custom fields or identify standard fields that receive their input values from view object attributes identified in "Sources". "Services" refer to the algorithms that can be used to modify or transform a field in an entity, based on Groovy script. Services define the entity attributes that can be read and written by algorithms.

If you change the predefined algorithm, then you need to enable the change by setting the value of the `CustomizationFlag` to true.

### If CustomizationFlag is False

If the last-published-version algorithm variable has its `CustomizationFlag` as false, this means you want to process the Revenue Management data without any customizations.

### If CustomizationFlag is True

If the last-published-version algorithm variable has its `CustomizationFlag` as true, this means you want to process the Revenue Management data with the customizations made in that version.

You can find more information on this subject in the My Oracle Support article, [How To Skip Subscription Charge Lines To Be Sent To RMCS From Subscription Management?](#) (Doc ID 2665162.1).

## Modify Service Mappings

To modify service mappings:

1. Create a sandbox with Extensibility and Manage Service Mappings tools enabled.
2. Enter the sandbox.
3. Navigate to **Manage Service Mappings** and open **Subscription RMCS Integration**.

To create a custom variable in the Subscription entity:

1. Select **Subscription Entity** in the **Entities** tab.
2. In the details table, click the plus icon to add a custom variable

3. If you're creating a row for SubscriptionNumber, which isn't available by default in the service mapping, enter the Attribute Name as `subscriptionNumber_Custom`. Note that `_Custom` is mandatorily followed for custom variables. For Type, use `string`, since Subscription Number is a string.
4. Click the **Sources** tab.
5. Select the **Subscription** entity.
6. In the child table, add a row.
7. Select the **SubscriptionNumber\_Custom** lookup from Entities.
8. The name used in Subscription Entity is View Object Attribute.
9. Go to the **Services** tab and select the **Subscription** entity. Create a row in the details table, and select **SubscriptionNumber\_Custom**. Give it read and write operations.
10. Navigate to the algorithm, **Subscription Management and RMCS Integration**.
11. Create or select a latest version algorithm that's active. Deactivate it, and re-activate it, to move the algorithm to an in-progress state.
12. Open the in-progress algorithm. It has two steps: Documents and Document Lines.
13. Write a Groovy script per your business requirements.
14. Navigate to the **Variables** tab and change the default expression of CustomizationFlag to true.
15. **Save and Close** the algorithm and **Publish** it.

**Note:** You should only customize the latest algorithm.

## How can I manage unit standalone selling prices?

By default, the application sends the unit standalone selling price as the charge list price to Revenue Management. But, you can also use the native Revenue Management functionality to upload the unit standalone selling price by sending this value as null from Subscription Management.

To set the unit standalone selling price as null:

1. Sign in as a setup user.
2. Go to the Subscription Management work area.
3. On the Subscriptions landing page, click **Subscription Configuration** tab.
4. Click **Manage Algorithms**.
5. Click **Subscription Management and RMCS Integration** algorithm.
6. From the Steps section, select **Send Revenue Information to Document Lines**.
7. In the Actions section, add this Groovy script: `RmcsDocLines.UnitSsp=null`
8. Click **Save and Close**.
9. From Manage Algorithms page, click **Actions > Publish**.

For usage charges, by default the Charge UOM is sent as null. If you want to use the Charge UOM in your Pricing Dimension Structure for usage charges, then you must use the fixed value of `ORA_PRICE_PERIOD_USAGE` in the ChargeUOM attribute of the RMCSDocLines entity.

### Related Topics

- [How To Disable Sending Unit SSP Value From Subscription To RMCS?](#)

## Enable Revenue Management Rules

You can determine how subscription amendments, renewals, and pricing terms are accounted for in Revenue Management.

You can use the Revenue Management Rule for Amendment and Revenue Management Rule for Renewal attributes on the Edit Subscription Profile page when a subscription is amended or renewed. For each rule, you can either create new performance obligations under an existing revenue contract or create a new revenue contract in compliance with ASC606 regulations.

First set the profile option, Enable Addition to Revenue Contract, to Yes:

1. Go to Setup and Maintenance and search for the Manage Administrator Profile Values task.
2. Search for Profile Option Code, `ORA_OSS_ADD_TO_REV_CONTRACT`.
3. Set the Profile Value to **yes** at Site level.

When you renew a subscription, the value of the Revenue Management Rule field in the Renewal UI defaults based on the Revenue Management Rule for Renewal attribute in the Subscription Profile. When a subscription is automatically renewed, the same Subscription Profile attribute, Revenue Management Rule for Renewal, determines how the revenue contract is created.

Similarly, when you want to amend a subscription, the value of this field defaults from the Revenue Management Rule for Amendment attribute in the Subscription Profile.

When there's a pricing term in a subscription product, the Revenue Management Rule for Amendment attribute is used to decide if a new revenue contract should be created based on a new performance obligation.

Additionally, you must enable customizations in the Subscription Management and RMCS Integration algorithm:

1. Go to **Manage Algorithms** in **Subscription Configuration**.
2. Select the **Subscription Management and RMCS Integration** algorithm.
3. Create new version of the algorithm. A new version should be created after selecting the 0th version of the algorithm.
4. Click the **Variables** tab.
5. Add a CustomizationFlag for the algorithm set its Default Expression value to true.
6. Save and publish the algorithm.

## Things to Remember

- Algorithm changes are not sandbox-aware. Any changes you make are applicable outside of the sandbox, too.
- When an environment is provisioned, the algorithm is in version 0. You must promote the algorithm to create a new version. This creates version 1 of the algorithm, which is the predefined algorithm, and you can't edit version 0.



## Examples of Subscription Impact on Revenue Management

When you activate a subscription in Subscription Management, the integration process automatically transfers data to these Revenue Management database tables:

Interface Table	Description
VRM_SOURCE_DOCUMENTS	Stores the basic subscription header information such as document date, document number, bill-to customer ID, bill-to site ID, subscription start date, subscription number, and so on.
VRM_SOURCE_DOC_LINES	Stores information about the subscription lines, such as the quantity, unit selling price, and line amount.
VRM_SOURCE_DOC_SUB_LINES	Stores the information about satisfaction events.

This example describes how subscription data is processed by the Revenue Management and inserted into:

- VRM\_SOURCE\_DOC\_LINES
- VRM\_SOURCE\_DOC\_SUB\_LINES

This table summarizes subscription types and fees associated with the sample Blast Internet Connection subscription:

Subscription Fee	Blast Internet Basic	Blast Internet Premium
Activation Fee (one-time)	\$80	\$80
Internet Fee (recurring)	\$50	\$60
Consumption Fee (usage)	Free Allowance: 100 GB Usage fee after 100 GB: \$1 for every 2 GB	Free Allowance: 100 GB Usage fee after 100 GB: \$1 for every 2GB

- An extra usage fee is charged if your customer exceeds the data consumption limit of 100 GB per month. If internet data consumption exceeds this limit, the customer is charged with \$1 for every 2 GB of extra usage.
- At any time, the customer can upgrade his subscription and opt for the premium package that costs \$60 per month.
- The customer has purchased the Blast Internet Basic subscription for 12 months.

### Scenario 1: Basic Subscription Activation

This scenario covers the impact of activating the Blast Internet Basic subscription on the Revenue Management database tables.

**Impact on VRM\_SOURCE\_DOC\_LINES:**

This table displays the values inserted in the VRM\_SOURCE\_DOC\_LINES database table:

Table Attributes	Doc Line 1	Doc Line 2
Source Line	Source Line 1	Source Line 2
Item	Blast Internet Basic	Blast Internet Basic
Extensible Attribute 1	Internet (Recurring)	Activation Fee(One-time)
Extensible Attribute 2	Monthly	One-time
UOM	Year	Year
Quantity	1	1
Unit Selling Price	50	80
Service Duration	12	1
Charge UOM	Month	ORA_PRICE_PERIOD_ONETIME
Line Amount	600	80
List Price	50	80
Version Number	1	1
Version Indicator	Null	Null
Plan Start Date	01-Jan-2020	NA
Plan End Date	31-Dec-2020	NA
Satisfaction Measurement Model	ORA_MEASURE_PERIOD_SATISFIED	ORA_MEASURE_QUANTITY_SATISFIED

Subscription activation results in the addition of two rows in this table:

- Doc Line 1 stores the values associated with the recurring monthly internet fee of \$50. Since the unit selling price is \$50, the line amount becomes \$600 (\$50 for 12 months).
- Doc Line 2 stores the values associated with the one-time activation fee of \$80.

**Impact on VRM\_SOURCE\_DOC\_SUB\_LINES:**

The application populates the values in this table only when the customer completes the payment for a fee type applicable to his subscription. This table displays the values inserted in the VRM\_SOURCE\_DOC\_SUB\_LINES database table:

Table Attributes	Doc Sub Line 1
Source Line	2
Sub Line Type Code	ORA_SATIS_EVENT_SMM_QUANTITY
Satisfaction Measurement Date	1-Jan-2020
Satisfied Quantity	1

Since the customer pays the activation fee at the time of subscription activation, only the activation fee meets the satisfaction criteria.

After the monthly fee of \$50 meets the satisfaction criteria, the application adds a new row at the end of every month.

## Scenario 2: Subscription with Usage Fee

This scenario covers a scenario where an extra consumption fee is applicable because the customer exceeds his internet data limit of 100 GB per month by:

- 20 GB in January
- 30 GB in February

This table shows the values inserted in the VRM\_SOURCE\_DOC\_LINES database table when the usage fee is applied to the subscription:

Table Attributes	Doc Line 3	Doc Line 4
Source Line	Source Line 3	Source Line 4
Item	Blast Internet Basic	Blast Internet Basic
Extensible Attribute 1	Internet (Recurring)	Internet (Recurring)
UOM	Year	Year
Quantity	120	130
Unit Selling Price	10/120	15/130
Service Duration	NA	NA

Table Attributes	Doc Line 3	Doc Line 4
Charge UOM	NA	NA
Line Amount	10	15
List Price	10/120	15/130
Plan Start Date	01-Jan-2020	01-Feb-2020
Plan End Date	31-Jan-2020	28-Feb-2020
Satisfaction Measurement Model	ORA_MEASURE_PERIOD_SATISFIED	ORA_MEASURE_PERIOD_SATISFIED

**Note:** New rows in the VRM\_SOURCE\_DOC\_LINES table aren't inserted at the time of subscription activation. To apply the usage fee on a subscription, a new accounting contract is created for every usage line. The customer is charged only when the usage fee becomes applicable.

The usage fee results in the addition of two rows:

- Doc Line 3 stores the values associated with the usage fee associated with January. The line amount is \$10, since the customer has used 20 GB of extra data, and every 2 GB of data costs \$1.
- Doc Line 4 stores the values associated with the usage fee associated with February. The line amount is \$15, since the customer has used 30 GB of extra data.

Exceeding the usage limit doesn't impact the VRM\_SOURCE\_DOC\_SUB\_LINES values. The VRM\_SOURCE\_DOC\_SUB\_LINES table displays the same values as described in Scenario 1.

## Scenario 3: Upgraded Subscription

This scenario shows an example of when a customer decides to upgrade his subscription to premium, which costs \$60 per month, for six months, from 01-July-2020 to 31-Dec-2020.

This table displays the values inserted in the VRM\_SOURCE\_DOC\_LINES database table when the customer upgrades the subscription:

Table Attributes	Doc Line 1	Doc Line 2	Doc Line 3	Doc Line 4
Source Line	Source Line 1	Source Line 2	Source Line 3	Source Line 1
Item	Blast Internet Basic	Blast Internet Basic	Blast Internet Premium	Blast Internet Basic
Extensible Attribute 1	Internet (Recurring)	Activation Fee (One-time)	Internet (Recurring)	Internet (Recurring)
Extensible Attribute 2	Monthly	One-time	Monthly	Monthly

Table Attributes	Doc Line 1	Doc Line 2	Doc Line 3	Doc Line 4
UOM	Year	Year	Year	Year
Quantity	1	1	1	1
Unit Selling Price	50	80	60	50
Service Duration	12	1	6	6
Charge UOM	Month	ORA_PRICE_PERIOD_ONETIME	Month	Month
Line Amount	600	80	360	300
List Price	50	80	60	50
Version Number	1	1	1	2
Version Indicator	Null	Null	Null	Y
Plan Start Date	01-Jan-2020		01-Jul-2020	01-Jan-2020
Plan End Date	31-Dec-2020		31-Dec-2020	30-Jun-2020
Satisfaction Measurement Model	ORA_MEASURE_PERIOD_SATISFIED	ORA_MEASURE_QUANTITY_SATISFIED	ORA_MEASURE_PERIOD_SATISFIED	ORA_MEASURE_PERIOD_SATISFIED

When the customer upgrades his subscription, two new rows are inserted in this Revenue Management table:

- Doc Line 3 stores the values associated with the recurring premium monthly internet fee of \$60. Since the unit selling price is \$60, the line amount becomes \$360 (\$60 for 6 months).
- Doc Line 4 is created as the new version of Doc Line 1, which was created at the time of the subscription activation. Doc Line 4 stores the values associated with the monthly internet fee paid until 30 June 2020. Since the unit selling price is \$50, the line amount becomes \$300 (\$50 for 6 months). Since Doc Line 4 is created as the replacement of Doc Line 1, the Version Number value is updated as 2 and the Version Indicator value is updated as Y.

Upgrading the subscription doesn't impact the VRM\_SOURCE\_DOC\_SUB\_LINES values. The VRM\_SOURCE\_DOC\_SUB\_LINES table displays the same values as described in Scenario 1.

#### Related Topics

- [How Revenue Basis Import Data Is Processed](#)
- [How Revenue Recognition Is Processed](#)



# 10 Analytics and Reports

## Analytics on the Go

Oracle Sales Analytics helps organizations compete more effectively in the marketplace by providing real-time, actionable insight into every sales opportunity at the point of customer contact.

Your sales team can view up to the moment, or historical data in the office, or on the road, on laptop, tablet, or mobile. What are my best opportunities? Where is this deal at in the pipeline? When was the last time I called this company? You get the insights you need right now, right at your fingertips.

Sales teams access analytics right from the home page of a mobile device. Analytics also are embedded contextually for work areas like accounts, contacts, opportunities, activities, leads and so on. The analytics on work areas give users detail on the records they are viewing or updating right on the spot.



## Additional Analytics Resources

For more information on how to use analytics, see the [Creating and Administering Analytics](#) guide.

## How do I analyze subscription trend reports?

Using the Oracle Business Intelligence (BI) and Oracle Transactional Business Intelligence (OTBI) subject areas, Subscription Management lets you report on key subscription metrics based on aggregated data.

You can analyze key subscription metrics by subscription product or customer. And, you can aggregate the subscription data based on the monthly, quarterly, and yearly periods.

## Predefined Dashboards

Subscription Management comes with several predefined dashboards. The dashboards consist of prebuilt reports that you can use to analyze your subscription data.

The predefined dashboards are:

- **Subscriptions Overview Dashboard**

A dashboard to analyze your subscription data across all customers and products.

- **Customer Dashboard**

A dashboard to analyze subscription data for one or more customers.

- **Product Dashboard**

A dashboard to analyze subscription data for one or more subscription products.

- **Cohort Retention Dashboard**

A dashboard to track monthly recurring revenue (MRR), total contract value (TCV), and the number of customers for a given cohort across time. A cohort is a distinct group of customers with active subscriptions at the start of a period.

## Predefined Subject Areas for Coverage Services

Subject areas let you report on various aspects of your coverage subscriptions:

- **Subscription Management - Covered Levels Real Time Subject Area:** You can analyze various covered levels by customer, product, status, and various dates.
- **Subscription Management - Coverage Entitlements and Adjustments Real Time:** You can analyze coverage templates based on various entitlements and adjustments.
- **Subscription Management - Subscription Billing Real Time:** You can analyze billing lines for covered levels by customer, product, status, and various dates.



## Additional Dashboards

Additionally, you can use these supplied dashboards. They can be found in /shared/Subscription Management/Embedded Content/Subscription Specialist/ in your Oracle Transaction Business Intelligence Catalog.

- **Coverage Products Dashboard:** You can view the list of coverage products and covered levels by searching for various fields like customer, business unit, dates etc. You can view coverage products and covered levels are about to expire and which ones have been terminated
- **Subscriptions by Entitlements and Adjustments:** You can view the list of coverage subscriptions that are covered by specific entitlements and adjustments, for example you can view a list of coverage subscriptions that have a coverage that provides 10% discount for labor.

## Subscription Metrics in Prebuilt Reports

This table lists available subscription metrics in the prebuilt reports, with a description of how each subscription metric is calculated. A period can be either a month, a quarter, or a year.

For the current period, the metric is calculated as the day when the incremental scheduled process is run. For previous periods, the metric is calculated on the last day of the period.

Subscription Metrics	Calculation Method
Number of Active Customers	The total number of customers with an active subscription at the start or end of a period.
MRR	The total monthly recurring revenue of all active subscriptions at the start or end of a period.
TCV	The sum of the total contract value of all active subscriptions at the start or end of a period.
Average Revenue per Customer	The total MRR divided by the total number of active customers at the start or end of a period.
Net Revenue Retention	The total MRR at the end of a period divided by the total MRR at the start of that period.
Number of Subscriptions	The total number of active subscriptions at the start or end of a period.
Number of New Customers	The total number of new customers who started an active subscription in a period.
New MRR	The total MRR of active subscriptions that started in a period and which aren't a result of an amendment, suspension, or renewal of existing subscriptions.
Number of New Subscriptions	The total number of active subscriptions that started in a period and which aren't a result of an amendment, suspension, or renewal of existing subscriptions.
Discount	The sum of discounts applied in a period across all active subscriptions. The discount for a subscription is calculated by summing up the difference between the list price and the net price of bill lines for a period (when the list price is higher).
Termination MRR	The total MRR of active subscriptions that are closed in a period. This metric doesn't include closed subscriptions due to the amendment or suspension of existing subscriptions.

Subscription Metrics	Calculation Method
Number of Terminated subscriptions	The total number of active subscriptions that are terminated in a period. This metric doesn't include closed subscriptions due to the amendment or suspension of existing subscriptions.
MRR due for Renewal	The total MRR of active subscriptions ending in a period.
Activated Renewal MRR	The total MRR of active subscriptions that are renewed from existing subscriptions and started in a specific period.
Number of Renewed Subscriptions	The total number of active subscriptions that are renewed from existing subscriptions and started in a specific period.
Lapsed Renewal MRR	The total MRR of active subscriptions that expired in a period without being renewed.
Churned Renewal MRR	The total MRR of subscriptions that are renewed from existing subscriptions but canceled in a specific period.
Expansion MRR	The total increase in MRR due to active subscriptions that were amended in a period.
Contraction MRR	The total decrease in MRR due to active subscriptions that were amended in a period.
Number of New Customers	The number of customers who started an active subscription in a period. A customer without any active subscriptions in the prior periods.
Number of Churned Customers	The number of customers whose active subscriptions were either terminated or expired without renewal.
Number of Reactivated Customers	The number of previously churned customers who started another active subscription.
Reactivation MRR	The total MRR of active subscriptions that belong to reactivated customers in a period.
Absolute Revenue Churn	The sum of termination MRR, lapsed renewal MRR, and churned Renewal MRR in a period.
MRR Churn Rate	The absolute revenue churn in a period divided by the MRR at the beginning of a period.
Customer Churn Rate	The number of churned customers in a period divided by the number of active customers at the beginning of the period.
MRR Renewal Rate	The activated renewal MRR divided by the MRR due for renewal in a period.

You can also access additional metrics that enable you to report on the period-over-period increase or decrease in metrics like the number of active customers, average revenue per customer, and so on.

## Subscription Scheduled Processes for Reports

Run these scheduled processes to refresh report data:

- Aggregate Historical Subscriptions Data for Reporting
- Aggregate Incremental Subscriptions Data for Reporting

## Find Logic for Field Calculations

To find the logic for a field calculation:

1. Navigate to and edit the dashboard.
2. Click on the **Criteria** tab.
3. Click on the gear icon in the relevant column name.
4. Select edit option on the formula.

For more information about how to use analytics, see the [Creating and Administering Analytics](#) guide.

# Use Subscription Objects in Business Intelligence Cloud Connector

Use Oracle Subscription Management objects in Oracle Business Intelligence Cloud Connector.

You can use Oracle Business Intelligence (BI) Cloud Connector to extract BI data from Subscription Management and export subscription data for analysis. Here are the subscription objects you can use in BI Cloud Connector:

- Subscription Header
- Subscription Parties
- Subscription Products
- Subscription Covered Levels
- Subscription Charges

For more information, see the related topic.

*Related Topics*

