Cello How-To Guide

Price Plans

Contents

1 Understanding Price Plans

A pricing plan tells the basis to bill the Customer. Pricing plans are subset of subscriptions and a Subscription plan can have any number of Pricing Plan mapped to it.

Example

1. **Silver Subscription**
    1.1. **Price Plan-1**
    1.2. **Price Plan-2**
2. **Gold subscription**
    2.1. **Price Plan-1**
    2.2. **Price Plan-2**
3. **Platinum Subscription**
    3.1. **Price Plan-1**
    3.2. **Price Plan-2**

So Tenant 1 can subscribe to **Silver Plan** and have **Price Plan1** and **Tenant 2** can subscribe to the Same **Silver Plan** but hold **Price Plan 2.** While Creating Invoice for Tenant1, the Silver+ Price Plan 1 will be considered and for Tenant 2 the Silver+ Price Plan 2 will be considered.

1.1 Components of Price Plan

Price Plan offers a flexible and fine grained payment calculation within a single subscription plan.

1.1.1 Flat Cost

A flat cost is set for a subscription; the same cost will be charged from the customer on month on month basis or based on the frequency [Refer Billing Cycles Topic to understand more about Frequencies] assigned by the Product Administrator.

Note: With this model, the product administrator might set limited usage for the features provided in the application. Refer the below example.

Example:

Product: SaaS CRM Application
Subscription Name: CRM Plus
Pricing Model: Flat
Cost: 99$

Billing Cycle: Monthly
Features:

       3 – Users
       500 – Contacts

Once the Tenant reaches the assigned limits, the tenant cannot use the features further and they have to wait until the month ends.

When the Invoice gets generated for this customer, the total invoice Cost would be Cost + Tax (If Applicable).

Click here to learn how to create a Subscription with Flat Cost.

1.1.2 Usage Cost (aka Pay-as-you-go)

As the name implies, the subscription cost depends on the metered usage [Click here to understand Usage Metering] of the service with or without base price.

Pay as you go model can work in two modes. They are

- Without Base Cost
- With Base Cost

1.1.3 Without Base Cost

This model is a true pay as you go model, where in the subscriber will only be charged for what he has used and there won't be any additional cost.

Example

Product: SaaS CRM Application
Subscription Name: CRM Pay As You GO
Pricing Model: Pay as you go
Billing Cycle: Monthly
Features:

      1 Opportunity ➔ 1$
      1 Contact ➔ .05 cents

By end of the month, if a tenant has used 100 Opportunities and 100 Contacts, the billing calculation would be as follows

1 * 100 (Opportunities)   = 100$
.05 * 100 (Opportunities) =   5$

                             =105$ + Tax

Pricing based on per unit might be attractive, but Tenants might ask for Slab based usages. That is

      1 - 99   Opportunities ➔ 50 $ --------------> Slab 1
      99 – 250   Oppurtunities ➔150$ etc --------- > Slab 2

In order to operate in this model, Product owners have to create slabs in as part of the Pricing Plan. Refer here to learn the steps involved in creating a Price Plan with slabs.

1.1.3.1 With Base Cost

This is as same as above model along with some base cost. Let's look at a example.

Example

Product: SaaS CRM Application
Subscription Name: CRM Pay As You GO

Pricing Model: Pay as you go
Base Cost: 99$
Usage included in the plan:

      100 Opportunities
      1000 Contacts

Billing Cycle: Monthly
Additional Usage Cost:

      1 Opportunity ➔ 1$
      1 Contact ➔ .05 cents

By end of the month, if a tenant has used 100 Opportunities and 100 Contacts, the billing calculation would be as follows

```
Base Cost                  = 99$
1 * 100 (Opportunities)    = 100$
.05 * 100 (Opportunities) =    5$
---------------------------------------------
                       =204$ + Tax
---------------------------------------------
```

1.2   Usage Based Cost Calculation

There are two types of Cost calculation under Usage Based Pricing model, they are

- o   Step Pricing
- o   Threshold Pricing

1.2.1.1 Volume based Pricing

In this model, the tenants are allowed to access the system beyond the actual limit, in addition to the base price; the additional usage cost will also be calculated. The volume based Pricing refers to a billing calculation where the base price is summed with all the applicable slabs in a step by step manner.

Slab - A Slab is nothing but usage limit variable with From – To parameters mapped to an amount. During the process of Cost Calculation, these slabs variable's parameters and amount is applied for arriving the final cost. Product administrators can set Pricing Slabs for each usage Variables.

Note: A Price Plan can contain any number of slabs.

Acted On Usage Variable - This variable is a subset of Slab Variable, specifically used for Cost Calculation. Let's look at a sample scenario to understand "Acted on usage Variable".

Scenario1 : A SaaS Based Bug Tracking system would like to charge the customer based on number of Users and number issues tracked by this users. In this scenario, "Users" could be considered as "Slab Variable" and "Number of Issues" can be considered as "Acted on Usage Variable".

Click here to learn "How to Register Usage Variables".

Factor – It determines the calculation method. There are two kinds of factor, they are

1. **Flat** – It denotes, the flat amount has to applied as is during the cost calculation
   i.e. 1-99 usage ➔ 50$
2. **Each** – It denotes, the amount has to be considered for each individual usage
   i.e 1 unit ➔ 1 $
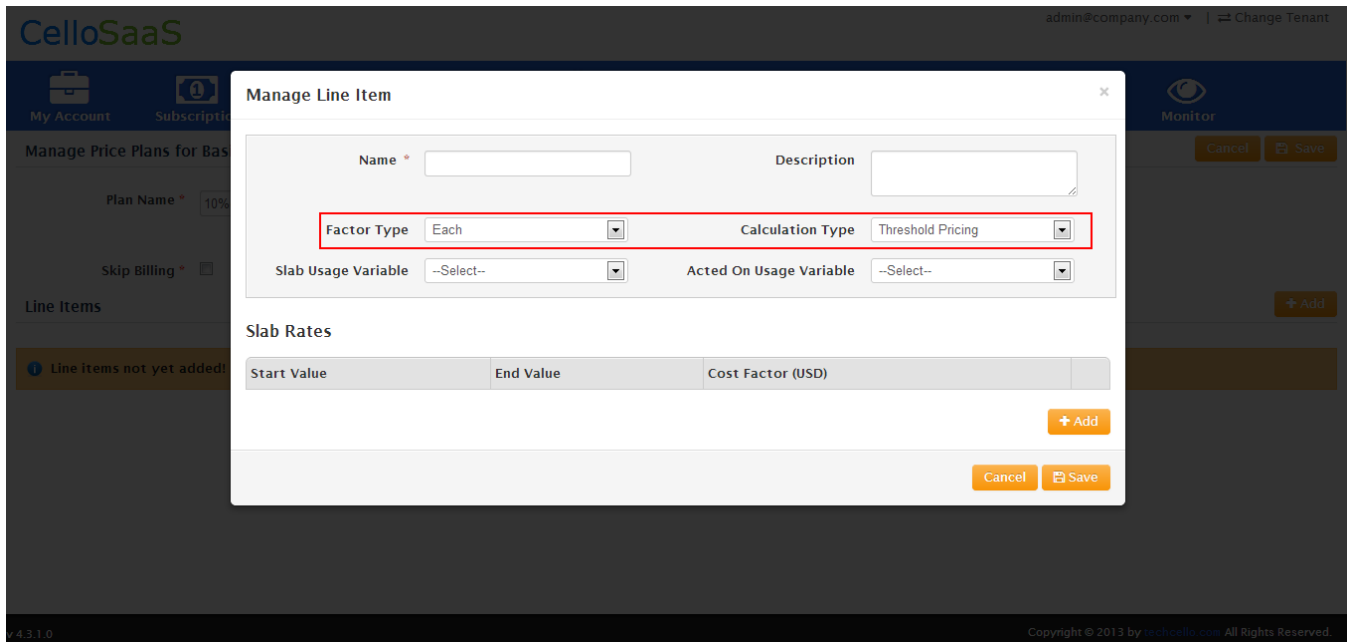
Manage Price Plan

Send Email - Feature		Usage count included in the Plan	30 units	Base Cost	100 $
Slab 1		01 to 99	50$		100 + 50
Slab 2		100 to 250	100$		100 + 100
Slab 3		250 to 1000	200$		100 + 200
Slab - n		1001 to n	500$		100 + 500

The below table refers to the Volume based Plan, according to this, For the first 30 transactions, the base cost will be charged, on exceeding the 30 transactions, if the additional usage count lets 350, it applies through all the possible slabs, so the Cost will be calculated like below

Base Cost   = 100 $
1-99 Usage (Slab 1)   =   99 $
100 – 250 Usage (Slab 2)   = 100 $
251 – 1000 Usage (Slab 3)   = 200 $

Total   = 499 $
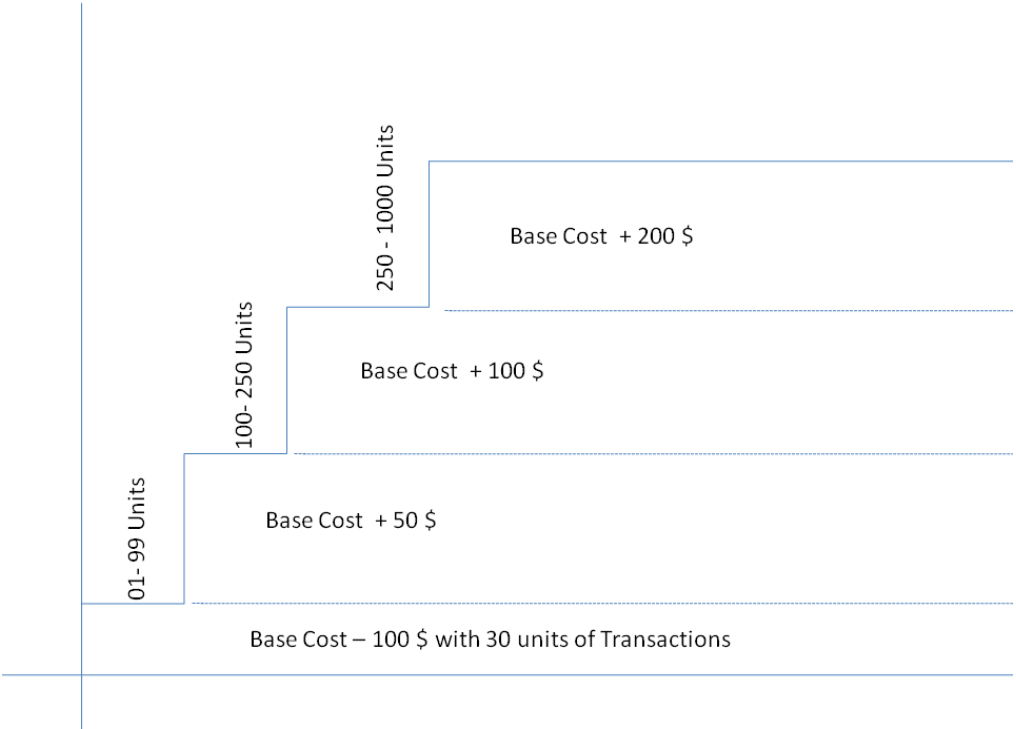
The Volume based pricing methodology can be better explained with the below scenario.

Scenario 1: Factor Type - Flat

Base Cost**: 30$**   Bill Frequency: Monthly
Cost Factor Type: **Flat**   Calculation Type: **Step Pricing**

Start Value	End Value	Cost in USD
1	1000	99

1001	2000	75
2000	9999	50

With the above price plan, let's say a customer's accumulated metered usage is 1890, so according to step pricing with factor type as Flat, the customer will be charged as below

Base Cost   = 30$
Additional Usage Cost [upto 1- 1000]   = 99$ [For the first 1000 usage, 99$ is applied]
Additional Usage Cost [upto 1001- 2000]   = 75$ [For the second 890 usage, Flat 75$ is applied]

Total   = 204$

Note: Incase if a Tenant has used 1 transaction after crossing the set threshold of 30$, the additional 99 $ will be levied as per this plan.

Scenario 2: Cost Factor Type - Each

Base Cost: 30$ Bill Frequency: Monthly
Cost Factor Type: **Each**   Calculation Type: Step Pricing

Start Value	End Value	Cost in USD
1	1000	1
1001	2000	.75
2000	9999	.50

With the above price plan, let's say a customer's accumulated metered usage is 1890, so according to step pricing with cost factor type as each, the customer will be charged as below

Base Cost   = 30$ =   30.00$
Additional Usage Cost [upto 1- 1000]   = 1000*1$ = 1000.00$
Additional Usage Cost [upto 1001- 2000]   = 890$*.75$ =   667.50$

Total   = 1697.50$

1.2.1.2 Threshold Pricing

In contrast to the Step Pricing, the Threshold pricing works in a different way of calculating the Pricing. In this model, tenant is allowed to use the product any restriction and total usage count is noted, during the cost calculation, it will calculated as base Price + the slab cost in which the additional usage falls.

For Example
Scenario 1: Cost Factor Type - Flat

Base Cost: 30$ Bill Frequency: Monthly
Cost Factor Type: Flat   Calculation Type: Threshold Pricing

Start Value	End Value	Cost in USD
1	1000	99
1001	2000	75
2000	9999	50

With the above price plan, let's say a customer's accumulated metered usage is 1500, so it falls under 1001-2000, now the customer will be charged as follows

Base Cost   = 30$
Additional Usage Cost = 75$

Total   = 105$

Scenario 1 : Cost Factor Type - Each

Base Cost: 30$ Bill Frequency : Monthly
Cost Factor Type: Each   Calculation Type: Threshold Pricing

Start Value	End Value	Cost in USD
1	1000	1
1001	2000	.75
2000	9999	.50

With the above price plan, let's say a customer's accumulated metered usage is 1500, so it falls under 1001-2000, now the customer will be charged as follows

Base Cost   = 30$ =30 $
Additional Usage Cost = 1500 .75$ =1125$

Total   = 1155$

1.3 How to Create Pricing Plan with base Cost

Price Plans can be created only after the Subscription Plan is created. To Create a subscription, refer "How to Create Subscription Plan - Topic". Once the Subscriptions are created, Navigate to Package Listing page and click on "Manage Price Plans". Upon clicking on Price Plans icon, it will display all the available Price Plans for the given package if available, if not available click on "Add" to add a new price plans for the package [To add new Price Plan refer this]. Fill the mandatory details and hit on "Save" to create the basic cost of the subscription.

- Navigate to Admin → Manage Subscriptions → Click on Manage Price Plan [Refer below Screenshot]

Package Management

- On clicking on the "Manage Price Plan", you will be redirected to "Price Plan Listing Page" [Refer below screenshot]

Price Plan Listing Page

- Click on Add button to add a new Pricing plan for a Package.

Add Price Plan

- Fill in the mandatory information and click and Save

Plan Name	Describes your plan and will appear on the subscriber's invoice.
Plan Description	A description of the plan that will appear on the subscriber's email invoice, if configured in email templates.
Plane Price	Base cost amount charged to a plan's subscribers. Click here to understand how to setup price plan with base Cost.
Skip Billing	Check if you don't want to use Cello's Invoicing Engine

Sample Scenario

Scenario 1:	Scenario 2:
Customer Name: ACME Corporation **Plan Name:** Starter plan **Cost**: 99 $ per month **Billing Frequency:** Quarterly **Billing Calculation:** 99 $ * 3 = 297 $	**Customer Name:** Strata Inc **Plan Name**: Enterprise Plan **Cost**: 250 $ per month **Billing Frequency:** Yearly **Billing Calculation:** 250 $ * 12 = 3000 $

1.3.1 How to Create Pricing Plan with Step Pricing

After creating the basic Price Plan for a subscription, click on "Add" button to add slabs or line items.
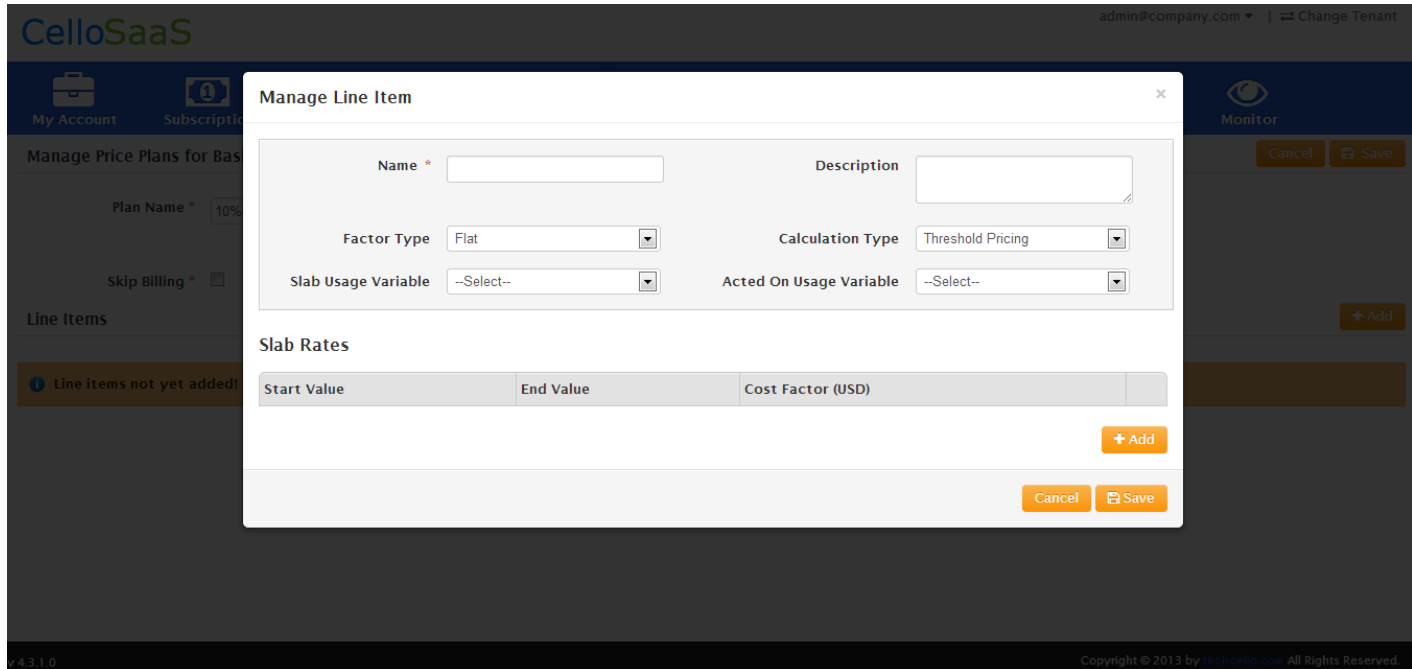
Create Slab Screen

Field Name	Description
Name	Name of Slab
Description	Description for the Slab
Factor Type	Select the factor type Flat or Each, Refer here
Calculation Type	Step or Threshold Pricing Calculation, Refer here
Slab Usage Variable	Refer Here
Acted on usage Variable	Refer Here

Fill in the above details and click on Add button to add Slab Rates for the Price Plan defined, Refer below Screenshot.

Slab Listing Screen

1.4 To Update Pricing Plan

- Navigate to Admin → Subscription→ Manage Subscription and click on Manage Price Plans

- Click on edit icon to edit the price plan details

- Click on edit icon to edit the price plan details

- Update the details and then click on Save.

1.5 To Delete Pricing Plan

Deleting a price plan is fairly straight forward. Navigate to Price Plans Page and click on the Delete icon.

If the Price plan is not mapped to any of the tenant, the system will allow you to delete the pricing plan, if not you may encounter the below info message on deleting the Pricing Plan.

1.6 To map Price Plan & Subscription to the Tenant

Once the Price Plans and Slab rates are defined, it will be automatically displayed in the Tenant Management module.

Navigate to Admin → Manage Tenants→ Add Tenant

While Creating a Tenant using Admin Dashboard, the subscription Plan and its related Price Plans are mapped to the Tenant. [Refer the Screenshot below]

Create Tenant Screen

1.7   Mapping of Price Plan in Self Registration Scenario

In the Self Registration mode, Users are allowed only to select a subscription plan, but not any specific pricing plan. As a policy, Cello Assigns the top most pricing plan of the selected subscription for the self Registered Tenant.

1.8 Manage Pricing Plans using API

Developers can use APIs to setup and manage Pricing plans within the system.

1.8.1 To Create Price Plan

Namespace: CelloSaaS.Billing.ServiceContracts

Assembly: CelloSaaS.Billing (in CelloSaaS.Billing.dll)

```
Guid AddPricePlan(
        PricePlan pricePlan
)
```

1.8.2 To Update Price Plan

Namespace: CelloSaaS.Billing.ServiceContracts

Assembly: CelloSaaS.Billing (in CelloSaaS.Billing.dll)

```
void UpdatePricePlan(
        PricePlan pricePlan
)
```

1.8.3 To delete Price Plan

Namespace: CelloSaaS.Billing.ServiceContracts

Assembly: CelloSaaS.Billing (in CelloSaaS.Billing.dll)

```
void DeletePricePlan(
        Guid pricePlanId,
        Guid tenantId
)
```

1.8.4 To get Price Plan

Namespace: CelloSaaS.Billing.ServiceContracts

Assembly: CelloSaaS.Billing (in CelloSaaS.Billing.dll)

```
PricePlan GetPricePlan(
        Guid pricePlanId,
        Guid tenantId
)
```

1.8.5 To get collection of Price Plans

Namespace: CelloSaaS.Billing.ServiceContracts

Assembly: CelloSaaS.Billing (in CelloSaaS.Billing.dll)

```
Dictionary<Guid, PricePlan> GetPricePlans(
        Guid[] pricePlanIds,
        Guid tenantId
)
```

1.8.6 To get Price Plan by Subcription ID

Namespace: CelloSaaS.Billing.ServiceContracts

Assembly: CelloSaaS.Billing (in CelloSaaS.Billing.dll)

```
Dictionary<Guid, PricePlan> GetPricePlansByPackageId(
        Guid packageId,
        Guid tenantId
)
```

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2 Contact Information

Any problem using this guide (or) using Cello Framework. Please feel free to contact us, we will be happy to assist you in getting started with Cello.

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