**RPost Provisioning Help Document**

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**Created By: Sheeraz Shaik**

**Review By:**

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## 

# Scope of the document

The scope of this document is to give some basic idea of all provisioning End points and some database tables information as well

# End Point URLs

Following are the list of all provisioning End – Points:

* GET All Plans 🡪 To retrieve all the plans
* GET All Plans/Key 🡪 To retrieve all the plans based on Company Reference key
* GET All Plan Types 🡪 To retrieve all Plan Types
* GET All Plan Unit Types 🡪 To retrieve all plan Unit Types
* GET All Plan Unit Count Types 🡪 To retrieve all Plan unit count types
* GET Authorization Type 🡪 To retrieve all Authorization Types
* GET Language 🡪 To retrieve all languages
* GET Customer Type 🡪 To retrieve all Customer Types
* POST Customer 🡪 To add /Provision a Customer
* POST Customer/Plan 🡪 To add plans to Customer
* POST Customer/Users 🡪 To add users to Customer
* POST Customer/Account Manager 🡪 To add Account manager to a Customer
* POST Token 🡪 To get the Tokens

## Customer Types

**Customers can be of different types as below:**

* Distributor
* Service provider
* Reseller
* Customer

**Pictorial Representation:**



Note: One Distributor can have multiple Service providers (SP) and each SP can have multiple resellers (RS) and each RS can have multiple Customers (CU) and each CU can have multiple users, as per the plan

## Add a Provision Customer

* A Distributor can add all the levels of customers like a new Distributor, Service provider, reseller, customers and users.
* Each customer can have multiple roles like a distributor can also be added as a customer and a reseller can also be added as Customer and the can associate users to them.
* Customer Name, Customer Type and Authorization value combination should be unique.

i.e.

Customer name = RPost Customer

Customer Type = DT

Authorization value = rpost.com

The above combination returns 200 Response Code. As the Customer name and Customer Type combination should be unique and also the Authorization value should be unique.

Customer name = RPost Customer

Customer Type = DT

Authorization value = rpost1.com

The above combination should return 400 error, as the Customer name and Customer Type combination is not unique, even though Authorization value is different.

* When a Distributor is adding a new Service provider or a Reseller, then the plans which ever are associated to Distributor are allowed to include while adding new reseller or service provider.
* When a Service provider creates a Reseller, he can associate only few plans to the reseller and in turn reseller can associate only those plans to customers.

**Service Provider 2**

Plan 5, Plan 6, Plan 7, Plan 8

**Service Provider 1**

Plan 1, Plan 2, Plan 3, Plan 4

**Customer 2**

Plan 2

**Customer 1**

Plan 1

**Distributor**

Plan 1 , Plan 2 , Plan 3 , Plan 4 , Plan 5 , Plan 6 , Plan 7 , Plan 8

**Reseller 1**

Plan 1, Plan 2

**Reseller 2**

Plan 3, Plan 4

* Authorization Token is not Case Sensitive
* Language will be validated only for customer type as “CU”.
* An inactive Account Manager Token should not be allowed to do any add/update/delete functions
* From the above fig , note that users can be associated to the plans , which are applicable for their customer

I.e. User 1 and User 2 can have only Plan 1, but not plan 2, as it’s associated with different customer.

* Even for Customers 1 and 2, they can be allocated to only Plan 1 and Plan 2, but not Plan 3 and Plan 4, as it’s with different Reseller.

## Add an Account Manager:

* One default Account manager is mandatory for creating any Customer. As Account manager for a customer is the main point of contact and who is responsible for adding users under that customer
* Only an Active Account manager can be associated to the Customers.
* An Account Manager of one distributor is not allowed to add customers or users to another Distributor
* Customer reference key is not Case Sensitive
* Account manager should be unique in Database

## Add Users to Customers:

* Users can be added only for the type as “Customers”. Users can not be added directly to Distributor, Service providers, resellers etc.
* Customer reference key is not Case Sensitive
* When a request is sent to add users to customers, and if there are some duplicate users in the request.

Then only the users which are not duplicate gets associated to the customer and a message gets displayed as “The following users are already exists and hence were not added, along with user email addresses“.

* Users should be unique in database , Same user cannot be associated to multiple Customers
* Number of users adding to a particular customer should not exceed the max number of users for that particular plan.

i.e.

Customer = 1 Plan with 10 Users (Customer is already having 5 users associated with the plan)

New users request = 10 Users for the above Plan

Should return response of 400, as customer is already having 5 users with the plan and new request is to add again 10 new users. Hence it’s a bad request.

If a request is send to add 5 new users , then Response of 200 will be returned and all the new 5 users gets associated for that customer for that particular plan.

* In a single request, up to 25 users can be added to a particular customer.
* Users can be associated to only Active customers.

## Add Plans to Customers/Users:

* Only Active and Authorized plans can be added to customers or users. When an inactive plan is associated to the customer or user, response code of 400 should get displayed.
* Customer reference key is not Case Sensitive
* Plan Codes are not case sensitive
* When a request is sent to add plans to users or customers, and if there are some duplicate plans in the request.

Then no error will be shown and only the non-duplicate plans gets associated to the customer or user.

* Plan Codes should be unique , No two plans can have same Plan Code

## Sample Plan:

**Plan ID = USD-1**

Unit Quantity = 5

Unit Type = Message

Range = Month

Renew = Auto

Plan Type = Individual

Max Users = 1

Overage = Fixed

Brand = IM

Default language = EN (English)

## Plan Types:

* Plan Types are of :
* **Individual**

1. An individual Plan Type can be associated to only one user, as it’s an individual plan
2. Max users for an individual plan must be always 1
3. If any customer wants to have individual plans to multiple users, then multiple instances of same individual plan can be provided to them and each instance can be associated with an individual user email address.
4. Units quantity is shared by only one user in Individual plan type
5. An Individual plan must be associated to only one user email address.
6. Alias email addresses are not supported in Individual plans. If any user wants to include Alias email address, either they can buy another instance of individual plan or change to a shared plan type.
7. An Individual plan supports both the Plan rages like yearly/monthly.
8. Customers will be authorized for either Domain or IP and all the plans under that customer (either individual or shared) will be applicable for same authorization.
9. An Individual plan supports both the Plan rages like yearly/monthly plans.
10. An individual plan supports both the overage plans like fixed/permitted overage.
11. An individual plan supports both the renew types like manual/auto renew types
12. Once the user is exhausted of the Units , then associated user and administrator will be notified ( this is not yet implemented)

* **Shared**

1. A shared plan type can be associated with multiple users.
2. For a Shared Plan Type , number of users is limited by the max number of users for the Plan
3. If the max users = 25 for a shared plan , then 25 different email addresses can be associated for this shared plan
4. Duplicate email addresses will be discarded from the request, only unique email addresses gets associated with the plan.
5. Alias email addresses are not supported in shared plans, and Alias address are considered as different email address only. I.e. if a user enters an email address as main address and a different address as alias address, then the alias address will also be considered as an individual email address.
6. Maximum users column is more applicable for Shared plan types when compared to individual plans
7. Unit’s quantity is shared by a group of users in shared plan type.
8. A shared plan supports both the Plan rages like yearly/monthly
9. Customers will be authorized for either Domain or IP and all the plans under that customer (either individual or shared) will be applicable for same authorization
10. A shared plan supports both the Plan rages like yearly/monthly plans.
11. A shared plan supports both the overage plans like fixed/permitted overage.
12. A shared plan supports both the renew types like manual/auto renew types
13. Once any of the user is exhausted of the Units , then associated user and administrator will be notified ( this is not yet implemented)

## Plan Unit Types:

* Plan Unit Types are of :
* **Messages**

1. If Plan Unit type is set as Message, then usage calculation is done based on per Message.

I.e. up to 99 recipients per message and 30MB email size. (Large mail feature can be sued to send mails beyond 30MB up to 200MB)

I.e. a message with up to 99 recipients and up to 30MB message size is considered as one unit only.

1. If any message is sent above 99 recipients per message, then sender receives an unauthorized mail and message will not be delivered to recipients.
2. If the message size is above 30MB, the mail will not be delivered and a notification will be sent to sender.
3. For a plan, if Unit quantity is set as 50 per month, then 50 messages can be sent by sender.
4. All the charged units for messages will be credited back to sender, in case of a failed message.
5. Plan Type as Messages can be applicable for both individual and Shared Plans.
6. Plan Type as Messages can be applicable for both Yearly and Monthly Plans
7. Plan Type as Messages can be applicable for both Fixed and Permitted Plan overages.

* **Units**

1. If Plan Unit type is set as Units, then usage calculation is done based on units.
2. Units are calculated based on Number of recipients and along with the size of the message

If a message of size 20MB is sent to 4 recipients, then

Total Units = Message Size / 5 MB (Per Recipient)

= 20/5 = 4 Units per recipient

= 4\*4

= 16 total Units

1. Even for Units calculation, messages can be sent up to 99 recipients per message and 30MB email size.
2. All the charged units will be credited back to sender usage plan , in case of a failed message
3. Plan Type as Units is applicable for both Individual and Shared Plans
4. Plan Type as Units can be applicable for both yearly and Monthly plans
5. Plan Type as units can be applicable for both Fixed and permitted Plan overages.

## Plan Ranges:

* Plan Ranges are of :
* **Monthly:**

1. When the plan range is set as ‘Monthly’, it means that the allocated units/message count per plan will reset to zero after current month.
2. Monthly is always month to month calculation. i.e. at the end of month the units will be reset.
3. When Plan range = Monthly , Renew = Manual , Units = 50 for a month of August

Sender can send the allocated 50 units by end of august and the unit quantity will be reset to zero on 31st of August, as the setting is for Manual renew.

1. When Plan range = Monthly and Renew = Auto , Units = 50 for a month of August

Sender can send the allocated 50 messages by end of august and the unit quantity will be reset to 50 again, as its set for an Auto renewal.

1. Even if sender is not using any units during current month, still it gets reset to zero by end of month (in case of manual renew).

* **Yearly:**

1. When the plan range is set as ‘Yearly’, it means that the allocated units/messages count per plan will reset to zero after current year.
2. Year start date is the date, when the first unit is used by the sender, not the user’s registration date.

Individual: if a user has registered for a yearly plan on 01/august/2015

Sent the first message by using any RPost service on 10/December/2015

Then start date is set as 10/December/2015 and End date = 09/December/2016

Shared: If the group has registered 10 email addresses for a yearly plan on 01/august/2015

First user sends a message on 10/august/2015

Second user sends a message on 25/august/2015

Then start date is set as 10/August/2015 and end date = 09/August/2016.

**Note:** For a group/shared plan, for a yearly range – the start date is the date when the first message is sent from any of the users in the group.

1. When Plan range = Yearly , Renew = Manual , Units = 5000 for an year

Sender can send the allocated 5000 units by end of allocated year and the unit quantity will be reset to zero by end of the year, as the setting is for Manual renew.

1. When Plan range = Yearly and Renew = Auto , Units = 5000 for an year

Sender can send the allocated 5000 messages by end of year and the unit quantity will be reset to 5000 again, as its set for an Auto renewal.

1. Even if sender is not using any units during current year, still it gets reset to zero by end of year (in case of manual renew).
2. Even if sender is not using any units during current year, it gets reset to 5000 by end of year (in case of Auto renew).

## Authorization Types:

* Authorization Types are of :
* Domain: Not applicable
* IP: Not applicable

## Plan Overage Types:

* Plan Overage Types are of :
* **Fixed:**

1. When a Plan overage type is set as ‘Fixed’, it means that sender does not have a feasibility to go beyond the allocated number of units /messages over a period of time.
2. For a Plan, Allocated units = 50 per month, Renew = Auto and Plan Overage is set as ‘Fixed’.

Sender can use only 50 units for that month and cannot go beyond 50 units

Need to wait for the rest of the month to get it reset to 50 again (which is done on the first day of next month).

1. Same above scenario applies for yearly plans as well.
2. Even for messages, it’s the same functionality. Once the message limit is exhausted, sender cannot go beyond the allocated number of message count.
3. This is applicable for both Individual and shared plans

* **Permitted:**

1. When a Plan overage type is set as ‘Permitted’, it means that sender has a feasibility to go beyond the allocated number of units /messages over a period of time.
2. For a Plan, Allocated units = 50 per month, Renew = Auto and Plan Overage is set as ‘Permitted’.

Sender can use beyond 50 units for that month

No need to wait for the rest of the month to get it reset to 50 again (which is done on the first day of next month).

1. Same above scenario applies for yearly plans as well.
2. Even for messages, it’s the same functionality. Even if the message limit is exhausted, sender can go beyond the allocated number of message count.
3. All those extra message sent on overage will be charged on overage charges.
4. There is no limit on sending overage messages, any number of messages can be sent, even if limit is exhausted.
5. This is applicable for both individual and shared plans.

## Plan Renew Types:

* Plan Renew types are of :
* **Manual:**

1. When a plan renew Type is set as ‘Manual’, it means that the plan will not be renewed automatically, but it’s a manual renewal.
2. When Plan range = Monthly , Renew = Manual , Units = 50 for a month of August

Sender can send the allocated 50 units by end of august and the unit quantity will be reset to zero on 31st of August, until it’s renewed manually.

1. Same applies for yearly plan as well.
2. For both Individual and Shared plans, we can set the Plan renew type as Manual.

* **Auto:**

1. When a plan renew Type is set as ‘Auto’, it means that the plan will be renewed automatically, at the end of the time period.
2. When Plan range = Monthly , Renew = Auto , Units = 50 for a month of August

Sender can send the allocated 50 units by end of august and the unit quantity will be reset to 50 again on 1st of September, as it’s an automatic renewal.

1. Same applies for yearly plan as well.
2. For both Individual and Shared plans, we can set the Plan renew type as Auto.
3. For Auto, we can set how many number of auto renewals are required like a monthly auto renewal can be done for 12 months and then change it to Manual.

Yearly Auto renewal is set for 2 years, then after two years it’s automatically turned to manual.

## Response Codes:

* 200 🡪 OK
* 201 🡪 Created
* 400 🡪 Bad Request
* 401 🡪 Un authorized
* 500 🡪 Internal Server Error

## Usage Calculation

* Usage calculation is done in Two ways :
* Per Recipient (Units)
* Per Message
* **Per Recipient (Units) :**

This usage is calculated based on number of recipients per message along with the size of the Message.

If a message of size 20MB is sent to 4 recipients, then

Total Units = Message Size / 5 MB (Per Recipient)

= 20/5 = 4 Units per recipient

= 4\*4

= 16 total Units

* **Per Message :**

This usage is calculated based on per message. It supports up to 99 recipients per message and upto 30Mb message size.

## Use Cases:

* **Use Case 1 :**

Unit Quantity = 10 messages per month

Unit Type = Units

Unit Count Type = Shared/volume

Max Users = 5

Send 5 messages in from User 1 and Send 5 messages from User 2 within a span of 5 days.

When Users 1 /user 2 /user 3 tries to send new messages, what is expected?

**Expected Result:**

Un Authorized notification mail should be received by all the users, as their monthly limit is exhausted, Even though used by only 2 users.

This behavior is because of the Shared unit count type, that 10 messages are commonly shared for all 5 users (not individual).

* **Use Case 2 :**

Unit Quantity = 10 messages per month

Unit Type = Units

Unit Count Type = Per User

Max Users = 5

Send 10 messages from User 1 and Send 5 messages from User 2 within a span of 5 days.

When Users 1 /user 2 /user 3 tries to send new messages, what is expected?

**Expected Result:**

Un Authorized notification mail should be received for user 1, as monthly limit is exhausted for user 1.

User 2 and user 3 should be authorized to send messages, till they reach their limit of 10 messages per month.

This behavior is because of the per user unit count type, that 10 messages are allocated for each individual.

## Version Control

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| --- | --- | --- |
| **Version No** | **Comments** | **Date** |
| 1.0 | Draft Version | 07/14/2015 |
| 1.1 | Included Usage Calculations and few Use cases | 07/24/2015 |
| 1.2 | Included Plan Types , Unit Types , plan range , authorization , plan overage , plan renew types | 08/12/2015 |