**Low Level Design Document**

Base Commission Calculator in PreTUPS retailer app:v6.5.0

15/09/2015

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**Revision History**

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Contents

[1.0 Introduction 5](#_Toc255557287)

[1.1 Purpose 5](#_Toc255557288)

[1.2 Scope 5](#_Toc255557289)

[1.3 Abbreviations, Acronyms & Definitions 5](#_Toc255557290)

[1.4 Intended Audience](#_Toc255557291) 6

[1.5 References 6](#_Toc255557292)

[2.0 Design Constraints and Considerations 6](#_Toc255557293)

[3.0 Software Architecture 6](#_Toc255557294)

[3.1 Physic Task Vs. System Design Unit Process Mapping 6](#_Toc255557295)

[3.2 Task List 6](#_Toc255557296)

[3.3 Event List 6](#_Toc255557297)

[3.4 Database Description 6](#_Toc255557298)

[3.5 External Interface Design 6](#_Toc255557299)

[4.0 Global Function Description 6](#_Toc255557300)

[4.1 Function Description 6](#_Toc255557301)

[4.2 Interface 6](#_Toc255557302)

[4.3 Global Data Structure Usage 7](#_Toc255557303)

[4.4 Processing Logic 7](#_Toc255557304)

[4.5 Exception/Error handling 7](#_Toc255557305)

[5.0 Software Detailed Design 7](#_Toc255557306)

[5.1 Task Description 7](#_Toc255557307)

[5.2 Task Type 7](#_Toc255557308)

[5.3 Structure Chart 7](#_Toc255557309)

[5.4 Database Usage 7](#_Toc255557310)

[5.5 Library Function/ Common Function Used 8](#_Toc255557311)

[5.6 Global Data Structure Description 8](#_Toc255557312)

[5.7 Call Convention 8](#_Toc255557313)

[5.8 Module Specifications 8](#_Toc255557314)

[5.8.1 Module Description 8](#_Toc255557315)

[5.8.2 Module Interface 9](#_Toc255557316)

[5.8.3 Global Data Structure Usage 9](#_Toc255557317)

[5.8.4 Local Data Structure Usage 9](#_Toc255557318)

[5.8.5 Processing Logic 9](#_Toc255557319)

[5.8.6 Exception/Error Handling 9](#_Toc255557320)

[5.9 Report Layout and Description 9](#_Toc255557321)

[6.0 Software Detailed Design For User Interface Processes 9](#_Toc255557322)

[6.1 Menu Hierarchy 9](#_Toc255557323)

[6.2 Class Hierarchy Diagram 9](#_Toc255557324)

[6.3 Class Description 9](#_Toc255557325)

[6.3.1 Class Name and Type 9](#_Toc255557326)

[6.3.2 Description 10](#_Toc255557327)

[6.3.3 Member of Class 10](#_Toc255557328)

[6.3.4 Dependencies of Class 10](#_Toc255557329)

[6.4 Task Description 10](#_Toc255557330)

[6.4.1 Screen(s) Layout 10](#_Toc255557331)

[6.4.2 Screen Item Description 12](#_Toc255557332)

[6.4.3 Functions Invoked 1](#_Toc255557333)3

[6.4.4 Database Usage 1](#_Toc255557334)3

[6.4.5 Library Function/Common Function Used 1](#_Toc255557335)3

[6.4.6 Global Data Structure Description 13](#_Toc255557336)

[6.4.7 Call Convention 13](#_Toc255557337)

[6.4.8 Report Layout and Description 1](#_Toc255557338)3

# 1 Introduction

## Purpose

Base Commission Calculator service will help the retailer/channel user to analyze the benefits of buying stock from Operator.

Base Commission Calculator helps retailer to know the net commission that will be earned by channel user for buying the stocks from operator. It helps retailer to estimate the earning from buying and selling the stock so that retailer can plan accordingly.

1. Base Commission is calculated for C2C and O2C services.

## Scope

1. This chapter gives a brief introduction of design of Base Commission in the retailer mobile application.

## Abbreviations, Acronyms & Definitions

|  |  |
| --- | --- |
| EXTGW | External Gateway / System |
| MAPPGW | Mobile Application Gateway |
| HTTP | Hypertext Transfer Protocol |
| API | Application Program Interface |
| XML | Extensible Markup Language |
| M | Mandatory |
| O | Optional |
| RC | Customer Recharge |
| N | No value |

## Intended Audience

1. Developer
2. Tester
3. Code Reviewer

## References

1. User story : USTRY53 Retailer APP- Calculate Base Commission

# Design Constraints and Considerations

2. List of Tasks on Server Side:
3. List of Task on Client Side:
4. Event List:

# Software Architecture

## Physic Task Vs. System Design Unit Process Mapping

## Task List

## Event List

## Database Description

## External Interface Design

# Global Function Description

## Function Description

## Interface

## Global Data Structure Usage

## Processing Logic

## Exception/Error handling

# Software Detailed Design

## Task Description

1) User clicks on the link commission calculator then screen navigated to screen with base and additional commission calculator.

2) User selects Base Commission

3) User selects the service type(O2C or C2C) to be commission calculated.

4) User enters the amount in the amount field.

5) User clicks on the calculate button, Based on the Operator commission flag the Request is Handled

6) After calculate button is pressed result is displayed on the same screen.

7) Result has the following contents:

a) Base Commission rate

b) Base Commission amount

c) Tax Rate

d) Tax value

e) Net Commission



## Task Type

## Structure Chart

## Database Usage

1. Entries for the a new service type "COMMCALC" in **SERVICE\_TYPE** table and in **SERVICE\_KEYWORDS** table.

## Library Function/ Common Function Used

## Global Data Structure Description

## Call Convention

## Module Specifications

### Module Description

1. Request syntax:
3. TYPE=COMMCALC&MSISDN=7277777779&MODULE=O2C&AMOUNT=100&IM EI=356 530065348522&PRODUCT=ETOPUP&SERVICE=N&GATEWAY=N

| TAG | Fields | Example | Max Length | Optional/Mandatory | Remarks |
| --- | --- | --- | --- | --- | --- |
| TYPE | COMMCALC | COMMCALC | 10 B | M | Request Type. Static & fixed value |
| MSISDN | Mobile number | 7277777779 | 10 | M | NUMERIC |
| MODULE | Module or service | O2C/C2C | 10 B | M | VARCHAR |
| AMOUNT | Requested Quantity for which the commission is to be calculated | 100 |  | M | NUMERIC |
| IMEI | IMEI number | 356530065348522 | 15 | M | NUMERIC |
| PRODUCT | Product code of the product which is assigned for the user | ETOPUP | 10 B | M | VARCHAR |
| SERVICE | Service code of the product which is assigned for the user | N (for base commission we either use N or give a service code for eg: RC) | 10 B | M | VARCHAR |
| GATEWAY | Gateway code of the product which is assigned for the user | N (for base commission we either use N or give the gateway code for eg: MAPPGW) | 10 B | M | VARCHAR |

1. Response syntax:
2. TYPE= COMMCALC&TXNSTATUS==<TXN CODE>&MESSAGE=<Message>

| TAG | Fields | Example | Max Length | Optional/Mandatory | Remarks |
| --- | --- | --- | --- | --- | --- |
| TYPE | COMMCALC | COMMCALC | 10 | M | Response Type. Static & fixed value |
| TXNSTATUS | Request Status | 200 | 5 | M | Transaction Status i.e.  Transaction OK (200), failed other status |
| MESSAGE | Transaction Message | Succes or fail. | 150 | M | Message specific to the error code. |

### Module Interface

### Global Data Structure Usage

### Local Data Structure Usage

### Processing Logic

### Exception/Error Handling

## Report Layout and Description

# Software Detailed Design For User Interface Processes

## Menu Hierarchy

## Class Hierarchy Diagram

## Class Description

### Class Name and Type

1. **Java files that are changed:**
2. CommCalculatorController.java (New addition)
3. PretupsI.java
4. PretupsErrorCodesI.java
5. Messages.properties

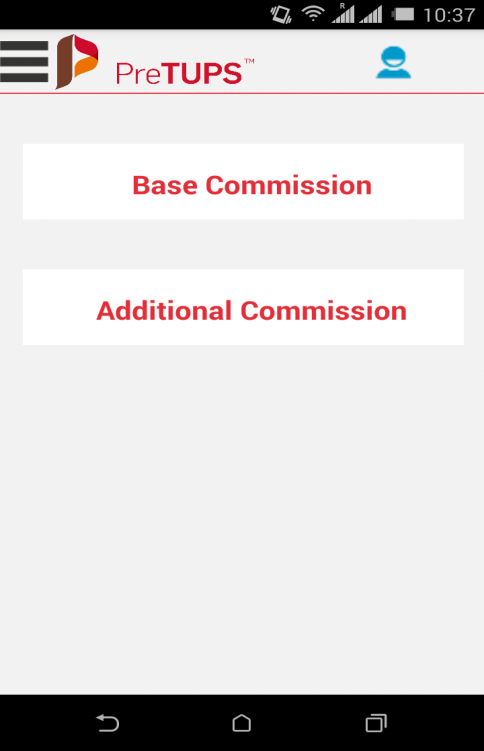
### Description

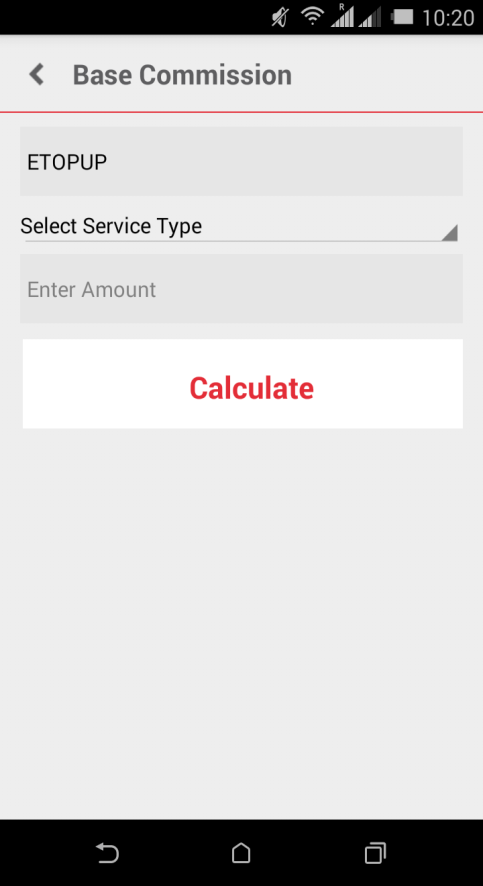
### Member of Class

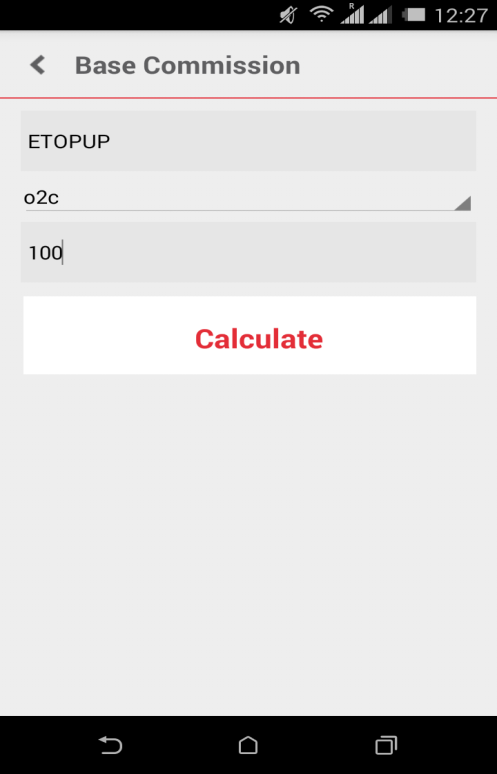
### Dependencies of Class

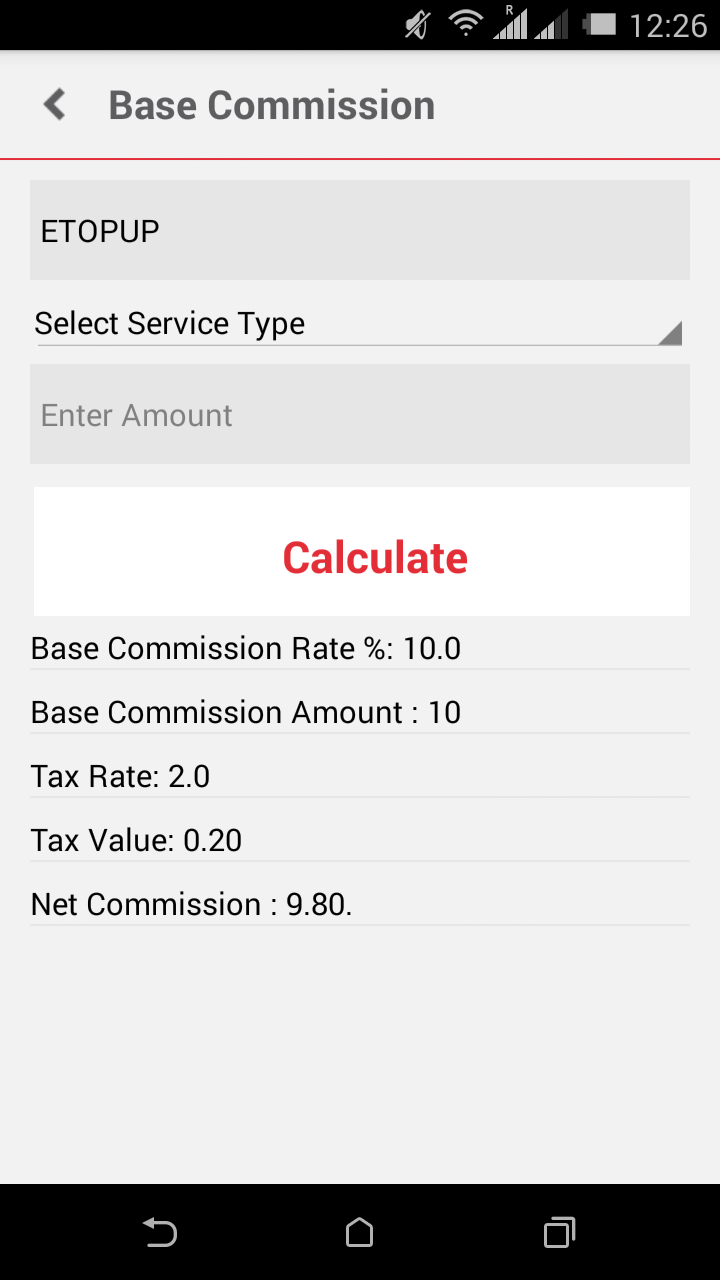
## Task Description

### Screen(s) Layout









### Screen Item Description



|  |  |  |
| --- | --- | --- |
| 1. ITEM NAME | 1. DATA TYPE | 1. DESCRIPTION |
| 1. ETOPUP | 1. VARCHAR | 1. Product code of the product which is assigned for the user. |
| 1. SERVICE TYPE | 1. VARCHAR | 1. Service (O2C or C2C). |
| 1. AMOUNT | 1. NUMERIC | 1. Requested Quantity for which the commission is being calculated. |
| 1. BASE COMMISSION RATE | 1. DOUBLE | 1. Commission Rate assigned with the commission profile. |
| 1. BASE COMMISSION AMOUNT | 1. LONG | 1. Commission value calculated based on the commission rate. |
| 1. TAX RATE | 1. DOUBLE | 1. Tax Rate assigned with the commission profile. |
| 1. TAX VALUE | 1. LONG | 1. Value calculated based on the tax rate. |
| 1. NET COMMISSION | 1. LONG | 1. Commission value after deducting tax. |
|  |  |  |

### Functions Invoked

### Database Usage

1. Entries for the a new service type "COMMCALC" in **SERVICE\_TYPE** table and in **SERVICE\_KEYWORDS** table..

### Library Function/Common Function Used

### Global Data Structure Description

### Call Convention

### Report Layout and Description

Appendix A – Contact Us

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