Software Requirement Specification

Content Provider (CP)

Version 1.0

July 5th, 2017

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1. Introduction

This section gives a scope description and overview of everything included in this SRS document.

1.1 Purpose

The purpose of this document is to give a detailed description of the requirements for the "Content Provider" (CP) web application. It will illustrate the purpose and complete declaration for the development of system. It will also explain system constraints, interface and interactions with other external applications. This document is primarily intended to be proposed to a customer for its approval and a reference for developing the first version of the system for the development team.

1.2 Scope

CP is a platform to manage mobile short code and provide content for its value added services via SMS. These services include quiz, voting, health, sports, religion, news, music, special events, campaign etc. The application has short codes and each of them has unique keywords. The client mainly manages the keywords and what content to provide based on information it receives. Mobile users subscribes to access all or some of these services. Telecom operators can also access the application to trace mobile numbers and manage subscription. Depending on the service, mobile users may receive regular contents and may get charged or not. They can also unsubscribe from any services. The client can get reports for subscription history, keywords usage, running event/campaign, vote, quiz, DND report etc.

The application is connected with our operator servers which are used to communicate & share data with telecom operator servers. Every requested message is processed in the application server and sends back response to the telecom operator servers. The protocol method could be HTTP or SMPP. If any of these servers are down then some part of our application will not work properly, mainly anything related to communication with telecom operator service will not work.

The application also utilizes some workers which run in the background, waiting for immediate or scheduled data to get fetched, process and send to mobile users. Occasionally they get halt due to application error or memory issue, which are simply fixed by restarting that particular worker.

1.3 Definitions

Term	Definition
MO	Message Originated
MT	Message Terminated
HTTP	HyperText Transfer Protocol
SMPP	Short Message Peer-to-Peer
PDU	Protocol Data Unit
IVR	Interactive Voice Response – User responds by submitting the input given in
	the recorded voice.
OBD	Object Behavior Design
WAP	Wireless Application Protocol
SDP	Service Delivery Platform (for Robi, Airtel)
SMSC	Short Message Service Center (for Banglalink, Teletalk)
DPDP	Digital Product Delivery Platform (for GP)

MSISDN	Mobile Station International Subscriber Directory Number
Administrator	System admin to manage the whole system.
Mobile User	Telecom mobile users to whom the contents are provided.
System User	Users who have access to our main web application.
Client Admin	Owner of the system with specific access privileges.
Client Operator	Operators managed by the owner with limited access.
Push-Pull	Responding with data for the given user request.
Benchmark	A milestone for Quiz points. Once users reach this milestone, the owner of the
	keyword has to pay to BTRC for some specified amount.

2. Overall Description

This section will give an overview of the whole system. The system will be explained in its context to show how the system interacts with other systems and introduce the basic functionality of it. It will also describe the type of users that will use the system and what functionality is available for each type. At last, the constraints and assumptions for the system will be presented.

2.1 Product Perspective

The application has two main functionalities:

- Send, Receive & Process text data via SMS.
- Manage short code, keywords, subscribed users etc. using the web application.

The telecom operators of the system are:

- Grameen Phone
- Robi
- Banglalink
- Airtel
- TeleTalk

To understand how the application works, we need to understand how the application is connected with some additional servers.

- A Public Server for Main Application with Main Central Database
- A Public Operator Gateway Server for Banglalink & TeleTalk with SMPP Protocol.
- A Private VPN Operator Gateway Server for Robi and Airtel with HTTP Protocol.
- A Private VPN Operator Gateway Server for GP with HTTP Protocol.
- All Operator Servers are communicated to their respective Telecom Operator Server.

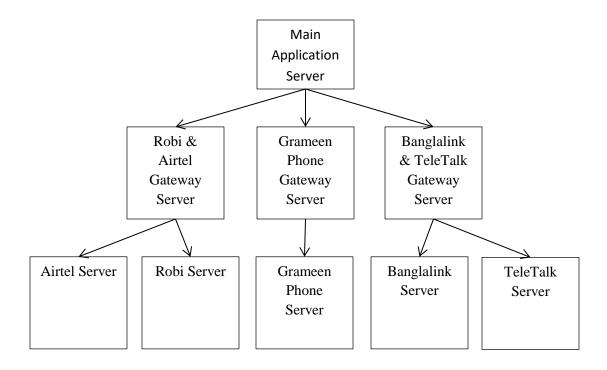


Figure 1 Server Connections

When a message is sent by the mobile user:

- First the user's message goes through its telecom operator's server. It sends the request to our operator gateway server. It routes the request to our application server.
- The request is processed by the given keywords and the message response gets stored in outgoing database table to send via the workers. A status response is generated which is sent back to the operator server via the gateway.

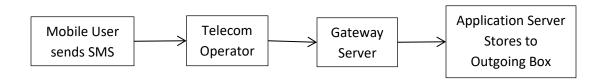


Figure 2 Mobile Sent SMS Workflow

When sending a message to mobile user:

- Application workers fetches the data need to send to mobile user. It makes request to the mobile users' respective operator gateway server to send the data.
- The operator gateway server sends it to the operator server which then sends it to the mobile user. The operator server returns a response which is received by the worker via gateway server.

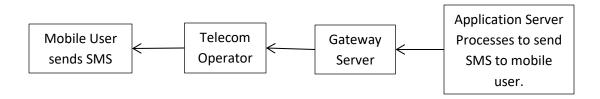


Figure 3 Sending SMS to mobile user workflow

Mobile users sends some keywords to a short code based on which they get the required information. Two types of Short Codes are managed in the application.

- **Message Oriented** (MO) This usually charges user for each successful request. Related keywords must match from the starts position of the message. All these keywords are owned by Manager and Clients.
- **Message Terminated** (MT) This might charge user if specified by the requested keyword. Related keywords could be positioned anywhere and must match from there. All these keywords are owned by Manager.

Keywords are made for specific Short Codes. These keywords are unique across the whole system and they belong to either clients or us. Clients can manage their own keywords while we as admin can manage all keywords. By managing the keywords, we can define what data to provide on success & failure, set specific time for once or periodic data, usage limit etc.

Various types of keywords are managed throughout the system and they all have different way of receiving & responding message.

• Generic Post Keyword

These are for MO type short code. When a message is received, it must match the 1st word with the keyword and rest of the message is included for processing. In response will provide a reply message. These can be used in campaign.

Static Keyword

These are for MO type short code. When a message is received, it must match with the single keyword exactly. Two or more keywords can be processed if those keywords have parent keyword. If a keyword has parent, then received message should match that keyword along with all the parent keywords. In response will provide a reply message.

Yellow Page

These are for MO type short code. Received message will contain one or two parts. First part must match with exact keyword. If second part contains, it is used for matching with code. Code could be like a mobile recharge code, discount coupon etc. and could be used once or multiple times. It will reply with message based on correct and incorrect code. If second part does not exist then a latest time is included with the reply message. These can also have campaign.

• 3rd Level Keyword

These are for MO type short code. Receive message will contain one or three parts. First part must match with exact keyword. If other two parts contains, those are used for matching with two codes of a set record. It replies based on correct and incorrect code. If these other two parts are not found then a latest time is included with the respond message. It can also be used in campaign.

HTTP Keyword

These are for MO type short code. When a message is received, its' first word must match the exact keyword and the whole message is sent to the URL set for the keyword by the client. Once a message is received from the URL, it is responded back to our operator server. It can also be used in campaign.

• Quiz

These are for MO type short code. Received message will have two parts. First part must match the keyword and second part is used for the answer to the quiz. Correct answer to the quiz will provide SMS points for the senders' mobile number. Can set Benchmark for a quiz. These quizzes are event based, so they will only work as long as the quizzes are active.

• Vote

These are for MO type short code. Received messages' first word must match the keyword and second part to the vote option set by the vote contents. A correct vote will add a vote to the chosen vote option. Options are part of vote keyword and are event based.

Special Quiz

These are for MO type short code. Message contains one or two parts. First part must match the keyword and second part consist the answer to the quiz if exists. Only providing the keyword replies to the user with the question. Providing with the answer, the correct answer to the quiz will set SMS points for the senders' mobile number. Can also set Benchmark for the quiz. Events are made for this quiz with daily quota limit and works within specified time.

• Subscription Quiz

These are for MT type short code and available only to the subscribed mobile users. Message contains one or two parts. First part must match the keyword and second part consist the answer to the quiz if exists. Only providing the keyword replies to the user with the question. Providing with the answer, the correct answer to the quiz will set SMS points for the senders' mobile number. Can also set Benchmark for the quiz. Events are made for this quiz with daily quota limit and works within specified time. It can also limit number of rounds playable.

Specified Keyword

These are for MT type short code. Keywords are used in conjunction with other Specified or Rolling Content type keywords. Received message must match this combination of keywords. It is mostly used to start or stop a single or all service. Can also be used for help or index of a service. For example, **B** used for Breaking News Service. User can send **Start B**

to subscribe to Breaking News Service. User can also send **Help B** to get info on Breaking News Service.

Rolling Content

These are for MT type short code and available only to the subscribed mobile users. Keywords are used in conjunction with Specified type keywords to subscribe or unsubscribe a service. To receive contents for these keywords, users need to subscribe to them. These keywords have some specified start/end date limit and a specified time at when the contents will trigger to send to users each day. We can also set the amount to be charged per message. Depending on the operator, we can verify if contents reached the mobile users successfully.

WAP Keyword

These are for MT type short code and mainly used for our **MobiShop** Application. So when received message is matched with the keywords, the message is sent to their API endpoint and processed at their end. Received response is responded back to operator server.

Rolling Push/Pull

These are for MO type short code. Requested message must match with the exact keyword. Each time the user requests for this keyword, it will provide the next available content sequentially. If all are sent, then will return to first content.

2.2 Product Features

A mobile user can send SMS to our short code with correct keywords to get information from requested service. These services include news, sports, health tips, beauty tips, quran quotes, Ramadan times, quiz, vote, balance checking etc. Some of these services require subscription to receive contents periodically. Some services charges user for its usage, others do not.

Using the web application, system users can manage subscribed users, keywords, event or campaign management, alert content and get reports. They can set what content to provide for each keyword. Some keyword has code for usage like coupon discount, mobile recharge, product discount, ticket discount etc. There are also campaign type keywords which only work for specific amount of time. Additionally it is possible to block mobile numbers from usage of our services.

With the **Alert Content** service, we can set content for a MT type keyword which will be sent to all subscribed users for the chosen keyword at given time. We can also set the amount for each message, though cost in many cases varies by operator. The **Bulk Alert** is also has a similar functionality, except that instead of keyword, a list of mobile numbers are uploaded to whom the content is sent at specified time. These contents lists are visible to *Manager* Role and the keywords they are individually assigned to, which are set by the *Administrator* in **User to Keywords** section.

The **Campaign** services are event based, so will only work on given time. Campaigned keys can be made for Generic Post, Yellow Pages, Third Level and HTTP. Added campaign can only be deleted before the start date. As long the event is active, campaign contents can be edited. Campaigns have scoring system

with Benchmark point. After the event is complete, if the keyword is rechargeable, then it will show link to list recharges with balance left.

For **Generic Post** and **HTTP** in Campaign, some fixed messages and scoring are set. Incorrect keyword is sent back to user with wrong message. For correct keyword, user is awarded with SMS points.

For **Yellow Pages** and **3rd Level** in Campaign, messages are matched with codes. Codes are uploaded using the Reply Management. They are processed based on Classification:

Category Wise

All codes have the same message set by the Campaign Category. So upload file only requires codes in each row.

Prefix Wise

The codes first few characters must match with the given prefix. All codes have same message set in the Campaign Management. So upload file only need codes in each row.

Individual Code Wise

All codes have their own message. So upload file requires both code and message in each row.

Range Wise

Codes are matched within given numeric range and messages are set for each range set.

If a **Campaign** is **rechargeable**, then some amount of money can be added towards the campaign. Recharge values added here does not hit the Recharge API. Recharge actions by mobile users are validated by this application before request passed to the Recharge API. Some options are available during adding recharge for campaign.

• Direct Credit

o Adds given amount towards campaign directly.

Adjust

Used for correcting amounts by adding more.

Revenue Share

Remarking the recharge used for sharing revenue with others.

Reconciliation

Any failed transactions are recorded with this type.

During Recharge Transaction by mobile user, Prepaid types usually processes successfully. Postpaid types fail for some mobile numbers. The failed processes are marked and are reprocessed again.

We also have another campaign which is called **Rolling Campaign**. Here subscribed user can participate on a quiz game. What's different about this is that users do not need to send the keyword along with the answer, only the answer is needed. Because of this, only one Rolling Campaign could run at a time. User can collect points for both correct and incorrect answer. If user decides to unsubscribe, then his/her points will reset to zero.

2.3 User Classes and Characteristics

There are two types of users that use this system: mobile users and system users.

Mobile users are the telecom operator customers who use their SMS service with our short code to get information from our system. They do not have access to our web application

System user can manage various section of the system using the web application, including subscribed users, keywords, campaign management, view SMS logs, view reports etc.

There are 6 different user groups that have different access privileges.

- 1. Super Administrator
 - Have access to everything.
- 2. Administrator
 - Have access to almost everything, except Report.
- 3. Manager
 - Have access to Campaign, Rolling Contents, Alert Contents, Reports, and SMS Logs.
- 4. Client (Admin)
 - Have access to Campaign, Reports, and SMS Logs.
- 5. Client (Operator)
 - Have access to SMS Logs.
- 6. Telecom Operator
 - Have access to Track User, DND List.

2.4 Operating Environment

Main Web Application

Operating System: Linux/CentOS
Web Server: Apache 2.3
Platform: PHP 5.3
Database: MySQL 5.1
PHP Framework: CakePHP 2.10.x

2.5 Design and Implementation Constraints

The application is constrained by its connected operator servers as well as telecom operator servers. Any problem or failure in those servers will make the application's main process non-functional. So it is necessary to ensure that those servers are on up state.

All the processes are done in the main application server. So in case of high usage demand, the system may get slow down and will take a performance hit.

2.6 Assumptions and Dependencies

Our assumption is that the application server should be able to process every request and respond in time. If any process is failed then it will affect responding to the mobile users. In some cases, we may

have message synchronization issue where old message is received after the new one. Some might not even get to the mobile user end.

3. Requirements

This section contains all of the functional and requirements of the system. It gives a detailed description of the system and all its features.

3.1 External Interface Requirements

This section provides a detailed description of all inputs into and outputs from the system with the description of the user, hardware, software and communication interfaces.

3.1.1 User Interfaces

To use the web application, users need to login. There is no registration option; they must be added to the system by the admin user. Once logged in, depending on the privileges available to the user, they can use the navigation bar to navigate to manage keywords, campaign, check SMS logs, make alert content and check reports.

3.1.2 Hardware Interfaces

There is no specific hardware requirement for this application.

3.1.3 Software Interfaces

The web application is used to communicate with our central database with operations consists both reading and modifying data. The application is running under Linux operating system. For Web Server, we are using Apache with PHP 5. For data storage, we are using MySQL database.

3.1.4 Communication Interfaces

Our main application is communicated across 3 operator servers which are used as middleman to route request to and from telecom operator servers. The telecom servers use either HTTP or SMPP to communicate with the application.

3.2 Functional Requirements

This section includes the requirements that specify all the fundamental actions of the software system.

3.2.1 User Class 1 - Mobile User (Message Processing)

3.2.1.1 FR1 – Send an unregistered Keyword via SMS

Scene: When user sends an SMS with keyword not registered in the system.

Expectation: It will respond with an invalid keyword provided message.

3.2.1.2 FR2 - Send registered Keyword via SMS

Scene: When user sends an SMS with keyword registered in the system.

Expectation: It will respond with message associated with the keyword reply message.

3.2.2 User Class 2 – System User (Web Application)

3.2.2.1 FR3 - Login to application

Given that the user is registered in the system and is active, then user can log in to the application.

Fields:

- Username Text, Textbox
- Password Text, Password Box

URL: /

3.2.2.2 FR4 - Dashboard Page

Given that the user is logged in, then user can see the dashboard page. It shows an overview of the system with overall stats and current stats for all the operators, cron status, statistics and some quick links. Based on user role, different info is shown in the pages.

URL: /Dashboards

Access:

- Super Administrator can see all info.
- Administrator can see all info.
- Managers can see quick links to subscription, some keywords, alert contents and some reports.
- Client (Admin) can see quick links to view SMS logs & change password.
- Client (Operator) can see quick links to view SMS logs & change password.
- Telecom Operators can see quick links track users and DND List.

Dependencies:

• FR3 – Login to application

3.2.2.3 FR5 - User Group List Page

Given that the user is logged in & has role of Super Administrator, then user can see the user groups list. No groups be added nor any current groups can be deleted. They can only access edit group and for some groups, can access modify privileges.

URL: /Groups

Access:

Super Administrator

Dependencies:

• FR3 – Login to application

3.2.2.4 FR6 - User Group Edit Page

Given that the user is logged in & has role of Super Administrator, then user can modify the group.

Fields:

- Name Text, Textbox Name of the Group
- Info Text, Textbox Description of the Group

URL: /Groups/edit/<GroupId>

Access:

Super Administrator

Dependencies:

• FR3 – Login to application

3.2.2.5 FR7 - User Group Edit Privilege Page

Given that the user is logged in & has role of Super Administrator, then user can edit a user group privilege. User can check or uncheck a checkbox to set if user group can access that specific privilege or not. Only few groups' privileges are modifiable. They are Administrator, Manager and Client (Admin). Depending on which group is being edited, it will show some privileges and hide others.

For Administrator, we can modify all of the privileges.

For Manager, except for administrative setup, everything else can be modified.

For Client (Admin), users and some report section can be modified.

URL: /Groups/accessControll/<GroupId>/<GroupName>

Access:

Super Administrator

Dependencies:

• FR3 – Login to application

3.2.2.6 FR8 - Users List Page

Given that the user is logged in & has access privilege, then user can see the users list. User can have access to add, edit and delete user.

URL: /Users

Access:

Super Administrator

Dependencies:

• FR3 – Login to application

3.2.2.7 FR9 - Users Form Page

Given that the user is logged in & has access privilege, then user can add and edit user.

Fields:

- Group Integer, Dropdown User group to belong
- Username Text, Textbox
- Password Text, Password box
- Confirm Password Text, Password box Used for confirming Password field
- Full Name Text, Textbox
- Email Address Text, Textbox Valid Email Address
- Contact Text, Textbox
- Status Integer, Dropdown Status to indicate web application access

URL:

- /Users/add (Add User)
- /Users/edit/<UserId> (Edit User)

Access:

Super Administrator

Dependencies:

• FR3 – Login to application

3.2.2.8 FR10 - User Delete

Given that the user is logged in & has access privilege, then user can delete users. Before deleting, user will be asked for confirmation. Once confirmed, user will be deleted.

URL: /Users/delete/<UserID>/<FullName>

Access:

Super Administrator

Dependencies:

- FR3 Login to application
- FR8 Users List Page

3.2.2.9 FR11 - User Change Password

Given that the user is logged in, then user can change own password.

Fields:

- Old Password Text, Password Box The current password
- New Password Text, Password Box
- Confirm Password Text, Password Box Confirm with New Password field

URL: /Users/ changePass

Dependencies:

• FR3 – Login to application

3.2.2.10 FR12 - User Set Individual Privileges

Given that the user is logged in & has access privilege, then user can modify individual user privileges. User can check or uncheck a checkbox to set if user group can access that specific privilege or not.

URL: /Useraccesslists/accessControll/<UserId>/<GroupName>/<UserFullName>/<GroupId>

Access:

• Super Administrator

Dependencies:

• FR3 – Login to application

3.2.2.11 FR13 - Operator to Keywords

Given that the user is logged in & has access privilege, then user can search for Keywords by Manager type user and assign them to some keywords which then the manager type user can manage themselves. Assigning is done by checking the checkboxes of the keywords.

URL: /UserToKeywords

Access:

Super Administrator

Dependencies:

• FR3 – Login to application

3.2.2.12 FR14 - Client Management List Page

Given that the user is logged in & has access privilege, then user can see the clients list. From here user can have access to add, edit or delete a client.

URL: /Clients

Access:

- Super Administrator
- Administrator

Dependencies:

• FR3 – Login to application

3.2.2.13 FR15 - Client Management Form Page

Given that the user is logged in & has access privilege, then user can add and edit a client.

Fields:

- Client Name Text, Textbox
- Email Text, Textbox Valid Email Address
- Contact Number Text, Textbox
- Address Text, Text area
- Keyword Menu Integer, Checkbox Indicates if Keyword Menu be shown or not
- Photo Text, File uploader, Store in file system
- Status Integer, Dropdown Sets if client active or not

URL:

- /Clients/add (Add Client)
- /Clients/edit/<ClientId> (Edit Client)

Access:

- Super Administrator
- Administrator

Dependencies:

• FR3 – Login to application

3.2.2.14 FR16 - Client Management Delete Client

Given that the user is logged in & has access privilege, then user can delete a client after confirming the delete.

URL: /Clients/delete/<ClientId>/<ClientName>

Access:

- Super Administrator
- Administrator

Dependencies:

- FR3 Login to application
- FR14 Client Management List Page

3.2.2.15 FR17 - Keyword Type Management List Page

Given that the user is logged in & has access privilege, then user see the list of keyword type. There is no option to add or delete keyword; only an edit option is available.

URL: /KeywordTypes

Access:

- Super Administrator
- Administrator

Dependencies:

• FR3 – Login to application

3.2.2.16 FR18 - Keyword Type Management Edit Form Page

Given that the user is logged in & has access privilege, then user edit a keyword type.

Fields:

• Name – Text, Textbox – Name of the Keyword Type

URL: /KeywordTypes/edit/<KeywordTypeId>

Access:

- Super Administrator
- Administrator

Dependencies:

FR3 – Login to application

3.2.2.17 FR19 - Service Type Management List Page

Given that the user is logged in & has access privilege, then user can see the service types list. From here, user can have access to add, edit and delete service type.

URL: /ServiceTypes

Access:

- Super Administrator
- Administrator

Dependencies:

• FR3 – Login to application

3.2.2.18 FR20 - Service Type Management Form Page

Given that the user is logged in & has access privilege, then user can add and edit a service type.

Fields:

- Name Text, Textbox
- Info Text, Textbox
- Status Integer, Dropdown Sets if Service Type active or not

URL:

- /ServiceTypes/add (Add Service Type)
- /ServiceTypes/edit/<ServiceTypeId> (Edit Service Type)

Access:

- Super Administrator
- Administrator

Dependencies:

• FR3 – Login to application

3.2.2.19 FR21 - Service Type Management Delete Service Type

Given that the user is logged in & has access privilege, then user can delete a client after confirming the delete.

URL: /ServiceTypes/delete/<ServiceTypeId>/<ServiceTypeName>

Access:

- Super Administrator
- Administrator

Dependencies:

- FR3 Login to application
- FR19 Service Type Management List Page

3.2.2.20 FR22 - Operator Management List Page

Given that the user is logged in & has access privilege, then user can see list of operators. There is no option to add or delete an operator, only edit option is available.

URL: /Operators

Access:

- Super Administrator
- Administrator

Dependencies:

• FR3 – Login to application

3.2.2.21 FR23 - Operator Management Edit Form Page

Given that the user is logged in & has access privilege, then user can edit an operator.

Fields:

- Name Text, Textbox
- Short Code Type Integer, Multi-Checkbox
- Info Text, Textbox

URL: /Operators/edit/<OperatorId>

Access:

- Super Administrator
- Administrator

Dependencies:

• FR3 – Login to application

3.2.2.22 FR24 - Short Code Types List Page

Given that the user is logged in & has access privilege, then user can see list of short code types. There is no option to add or delete a short code type, only edit option is available.

URL: /ShortTypes

Access:

- Super Administrator
- Administrator

Dependencies:

• FR3 – Login to application

3.2.2.23 FR25 - Short Code Types Edit Form Page

Given that the user is logged in & has access privilege, then user can see edit a short code type.

Fields:

- Name Text, Textbox
- Info Text, Textbox

URL: /ShortTypes/edit/<ShortCodeTypeId>

Access:

- Super Administrator
- Administrator

Dependencies:

• FR3 – Login to application

3.2.2.24 FR26 - Short Code List Page

Given that the user is logged in & has access privilege, then user can see list of short codes. There is no option to add or delete a short code, only edit option is available.

URL: /ShortCodes

Access:

- Super Administrator
- Administrator

Dependencies:

• FR3 – Login to application

3.2.2.25 FR27 - Short Code Edit Form Page

Given that the user is logged in & has access privilege, then user can edit a short code.

Fields:

- Short Code Type Integer, Dropdown
- Info Text, Textbox
- Wrong Keyword Message Text, Text area
- Operator Integer, Multi-Checkbox
- Status Integer, Dropdown Set if Active or Inactive

URL: /ShortCodes/edit/<ShortCodeId>

Access:

- Super Administrator
- Administrator

Dependencies:

• FR3 – Login to application

3.2.2.26 FR28 - Recharge Gateway Activation

Given that the user is logged in & has access privilege, then user can see list of rechargeable gateways. User can active a single recharge gateway as a default service to use for mobile recharge.

Once a gateway is selected and the **Activate** button is clicked, the selected recharge gateway will be set as default recharge service if request was successful. If any error occurred, an error message will be shown and activation will be failed.

There is no option to add, edit or delete a recharge gateway service.

URL: /RechargeApis

Access:

- Super Administrator
- Administrator

Dependencies:

• FR3 – Login to application

3.2.2.27 FR29 - Subscribers List Page

Given that the user is logged in & has access privilege, then user can see list of subscribed mobile users. User can have access to add, edit and delete a subscribed user. Additionally user can check a subscribed user's history. Subscribed users are unique by their mobile number.

URL: /Subscribers

Access:

- Super Administrator
- Administrator
- Manager

Dependencies:

• FR3 – Login to application

3.2.2.28 FR30 - Subscribers Add Form Page

Given that the user is logged in & has access privilege, then user can add a mobile user to the subscribe list. A new mobile number gets added to the subscribers list with the chosen keyword while an existing mobile number only adds the keyword against that.

Fields:

- Keyword Integer, Dropdown
- Mobile Number Integer, Textbox Must not be in DND, Block List
- Subscription Time Date Time, Date Time

URL: /Subscribers/add

Access:

- Super Administrator
- Administrator
- Manager

Dependencies:

• FR3 – Login to application

3.2.2.29 FR31 - Subscribers Edit Form Page

Given that the user is logged in & has access privilege, then user can edit a subscribed mobile user.

Fields:

Mobile Number – Integer, Textbox – Must not be in DND, Block List

URL: /Subscribers/edit/<SubscribeId>

Access:

- Super Administrator
- Administrator
- Manager

Dependencies:

• FR3 – Login to application

3.2.2.30 FR32 - Subscriber Delete Action

Given that the user is logged in & has access privilege, then user can delete a subscribed mobile user.

URL: /Subscribers/delete/<SubscribeId>

Access:

- Super Administrator
- Administrator
- Manager

Dependencies:

- FR3 Login to application
- FR29 Subscribers List Page

3.2.2.31 FR33 - Subscribers History Page

Given that the user is logged in & has access privilege, then user can see a subscribed mobile user's history. It shows which to keywords they subscribed and unsubscribed and at what time.

URL: /SubscriberHistories

Access:

- Super Administrator
- Administrator
- Manager

Dependencies:

• FR3 – Login to application

3.2.2.32 FR34 - Subscribers Upload to List

Given that the user is logged in & has access privilege, then user can upload a list of mobile numbers in in a file and those numbers will be added to subscribers list and subscribe against the chosen keyword. If mobile number already added to subscriber list or the number is listed in DND or Block list, it will ignore that number. Also if a mobile number is subscribed to the chosen keyword, it will ignore that number.

Fields:

- Keyword Integer, Dropdown Keywords are from Rolling Content Type
- File File uploader, CSV Type File

URL: /Subscribers/upload

Access:

- Super Administrator
- Administrator
- Manager

Dependencies:

• FR3 – Login to application

3.2.2.33 FR35 - OBD Key Control Input Assignment

Given that the user is logged in & has access privilege, then user can assign keyword to a specific number input.

OBD Key control is used for the IVR system to define which keyword to use for the given number input.

URL: /ObdKeyControl

Access:

- Super Administrator
- Administrator
- Manager

Dependencies:

• FR3 – Login to application

3.2.2.34 FR36 - DND List Page

Given that the user is logged in & has access privilege, then user can see mobile numbers in DND List. User can have access to add, edit and delete any entry.

Any number in this list indicates that this mobile user cannot be subscribed by using the Upload Subscriber or Add Subscriber Form Page. But those mobile users can subscribe by themselves via SMS.

URL: /Dnds

Access:

- Super Administrator
- Administrator
- Manager

Dependencies:

• FR3 – Login to application

3.2.2.35 FR37 - DND Form Page

Given that the user is logged in & has access privilege, then user can add and edit a DND entry.

Fields:

- Operator Integer, Dropdown Telecom Operators
- Mobile Number Integer, Textbox

URL:

/Dnds/add – (Add DND Entry)

• /Dnds/edit/<Id> – (Edit DND Entry)

Access:

- Super Administrator
- Administrator
- Manager

Dependencies:

• FR3 - Login to application

3.2.2.36 FR38 - DND Delete Entry

Given that the user is logged in & has access privilege, then user can delete an entry after confirming the delete.

URL: /Dnds/delete/<Id>/<MobileNo>

Access:

- Super Administrator
- Administrator
- Manager

Dependencies:

- FR3 Login to application
- FR36 DND List Page

3.2.2.37 FR39 - DND Ranges List Page

Given that the user is logged in & has access privilege, then user can see ranges of mobile numbers in DND Ranges List. User can have access to add, edit and delete any entry.

Any number range in this list indicates that these mobile users cannot be subscribed by using the Upload Subscriber or Add Subscriber Form Page. But those mobile users can subscribe by themselves via SMS.

URL: /DndRanges

Access:

- Super Administrator
- Administrator
- Manager

Dependencies:

• FR3 – Login to application

3.2.2.38 FR40 - DND Ranges Form Page

Given that the user is logged in & has access privilege, then user can add and edit a DND Range entry.

Fields:

- Operator Integer, Dropdown Telecom Operators
- Start Number Integer, Textbox Must be lower than End Number
- End Number Integer, Textbox Must be greater than Start Number

URL:

- /DndRanges/add (Add DND Entry)
- /DndRanges/edit/<Id> (Edit DND Entry)

Access:

- Super Administrator
- Administrator
- Manager

Dependencies:

• FR3 – Login to application

3.2.2.39 FR41 - DND Ranges Delete Entry

Given that the user is logged in & has access privilege, then user can delete an entry after confirming the delete.

URL: /DndRanges/delete/<Id>

Access:

- Super Administrator
- Administrator
- Manager

Dependencies:

- FR3 Login to application
- FR39 DND Ranges List Page

3.2.2.40 FR42 - Bulk DND Unsubscribe List Page

Given that the user is logged in & has access privilege, then user can see list of referenced files used for unsubscribe and DND. We can see how many records where in a file and how many of them are unsubscribed and added to DND list.

URL: /BulkUnsubscribeDnds/listing

Access:

- Super Administrator
- Administrator
- Manager

Dependencies:

• FR3 – Login to application

3.2.2.41 FR43 - Bulk DND Unsubscribe Upload

Given that the user is logged in & has access privilege, then user can upload file to unsubscribe and/or add to DND list.

Fields:

- Action Integer, Dropdown Choose DND, Unsubscribe or both.
- Operator Integer, Dropdown Choose which operator's numbers to process
- Reference Text, Textbox Used as a reference number
- File Text, File uploader, CSV (2MB) or Excel (500KB) File

URL: /BulkUnsubscribeDnds/upload

Access:

- Super Administrator
- Administrator
- Manager

Dependencies:

• FR3 – Login to application

3.2.2.42 FR44 - Block List Page

Given that the user is logged in & has access privilege, then user can see list of blocked mobile numbers. User can have access to add, edit or delete a number.

Any entry listed here are unable to subscribe to any service.

URL: /Blocks

Access:

- Super Administrator
- Administrator
- Manager

Dependencies:

• FR3 – Login to application

3.2.2.43 FR45 - Block Form Page

Given that the user is logged in & has access privilege, then user can add and edit a blocked mobile number.

Fields:

- Operator Integer, Dropdown Telecom Operators
- Mobile Number Integer, Textbox

URL:

- /Blocks/add (Add Block Number)
- /Blocks/edit/<Id> (Edit Block Number)

Access:

- Super Administrator
- Administrator
- Manager

Dependencies:

• FR3 – Login to application

3.2.2.44 FR46 - Block Delete Entry

Given that the user is logged in & has access privilege, then user can delete a blocked mobile number.

URL: /Blocks/delete/<Id>/<MobileNo>

Access:

- Super Administrator
- Administrator
- Manager

Dependencies:

- FR3 Login to application
- FR44 Block List Page

3.2.2.45 FR47 - Block Ranges List Page

Given that the user is logged in & has access privilege, then user can see list of blocked mobile number ranges. User can have access to add, edit or delete an entry.

Any entry listed here are unable to subscribe to any service.

URL: /BlockRanges

Access:

- Super Administrator
- Administrator
- Manager

Dependencies:

• FR3 – Login to application

3.2.2.46 FR48 - Block Ranges Form Page

Given that the user is logged in & has access privilege, then user can add and edit an entry to ranged blocked mobile numbers.

Fields:

- Operator Integer, Dropdown Telecom Operators
- Start Number Integer, Textbox Must be less than End Number
- End Number Integer, Textbox Must be greater than Start Number

URL:

- /BlockRanges/add (Add Block Number)
- /BlockRanges/edit/<Id> (Edit Block Number)

Access:

- Super Administrator
- Administrator
- Manager

Dependencies:

• FR3 – Login to application

3.2.2.47 FR49 - Block Ranges Delete Entry

Given that the user is logged in & has access privilege, then user can delete an entry of ranged blocked mobile numbers.

URL: /BlockRanges/delete/<Id>

Access:

- Super Administrator
- Administrator
- Manager

Dependencies:

- FR3 Login to application
- FR44 Block List Page

3.2.2.48 FR50 - Keyword - Generic Post Keywords List

Given that the user is logged in & has access privilege, then user can see list of Keywords of Generic Post type. User can have access to add, edit and delete a keyword.

URL: /Gpks

Access:

- Super Administrator
- Administrator
- Manager
- Client (Admin) Can only edit owned keywords

Dependencies:

• FR3 – Login to application

3.2.2.49 FR51 - Keyword - Generic Post Keywords Form

Given that the user is logged in & has access privilege, then user can add and edit a keyword.

Fields:

- Short Code Integer, Dropdown MO Types
- Operators Integer, Checkbox View on Short Code selected
 - O Service ID Text, Textbox Some Operators require this
- Select Client Integer, Dropdown Assign Keyword with a Client
- Service Type Integer, Dropdown
- Keyword Text, Textbox
- Description Text, Text area
- Campaign Integer, Checkbox
- Reply Message Text, Text area 160 char, View when Campaign is unchecked
- Campaign Offline Message Text, Text area 160 char, View when Campaign is checked
- Status Integer, Dropdown Status for Active/Inactive

URL:

- /Gpks/add (Add Keyword)
- /Gpks/edit/<Id> (Edit Keyword)

Access:

- Super Administrator
- Administrator
- Manager
- Client (Admin) Can only edit owned keywords

Dependencies:

• FR3 – Login to application

3.2.2.50 FR52 - Keyword - Generic Post Keywords Delete

Given that the user is logged in & has access privilege, then user can delete a generic post type keyword. On delete, if client id is found, keyword assignment with client is also removed.

URL: /Gpks/delete/<Id>/<Keyword>/<ClientId>

Access:

- Super Administrator
- Administrator
- Manager
- Client (Admin) Can only edit owned keywords

Dependencies:

- FR3 Login to application
- FR50 Keyword Generic Post Keywords List

3.2.2.51 FR53 - Keyword - Static Keywords List

Given that the user is logged in & has access privilege, then user can see list of Keywords of Static type. User can have access to add, edit and delete a keyword.

URL: /StaticKeywords

Access:

- Super Administrator
- Administrator
- Manager
- Client (Admin) Can only edit owned keywords

Dependencies:

• FR3 – Login to application

3.2.2.52 FR54 - Keyword - Static Keywords Form

Given that the user is logged in & has access privilege, then user can add and edit a keyword.

Fields:

- Short Code Integer, Dropdown MO Types
- Operators Integer, Checkbox View on Short Code selected
 - Service ID Text, Textbox Some Operators require this
- Select Client Integer, Dropdown Assign Keyword with a Client
- Service Type Integer, Dropdown
- Keyword Text, Textbox
- Description Text, Text area
- Reply Message Text, Text area 160 char
- Invalid Message Text, Text area 160 char
- Status Integer, Dropdown Status for Active/Inactive

URL:

- /StaticKeywords/add (Add Keyword)
- /StaticKeywords/edit/<Id> (Edit Keyword)

Access:

- Super Administrator
- Administrator
- Manager
- Client (Admin) Can only edit owned keywords

Dependencies:

• FR3 – Login to application

3.2.2.53 FR55 - Keyword - Static Keywords Delete

Given that the user is logged in & has access privilege, then user can delete a generic post type keyword. On delete, if client id is found, keyword assignment with client is also removed.

URL: /StaticKeywords/delete/<ld>/<Keyword>/<ClientId>

- Super Administrator
- Administrator
- Manager

• Client (Admin) – Can only edit owned keywords

Dependencies:

- FR3 Login to application
- FR53 Keyword Static Keywords List

3.2.2.54 FR56 - Keyword - Yellow Pages Keywords List

Given that the user is logged in & has access privilege, then user can see list of Keywords of Yellow Pages type. User can have access to add, edit and delete a keyword.

URL: /YellowPages

Access:

- Super Administrator
- Administrator
- Manager
- Client (Admin) Can only edit owned keywords

Dependencies:

• FR3 – Login to application

3.2.2.55 FR57 - Keyword - Yellow Pages Keywords Form

Given that the user is logged in & has access privilege, then user can add and edit a keyword.

Fields:

- Short Code Integer, Dropdown MO Types
- Operators Integer, Checkbox View on Short Code selected
 - Service ID Text, Textbox Some Operators require this
- Select Client Integer, Dropdown Assign Keyword with a Client
- Service Type Integer, Dropdown
- Keyword Text, Textbox
- Description Text, Text area
- Campaign Integer, Checkbox
- Prefix Text, Textbox Added before reply message, View when Campaign is unchecked
- Suffix Text, Textbox Added after reply message, View when Campaign is unchecked
- Invalid Keyword Message Text, Text area 160 char, View when Campaign is unchecked
- Current Date as Last Param Integer, Checkbox View when Campaign is unchecked Set current date to the respond message.
- Campaign Offline Message Text, Text area 160 char, View when Campaign is checked
- Mobile Recharge Integer, Checkbox
- Status Integer, Dropdown Status for Active/Inactive

URL:

- YellowPages/add (Add Keyword)
- /YellowPages/edit/<Id> (Edit Keyword)

Access:

- Super Administrator
- Administrator
- Manager
- Client (Admin) Can only edit owned keywords

Dependencies:

• FR3 – Login to application

3.2.2.56 FR58 - Keyword - Yellow Pages Keywords Delete

Given that the user is logged in & has access privilege, then user can delete a yellow page type keyword. On delete, if client id is found, keyword assignment with client is also removed.

URL: /YellowPages/delete/<Id>/<Keyword>/<ClientId>

Access:

- Super Administrator
- Administrator
- Manager
- Client (Admin) Can only edit owned keywords

Dependencies:

- FR3 Login to application
- FR56 Keyword Yellow Pages Keywords List

3.2.2.57 FR59 - Keyword - Yellow Pages Content List

Given that the user is logged in & has access privilege, then user can see list of contents of a Yellow Pages keyword. User can have access to add, edit and delete content.

URL: /Ypcontents/index/<KeywordId>/<Keyword>

- Super Administrator
- Administrator
- Manager
- Client (Admin) Can only edit owned keywords

- FR3 Login to application
- FR56 Keyword Yellow Pages Keywords List

3.2.2.58 FR60 - Keyword - Yellow Pages Content Form

Given that the user is logged in & has access privilege, then user can add and edit content.

Fields:

- Serial Text, Textbox
- Code Text, Textbox
- Amount –Text, Textbox
- Message Text, Textbox 160 char

URL:

- /Ypcontents/add/<KeywordId>/<Keyword> (Add Content)
- /Ypcontents/edit/<Id>/<KeywordId>/<Keyword> (Edit Content)

Access:

- Super Administrator
- Administrator
- Manager
- Client (Admin) Can only edit owned keywords

Dependencies:

- FR3 Login to application
- FR56 Keyword Yellow Pages Keywords List

3.2.2.59 FR61 - Keyword - Yellow Pages Content Delete

Given that the user is logged in & has access privilege, then user can delete yellow page content.

URL: /Ypcontents/delete/<id>/<KeywordId>/<Keyword>/<Code>

Access:

- Super Administrator
- Administrator
- Manager
- Client (Admin) Can only edit owned keywords

Dependencies:

• FR3 – Login to application

• FR59 – Keyword – Yellow Pages Content List

3.2.2.60 FR62 - Keyword - Yellow Pages Content Upload

Given that the user is logged in & has access privilege, then user can upload yellow page content via CSV or XLS file.

Fields:

• File – File uploader – CSV (2MB) or XLS (500KB)

URL: /Ypcontents/upload/<KeywordId>/<Keyword>

Access:

- Super Administrator
- Administrator
- Manager
- Client (Admin) Can only edit owned keywords

Dependencies:

- FR3 Login to application
- FR56 Keyword Yellow Pages Keywords List

3.2.2.61 FR63 - Keyword - 3rd Level Keywords List

Given that the user is logged in & has access privilege, then user can see list of Keywords of 3rd level type. User can have access to add, edit and delete a keyword.

URL: /ThirdLevelKeywords

Access:

- Super Administrator
- Administrator
- Manager
- Client (Admin) Can only edit owned keywords

Dependencies:

• FR3 – Login to application

3.2.2.62 FR64 - Keyword - 3rd Level Keywords Form

Given that the user is logged in & has access privilege, then user can add and edit a keyword.

Fields:

• Short Code – Integer, Dropdown – MO Types

- Operators Integer, Checkbox View on Short Code selected
 - Service ID Text, Textbox Some Operators require this
- Select Client Integer, Dropdown Assign Keyword with a Client
- Service Type Integer, Dropdown
- Keyword Text, Textbox
- Description Text, Text area
- Campaign Integer, Checkbox
- Prefix Text, Textbox Added before reply message, View when Campaign is unchecked
- Suffix Text, Textbox Added after reply message, View when Campaign is unchecked
- Invalid Keyword Message Text, Text area 160 char, View when Campaign is unchecked
- Current Date as Last Param Integer, Checkbox View when Campaign is unchecked Set current date to the respond message.
- Campaign Offline Message Text, Text area 160 char, View when Campaign is checked
- Status Integer, Dropdown Status for Active/Inactive

URL:

- /ThirdLevelKeywords/add (Add Keyword)
- /ThirdLevelKeywords/edit/<Id> (Edit Keyword)

Access:

- Super Administrator
- Administrator
- Manager
- Client (Admin) Can only edit owned keywords

Dependencies:

• FR3 – Login to application

3.2.2.63 FR65 - Keyword - 3rd Level Keywords Delete

Given that the user is logged in & has access privilege, then user can delete a 3rd level type keyword. On delete, if client id is found, keyword assignment with client is also removed.

URL: /ThirdLevelKeywords/delete/<Id>/<Keyword>/<ClientId>

Access:

- Super Administrator
- Administrator
- Manager
- Client (Admin) Can only edit owned keywords

Dependencies:

- FR3 Login to application
- FR63 Keyword 3rd Level Keywords List

3.2.2.64 FR66 - Keyword - 3rd Level Content List

Given that the user is logged in & has access privilege, then user can see list of contents of a 3rd level keyword. User can have access to add, edit and delete content.

URL: /Level3contents/index/<KeywordId>/<Keyword>

Access:

- Super Administrator
- Administrator
- Manager
- Client (Admin) Can only edit owned keywords

Dependencies:

- FR3 Login to application
- FR63 Keyword 3rd Level Keywords List

3.2.2.65 FR67 - Keyword - 3rd Level Content Form

Given that the user is logged in & has access privilege, then user can add and edit content.

Fields:

- First Code Text, Textbox
- Second Code Text, Textbox
- Message Text, Textbox 160 char

URL:

- /Level3contents/add/<KeywordId>/<Keyword> (Add Content)
- /Level3contents/edit/<ld>/<KeywordId>/<Keyword> (Edit Content)

Access:

- Super Administrator
- Administrator
- Manager
- Client (Admin) Can only edit owned keywords

Dependencies:

- FR3 Login to application
- FR63 Keyword 3rd Level Keywords List

3.2.2.66 FR68 - Keyword - 3rd Level Content Delete

Given that the user is logged in & has access privilege, then user can delete 3rd level content.

URL: /Level3contents/delete/<id>/<KeywordId>/<Keyword>/<Code>

Access:

- Super Administrator
- Administrator
- Manager
- Client (Admin) Can only edit owned keywords

Dependencies:

- FR3 Login to application
- FR66 Keyword 3rd Level Content List

3.2.2.67 FR69 - Keyword - 3rd Level Content Upload

Given that the user is logged in & has access privilege, then user can upload 3rd level content via CSV or XLS file.

Fields:

• File – File uploader – CSV (2MB) or XLS (500KB)

URL: /Level3contents/upload/<KeywordId>/<Keyword>

Access:

- Super Administrator
- Administrator
- Manager
- Client (Admin) Can only edit owned keywords

Dependencies:

- FR3 Login to application
- FR63 Keyword 3rd Level Keywords List

3.2.2.68 FR70 - Keyword - HTTP Keywords List

Given that the user is logged in & has access privilege, then user can see list of Keywords of HTTP type. User can have access to add, edit and delete a keyword.

URL: /HttpKeywords

- Super Administrator
- Administrator
- Manager
- Client (Admin) Can only edit owned keywords

FR3 – Login to application

3.2.2.69 FR71 - Keyword - HTTP Keywords Form

Given that the user is logged in & has access privilege, then user can add and edit a keyword.

Fields:

- Short Code Integer, Dropdown MO Types
- Operators Integer, Checkbox View on Short Code selected
 - Service ID Text, Textbox Some Operators require this
- Select Client Integer, Dropdown Assign Keyword with a Client
- Service Type Integer, Dropdown
- Keyword Text, Textbox
- Description Text, Text area
- Campaign Integer, Checkbox
- URL Text, Textbox URL to send data to, View when Campaign is unchecked
- Timeout Text, Textbox Timeout URL request in seconds, View when Campaign is unchecked
- Error Message Text, Text area 160 char, View when Campaign is unchecked
- Campaign Offline Message Text, Text area 160 char, View when Campaign is checked
- Status Integer, Dropdown Status for Active/Inactive

URL:

- /HttpKeywords/add (Add Keyword)
- /HttpKeywords/edit/<Id> (Edit Keyword)

Access:

- Super Administrator
- Administrator
- Manager
- Client (Admin) Can only edit owned keywords

Dependencies:

• FR3 – Login to application

3.2.2.70 FR72 - Keyword - HTTP Keywords Delete

Given that the user is logged in & has access privilege, then user can delete a HTTP type keyword. On delete, if client id is found, keyword assignment with client is also removed.

URL: /HttpKeywords/delete/<Id>/<Keyword>/<ClientId>

Access:

- Super Administrator
- Administrator
- Manager
- Client (Admin) Can only edit owned keywords

Dependencies:

- FR3 Login to application
- FR70 Keyword HTTP Keywords List

3.2.2.71 FR73 - Keyword - Quiz Keywords List

Given that the user is logged in & has access privilege, then user can see list of Keywords of Quiz type. User can have access to add, edit and delete a keyword.

URL: /Quizes

Access:

- Super Administrator
- Administrator
- Manager
- Client (Admin) Can only edit owned keywords

Dependencies:

• FR3 – Login to application

3.2.2.72 FR74 - Keyword - Quiz Keywords Form

Given that the user is logged in & has access privilege, then user can add and edit a keyword.

Fields:

- Short Code Integer, Dropdown MO Types
- Operators Integer, Checkbox View on Short Code selected
 - Service ID Text, Textbox Some Operators require this
- Select Client Integer, Dropdown Assign Keyword with a Client
- Service Type Integer, Dropdown
- Keyword Text, Textbox

- Description Text, Text area
- Event Offline Message Text, Text area 160 char
- Status Integer, Dropdown Status for Active/Inactive

URL:

- /Quizes/add (Add Keyword)
- /Quizes/edit/<Id> (Edit Keyword)

Access:

- Super Administrator
- Administrator
- Manager
- Client (Admin) Can only edit owned keywords

Dependencies:

• FR3 – Login to application

3.2.2.73 FR75 - Keyword - Quiz Keywords Delete

Given that the user is logged in & has access privilege, then user can delete a HTTP type keyword. On delete, if client id is found, keyword assignment with client is also removed.

URL: /Quizes/delete/<Id>/<Keyword>/<ClientId>

Access:

- Super Administrator
- Administrator
- Manager
- Client (Admin) Can only edit owned keywords

Dependencies:

- FR3 Login to application
- FR73 Keyword Quiz Keywords List

3.2.2.74 FR76 - Keyword - Quiz Events List

Given that the user is logged in & has access privilege, then user can see list of Quiz Events. User can have access to add, edit and delete an event.

URL: /Quizcontents

Access:

• Super Administrator

- Administrator
- Manager
- Client (Admin) Can only edit owned keywords

- FR3 Login to application
- FR73 Keyword Quiz Keywords List

3.2.2.75 FR77 - Keyword - Quiz Events Form

Given that the user is logged in & has access privilege, then user can add and edit a quiz event.

Fields:

- Event Name Text, Textbox
- SMS Point Integer, Textbox
- Benchmark Integer, Textbox A target point for mobile users to reach.
- Question Text, Text area
- Correct Answer Text, Textbox
- Start Date Date Time, Date Time Picker
- End Date Date Time, Date Time Picker
- Success Message Text, Text area 160 char
- Failure Message Text, Text area 160 char
- Status Integer, Dropdown Status for Active/Inactive

URL:

- /Quizcontents/add (Add Event)
- /Quizcontents/edit/<Id> (Edit Event)

Access:

- Super Administrator
- Administrator
- Manager
- Client (Admin) Can only edit owned keywords

Dependencies:

- FR3 Login to application
- FR73 Keyword Quiz Keywords List

3.2.2.76 FR78 - Keyword - Quiz Events Delete

Given that the user is logged in & has access privilege, then user can delete a quiz event. On delete, if client id is found, keyword assignment with client is also removed.

URL: /Quizcontents/delete/<Id>/<KeywordId>/<Keyword>/<ClientId>

Access:

- Super Administrator
- Administrator
- Manager
- Client (Admin) Can only edit owned keywords

Dependencies:

- FR3 Login to application
- FR76 Keyword Quiz Events List

3.2.2.77 FR79 - Keyword - Vote Keywords List

Given that the user is logged in & has access privilege, then user can see list of Keywords of Vote type. User can have access to add, edit and delete a keyword.

URL: /Votes

Access:

- Super Administrator
- Administrator
- Manager
- Client (Admin) Can only edit owned keywords

Dependencies:

• FR3 – Login to application

3.2.2.78 FR80 - Keyword - Vote Keywords Form

Given that the user is logged in & has access privilege, then user can add and edit a keyword.

Fields:

- Short Code Integer, Dropdown MO Types
- Operators Integer, Checkbox View on Short Code selected
 - Service ID Text, Textbox Some Operators require this
- Select Client Integer, Dropdown Assign Keyword with a Client
- Service Type Integer, Dropdown
- Keyword Text, Textbox
- Description Text, Text area
- Reply Message Text, Text area 160 char
- Invalid Keyword Message Text, Text area 160 char

Status – Integer, Dropdown – Status for Active/Inactive

URL:

- /Votes/add (Add Keyword)
- /Votes/edit/<Id> (Edit Keyword)

Access:

- Super Administrator
- Administrator
- Manager
- Client (Admin) Can only edit owned keywords

Dependencies:

• FR3 – Login to application

3.2.2.79 FR81 - Keyword - Vote Keywords Delete

Given that the user is logged in & has access privilege, then user can delete a quiz type keyword.

URL: /Quizes/delete/<Id>/<Keyword>

Access:

- Super Administrator
- Administrator
- Manager

Dependencies:

- FR3 Login to application
- FR79 Keyword Vote Keywords List

3.2.2.80 FR82 - Keyword - Vote Contents List

Given that the user is logged in & has access privilege, then user can see list of Keywords of Vote type. User can have access to add, edit and delete a keyword.

URL: /Votecontents/index/<KeywordId>/<Keyword>

- Super Administrator
- Administrator
- Manager
- Client (Admin) Can only edit owned keywords

- FR3 Login to application
- FR79 Keyword Vote Keywords List

3.2.2.81 FR83 - Keyword - Vote Contents Form

Given that the user is logged in & has access privilege, then user can see list of Keywords of Vote type. User can have access to add, edit and delete a keyword.

Fields:

- Event Name Text, Textbox
- SMS Point Integer, Textbox
- Benchmark Integer, Textbox A target point for mobile users to reach.
- Question Text, Text area
- Correct Answer Text, Textbox
- Start Date Date Time, Date Time Picker
- End Date Date Time, Date Time Picker
- Success Message Text, Text area 160 char
- Failure Message Text, Text area 160 char
- Status Integer, Dropdown Status for Active/Inactive

URL:

- /Votecontents/add/<KeywordId>/<Keyword> (Add Event)
- /Votecontents/edit/<Id>/<KeywordId>/<Keyword> (Edit Event)

Access:

- Super Administrator
- Administrator
- Manager
- Client (Admin) Can only edit owned keywords

Dependencies:

- FR3 Login to application
- FR79 Keyword Vote Keywords List

3.2.2.82 FR84 - Keyword - Vote Contents Delete

Given that the user is logged in & has access privilege, then user can delete vote content. On delete, if client id is found, keyword assignment with client is also removed.

URL: /Quizcontents/delete/<Id>/<KeywordId>/<Keyword>/<ClientId>

Access:

- Super Administrator
- Administrator
- Manager
- Client (Admin) Can only edit owned keywords

Dependencies:

- FR3 Login to application
- FR82 Keyword Vote Contents List

3.2.2.83 FR85 - Keyword - Special Quiz Keywords List

Given that the user is logged in & has access privilege, then user can see list of Keywords of Special Quiz type. User can have access to add, edit and delete a keyword.

URL: /SpecialQuizes

Access:

- Super Administrator
- Administrator
- Manager
- Client (Admin) Can only edit owned keywords

Dependencies:

• FR3 – Login to application

3.2.2.84 FR86 - Keyword - Special Quiz Keywords Form

Given that the user is logged in & has access privilege, then user can add and edit a keyword.

Fields:

- Short Code Integer, Dropdown MO Types
- Operators Integer, Checkbox View on Short Code selected
 - Service ID Text, Textbox Some Operators require this
- Select Client Integer, Dropdown Assign Keyword with a Client
- Service Type Integer, Dropdown
- Keyword Text, Textbox
- Description Text, Text area
- Service Offline Message Text, Text area 160 char
- Status Integer, Dropdown Status for Active/Inactive

URL:

- /SpecialQuizes/add (Add Keyword)
- /SpecialQuizes/edit/<Id> (Edit Keyword)

Access:

- Super Administrator
- Administrator
- Manager
- Client (Admin) Can only edit owned keywords

Dependencies:

• FR3 – Login to application

3.2.2.85 FR87 - Keyword - Special Quiz Keywords Delete

Given that the user is logged in & has access privilege, then user can delete a quiz type keyword.

URL: /SpecialQuizes/delete/<Id>/<Code>

Access:

- Super Administrator
- Administrator
- Manager

Dependencies:

- FR3 Login to application
- FR85 Keyword Special Quiz Keywords List

3.2.2.86 FR88 - Keyword - Special Quiz Events List

Given that the user is logged in & has access privilege, then user can see list of Special Quiz Events of a Special Quiz Keyword. User can have access to add, edit and delete an event.

URL: /Spquizevents/index/<KeywordId>

Access:

- Super Administrator
- Administrator
- Manager
- Client (Admin) Can only edit owned keywords

Dependencies:

- FR3 Login to application
- FR85 Keyword Special Quiz Keywords List

3.2.2.87 FR89 - Keyword - Special Quiz Events Form

Given that the user is logged in & has access privilege, then user can add and edit an event.

Fields:

- Name Text, Textbox
- Start Date Date Time, Date Time Picker Must be less than Expire Date
- Expire Date Date Time, Date Time Picker Must be greater than Start Date
- Daily Limit Integer, Textbox
- Send Score Integer, Checkbox Send score on correct answer
- Wrong Answer Message Text, Text area 160 char
- Daily Quota Overflow Message Text, Text area 160 char
- Completion Message Text, Text area 160 char
- Status Integer, Dropdown Status for Active/Inactive

URL:

- /Spquizevents/add/<KeywordId> (Add Event)
- /Spquizevents/edit/<KeywordId>/<Id> (Edit Event)

Access:

- Super Administrator
- Administrator
- Manager
- Client (Admin) Can only edit owned keywords

Dependencies:

- FR3 Login to application
- FR85 Keyword Special Quiz Keywords List

3.2.2.88 FR90 - Keyword - Special Quiz Events Delete

Given that the user is logged in & has access privilege, then user can delete events.

URL: /Spquizevents/delete/<KeywordId>/<Id>/<EventName>

Access:

- Super Administrator
- Administrator
- Manager
- Client (Admin) Can only edit owned keywords

Dependencies:

- FR3 Login to application
- FR88 Keyword Special Quiz Events List

3.2.2.89 FR91 - Keyword - Special Quiz Question Bank Management

Given that the user is logged in & has access privilege, then user can see list of questions of a Special Quiz Event and form to add and edit a question. From the list user can have access to edit and delete question.

Fields:

- Question Text, Text area 160 char
- Correct Answer Text, Textbox

URL:

- /Spquizbanks/add/<Id>/<EventId>/<EventName> List and Form
- /Spquizbanks/delete/<Id>/<EventId>/<EventName>/<Question> Delete

Access:

- Super Administrator
- Administrator
- Manager
- Client (Admin) Can only edit owned keywords

Dependencies:

- FR3 Login to application
- FR88 Keyword Special Quiz Events List

3.2.2.90 FR92 - Keyword - Subscription Quiz Keywords List

Given that the user is logged in & has access privilege, then user can see list of Keywords of Subscription Quiz type. User can have access to add, edit and delete a keyword.

URL: /SubscriptionQuizes

Access:

- Super Administrator
- Administrator
- Manager
- Client (Admin) Can only edit owned keywords

Dependencies:

• FR3 – Login to application

3.2.2.91 FR93 - Keyword - Subscription Quiz Keywords Form

Given that the user is logged in & has access privilege, then user can add and edit a keyword.

Fields:

- Short Code Integer, Dropdown MT Types
- Operators Integer, Checkbox View on Short Code selected
 - Service ID Text, Textbox Some Operators require this
- Select Client Integer, Dropdown Assign Keyword with a Client
- Service Type Integer, Dropdown
- Keyword Text, Textbox
- Description Text, Text area
- Send Question on Subscription Integer, Checkbox
- Subscription Required Message Text, Text area
- Service Offline Message Text, Text area 160 char
- Subscriber Message Text, Text area 160 char
- Already Subscriber Message Text, Text area 160 char
- Successfully Unsubscribe Message Text, Text area 160 char
- Not Subscriber Message Text, Text area 160 char
- Status Integer, Dropdown Status for Active/Inactive

URL:

- /SubscriptionQuizes/add (Add Keyword)
- /SubscriptionQuizes/edit/<Id> (Edit Keyword)

Access:

- Super Administrator
- Administrator
- Manager
- Client (Admin) Can only edit owned keywords

Dependencies:

• FR3 – Login to application

3.2.2.92 FR94 - Keyword - Subscription Quiz Keywords Delete

Given that the user is logged in & has access privilege, then user can delete a subscription quiz type keyword.

URL: /SubscriptionQuizes/delete/<Id>/<Keyword>

- Super Administrator
- Administrator
- Manager

- FR3 Login to application
- FR92 Keyword Subscription Quiz Keywords List

3.2.2.93 FR95 - Keyword - Subscription Quiz Events List

Given that the user is logged in & has access privilege, then user can see list of Subscription Quiz Events of a Subscription Quiz Keyword. User can have access to add, edit and delete an event. If any event is expired, then those events cannot be edited nor deleted.

URL: /Subscriptionquizevents/index/<KeywordId>

Access:

- Super Administrator
- Administrator
- Manager
- Client (Admin) Can only edit owned keywords

Dependencies:

- FR3 Login to application
- FR92 Keyword Subscription Quiz Keywords List

3.2.2.94 FR96 - Keyword - Subscription Quiz Events Form

Given that the user is logged in & has access privilege, then user can add and edit an event. For edit however if an event is expired then it cannot be edited.

Fields:

- Name Text, Textbox
- Start Date Date Time, Date Time Picker Must be less than Expire Date
- Expire Date Date Time, Date Time Picker Must be greater than Start Date
- Error Message Text, Text area 160 char
- Daily Limit Integer, Textbox
- Send Score with Reply SMS Integer, Checkbox
- Send Next Question on Correct Answer Integer, Checkbox
- Game Over After Round Integer, Textbox
- Set Random Question After Round Integer, Textbox

Status – Integer, Dropdown – Status for Active/Inactive

URL:

- /Subscriptionquizevents/add/<KeywordId> (Add Event)
- /Subscriptionquizevents/edit/<KeywordId>/<Id> (Edit Event)

Access:

- Super Administrator
- Administrator
- Manager
- Client (Admin) Can only edit owned keywords

Dependencies:

- FR3 Login to application
- FR92 Keyword Subscription Quiz Keywords List

3.2.2.95 FR97 - Keyword - Subscription Quiz Events Delete

Given that the user is logged in, has access privilege & the event is not expired then user can delete events.

URL: /Subscriptionquizevents/delete/<KeywordId>/<Id>/<EventName>

Access:

- Super Administrator
- Administrator
- Manager
- Client (Admin) Can only edit owned keywords

Dependencies:

- FR3 Login to application
- FR95 Keyword Subscription Quiz Events List

3.2.2.96 FR98 - Keyword - Subscription Quiz Question Bank Management

Given that the user is logged in & has access privilege, then user can see list of questions of a Subscription Quiz Event. If event is not expired then user can use form to add and edit a question. From the list user can have access to edit and delete question.

Fields:

- Question Text, Text area 160 char
- Correct Answer Text, Textbox

URL:

- /Subscriptionquizbanks/add/<Id>/<EventId>/<EventName> List and Form
- /Subscriptionquizbanks/delete/<Id>/<EventId>/<EventName>/<Question> Delete

Access:

- Super Administrator
- Administrator
- Manager
- Client (Admin) Can only edit owned keywords

Dependencies:

- FR3 Login to application
- FR95 Keyword Subscription Quiz Events List

3.2.2.97 FR99 - Keyword - Specified Keywords List

Given that the user is logged in & has access privilege, then user can see list of Keywords of Specified type. User can only have access to edit a keyword.

URL: /SpecifiedKeywords

Access:

- Super Administrator
- Administrator
- Manager

Dependencies:

• FR3 – Login to application

3.2.2.98 FR100 - Keyword - Specified Keywords Edit Form

Given that the user is logged in & has access privilege, then user can edit a keyword.

Fields:

- Keyword Text, Textbox Must be unique across the system
- Reply Message Text, Text area 160 char
- Subscription Message Text, Text area 160 char

URL: /SpecifiedKeywords/edit/<KeywordId>

Access:

Super Administrator

- Administrator
- Manager

• FR3 – Login to application

3.2.2.99 FR101 - Keyword - Rolling Content Keywords List

Given that the user is logged in & has access privilege, then user can see list of Keywords of Rolling Content type. User can have access to add, edit and delete a keyword.

URL: /RollingContents

Access:

- Super Administrator
- Administrator
- Manager

Dependencies:

• FR3 – Login to application

3.2.2.100 FR102 - Keyword - Rolling Content Keywords Form

Given that the user is logged in & has access privilege, then user can add and edit a keyword.

Fields:

- Short Code Integer, Dropdown MT Types
- Operators Integer, Checkbox View on Short Code selected
 - Service ID Text, Textbox Some Operators require this
- Service Type Integer, Dropdown
- Keyword Text, Textbox
- Description Text, Text area
- Subscriber Message Text, Text area 160 char
- Already Subscriber Message Text, Text area 160 char
- Successfully Unsubscribe Message Text, Text area 160 char
- Not Subscriber Message Text, Text area 160 char
- Consent Message Text, Text area 160 char
- Send Content on Subscription Integer, Checkbox
- Status Integer, Dropdown Status for Active/Inactive

URL:

/RollingContents/add – (Add Keyword)

/RollingContents/edit/<Id> – (Edit Keyword)

Access:

- Super Administrator
- Administrator
- Manager

Dependencies:

• FR3 – Login to application

3.2.2.101 FR103 - Keyword - Rolling Content Keywords Delete

Given that the user is logged in & has access privilege, then user can delete a Rolling Content type keyword.

URL: /RollingContents/delete/<Id>/<Keyword>

Access:

- Super Administrator
- Administrator
- Manager

Dependencies:

- FR3 Login to application
- FR101 Keyword Rolling Content Keywords List

3.2.2.102 FR104 - Keyword - Rolling Content Schedules List

Given that the user is logged in & has access privilege, then user can see list of Rolling Content Schedules of a Rolling Content Keyword. User can have access to add, edit and delete a schedule.

URL: /Rollingcontentschedules/index/<KeywordId>/<Keyword>

Access:

- Super Administrator
- Administrator
- Manager

Dependencies:

- FR3 Login to application
- FR101 Keyword Rolling Content Keywords List

3.2.2.103 FR105 - Keyword - Rolling Content Schedules Form

Given that the user is logged in & has access privilege, then user can add and edit a schedule.

Fields:

- Start Date Date, Date Picker
- Expire Date Date, Date Picker
- Time Time, Time Picker
- Amount Integer, Dropdown Amount to charge users
- Select Operators Integer, Multi-Checkbox
- Start From Integer, Textbox From which serial to start content

URL:

- /Rollingcontentschedules/add/<KeywordId>/<Keyword>
- /Rollingcontentschedules/edit/<Id>/<KeywordId>/<Keyword>

Access:

- Super Administrator
- Administrator
- Manager

Dependencies:

- FR3 Login to application
- FR101 Keyword Rolling Content Keywords List

3.2.2.104 FR106 - Keyword - Rolling Content Schedules Delete

Given that the user is logged in & has access privilege, then user can delete a schedule.

URL: /Rollingcontentschedules/delete/<Id>/<KeywordId>/<Keyword>

Access:

- Super Administrator
- Administrator
- Manager

Dependencies:

- FR3 Login to application
- FR104 Keyword Rolling Content Schedules List

3.2.2.105 FR107 - Keyword - Rolling Content Banks List

Given that the user is logged in & has access privilege, then user can see list of Rolling Content Banks of a Rolling Content Schedule. User can have access to add, edit and delete a content bank. If schedule date is expired then content cannot be edited nor deleted.

URL: /Rollingcontentbanks/index/<KeywordId>/<ScheduleId>

Access:

- Super Administrator
- Administrator
- Manager

Dependencies:

- FR3 Login to application
- FR104 Keyword Rolling Content Schedules List

3.2.2.106 FR108 - Keyword - Rolling Content Banks Form

Given that the user is logged in & has access privilege, then user can add & edit a content bank. If schedule date is expired then it cannot be edited.

Fields:

• Content – Text, Text area – 160 char

URL:

- /Rollingcontentbanks/add/<KeywordId>/<ScheduleId>
- /Rollingcontentbanks/edit/<Id>/<KeywordId>/<ScheduleId>

Access:

- Super Administrator
- Administrator
- Manager

Dependencies:

- FR3 Login to application
- FR104 Keyword Rolling Content Schedules List

3.2.2.107 FR109 - Keyword - Rolling Content Banks Delete

Given that the user is logged in, has access privilege and schedule date is not expired, then user can delete a content bank.

URL: /Rollingcontentbanks/delete/<Id>/<KeywordId>/<ScheduleId>

Access:

- Super Administrator
- Administrator
- Manager

Dependencies:

- FR3 Login to application
- FR107 Keyword Rolling Content Banks List

3.2.2.108 FR110 - Keyword - WAP Keywords List

Given that the user is logged in & has access privilege, then user can see list of Keywords of WAP type. User can have access to add, edit and delete a keyword.

URL: /WapKeywords

Access:

- Super Administrator
- Administrator
- Manager

Dependencies:

• FR3 – Login to application

3.2.2.109 FR111 - Keyword - WAP Keywords Form

Given that the user is logged in & has access privilege, then user can add and edit a keyword.

Fields:

- Short Code Integer, Dropdown MT Types
- Operators Integer, Checkbox View on Short Code selected
 - Service ID Text, Textbox Some Operators require this
- Service Type Integer, Dropdown
- Keyword Text, Textbox
- Description Text, Text area
- Reply Message Text, Text area 160 char
- Invalid Keyword Message Text, Text area 160 char
- Status Integer, Dropdown Status for Active/Inactive

URL:

- /WapKeywords/add (Add Keyword)
- /WapKeywords/edit/<Id> (Edit Keyword)

Access:

- Super Administrator
- Administrator
- Manager

Dependencies:

• FR3 – Login to application

3.2.2.110 FR112 - Keyword - WAP Keywords Delete

Given that the user is logged in & has access privilege, then user can delete a WAP type keyword.

URL: /WapKeywords/delete/<Id>/<Keyword>

Access:

- Super Administrator
- Administrator
- Manager

Dependencies:

- FR3 Login to application
- FR110 Keyword WAP Keywords List

3.2.2.111 FR113 - Keyword - Rolling Push/Pull Keywords List

Given that the user is logged in & has access privilege, then user can see list of Keywords of Rolling Push/Pull type. User can have access to add, edit and delete a keyword.

URL: /Rollingpps

Access:

- Super Administrator
- Administrator
- Manager
- Client (Admin) Can only edit owned keywords

Dependencies:

• FR3 – Login to application

3.2.2.112 FR114 - Keyword - Rolling Push/Pull Keywords Form

Given that the user is logged in & has access privilege, then user can add and edit a keyword.

Fields:

- Short Code Integer, Dropdown MO Types
- Operators Integer, Checkbox View on Short Code selected
 - Service ID Text, Textbox Some Operators require this
- Select Client Integer, Dropdown Assign Keyword with a Client
- Service Type Integer, Dropdown
- Keyword Text, Textbox
- Description Text, Text area
- Prefix Text, Textbox
- Suffix Text, Textbox
- Error Message Text, Text area 160 char
- Daily Quota Overflow Message Text, Text area 160 char
- Status Integer, Dropdown Status for Active/Inactive

URL:

- /Rollingpps/add (Add Keyword)
- /Rollingpps/edit/<Id> (Edit Keyword)

Access:

- Super Administrator
- Administrator
- Manager
- Client (Admin) Can only edit owned keywords

Dependencies:

• FR3 – Login to application

3.2.2.113 FR115 - Keyword - Rolling Push/Pull Keywords Delete

Given that the user is logged in & has access privilege, then user can delete a Rolling Push/Pull type keyword.

URL: /Rollingpps/delete/<Id>/<Keyword>/<ClientId>

Access:

- Super Administrator
- Administrator
- Manager
- Client (Admin) Can only edit owned keywords

Dependencies:

• FR3 – Login to application

• FR113 - Keyword - Rolling Push/Pull Keywords List

3.2.2.114 FR116 - Keyword - Rolling Push/Pull Contents List

Given that the user is logged in & has access privilege, then user can see list of Rolling Push/Pull Contents of a Rolling Push/Pull keyword. User can have access to add, edit and delete content.

URL: /RollingppContents

Access:

- Super Administrator
- Administrator
- Manager
- Client (Admin) Can only edit owned keywords

Dependencies:

- FR3 Login to application
- FR113 Keyword Rolling Push/Pull Keywords List

3.2.2.115 FR117 - Keyword - Rolling Push/Pull Contents Form

Given that the user is logged in & has access privilege, then user can add & edit content.

Fields:

• Content – Text, Text area – 160 char

URL:

- /RollingppContents/add/<KeywordId>/<KeywordName> (Add Content)
- /RollingppContents/edit/<Id>/<KeywordId>/<KeywordName> (Edit Content)

Access:

- Super Administrator
- Administrator
- Manager
- Client (Admin) Can only edit owned keywords

Dependencies:

- FR3 Login to application
- FR113 Keyword Rolling Push/Pull Keywords List

3.2.2.116 FR118 - Keyword - Rolling Push/Pull Contents Delete

Given that the user is logged in & has access privilege, then user can delete rolling push/pull content.

URL: /RollingppContents/delete/<Id>

Access:

- Super Administrator
- Administrator
- Manager
- Client (Admin) Can only edit owned keywords

Dependencies:

- FR3 Login to application
- FR116 Keyword Rolling Push/Pull Contents List

3.2.2.117 FR119 - Alert Contents List

Given that the user is logged in & has access privilege, then user can see list of alert contents. User can have access to add, edit and delete content.

URL: /SentContents

Access:

- Super Administrator
- Administrator
- Manager

Dependencies:

• FR3 – Login to application

3.2.2.118 FR120 - Alert Contents Form

Given that the user is logged in & has access privilege, then user can add & edit content.

Fields:

- Short Code Integer, Dropdown MT Types
- Keyword Text, Textbox
- Content Text, Text area 160 char
- Amount Integer, Dropdown
- Time to send Date Time, Dropdown 160 char

URL:

- /SentContents/add (Add Content)
- /SentContents/edit/<Id> (Edit Content)

- Super Administrator
- Administrator
- Manager

• FR3 – Login to application

3.2.2.119 FR121 - Alert Contents Delete

Given that the user is logged in & has access privilege, then user can delete content.

URL: /SentContents/delete/<Id>

Access:

- Super Administrator
- Administrator
- Manager

Dependencies:

• FR3 – Login to application

3.2.2.120 FR122 - Bulk Alerts Add Content Form

Given that the user is logged in & has access privilege, then user can add content.

Fields:

- Short Code Integer, Dropdown MT Types
- Operator Integer, Dropdown Telecom Operators
- Amount Integer, Dropdown
- Content Text, Text area 160 char
- Select File File Uploader, File type CSV(2MB) or XLS(500KB)
- Time to send Date Time, Dropdown 160 char

URL:

- /SentContents/add (Add Content)
- /SentContents/edit/<Id> (Edit Content)

Access:

- Super Administrator
- Administrator
- Manager

Dependencies:

• FR3 – Login to application

3.2.2.121 FR123 - Campaigns List

Given that the user is logged in & has access privilege, then user can see the list of campaigns. User can have access to add, edit and delete a campaign. If any campaigns are expired, then those cannot be edited nor deleted.

URL: /Campaigns

Access:

- Super Administrator
- Administrator
- Manager

Dependencies:

• FR3 – Login to application

3.2.2.122 FR124 - Campaigns Form

Given that the user is logged in & has access privilege, then user can add & edit a campaign. If campaign is expired then campaign cannot be edited.

Fields:

- Keyword Type Integer, Dropdown Only shows Generic, Yellow Pages, Third Level & HTTP
- Keyword Integer, Dropdown
- Classification Integer, Dropdown Views if Keyword type is either Yellow Pages or Third Level
- Name Text, Textbox Name for the campaign
- Start Date Date Time, Date Time Picker
- Expire Date Date Time, Date Time Picker
- Info Text, Text area
- Wrong Code Message Text, Text area 160 char
- Unique SMS Point Integer, Textbox
- Benchmark Point Integer, Textbox
- Score Message Text, Text area 160 char
- Status Integer, Dropdown Status for Active/Inactive

URL:

- /Campaigns/add (Add Campaign)
- /Campaigns/edit/<Id> (Edit Campaign)

- Super Administrator
- Administrator
- Manager

• FR3 – Login to application

3.2.2.123 FR125 - Campaigns Delete

Given that the user is logged in, has access privilege and is not expired, then user can delete a campaign.

URL: /Campaigns/delete/<Id>

Access:

- Super Administrator
- Administrator
- Manager

Dependencies:

- FR3 Login to application
- FR123 Campaigns List

3.2.2.124 FR126 - Campaign Recharge History

Given that the user is logged in, has access privilege & the campaigned keyword is rechargeable, then user can see a list of recharges of a campaign occurred during the campaign was active.

URL: /Campaigns/rechargehistory/<CampaignId>

Access:

- Super Administrator
- Administrator
- Manager

Dependencies:

- FR3 Login to application
- FR123 Campaigns List

3.2.2.125 FR127 - Campaign Recharge Add Form

Given that the user is logged in, has access privilege & the campaigned keyword is rechargeable, and then user can add recharges for a campaign as long the campaign was active. This is not modifiable once added.

Fields:

- Credit Type Integer, Dropdown Defines what type of amount is being added
- Amount Integer, Textbox
- Remarks Text, Text area

URL: /Campaigns/recharge/<CampaignId>

Access:

- Super Administrator
- Administrator
- Manager

Dependencies:

- FR3 Login to application
- FR123 Campaigns List

3.2.2.126 FR128 - Campaign Category List

Given that the user is logged in & has access privilege, then user can see list of categories of a campaign. Use can have access to add, edit & delete a category.

URL: /CampaignCategories

Access:

- Super Administrator
- Administrator
- Manager

Dependencies:

- FR3 Login to application
- FR123 Campaigns List

3.2.2.127 FR129 - Campaign Category Form

Given that the user is logged in & has access privilege, then user can add & edit a category.

Fields:

- Keyword Type Integer, Dropdown Only Yellow Pages and Third Level
- Keyword Integer, Dropdown Based on Keyword type and only campaigned keywords shown
- Campaign Integer, Dropdown Choose from Category Wise Campaign
- Name Text, Textbox
- Info Text, Text area
- Reply Message Text, Text area 160 char
- Status Integer, Dropdown Status for Active/Inactive

URL:

- /CampaignCategories/add (Add Category)
- /CampaignCategories/edit/<Id> (Edit Category)

Access:

- Super Administrator
- Administrator
- Manager

Dependencies:

- FR3 Login to application
- FR123 Campaigns List

3.2.2.128 FR130 - Campaign Category Delete

Given that the user is logged in & has access privilege, then user can delete a category.

URL: /CampaignCategories/delete/<Id>

Access:

- Super Administrator
- Administrator
- Manager

Dependencies:

- FR3 Login to application
- FR128 Campaign Category List

3.2.2.129 FR131 - Campaign Reply List

Given that the user is logged in & has access privilege, then user can see list of reply set of a campaign with category. Use can have access to add, edit & delete a reply set.

URL: /CampaignReplys

Access:

- Super Administrator
- Administrator
- Manager

Dependencies:

• FR3 – Login to application

• FR123 - Campaigns List

3.2.2.130 FR132 - Campaign Reply Form

Given that the user is logged in & has access privilege, then user can add & edit a reply set.

Fields:

- Keyword Type Integer, Dropdown Only Yellow Pages and Third Level
- Keyword Integer, Dropdown Based on Keyword type and only campaigned keywords shown
- Campaign Integer, Dropdown Choose from Category Wise Campaign
- Category Integer, Dropdown (Shown if Campaign selected is Category Wise Classification)
- Select File File Uploader (Shown if Campaign selected is Category Wise & Individual Code Wise Classification)
- Overwrite Existing Data Integer, Checkbox Will remove any existing codes for the campaign, (Shown if Campaign selected is Category Wise & Individual Code Wise Classification)
- Start Range Integer, Textbox (Shown if Campaign selected is Range Wise Classification)
- End Range Integer, Textbox (Shown if Campaign selected is Range Wise Classification)
- Prefix Text, Textbox (Shown if Campaign selected is Prefix Wise Classification)
- Reply Message Text, Text area 160 char (Shown for Classification Range & Prefix)
- Status Integer, Dropdown Status for Active/Inactive

URL:

- /CampaignCategories/add (Add Category)
- /CampaignCategories/edit/<Id> (Edit Category)

Access:

- Super Administrator
- Administrator
- Manager

Dependencies:

- FR3 Login to application
- FR123 Campaigns List

3.2.2.131 FR133 - Campaign Reply Delete

Given that the user is logged in & has access privilege, then user can delete a reply set.

URL: /CampaignReplys/delete/<Id>

Access:

• Super Administrator

- Administrator
- Manager

- FR3 Login to application
- FR131 Campaign Reply List

3.2.2.132 FR134 - Campaign Reply Category Wise Yellow Pages Content List

Given that the user is logged in & has access privilege, then user can see list of Category Wise Yellow Pages Contents/Codes for the campaign.

URL: /CampaignReplys/categorywiseYpContentView/<Id>

Access:

- Super Administrator
- Administrator
- Manager

Dependencies:

• FR3 – Login to application

3.2.2.133 FR135 - Campaign Reply Individual Code Wise Yellow Pages Content List

Given that the user is logged in & has access privilege, then user can see list of Individual Code Wise Yellow Pages Contents/Codes for the campaign.

URL: /CampaignReplys/ypContentView/<Id>

Access:

- Super Administrator
- Administrator
- Manager

Dependencies:

• FR3 – Login to application

3.2.2.134 FR136 - Campaign Reply Category Wise 3rd Level Content List

Given that the user is logged in & has access privilege, then user can see list of Category Wise Yellow Pages Contents/Codes for the campaign.

URL: /CampaignReplys/cwThirdlevelContentView/<Id>

- Super Administrator
- Administrator
- Manager

• FR3 – Login to application

3.2.2.135 FR137 - Campaign Reply Individual Code Wise 3rd Level Content List

Given that the user is logged in & has access privilege, then user can see list of Individual Code Wise Third Level Contents/Codes for the campaign.

URL: /CampaignReplys/thirdlevelContentView/<Id>

Access:

- Super Administrator
- Administrator
- Manager

Dependencies:

• FR3 – Login to application

3.2.2.136 FR138 - Report - Inbox Hit - Keyword Wise

Given that the user is logged in & has access privilege, then user can see report on how many hits occurred on keywords. Once search options are submitted, user can see report based on that.

Search Fields:

- From Date Date Time
- To Date Date Time
- Keyword Type Integer, Dropdown
- Service Provider Integer, Dropdown Telecom Operators
- Short Code Integer, Dropdown
- Mobile No. Integer, Textbox

URL: /KeywordWises

- Super Administrator
- Administrator
- Manager
- Client (Admin)

• FR3 – Login to application

3.2.2.137 FR139 - Report - Inbox Hit - Date Wise

Given that the user is logged in & has access privilege, then user can see report on how many hits occurred on given dates. Once search options are submitted, user can see report based on that.

Search Fields:

- From Date Date Time
- To Date Date Time
- Keyword Type Integer, Dropdown
- Keyword Integer, Dropdown
- Service Provider Integer, Dropdown Telecom Operators
- Short Code Integer, Dropdown
- Mobile No. Integer, Textbox

URL: /DayWiseDailyHitCounterRpts

Access:

- Super Administrator
- Administrator
- Manager
- Client (Admin)

Dependencies:

• FR3 – Login to application

3.2.2.138 FR140 - Report - Inbox Hit - MSISDN

Given that the user is logged in & has access privilege, then user can see report on how many hits made by a mobile number. Once search options are submitted, user can see report based on that.

Search Fields:

- From Date Date Time
- To Date Date Time
- Keyword Type Integer, Dropdown
- Keyword Integer, Dropdown
- Service Provider Integer, Dropdown Telecom Operators
- Short Code Integer, Dropdown
- Mobile No. Integer, Textbox

URL: /MobileNumberWiseHitCounterRpts

Access:

- Super Administrator
- Administrator
- Manager
- Client (Admin)

Dependencies:

• FR3 – Login to application

3.2.2.139 FR141 - Report - Inbox Hit - Incoming Message

Given that the user is logged in & has access privilege, then user can see report on how many hits made by mobile number. Once search options are submitted, user can see report based on that.

Search Fields:

- From Date Date Time
- To Date Date Time
- Keyword Type Integer, Dropdown
- Keyword Integer, Dropdown
- Service Provider Integer, Dropdown Telecom Operators
- Short Code Integer, Dropdown
- Mobile No. Integer, Textbox

URL: /IncomingMessageRpts

Access:

- Super Administrator
- Administrator
- Manager
- Client (Admin)
- Client (Operator)

Dependencies:

• FR3 – Login to application

3.2.2.140 FR142 - Report - Special Quiz Report - Top Scorer

Given that the user is logged in & has access privilege, then user can see report on highest scorer on special quiz by mobile number. Once search options are submitted, user can see report based on that.

Search Fields:

- From Date Date Time
- To Date Date Time
- Event Integer, Dropdown
- Keyword Integer, Dropdown

URL: /Spquizlogs/topScore

Access:

- Super Administrator
- Administrator
- Manager
- Client (Admin)

Dependencies:

• FR3 – Login to application

3.2.2.141 FR143 - Report - Special Quiz Report - MSISDN Wise

Given that the user is logged in & has access privilege, then user can see report on given answers on special quiz by mobile number. Once search options are submitted, user can see report based on that.

Search Fields:

- From Date Date Time
- To Date Date Time
- Event Integer, Dropdown
- Keyword Integer, Dropdown
- Mobile No. Integer, Textbox

URL: /Spquizlogs/individualMsisdn

Access:

- Super Administrator
- Administrator
- Manager
- Client (Admin)

Dependencies:

• FR3 – Login to application

3.2.2.142 FR144 - Report - Special Quiz Report - Summary Report

Given that the user is logged in & has access privilege, then user can see report on correct, incorrect and total scores on special quiz by mobile number. Once search options are submitted, user can see report based on that.

Search Fields:

- From Date Date Time
- To Date Date Time
- Event Integer, Dropdown
- Keyword Integer, Dropdown

URL: /Spquizlogs/summary

Access:

- Super Administrator
- Administrator
- Manager
- Client (Admin)

Dependencies:

• FR3 – Login to application

3.2.2.143 FR145 - Report - Rolling Campaign Quiz - Top Scorer

Given that the user is logged in & has access privilege, then user can see report on highest scorer on rolling campaign quiz by mobile number. Once search options are submitted, user can see report based on that.

Search Fields:

- Short Code Integer, Dropdown
- Keyword Integer, Dropdown
- Campaign Integer, Dropdown
- Operator Integer, Dropdown
- MSISDN Integer, Textbox

URL: /RcqQuizReports/topScore

- Super Administrator
- Administrator
- Manager
- Client (Admin)

• FR3 – Login to application

3.2.2.144 FR146 - Report - Rolling Campaign Quiz - Subscription List

Given that the user is logged in & has access privilege, then user can see report on user subscription times on rolling campaign quiz by mobile number. Once search options are submitted, user can see report based on that.

Search Fields:

- Short Code Integer, Dropdown
- Keyword Integer, Dropdown
- Campaign Integer, Dropdown
- Operator Integer, Dropdown
- MSISDN Integer, Textbox
- Status Integer, Dropdown Active status of subscriber

URL: /RcqQuizReports/subscriptionList

Access:

- Super Administrator
- Administrator
- Manager
- Client (Admin)

Dependencies:

• FR3 – Login to application

3.2.2.145 FR147 - Report - Rolling Campaign Quiz - Quiz History

Given that the user is logged in & has access privilege, then user can see report on quiz histories on rolling campaign quiz by a mobile number. Once search options are submitted, user can see report based on that.

Search Fields:

- Short Code Integer, Dropdown
- Keyword Integer, Dropdown
- Campaign Integer, Dropdown
- MSISDN Integer, Textbox
- Subscription ID Integer, Textbox

URL: /RcqQuizReports/gameHistory

Access:

- Super Administrator
- Administrator
- Manager
- Client (Admin)

Dependencies:

• FR3 – Login to application

3.3 Non-Functional Requirements

This section includes the requirements that are not specified by the functional requirements.

3.3.1 Performance Requirements

- Must ensure that web browsing response time should be within 2 seconds.
- Must ensure that message processing response time should be within 250ms.
- Must ensure that job workers are using memory efficiently.

3.3.2 Security Requirements

- Must ensure that unauthorized access to the application is not possible.
- Must ensure that SQL injection to disrupt the application is prevented.

3.3.3 Availability Requirements

- If the main application server is down, then the support team will be notified of this situation.
- Should keep application working even under heavy load.

3.3.4 Capacity Requirements

- Application Disk Space should be within 50MB, excluding uploaded files, images & generated logs.
- Memory usage of Application should be within 10MB for processing, 100MB for generating reports in Excel, CSV.

3.3.5 Maintainability Requirements

- Application should be easily extensible so that new features or modifications can be done in the code easily.
- Application should be testable in a test environment to test with various functionalities.