Communicate Home

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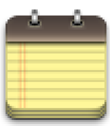	**Requirements spec** Functional requirements, use cases, gui mockups etc. • Functional Requirements • REST API Specifications
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Communicate Requirements

Functional Requirements

REST API Specifications

Communicate Functional Requirements

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Mind Map of All Communicate Functional Requirements

General - Login & Logout (FR100)

Req No	Req Name	Requirement Description (includes Business Rules)	Process Diagram	GUI Mockup	Use Case	Test Case		Feature Complete?
FR101	Login	Allow user to log in to the system, providing a username and password.	N.A.	N.A.	UC101	TC101		(ZT)
FR102	Forgotten Password	Send the user a new password. Note that password is encrypted so can't send password. This may be via email or via SMS. Generate a new password and send this to a client. Initially do email only.	PD102	Email Template GM102	UC102	TC102		(ZT)
FR103	Logout	Allow user to log out of the system.	N.A.	N.A.	UC103	TC103		(ZT)

General - My Profile (FR110)

Req No	Req Name	Requirement Description (includes Business Rules)	Process Diagram	GUI Mockup	Use Case	Test Case		Feature Complete?

FR111	Update / View My Profile	Allow the logged in user the ability to update their username, first name, last name, mobile number, email and password.	N.A.	GM111	UC111	TC111		(NJ)

General - Balance Management (FR120)

Req No	Req Name	Requirement Description (includes Business Rules)	Process Diagram	GUI Mockup	Use Case	Test Case		Feature Complete?
FR121	Balance Management	The system must manage balances. This includes reserving credits when campaigns are created, when recipients are added to campaigns, unreserving credits when messages fail to send, etc.	N.A.	N.A.				(NJ to sign off)

Admin - Organisation (FR200)

Req No	Req Name	Requirement Description (includes Business Rules)	Process Diagram	GUI Mockup	Use Case	Test Case		Feature Complete?

FR201	Add New Organisation	Allow admin user to add new organisation to the system. This includes the organisation name, organisation address, contact person name, contact person email address, contact person phone number and balance threshold.	N.A.	GM201	UC201	TC201		(ZT)
FR202	Update / View Organisation 's Details	Allow admin user to update / view organisation' s details.	N.A.	N.A.		TC202		(ZT)
FR203	Deactivate an Organisation	Allow admin user to deactivate an organisation	N.A.	GM203	UC203			(todo)

Admin - Users (FR210)

Req No	Req Name	Requireme nt Description (includes Business Rules)	Process Diagram	GUI Mockup	Use Case	Test Case		Feature Complete?
FR211	Add New User	Allow an admin user to add a new user to the system.	N.A.	N.A.	UC211	TC211		(NJ)
FR212	Update a User's Details	Allow an admin user to view any user's details	N.A.	N.A.	UC212	TC212		(NJ)

FR213	Delete / Deactivate a User	Deactivate User	N.A.	GM213	UC213			(todo)
FR214	View All Users	Allow admin user to see all users (including name, organisation, last login date and if they are currently logged on) *This will assist when doing maintenance / upgrades.*	N.A.	GM214				(todo)

Admin - Roles (FR220)

A **role** is a group of system-defined permissions

Req No	Req Name	Req Description	Process Diagram	GUI Mockup	Use Case	Test Case		Feature Complete?
FR221	Add New Role	Allow admin user to add a new role						(todo)
FR222	Update / View User Roles	Allow admin user to update / view the permissions in an existing role.						(todo)
FR223	Delete / Deactivate Role	Allow admin user to deactivate / delete a role			UC223			(todo)

Admin - Channels (FR230)

Req No	Req Name	Requirement Description (includes Business Rules)	Process Diagram	GUI Mockup	Use Case	Test Case		Feature Complete?

FR231	Add New Channel							(todo)
FR232	Update / View Channel's Details							(todo)
FR233	Delete / Deactivate Channel							(todo)

Admin - Campaign Management (FR240)

- Campaign State Changes

Req No	Req Name	Requirement Description (includes Business Rules)	Process Diagram	GUI Mockup	Use Case	Test Case		Feature Complete ?

FR241	Create New Campaign	The admin user must be able to create a new campaign. This can be creating a new one from scratch, or set one up based on an existing template. There are 4 steps in this process: * Step 1: Import from Existing Campaign or Create New Campaign from Scratch * Step 2: Select Campaign Type: Fixed (e.g. 25th of every month), Generic (e.g. PMTCT) or Recipient-Specific (e.g. Adherence) * Step 3: Welcome Message (and Questions for Recipient-Specific) * Step 4: Messages and Schedules	N.A.	Step 1 , Step 2 , Step 3 (Fixed , Generic, Recipient-Specific), Step 4 (Fixed, Generic , Recipient-Specific)	• UC241A • UC241B • UC241C • UC241D	• TC241A • TC241B • TC241C • TC241D		Recipient Specified Generic (Fixed todo)	

FR242	View All Campaigns	All campaigns from all organisations should be listed, irrespective of their status.		GM242				
FR243	Update a Campaign	Allow the admin user to update a campaign. See business rules for when a campaign can be changed, as well as what can be changed. (Discussions with Faisel and Katherine seem to indicate that you should be able to change the contents - e.g. landline number has changed in the message text, spelling mistake, etc. Apparently it happens regularly.		Refer to the various screens for FR241 for updating	UC243	refer to test cases for FR241		

FR244	Stop a Campaign	The admin user must be able to stop a campaign. This would not delete it from the system, but change its state. By stopping a campaign, the organisation user will not be able to add any more recipients. The existing recipients would complete their set of messages. From Simon: "Brings up dialog box, if confirmed, changes state to STOPPING, sets END DATE of the campaign (note that people still get messages)"			UC243	TC243		
FR245	Delete a Campaign	Click here for requirements descriptions and business rule			UC245	TC245		(todo))

FR246	Set Up Opt In & Opt Out Numbers for a Campaign	The admin user must be able to activate a program for a particular organisation. This would involve setting which organisation the program is for, possibly setting up PCM / keywords for Opt In and Opt Out						(todo) for version 3
FR247	Import Campaign Messags and Schedules	The admin user must be able to import data (messages and schedules) from a CSV file prepared earlier.		GM247	UC247	TC247		
FR248	Export Campaign Messages and Schedules	The admin user must be able to export data (messages and schedules) to a CSV file.		GM248	UC248	TC248		

Admin - 'Just Send SMS' Management (FR250)

Req No	Req Name	Requirement Description (includes Business Rules)	Process Diagram	GUI Mockup	Use Case	Test Case		Feature Complete?

FR251	View All 'Just Send SMS' Campaigns	The admin user must be able to view all 'Just Send SMS' campaigns that have been set up. This includes campaigns from all organisations, and include campaigns in ANY state.	N.A.	GM251	UC251	TC251			(NJ)
FR252	Update a 'Just Send SMS' Campaign	The admin user must be able to update any 'Just Send SMS' campaign that has been set up. This includes campaigns from all organisations, for campaigns that are in any state. BUSINESS RULES NOT DOCUMENTED - ADMIN USER CAN UPDATE A JUST-SEND-SMS FROM ANY ORGANISATION Refer to FR301 - Update / View My 'Just Send SMS' Campaigns							(NJ to sign off)

FR253	Delete a 'Just Send SMS' Campaign	Allow the Admin user to delete a Just Send SMS Campaign					(NJ)

Admin - Incoming Messages Management (FR260, FR270)

Req No	Req Name	Requirement Description (includes Business Rules)	Process Diagram	GUI Mockup	Use Case	Test Case
FR260	Receive Incoming Message	The system must be able to receive incoming messages (from a WASP) and process these according to existing filters		N.A.		
FR261	Create New Filter	Allow the admin user to create a new filter to receive incoming messages		GM261	UC261	
FR262	Edit an Existing Filter	Allow the admin user to edit an existing filter		GM262	UC262	
FR263	View All Filters	Allow the admin user to view all flters for all organisations		GM263	UC263	
FR264	View Messages (Inbox) on a Filter	Allow the admin user to view messages on a specific filter		GM264	UC264	
FR265	Delete a Filter	Allow the admin user to delete an existing filter			UC265	

FR266	Add New Filter Action	various types: Update GUIs to include these two (they were included in the initial brainstorm and don't want to forget about them): - Parse Incoming Message Content to XML & Forward to EMIT - Forward Incoming Message to a URL (Social Networking Site)				
FR267	Delete a Filter Action	do we still store previous actions that have happened on an action?				
FR268	Show Filter Action Status	flags different colours				
FR269	Retry Filter Actions	retry actions that may have failed (e.g. insufficient credit, server down)				
FR270	Process Lost Messages	Allow non-identified incoming messages to be placed in the 'Lost Messages' Section.	PD270	GM270		

Organisation User - Just Send SMS (FR300)

Req No	Req Name	Requirement Description (includes Business Rules)	Process Diagram	GUI Mockup	Use Case	Test Case		Feature Complete?

FR301	Create New 'Just Send SMS' Campaign	Allow a logged in user to create a new 'Just Send SMS' campaign. Note that all users will be able to create a new 'Just Send SMS' campaign.	N.A.	GM301	UC301	TC301		(NJ)
FR302	View My 'Just Send SMS' Campaigns	Allow a logged in user to view all the existing 'Just Send SMS' Campaigns for their organisation.	N.A.	GM302		TC302		(ZT)
FR303	Update My 'Just Send SMS' Campaigns	Allow a logged in user to edit their existing 'Just Send SMS' campaigns. This would include program name, message recipients, and all other program-specific information. BUSINESS RULES: CAN ONLY EDIT IT IF IT HASN'T RUN ALREADY!	N.A.		UC303	TC303		(ZT)

FR304	Delete / Deactivate My 'Just Send SMS' Campaign	Allow a logged in user to delete / deactivate a 'Just Send SMS' campaign. This would not delete it from the system, merely deactivate it. The user should only be able to delete a campaign that is still going to be run - that is, the day / time that the message will be sent hasn't yet passed.	N.A.					(todo)

FR305	Unschedule a 'Just Send SMS' Campaign	Allow a logged in user to unschedule a 'Just Send SMS' campaign that has been created for their organisation. *From SPRINT (remove once business rules have been created): Business rules needed regarding can't unschedule something that is scheduled to be sent out in the next 10 minutes.Also , what states does the campaign need to be in for a user to be able to unscheduled it (e.g. can't be running)*	See State Change Diagram (link)					⭐ (NJ to sign off)

Organisation User - Manage Recipients in a Campaign (FR310)

Req No	Req Name	Requirement Description (includes Business Rules)	Process Diagram	GUI Mockup	Use Case	Test Case
FR311	Add an existing contact to a Campaign	Allow the organisation user to add an existing contact to a campaign.				

FR312	Add all existing contacts to a Campaign	Allow the organisation user to add all existing contacts to a campaign.				
FR313	Add an existing group or all existing groups to a Campaign	Allow the organisation user to add an existing group or all existing groups to a campaign.				
FR314	Add a new contact in a Campaign	Allow the organisation user to add a new contact to a campaign.				
FR315	Add contacts in bulk to a campaign	Allow the organisation user to import a CSV file containing a list of contact numbers into the campaign.				
FR316	Edit the Message Times in a Campaign	Allow the organisation user to edit the message times of the messages to be sent out in a campaign.				
FR317	Remove a recipient or remove all recipients from a Campaign	Allow the organisation user to remove a recipient or all recipients from a campaign				
FR318	Remove selected recipients in a campaign by using the bulk removal functionality	Allow the organisation user to import a CSV file containing a list of contact numbers to be removed from a campaign.				

Organisation User - Alerts (FR320)

Req No	Req Name	Requirement Description (includes Business Rules)	Process Diagram	GUI Mockup	Use Case	Test Case

FR321	Alert Users in Banner if Credit is Below Organisation's Balance Threshold	If the organisation's credit is below their threshold value (stored in the organisation table), the banner at the top of the screen should be updated and highlighted in red to remind them to reload credit.	N.A.	N.A.		
FR322	Email Organisation if Credit is Below Organisation's Balance Threshold The organisation must be emailed when their credit balance is below their specified threshold value. The credit balance is the amount of credit they can use (i.e. balance available - reserved amounts). The email address supplied in the Organisation's Profile must be used. The email should only be sent once as the users of the organisation will see the highlighted banner each time they log on.	N.A.	GM322 Email Organisation if Credit is Below Organisation's Threshold - Email Template			

Organisation User - Incoming Messages (FR330)

Req No	Req Name	Requirement Description (includes Business Rules)	Process Diagram	GUI Mockup	Use Case	Test Case

FR331	View My Filters	Allow the organisation user to view all filters that belong to their organisation.	N.A.			
FR332	View Messages on My Filters	Allow the organisation user to see all messages that have come through on their filters.	N.A.			
FR333	Request a New Filter	All the organisation user to request a new incoming message / filter service.	N.A.			

Contacts - My Contacts (FR400)

A **contact** will receive messages from the system. This will be of the form of a cellphone number with other contact-specific information.

Req No	Req Name	Requirement Description (includes Business Rules)	Process Diagram	GUI Mockup	Use Case	Test Case		Feature Complete?
FR401	Add New Contact	Allow user to add a new contact to the system.	N.A.	GM401	UC401	TC401		(ZT)
FR402	View My Contacts	Allow user too view all their contacts.	N.A.	GM402	UC402	TC402		(ZT)
FR403	Update a Contact's Details	Allow user to update a contact's details	N.A.	Refer to FR401 Add New Contact				(ZT)
FR404	Delete / Deactivate Contact	Allow user to deactivate a contact. This would remove the contact from all groups in which they are included.	N.A.					(todo)

FR405	Export My Contacts	The system should allow the user to export their contacts. This should be accessible from the 'Contacts' page and all users (admin and non-admin) should be able to access this. The export should look like the attached template.	N.A.	GM404				(SB)

Contacts - My Groups (FR410)

A **group** is a group of contacts (usually subscriber lists).

Req No	Req Name	Requirement Description (includes Business Rules)	Process Diagram	GUI Mockup	Use Case	Test Case		Feature Complete?
FR411	Add New Group	Allow user to add a new group to the system. The user would need to specify the contacts that should be members of the group.	N.A.	N.A.	UC411	TC411		(ZT)

FR412	Update / View Group's Details	Allow user to update / view the details of a group. This includes adding more contacts to the group, deleting contacts from a group and changing the name of the group.	N.A.	N.A.	UC412	TC412		(ZT)
FR413	Delete / Deactivate Group	Allow user to delete / deactivate a group	N.A.					(todo)

Contacts - Import Contacts (FR420)

Req No	Req Name	Requirement Description (includes Business Rules)	Process Diagram	GUI Mockup	Use Case	Test Case		Feature Complete?
FR421	Import Contacts	Allow the user to import contacts into the Mobilisr system. This would be from a CSV file.	N.A.	GM421	UC421	TC421		(NJ)

All Users - Campaign General (FR500)

Req No	Req Name	Requirement Description (includes Business Rules)	Process Diagram	GUI Mockup	Use Case	Test Case		Feature Complete?

FR501	View Campaign Message Logs	Allow all users to view all the messages sent for a particular campaign to which they have access. This would show the status of messages (in terms of success and failures).	N.A.	GM501	UC501	TC501		
FR502	View Recipients in a Campaign (with Export)	All users should be able to view the recipients in a campaign, and be able to export this information to CSV. This screen will be accessible from both the Admin user's 'View All Campaigns' as well as the organisation user's 'View My Campaigns' screens.	N.A.	GM502				

FR503	View Recipients in a 'Just Send SMS' Campaign (with Export)	All users should be able to view the recipients in a 'Just Send SMS' campaign, and be able to export this information to CSV. This screen will be accessible from both the Admin user's 'All Just Send SMS Campaigns' as well as the organisation user's 'My 'Just Send SMS' Campaigns' screens.	N.A.	GM503				

Product Backlog

Req Name	Req Description
Programs	Newsletters, LBS, Setup Keyword, Appointment Reminders, Relay / Trigger SMS, Citizen Journalism / Rating Service
Help	Online help - is it necessary?

Reports	All should be downloadable in CSV or a similar format.
	
	1. When we SMS someone, we'd like to see their network in the log (Integrat logs give us that). This is useful for when you need to incentivise.
	    a. This isn't an actual report, it will be seen in the message logs for 'Just Send SMS' and all other campaigns
	2. Error reports: Need to see if SMSs don't go out to particular users. So if I send out SMSs to 100 people, I'd like to see how many didn't get the SMS, and who that was (ie their cell). This could be in a log of all SMSs sent out, and there's a column that shows if it was sent or not. See attached Integrat logs for what they provide; not saying that all that data is necessarily needed!)
	    a. Need to confirm with Katherine if she is happy with the current message logs in Molbilisr 2
	3. SMSs sent to a particular user: I'd like to see a log of all SMSs ever sent to a particular user, as well as messages that are scheduled for this number
	4. Be good to see, per campaign, how many SMSs have been sent out, and how many are scheduled to be sent out.
	5. Spending on a campaign: what has been spent, and what is scheduled to be sent/spent.
	    a. We will have a separate meeting with the Financial Manager to get a better understanding of all financial reports required from Mobilisr.
	6. Financial Report: Log of all transactions on organisations (adding and removing credit to an organisation)
	7. If USSD is included, then one needs to see: user cell number; network; session length; their path through the USSD screens (ie which screens they chose to see, incl where they ended)
	8. Campaign-Specific Reports
	9. System Usage: Activity on an organisation
	10. Overall entire system – how many messages have been sent out within a time period (for Cell-Life donor reporting)
	11. Consecutive Message Failures Report (specifically for CIDA): The user should input the number of consecutive messages they are interested in viewing, as well as the campaign (including all campaigns for that organisation), and the report should list the phone number, campaign name, times and dates the X messages should have gone out.
	12. Summary info for campaigns (can currently only see message logs)
	    a. Able to see which contacts are on a campaign and the times they have selected to get messages. Click on a contact and you can see the info for that contact, logs, billing etc.
	    b. Billing info for that campaign

Disclaimers	Preventing SPAM, require opt
Customise with Stylesheets	Customize Mobilisr per Organisation (style sheets according to the org,
Client alert view	
Email Support	Button / link on the screen where users can automatically email support (creates ticket on Jira)
View contacts for campaign	• View number of contacts according to which day they are on. e.g. day 1 - 3 contacts, day 2 - 6 contacts etc. Clicking on a group will show you a list of those contacts which you can export / add to group.

SMS log view	An sms log view showing ALL smslogs with filtering by organization, date, contact, status
Export smslogs	From any smslog view be able to export the smslogs

08 Sept 2010 (Scheduling)

There are two types of message schedules:

Fixed

Appointment reminders – will have to set them up every month (ppl can come early or late) – once off message (different for PMTCT)

Date time

Repeat interval

Repeat every day for 3 days

Relative

Relative is further broken down into two types:

- Generic - on day 1, 3am, 4pm, on day 2, 5pm 8pm, etc. (e.g. PMTCT)
- Once per day, twice per day, 3 times per day (contact specific timing) (e.g. Adherence)
    - Admin user selects what time options are available (are there boundaries - 7am/7pm?)
    - When a contact is being added to this campaign, the user must specify what time slot that contact wants
-

Start end date

Based on subscriber start date

??? User adds Start end date

Welcome message (on day 0) – can’t specify a time

Time for all other messages

30, 60, 90 messages (can’t really have all on same page, paginated)

Add recurring for ‘just send an sms’ (fixed)

GUI mock-ups for relative (sit with Katherine, then Faisel)

Mind Map of Mobilisr Functional Requirements

Mobilisr GUI Mockups

GM102 Email Template

To: <User Email address>

Subject: Mobilisr: Your password has been reset

Good Day Mobilisr User,

Your password has been reset and your new password is ABC123.

Click on the link below to go to the Mobilisr login screen.

https://www.mobilisr.com/accounts/RP?c=CIS8jJ6H0MzWzAEQ3-PtmvLjkKcg&hl=en

If clicking the link above doesn't work, please copy and paste the URL in a new browser window instead.

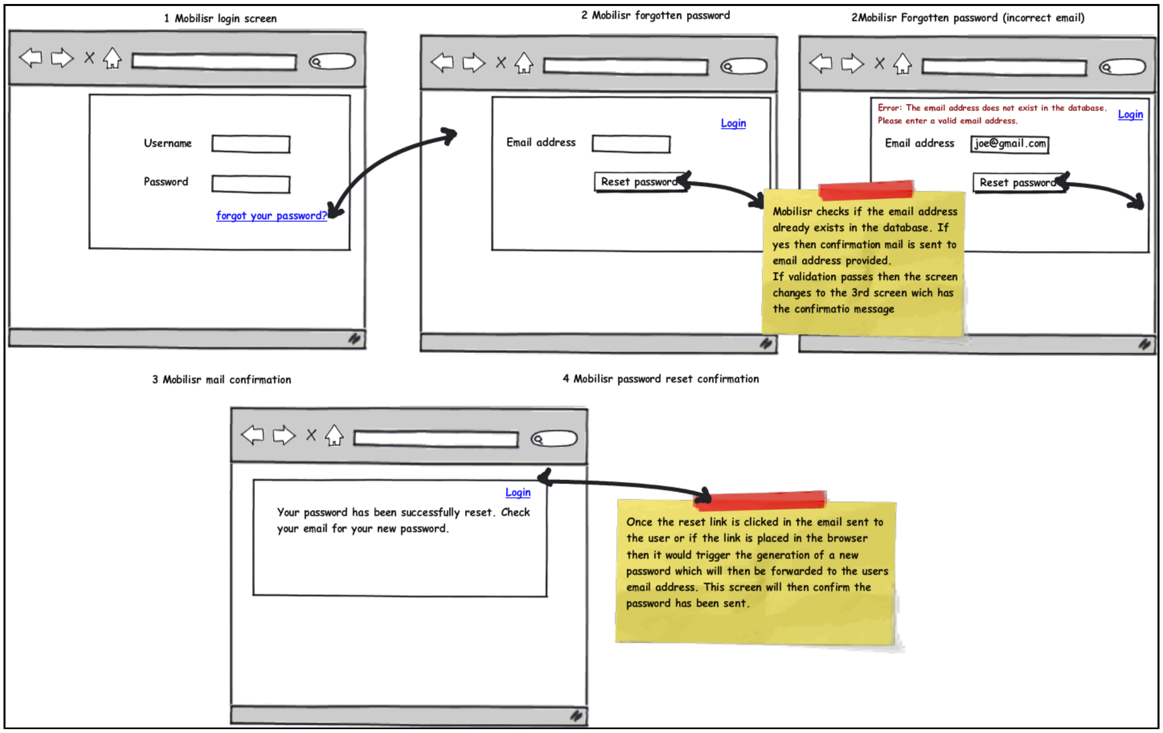
Thank you for using Cell-Life Mobilisr.

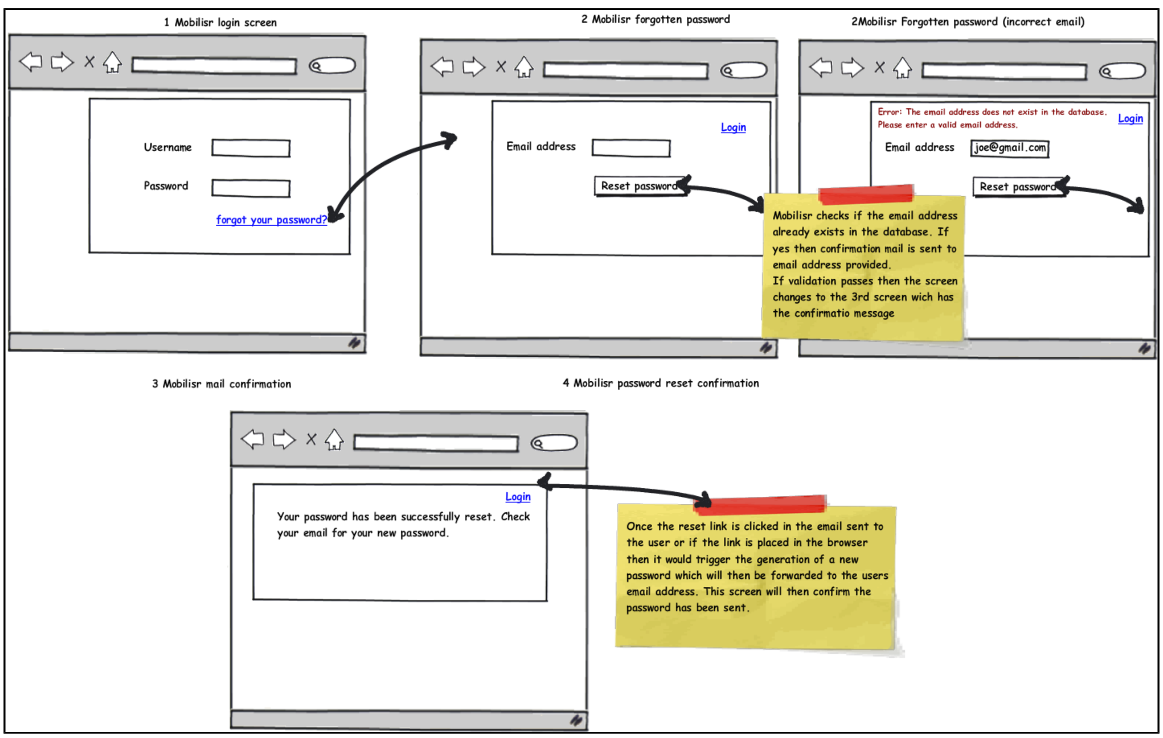
For questions or concerns about your account, please mail our support office at support@cell-life.org.

This email is sent from the system so please don't reply to it (replies to this message will not be answered).

GM102 Forgotten Password

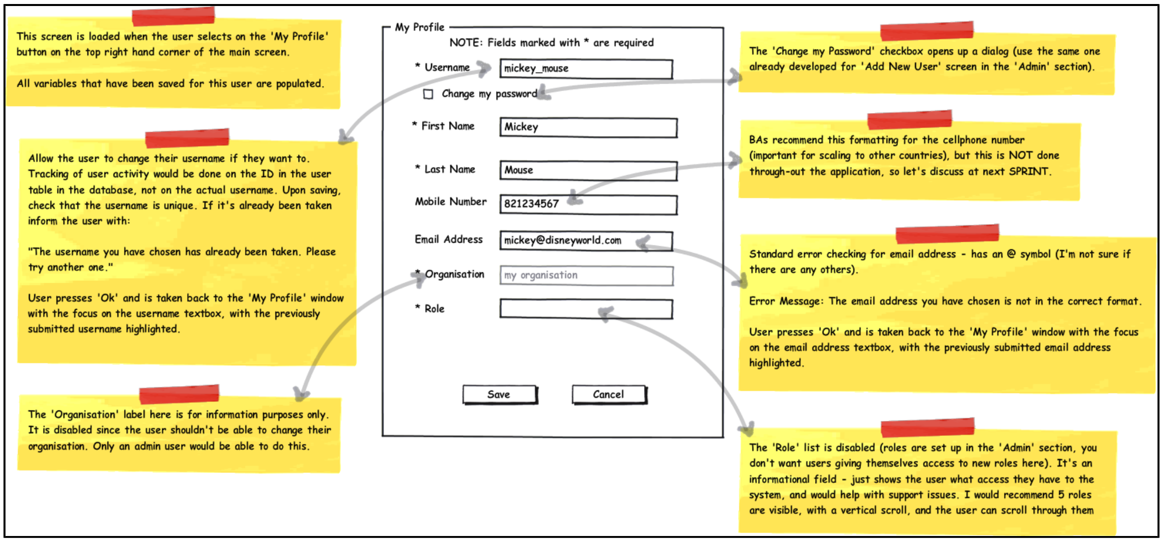
updated design (excl confirmation mail)





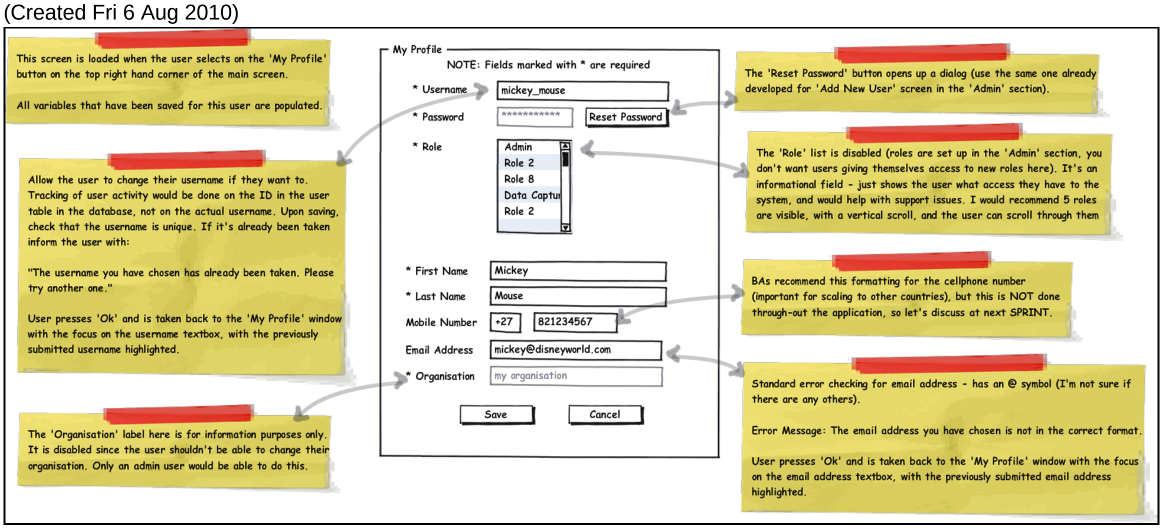
GM111 Update or View My Profile

GUI Redesign (Created Tues 12 Oct 2010)



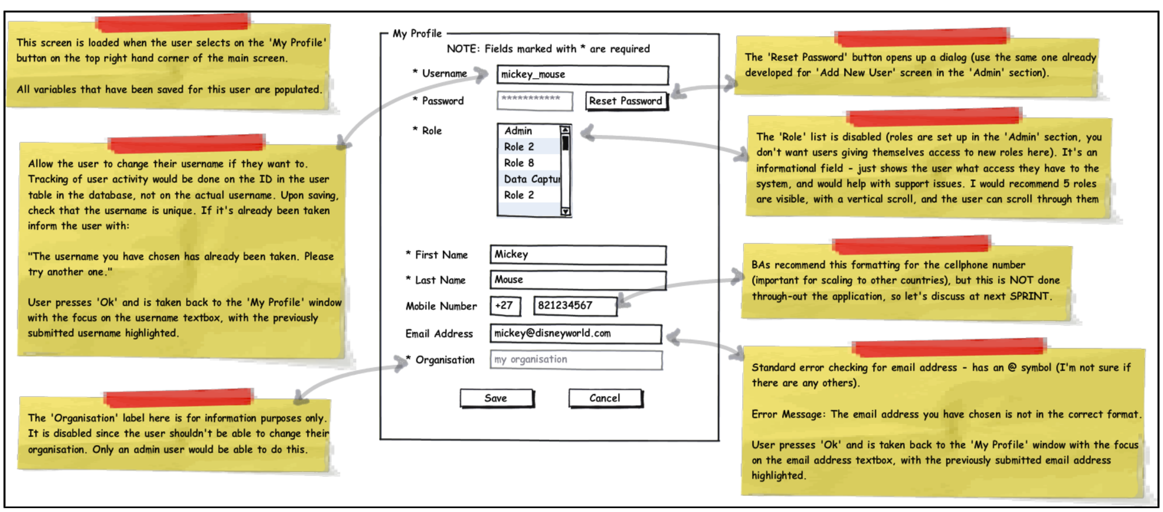
GUI Redesign

(Created Fri 6 Aug 2010)

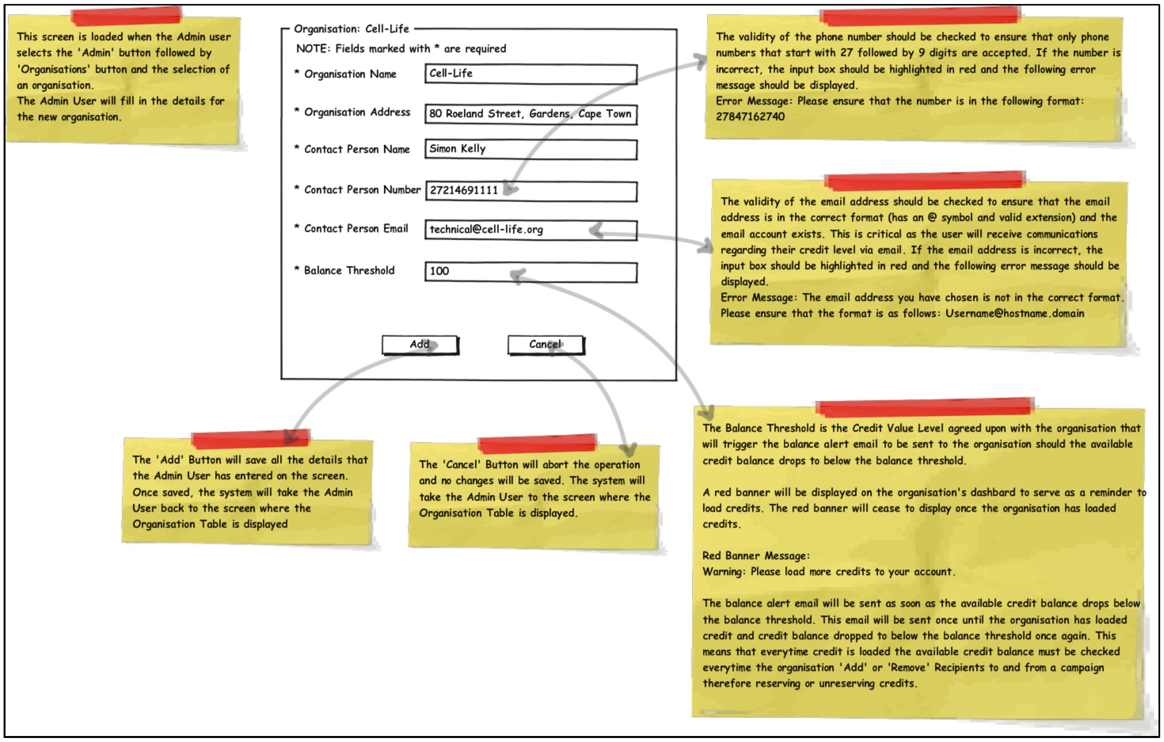


Previous GUI

(Created Thur 5 Aug 2010)



GM201 Add New Organisation



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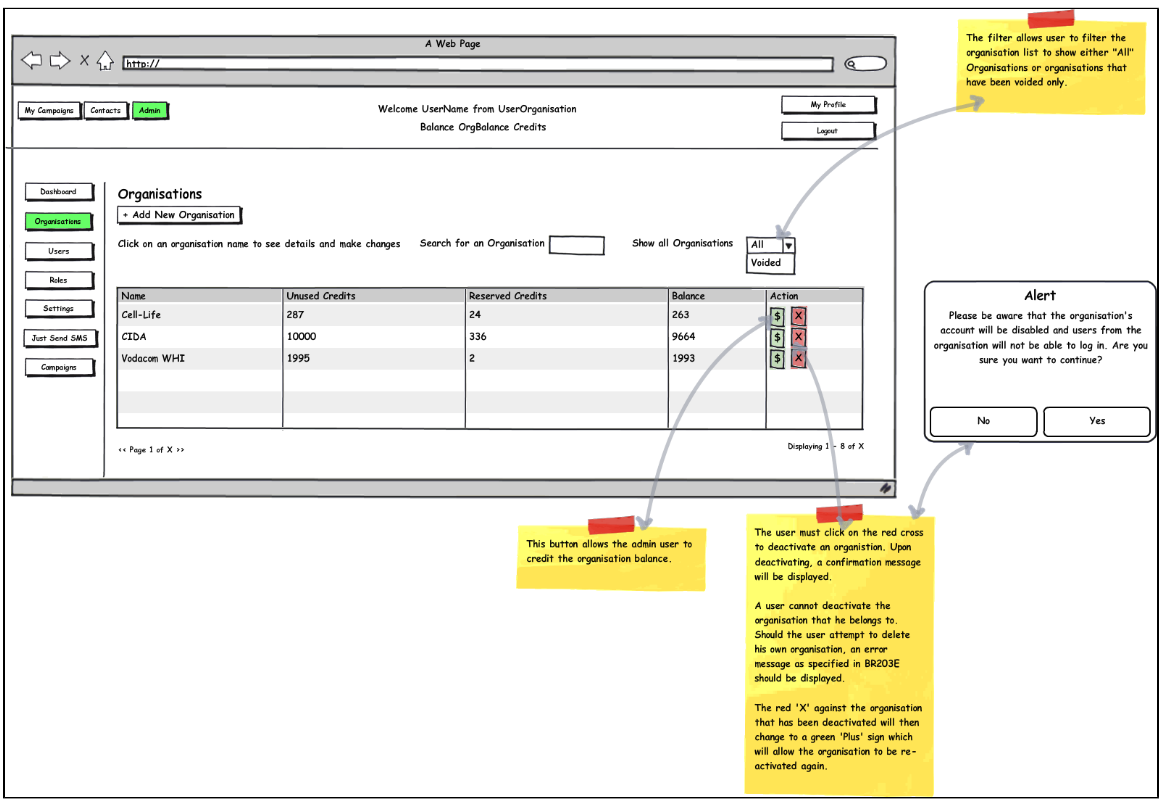
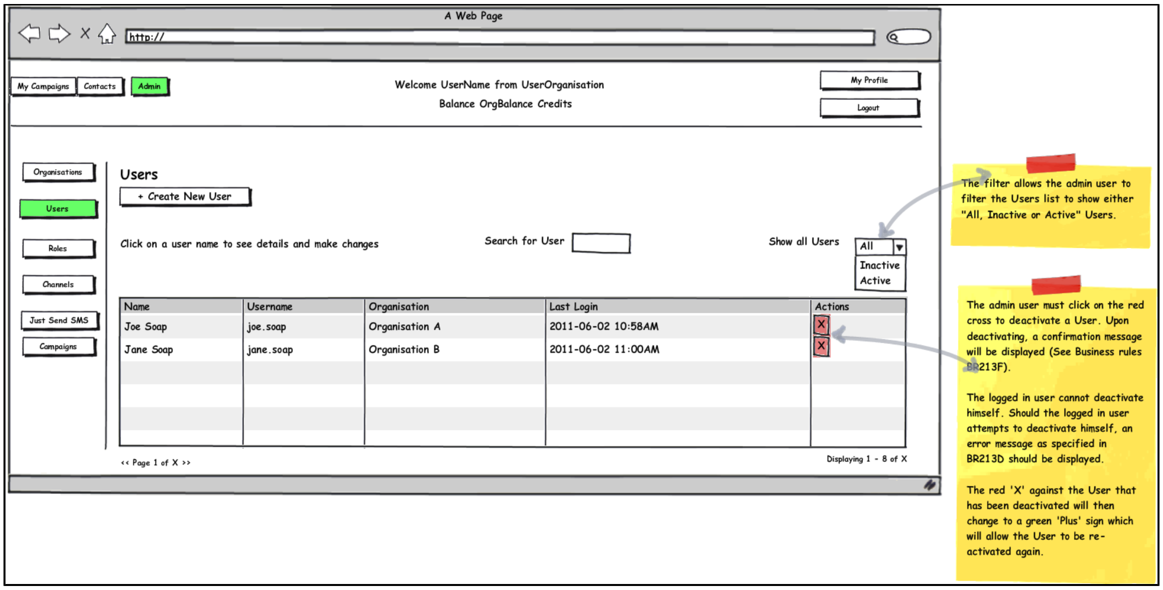
GM203 Deactivate an Organisation

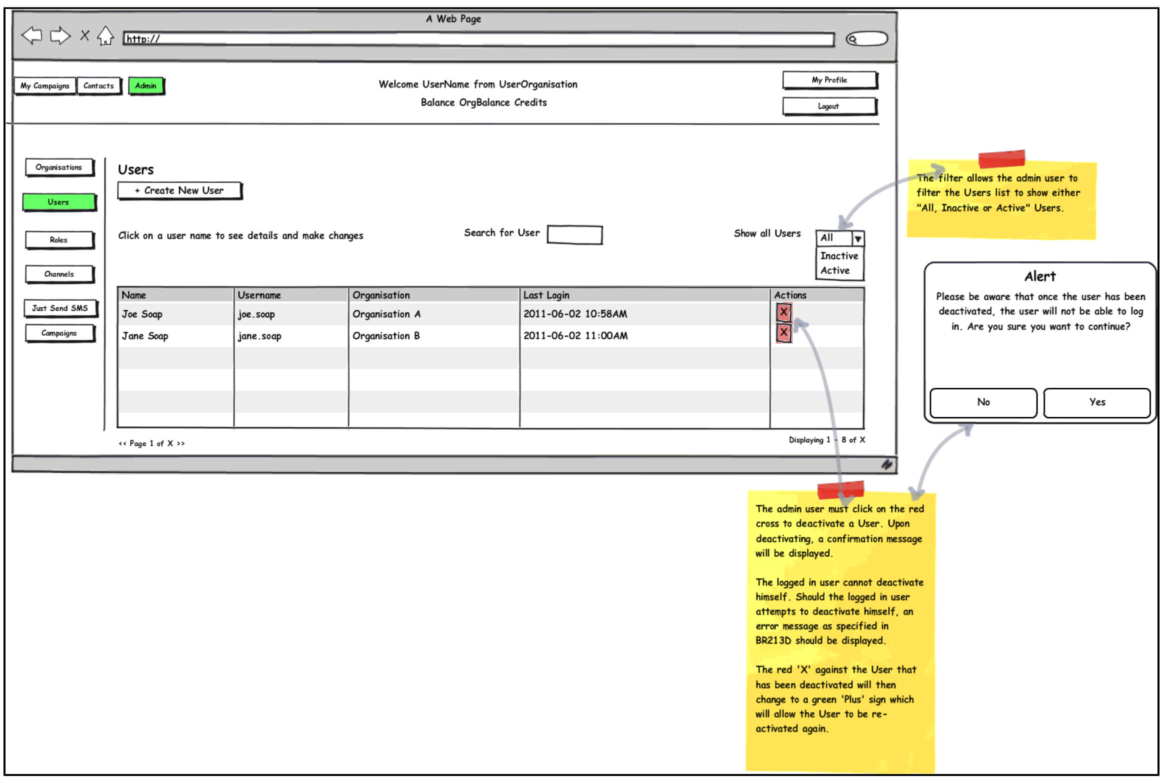
Updated on Monday 20th of June 2011



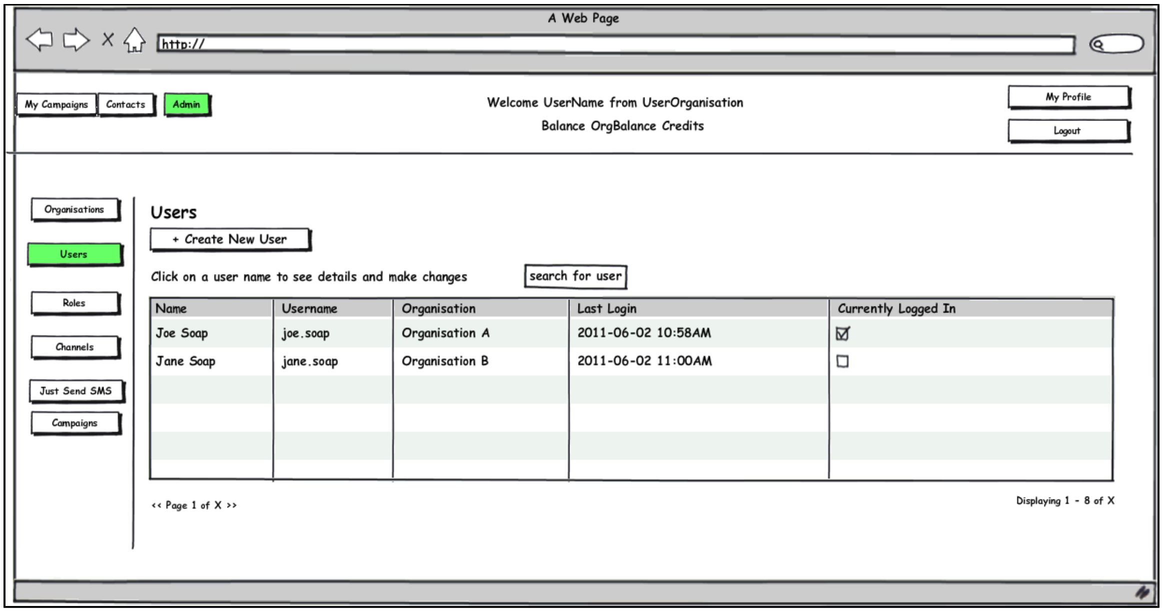
GM213 Delete or Deactivate a User

Version 2 (12/07/2011)



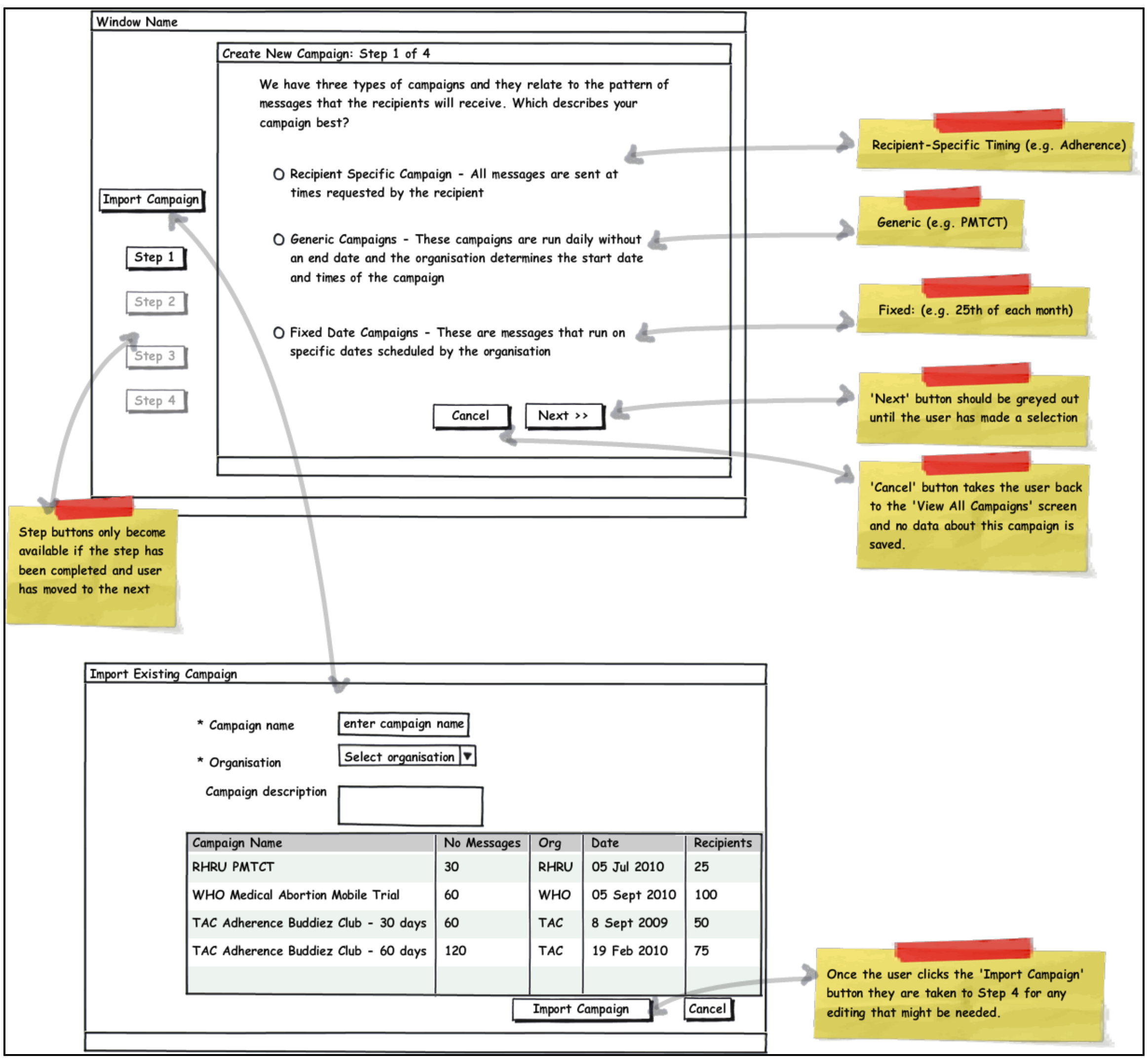


GM214 View All Users

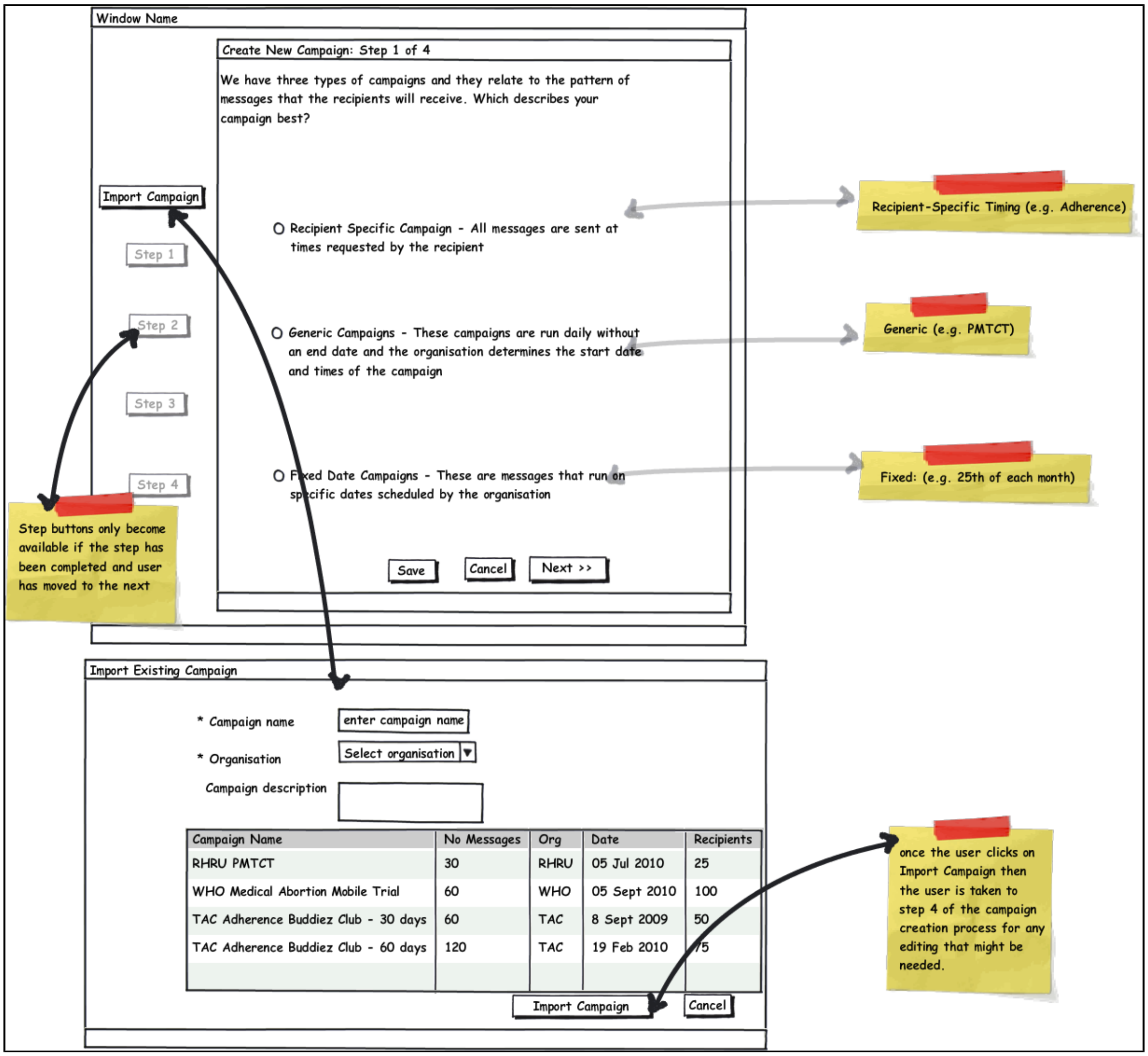


GM241 Create New Campaign - Step 1 (Select Campaign Type or Import)

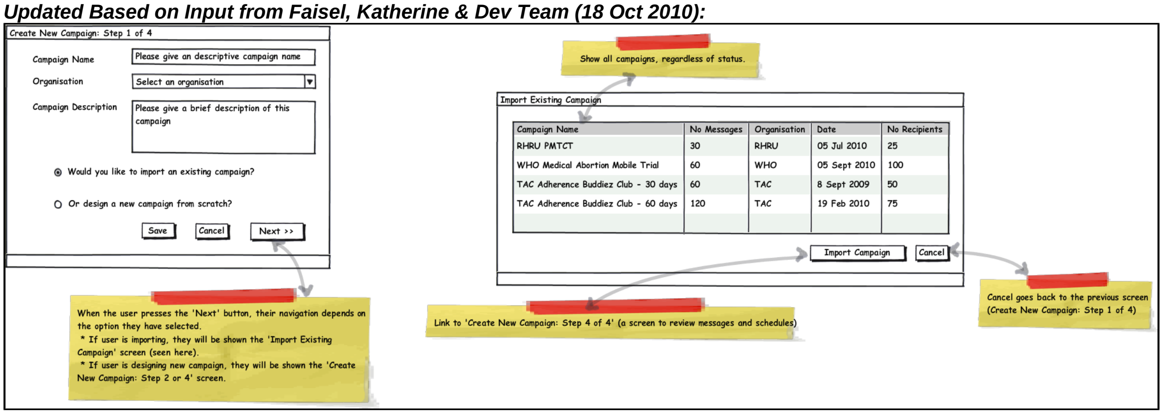
Update Based on Testing with Munaf (01 Mar 2011) - re additional info for buttons (save, cancel and next)

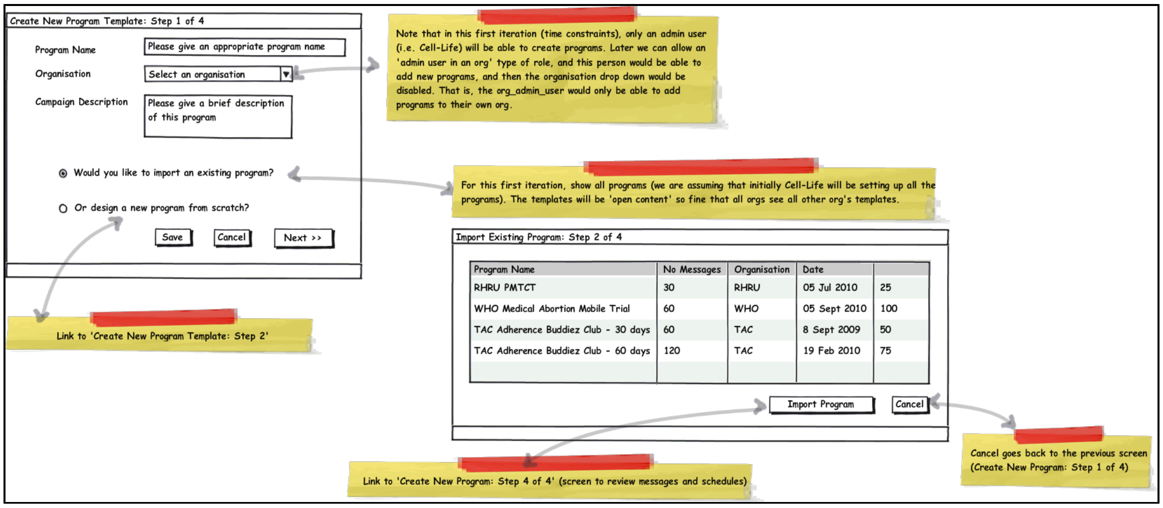


Update Based on Discussion with Vikram & Sarah (25 Nov 2010)



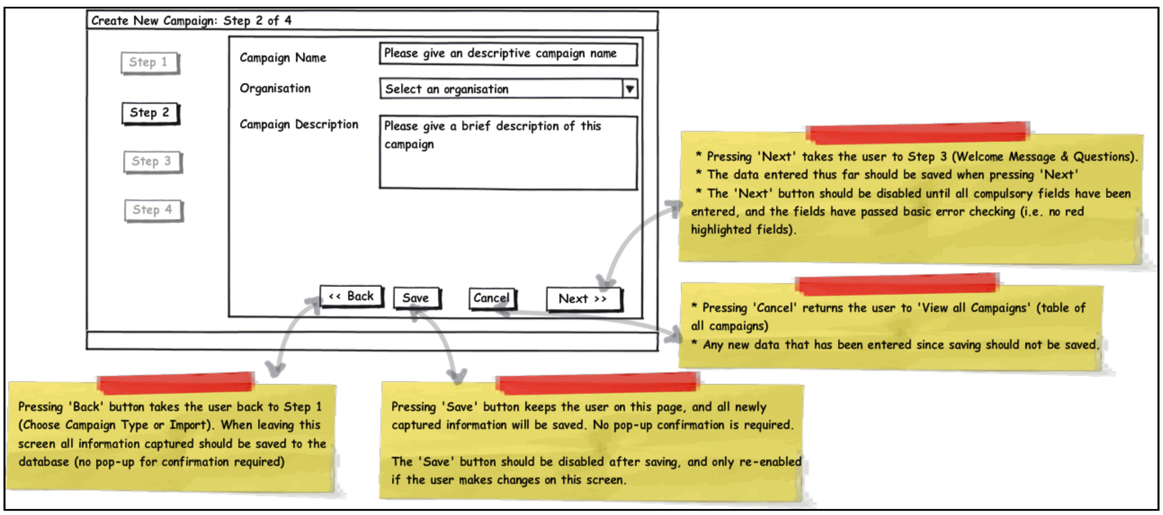
Updated Based on Input from Faisel, Katherine & Dev Team (18 Oct 2010):



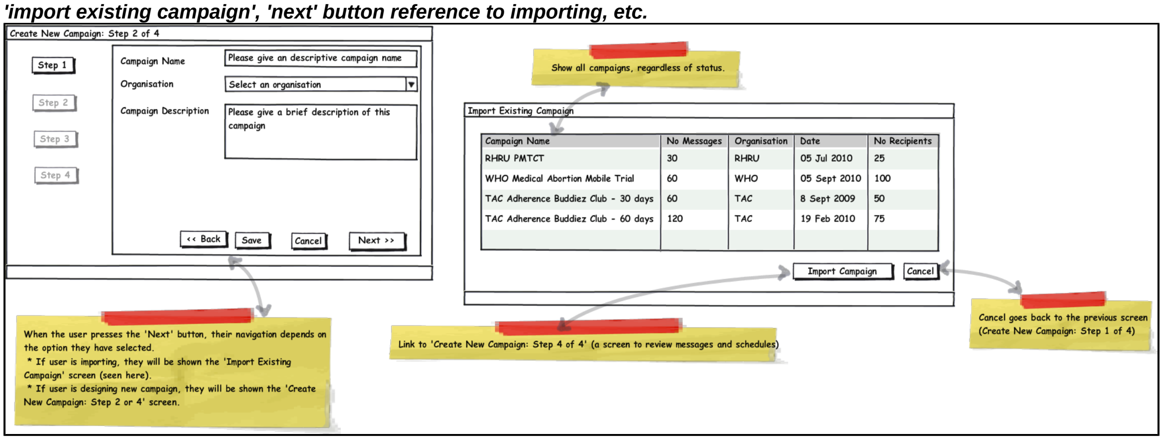


GM241 Create New Campaign - Step 2 (Campaign Details)

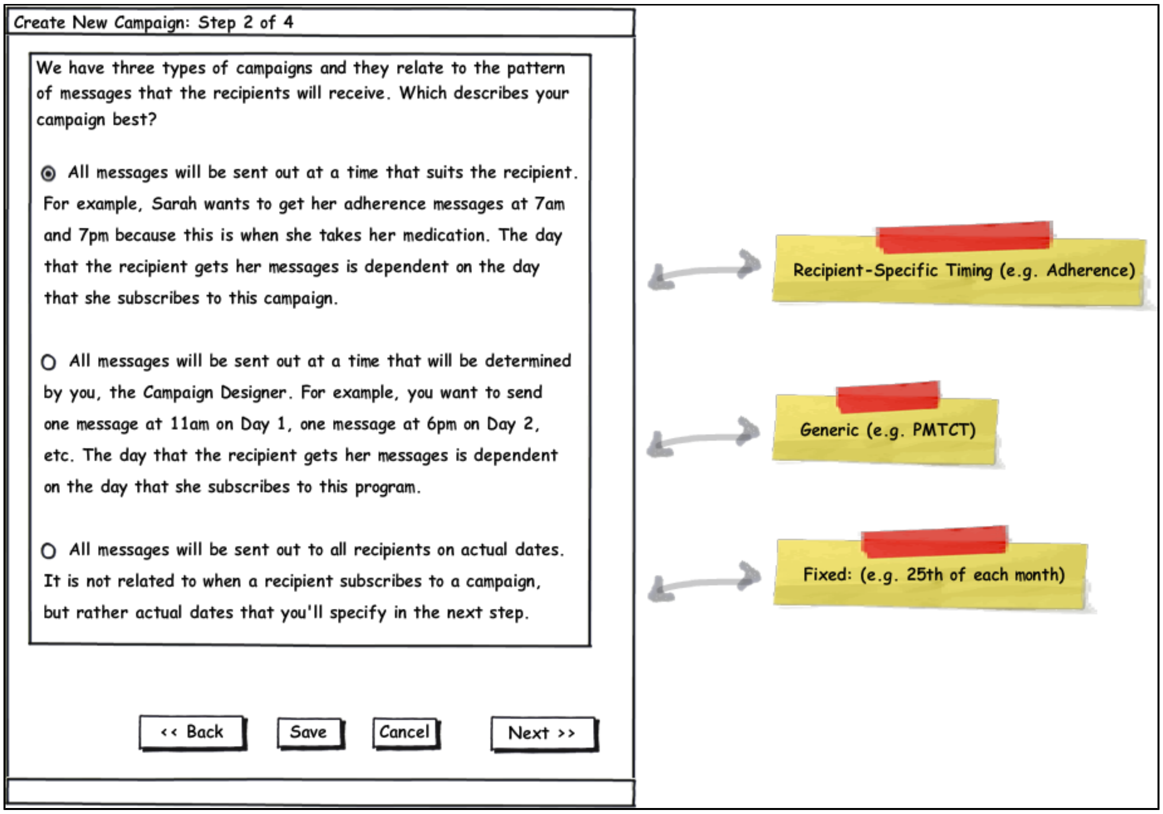
Updated Based on Testing with Munaf (1 Mar 2011) - Additional info re back, next, save & cancel buttons



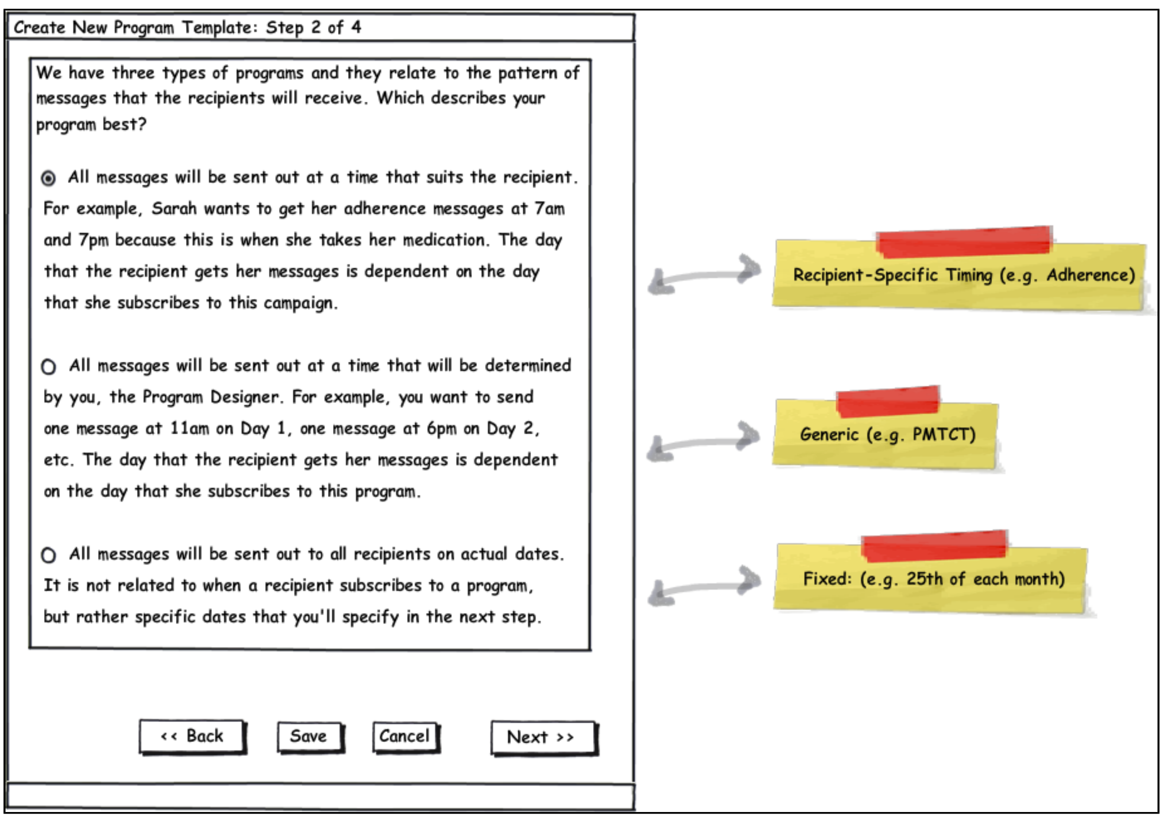
Update based on Discussion with Vikram and Sarah (25 Nov 2010) - note this GUI needs to be updated but can't access biko right now - ignore 'import existing campaign', 'next' button reference to importing, etc.



Updated GUI - Based on feedback from Faisel, Katherine & Dev Team (18 Oct 2010)

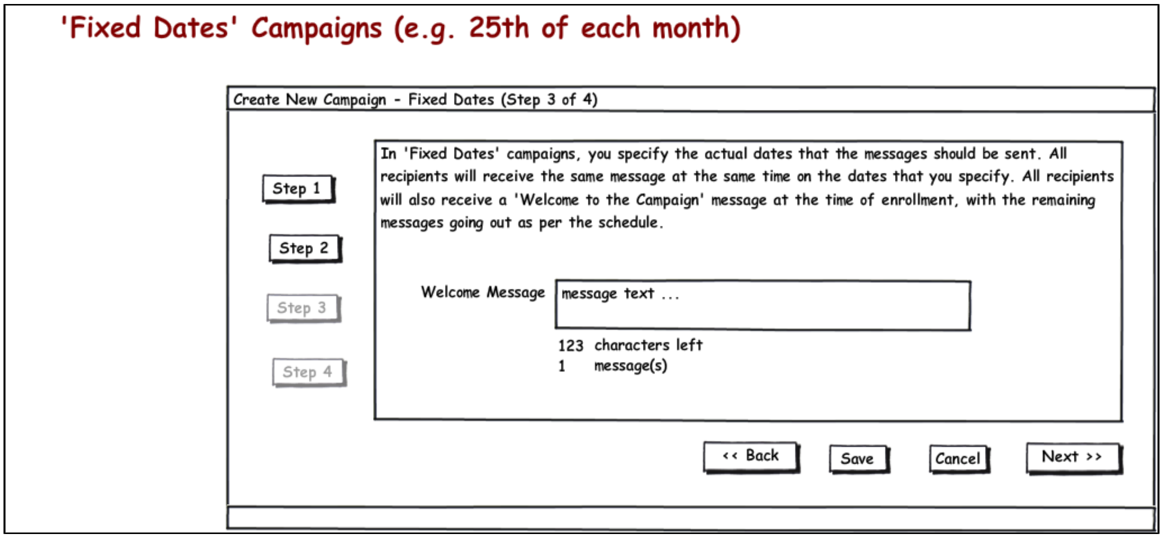


Original GUI

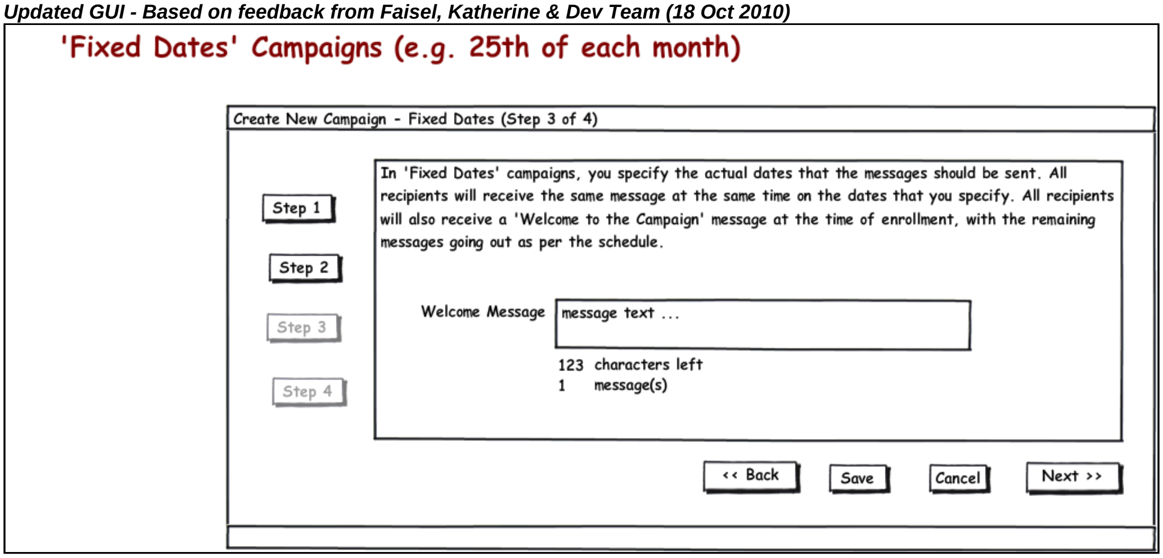


GM241 Create New Campaign - Step 3 (Fixed Dates - Welcome Message)

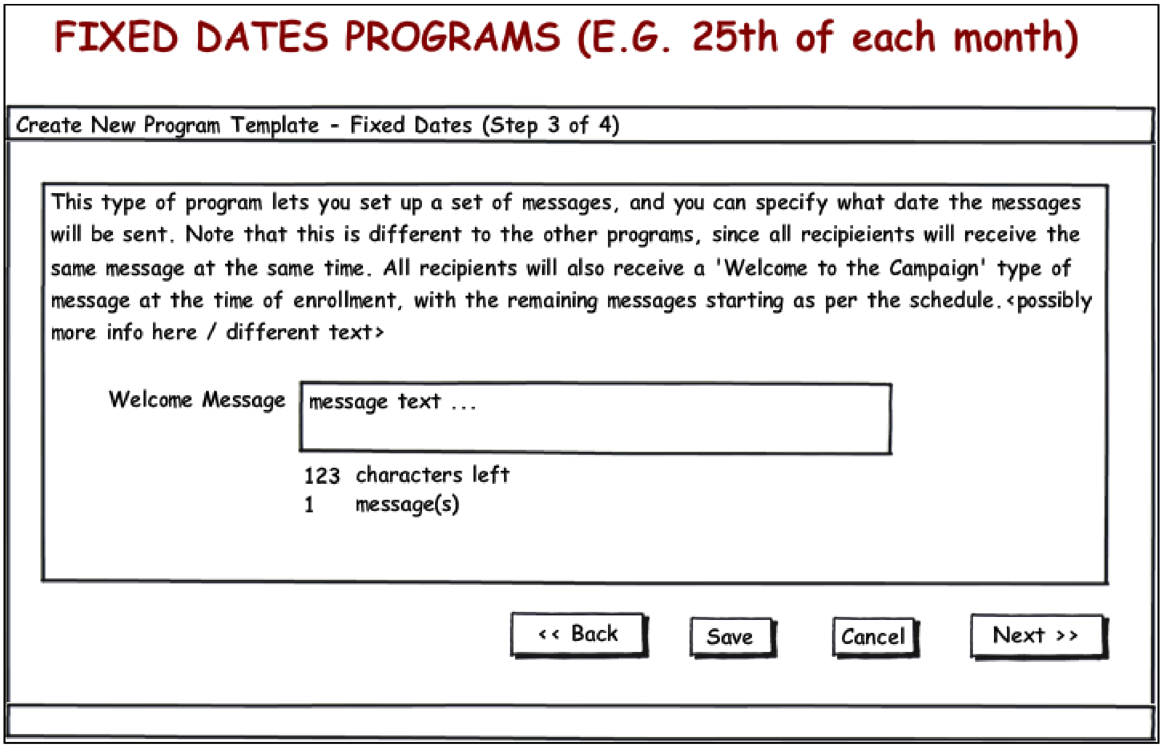
Updated GUI - Based on discussion with Vikram and Sarah (25 Nov 2010)



Updated GUI - Based on feedback from Faisel, Katherine & Dev Team (18 Oct 2010)

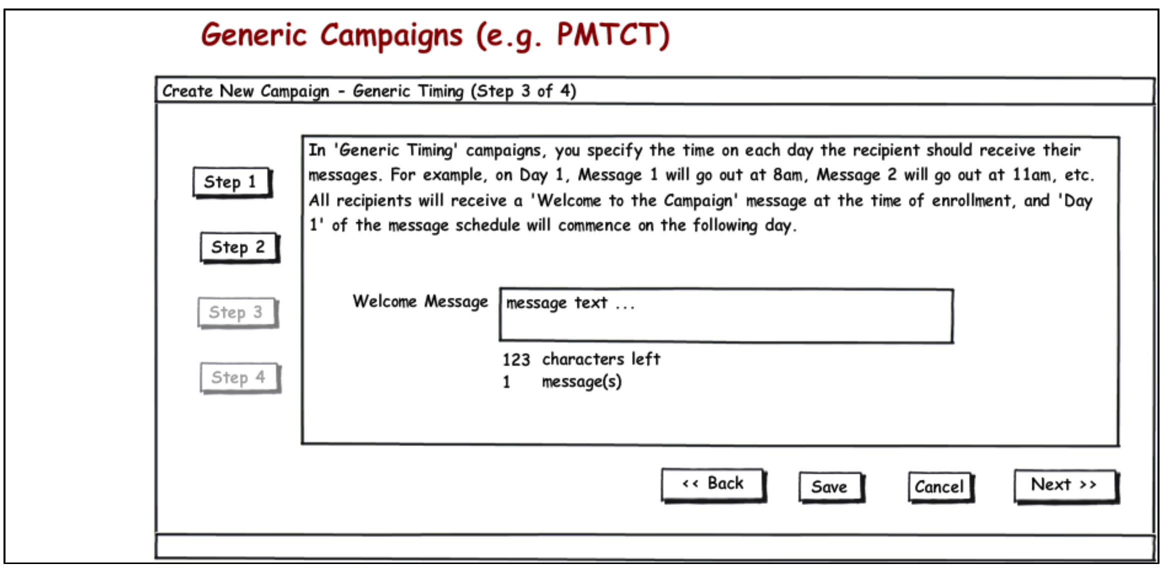


Original GUI

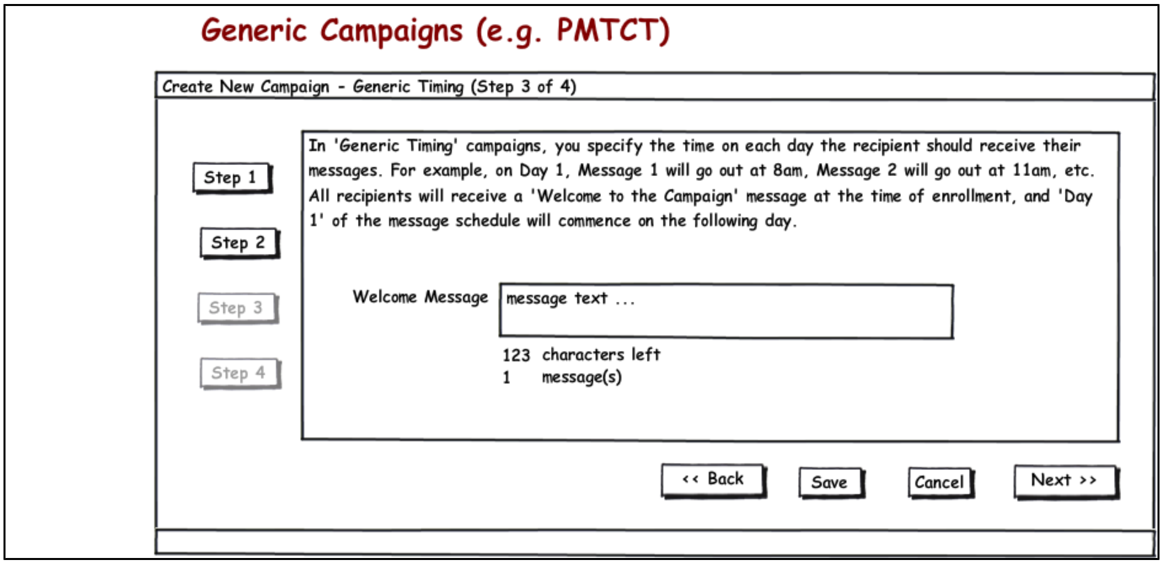


GM241 Create New Campaign - Step 3 (Generic - Welcome Message)

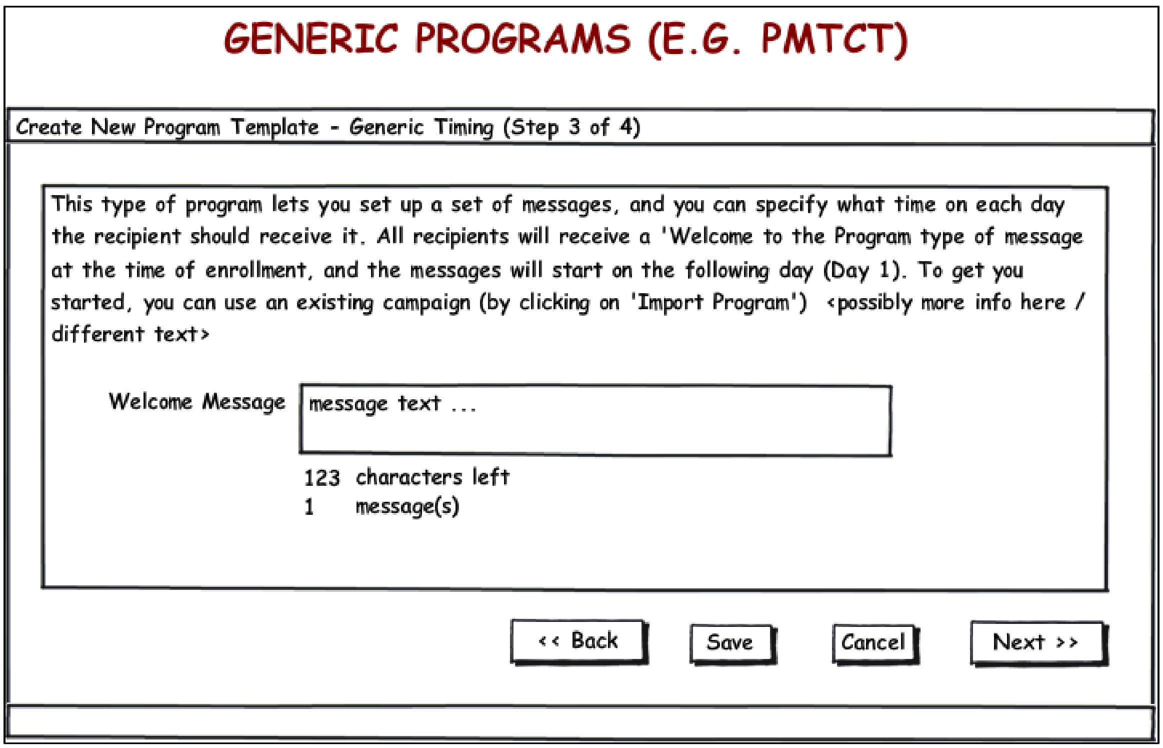
Updated Gui - Based on Discussion with Vikram and Sarah (25 Nov 2010)



Updated GUI - Based on feedback from Faisel, Katherine & Dev Team (18 Oct 2010)

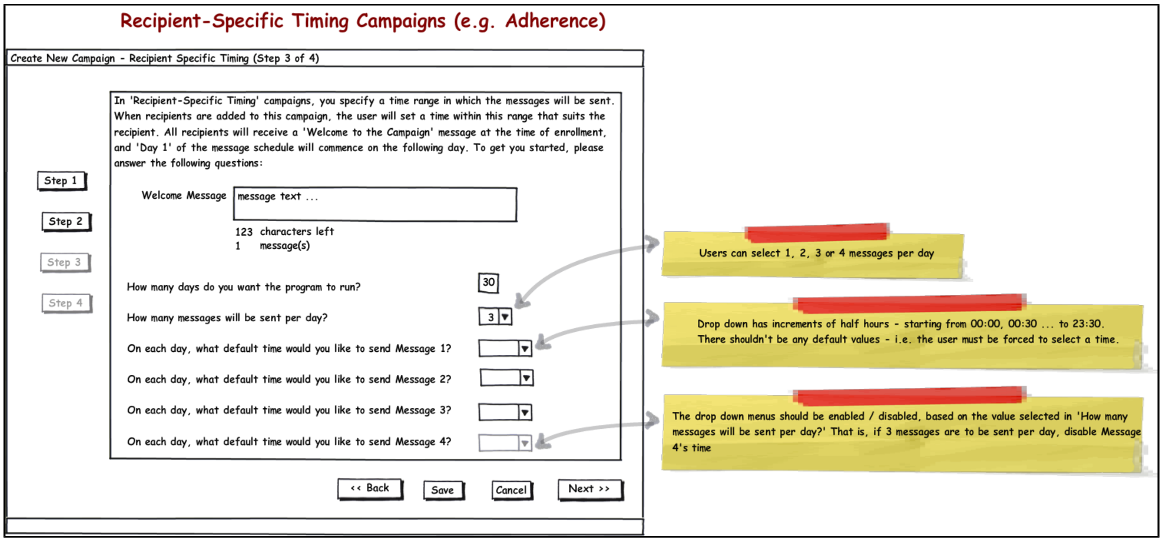


Original GUI

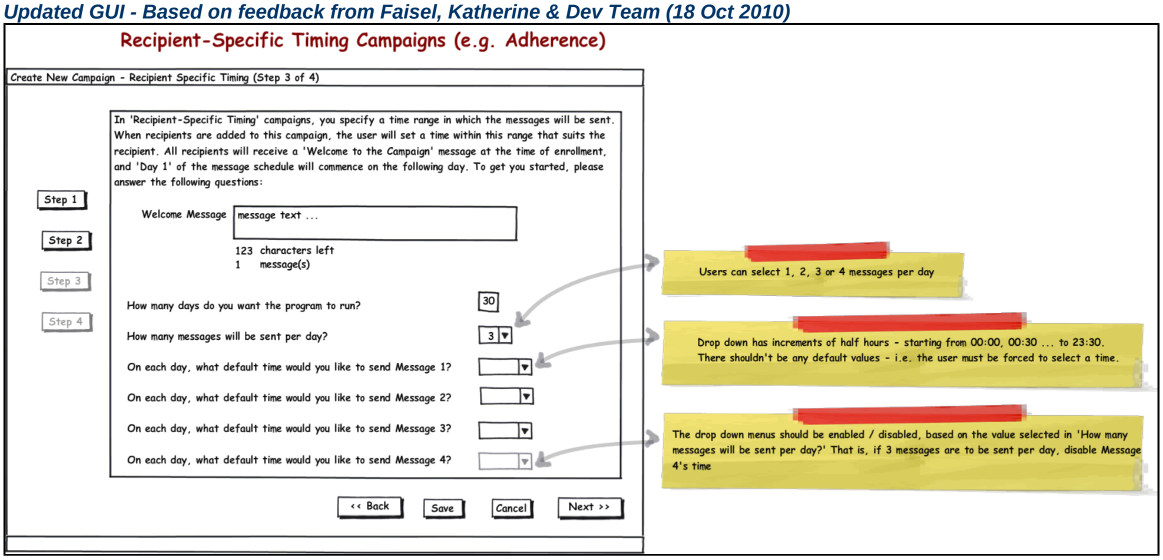


GM241 Create New Campaign - Step 3 (Recipient-Specific - Welcome Message and Questions)

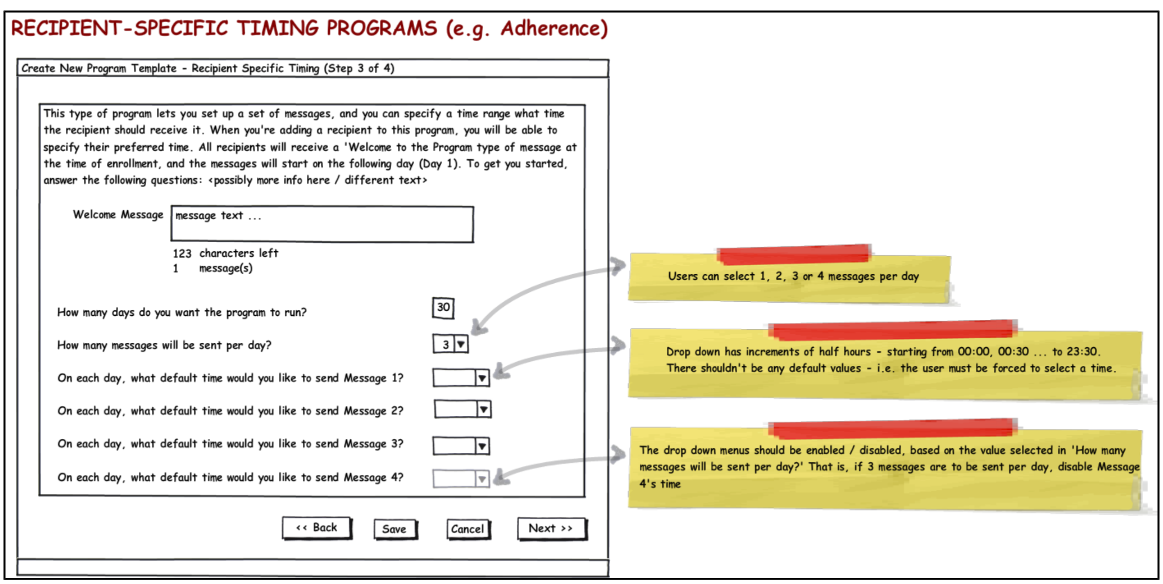
Update GUI - Based on Discussion with Vikram and Sarah (25 Nov 2010)



Updated GUI - Based on feedback from Faisel, Katherine & Dev Team (18 Oct 2010)

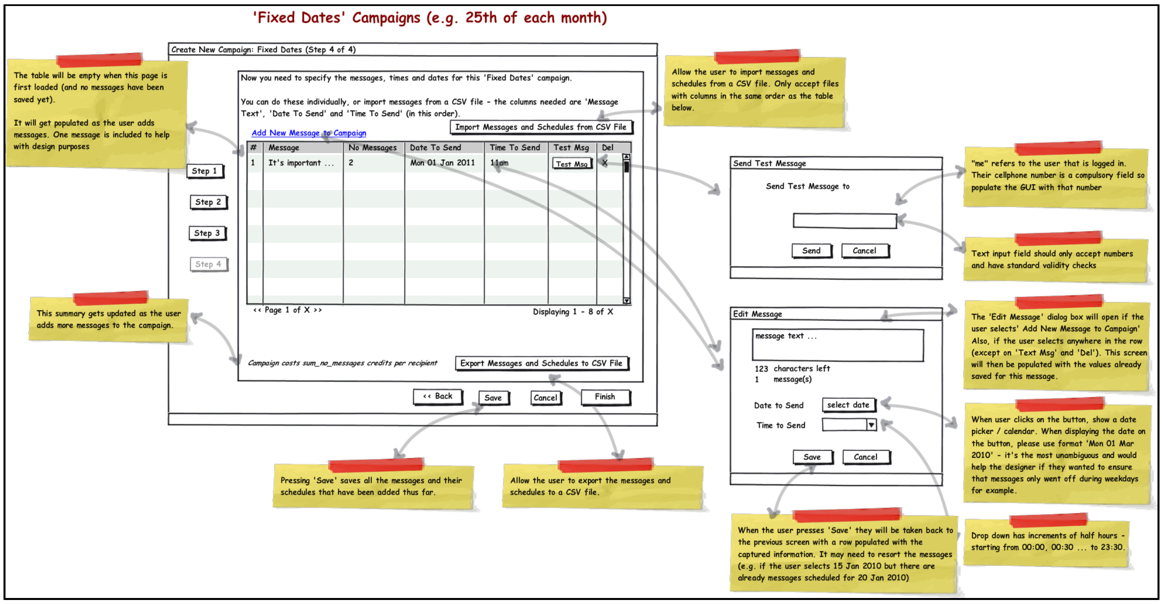


Original GUI

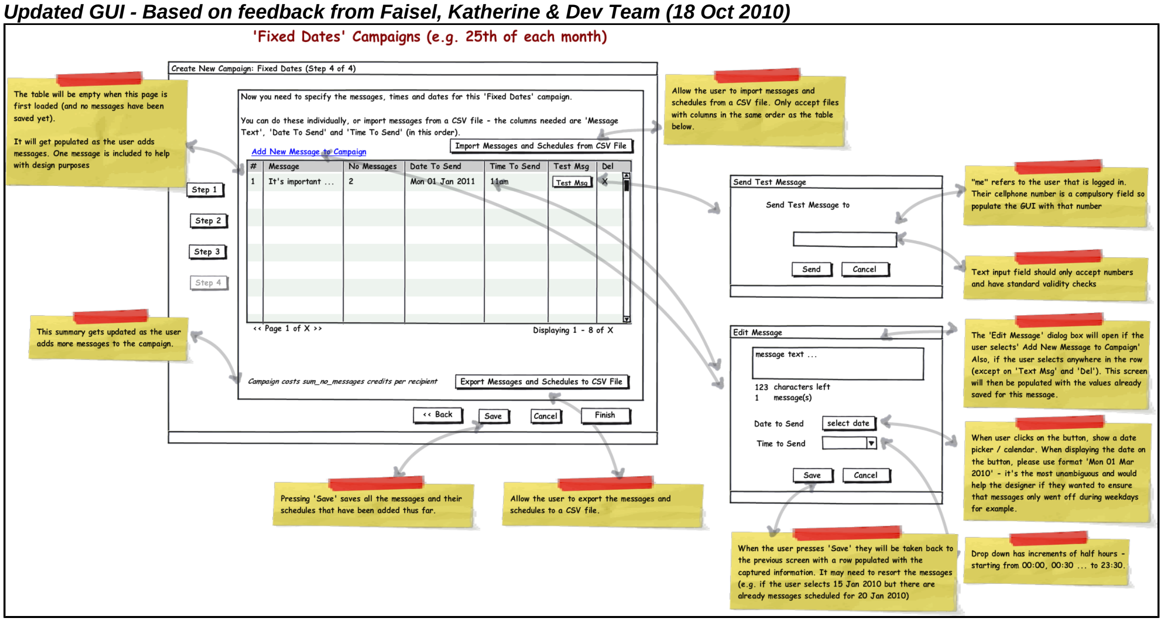


GM241 Create New Campaign - Step 4 (Fixed Dates - Messages and Schedules)

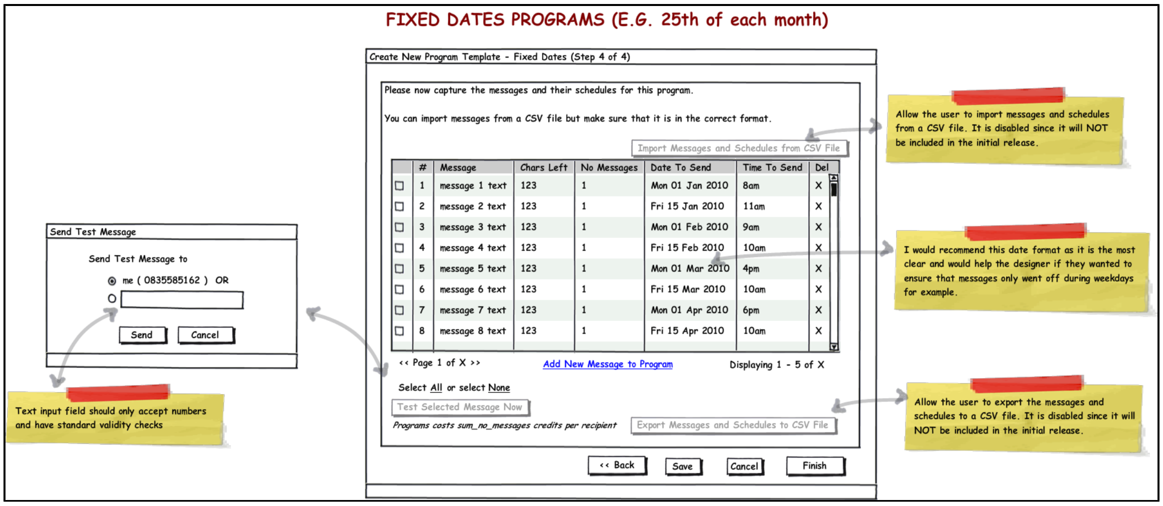
Update Gui- Based on Discussion with Vikram and Sarah (25 Nov 2010)



Updated GUI - Based on feedback from Faisel, Katherine & Dev Team (18 Oct 2010)

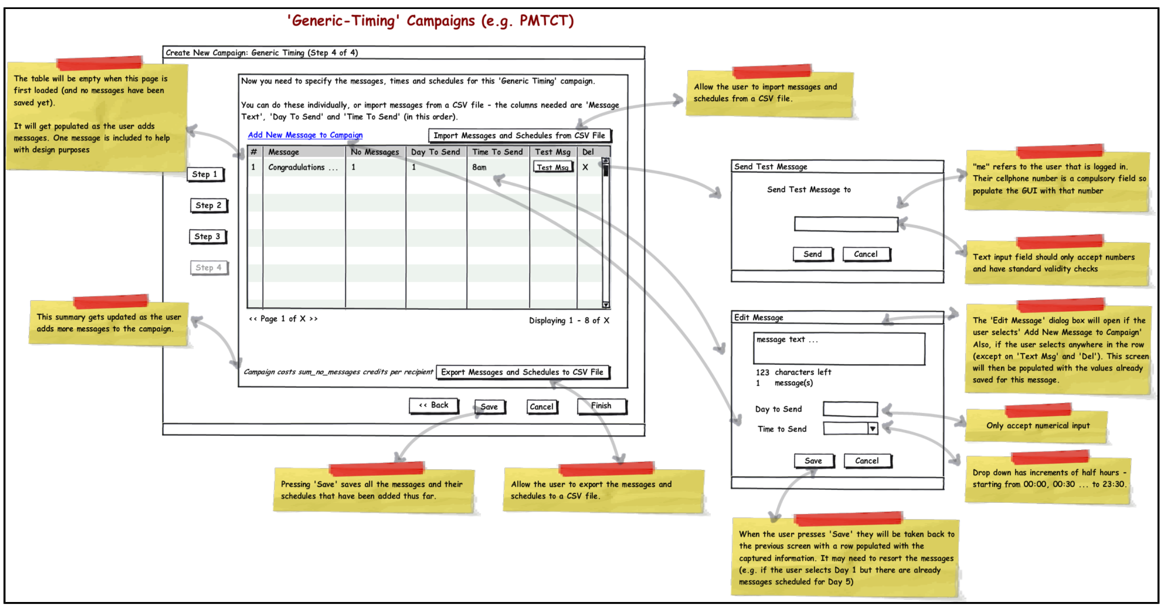


Original GUI

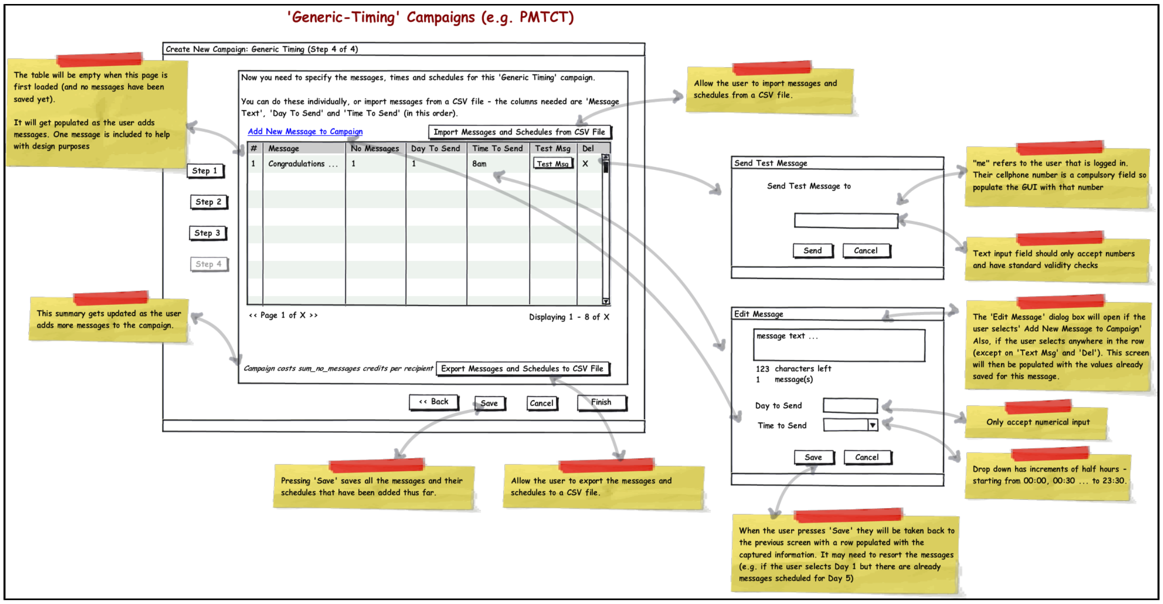


GM241 Create New Campaign - Step 4 (Generic - Messages and Schedules)

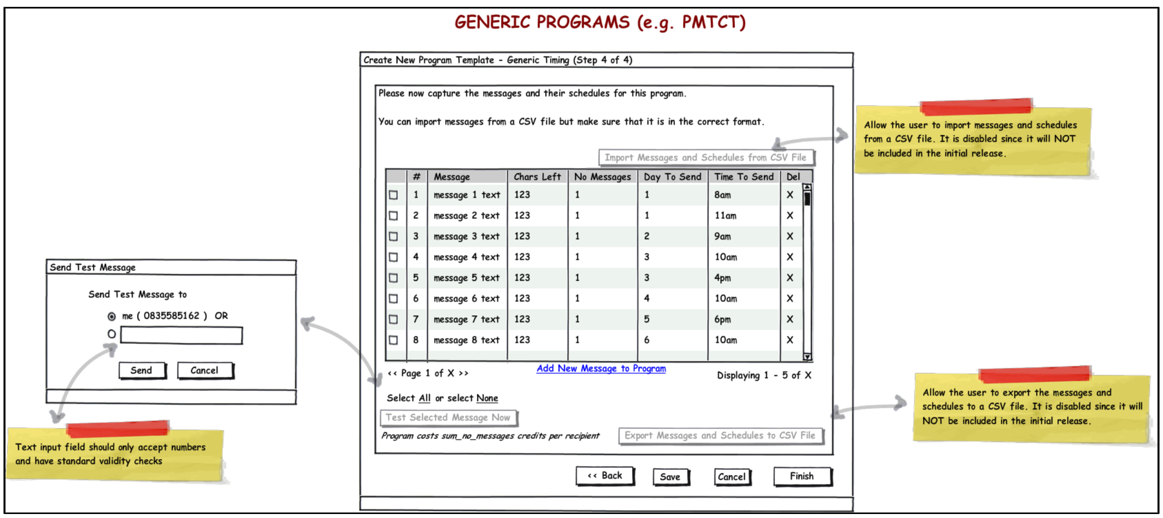
Updated Gui - Based on Discussion with Vikram and Sarah (25 Nov 2010)



Updated GUI - Based on feedback from Faisel, Katherine & Dev Team (18 Oct 2010)

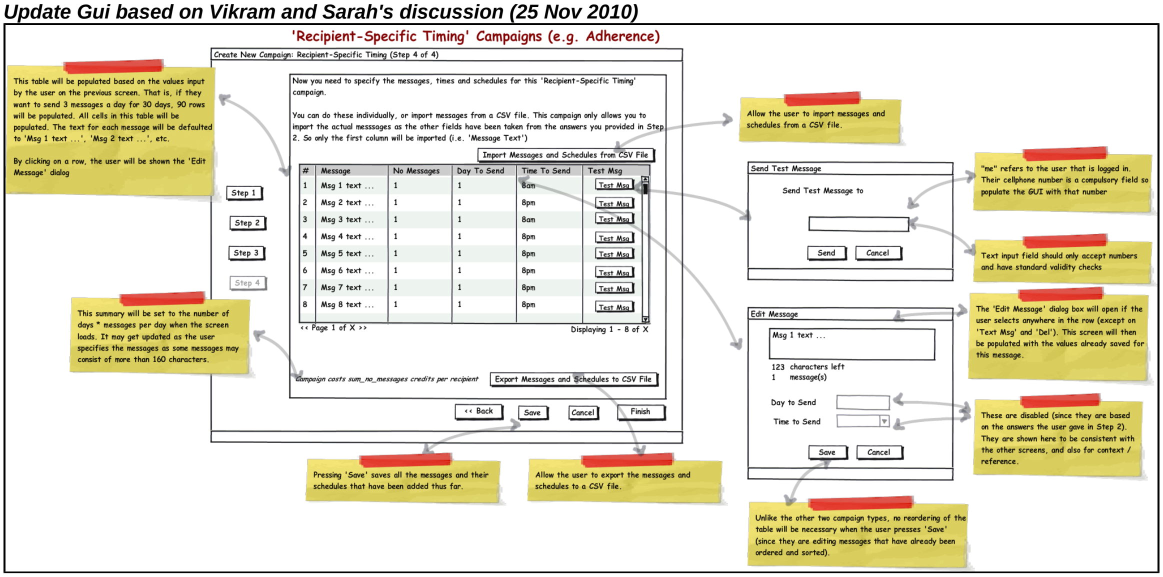


Original GUI

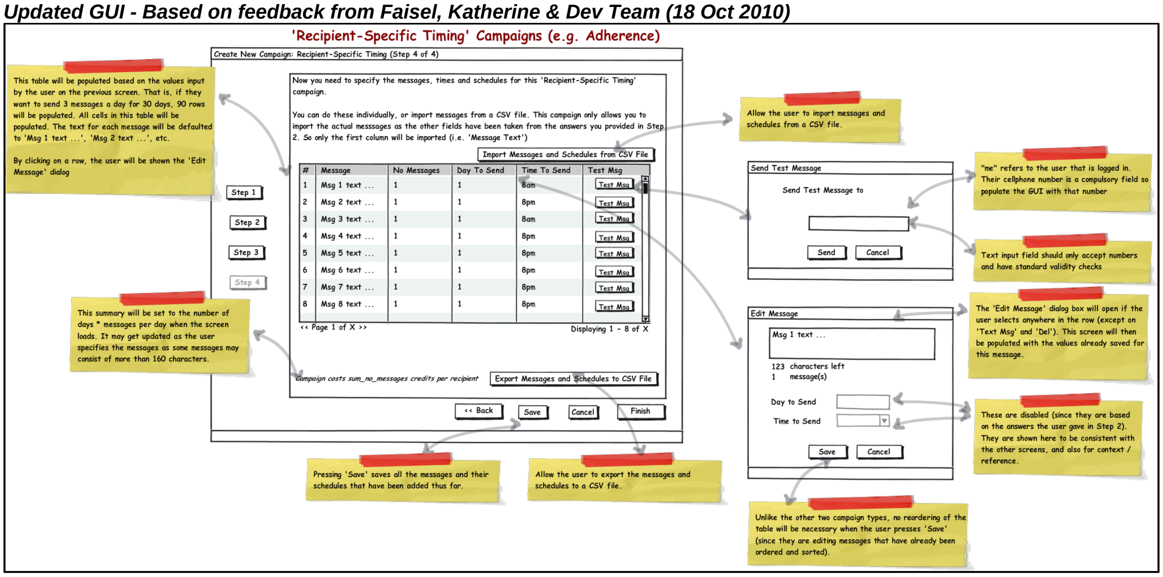


GM241 Create New Campaign - Step 4 (Recipient-Specific - Messages and Schedules)

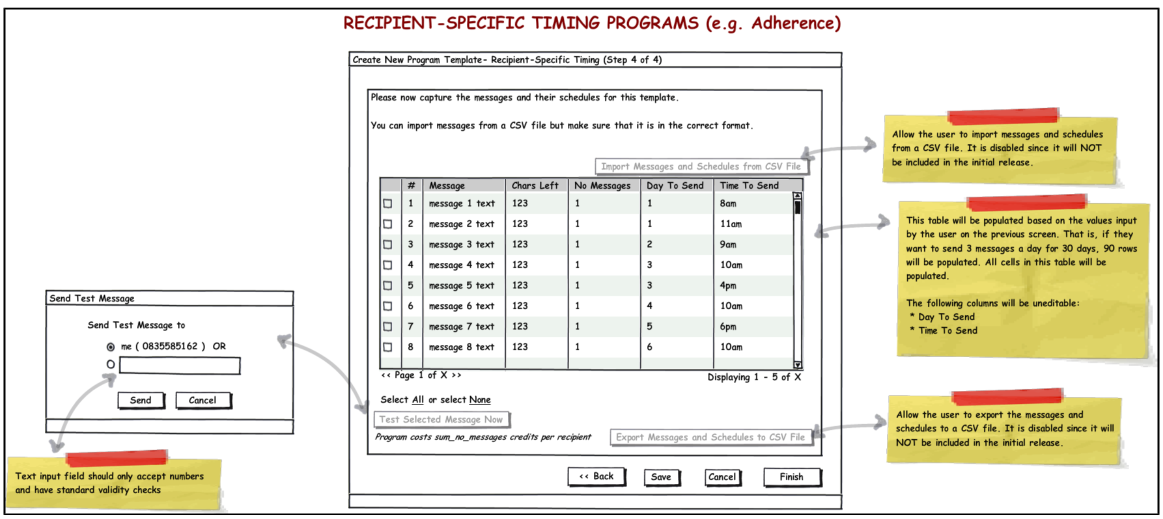
Update Gui based on Vikram and Sarah's discussion (25 Nov 2010)



Updated GUI - Based on feedback from Faisel, Katherine & Dev Team (18 Oct 2010)

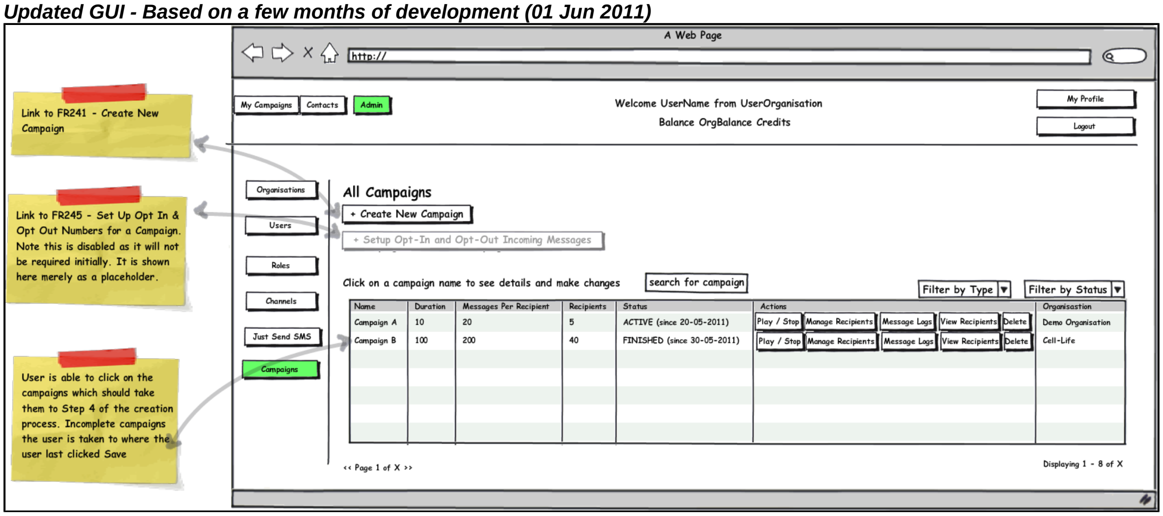


Original GUI

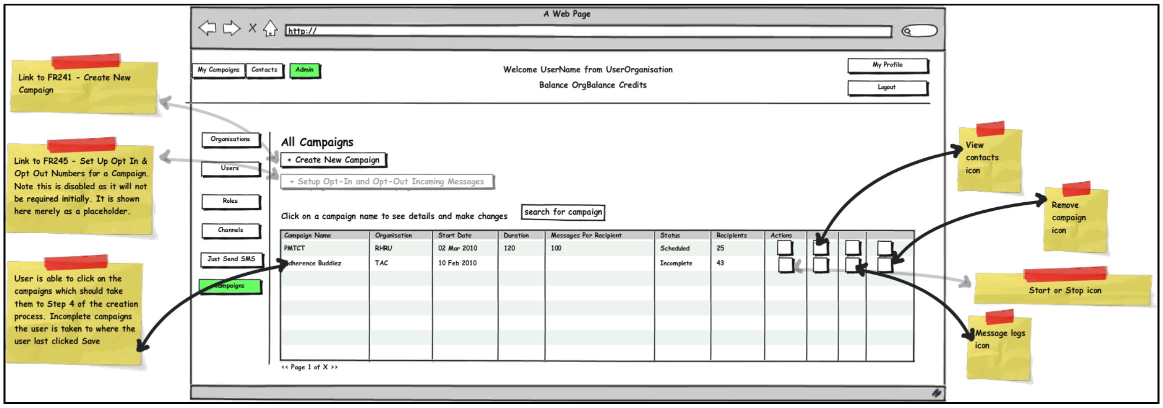


GM242 View All Campaigns

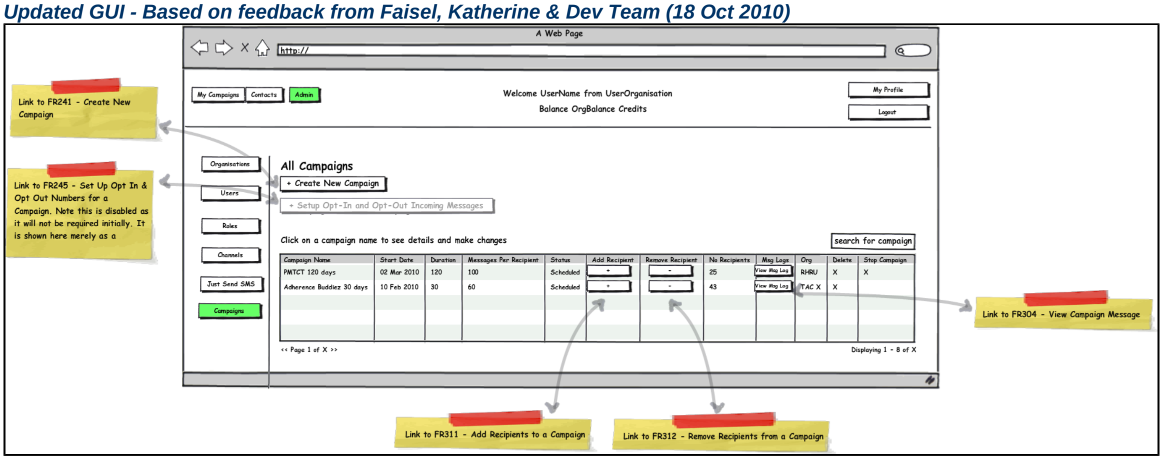
Updated GUI - Based on a few months of development (01 Jun 2011)



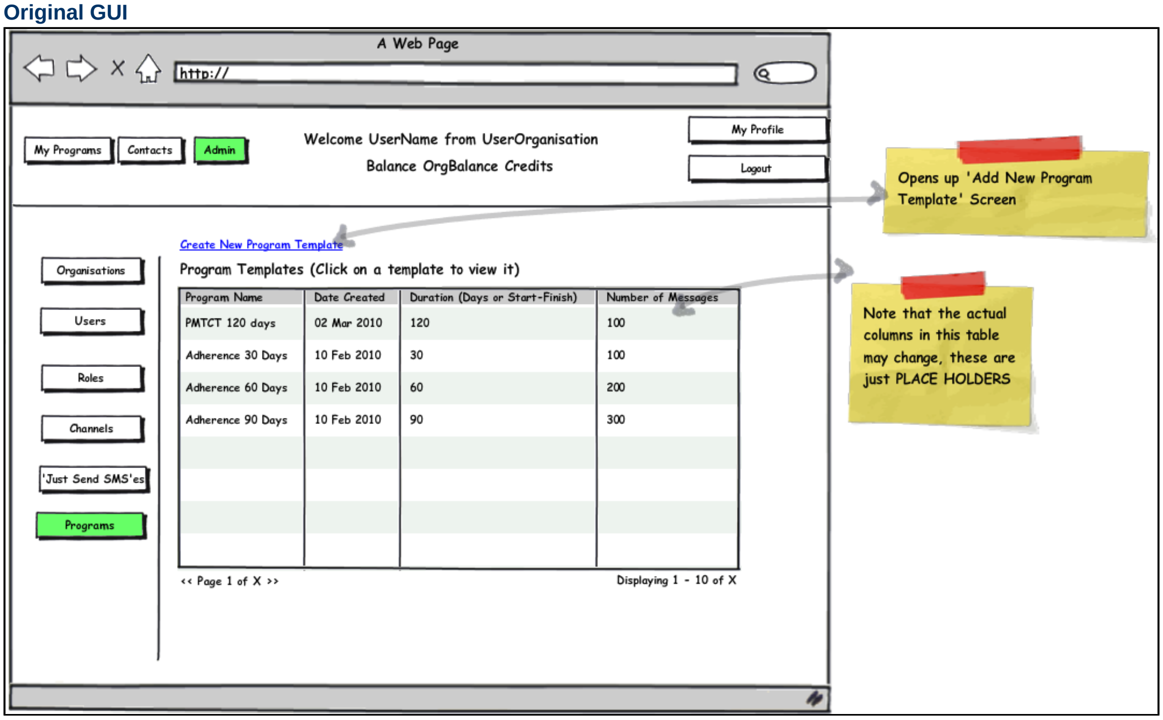
Updated GUI - Based on discussion with Vikram and Sarah (25 Nov 2010)



Updated GUI - Based on feedback from Faisel, Katherine & Dev Team (18 Oct 2010)

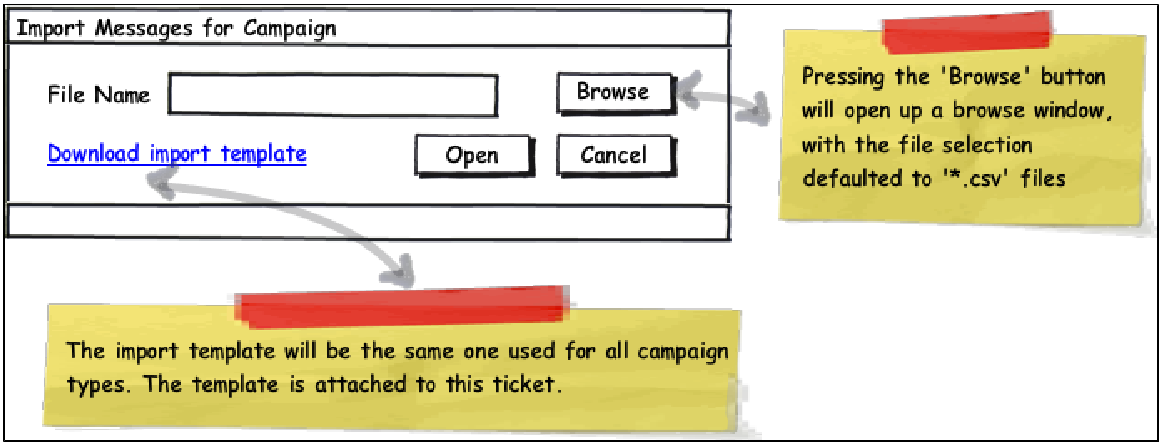


Original GUI

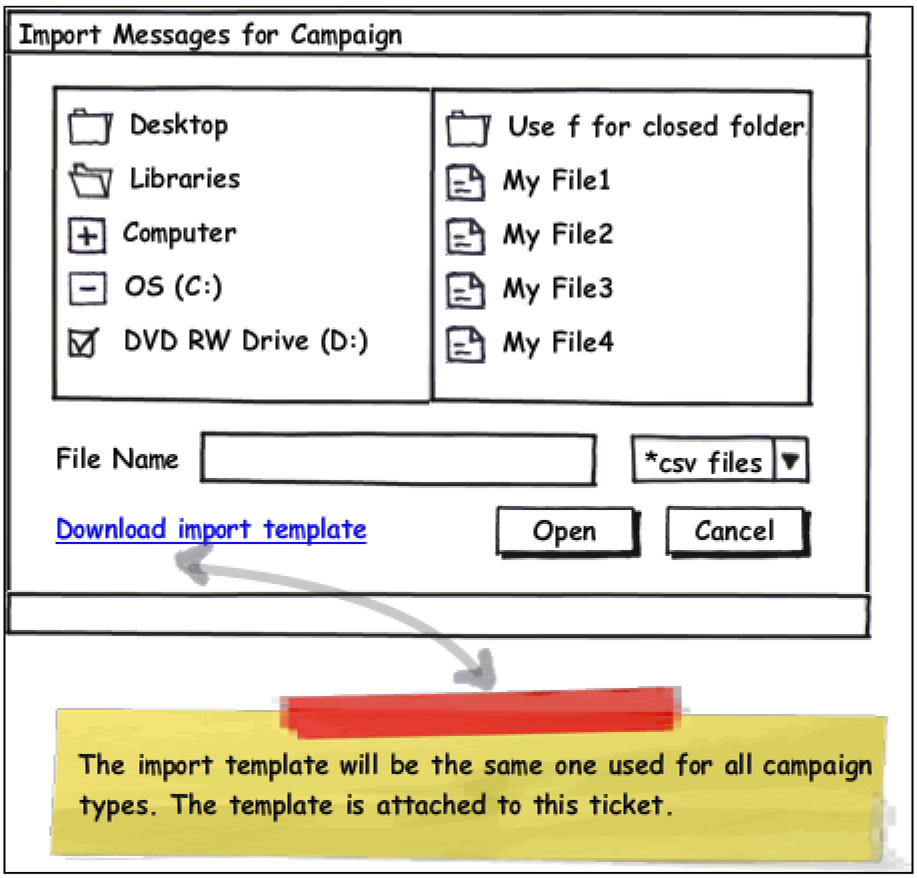


GM247 Import Campaign Messages and Schedules

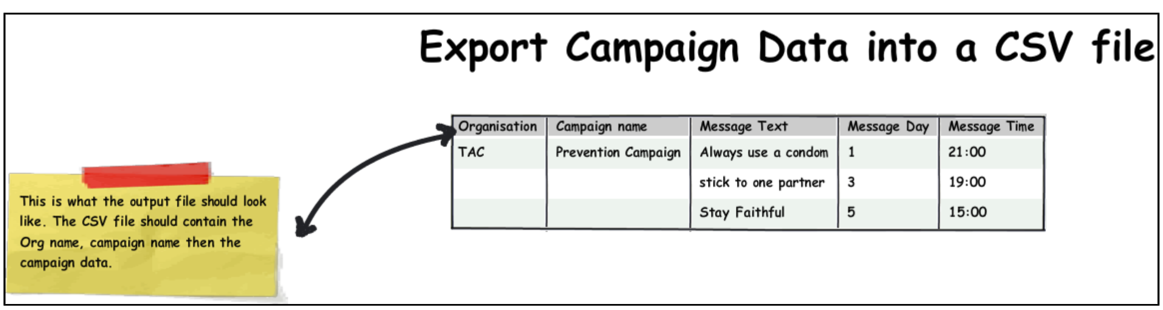
Updated based on feedback from Vikram (9 Feb 2011)



Initial GUI Mockup (9 Feb 2011)

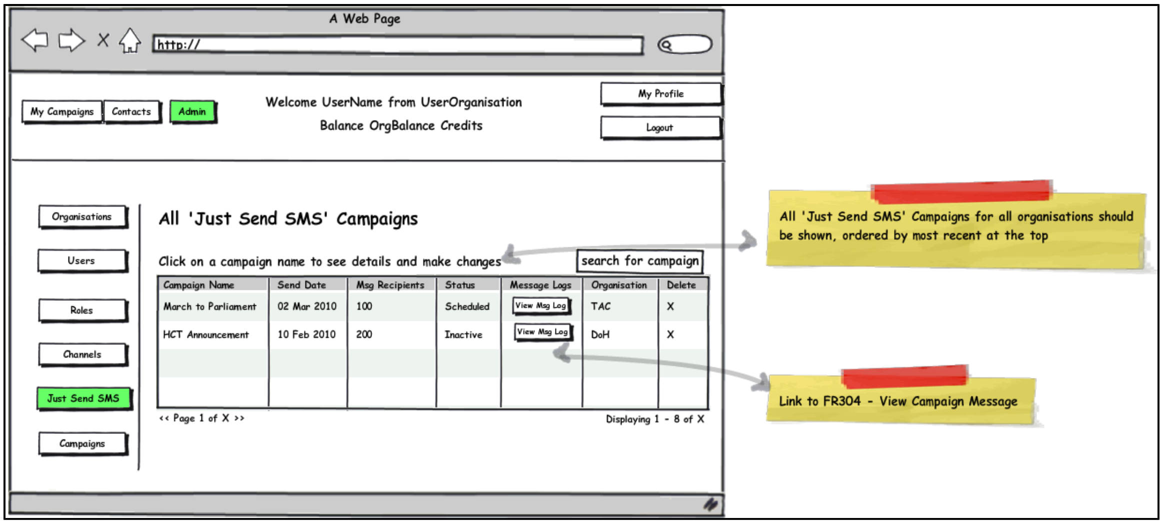


GM248 Export Campaign Messages and Schedules

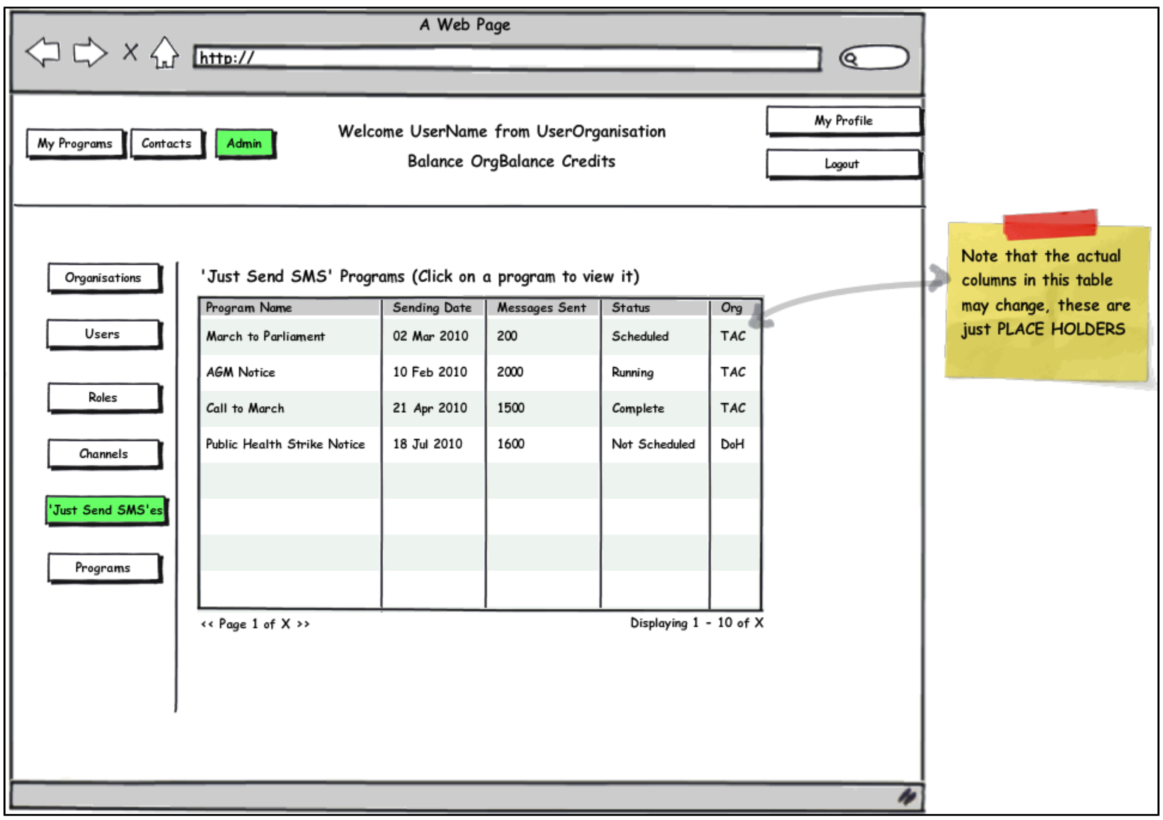


GM251 View All 'Just Send SMS' Campaigns

Updated GUI - Based on feedback from Faisel, Katherine & Dev Team (18 Oct 2010)

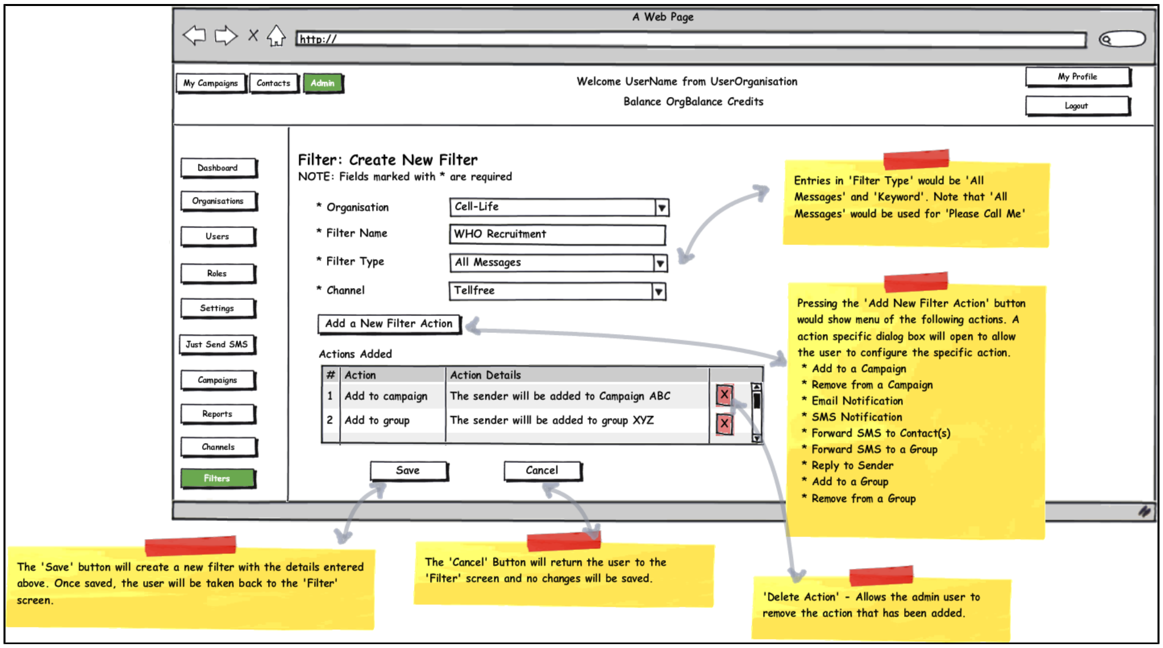


Original GUI

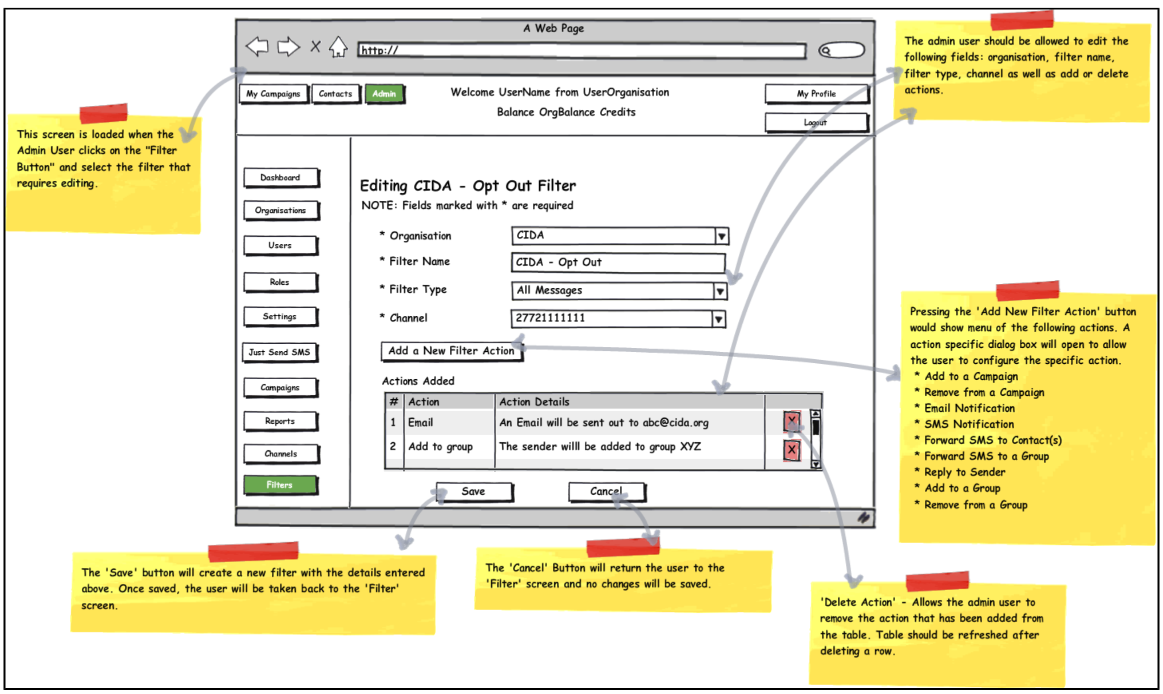


GM261 Create New Filter

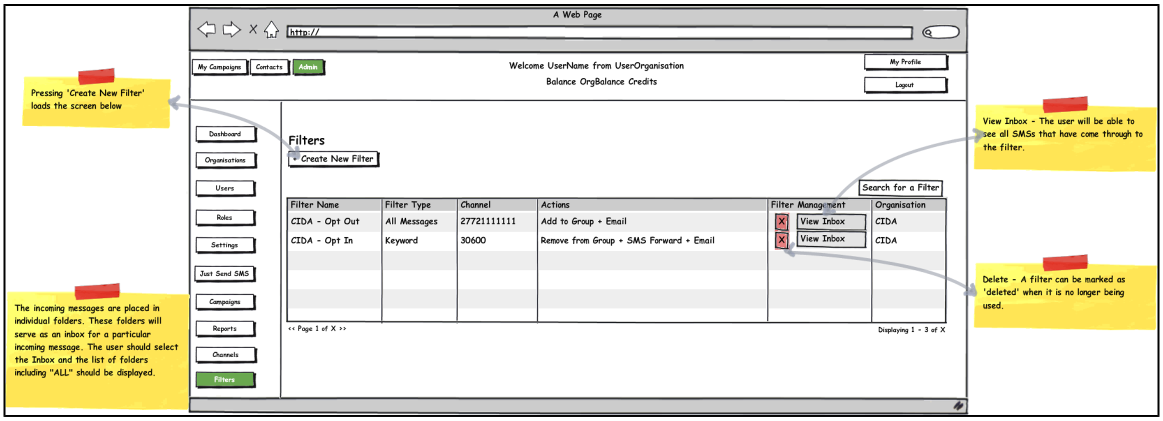
Original Design (August 2011)



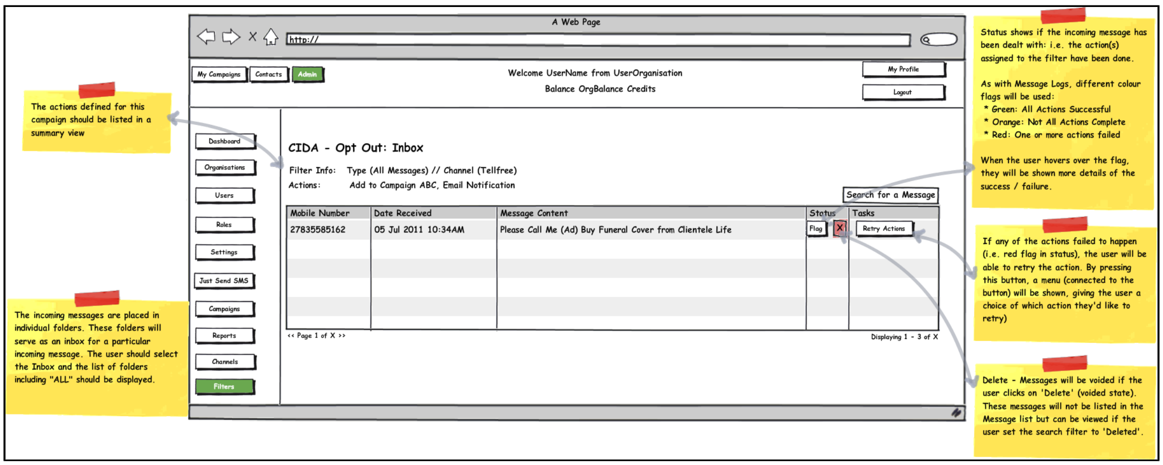
GM262 Edit Existing Filter



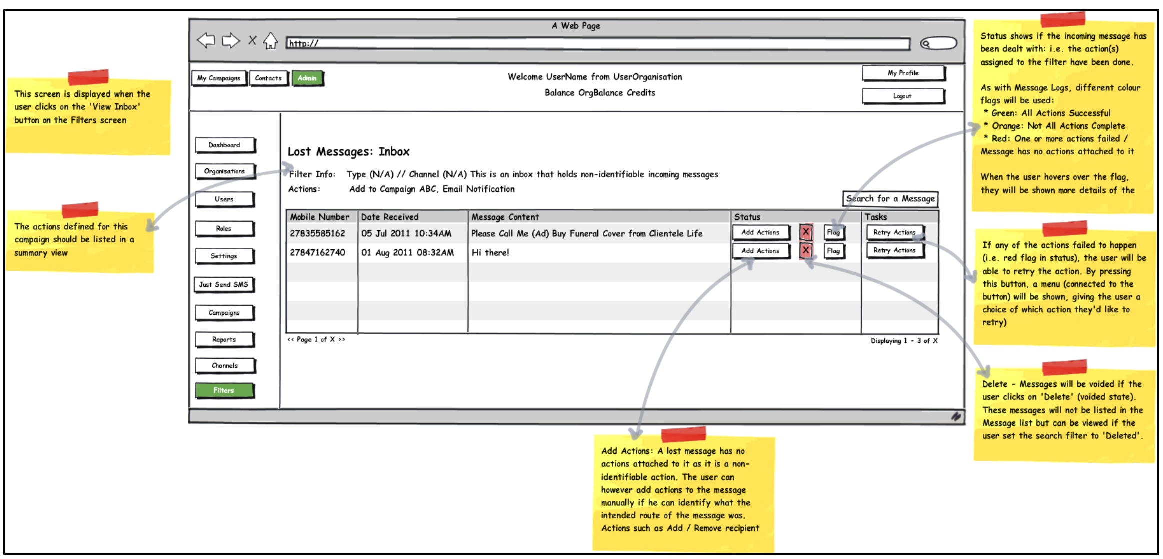
GM263 View all Filters



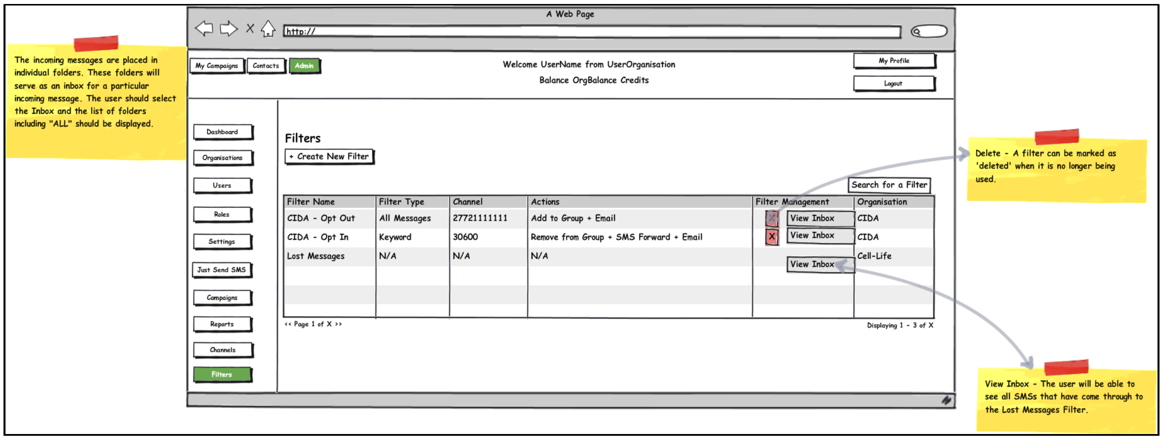
GM264 View Messages on a Filter



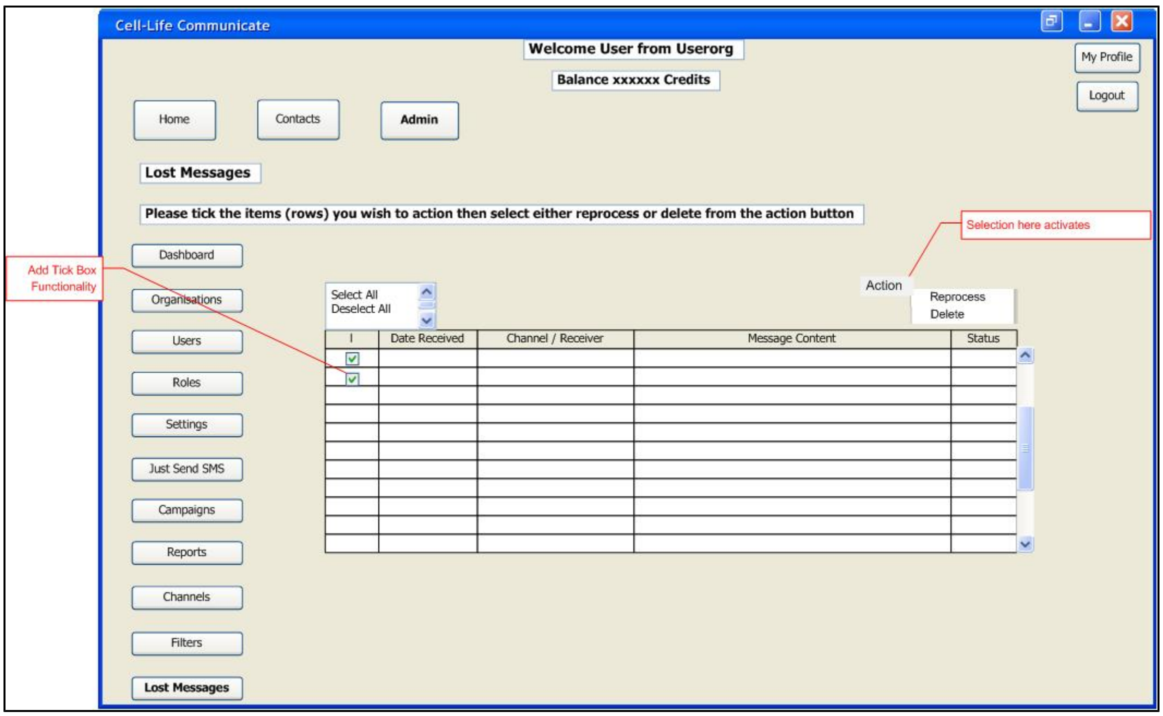
GM270 Lost Messages (Step 2)



GM270 - Lost Messages (Step 1)

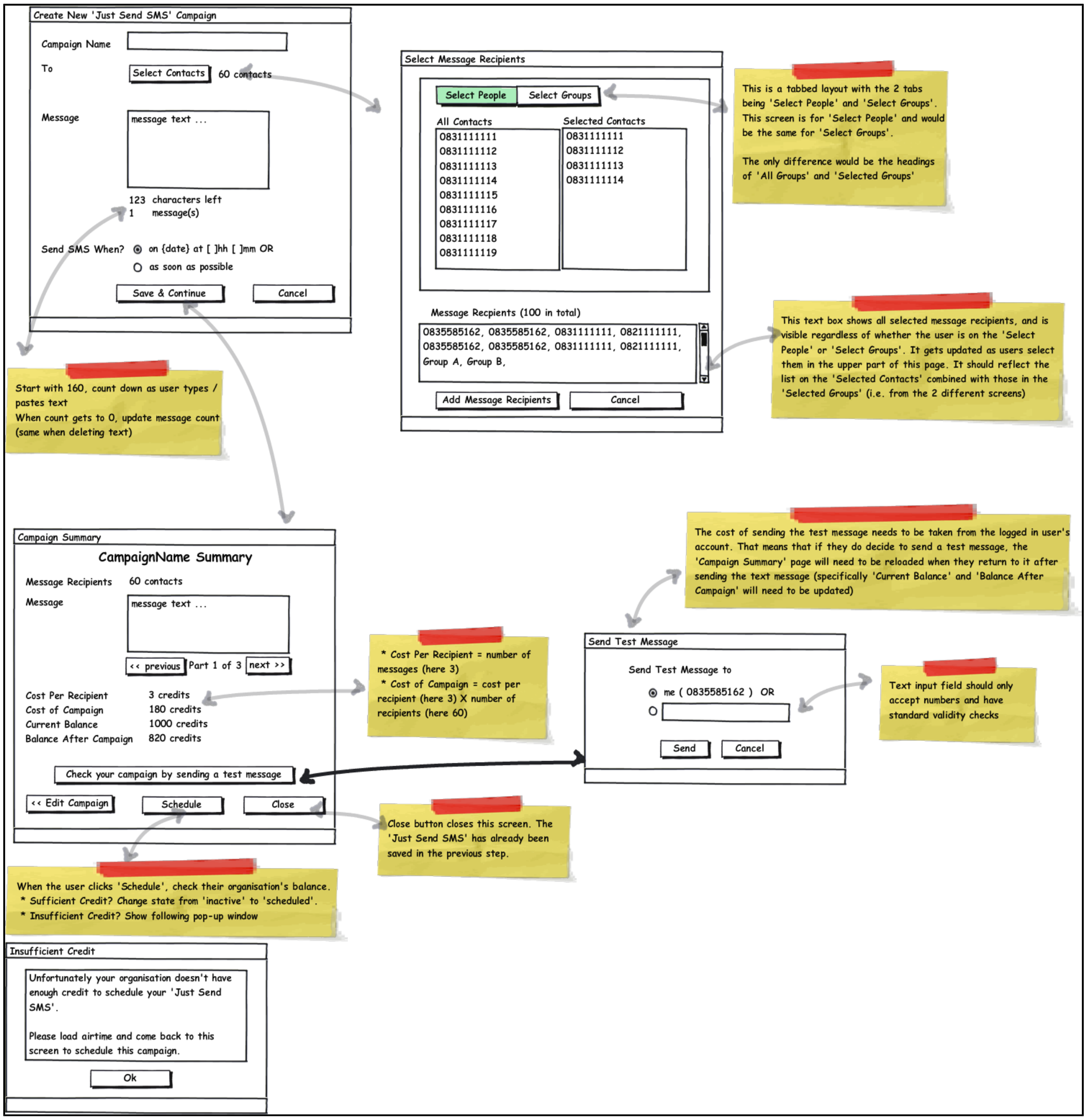


GM270 Process Lost Messages



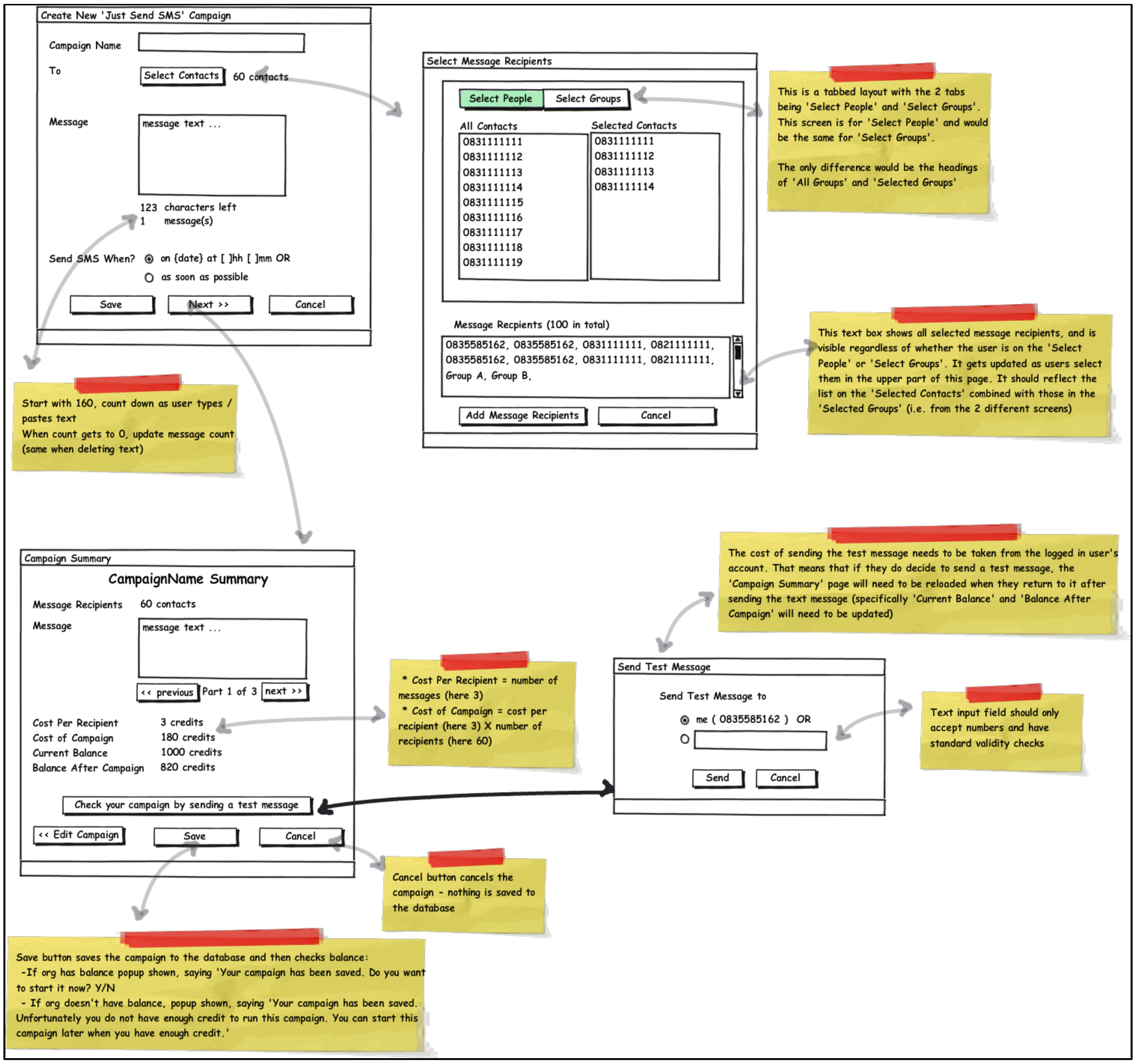
GM301 Create New 'Just Send SMS' Campaign

Redesign of GUI (Based on team discussions Fri 01 Oct):

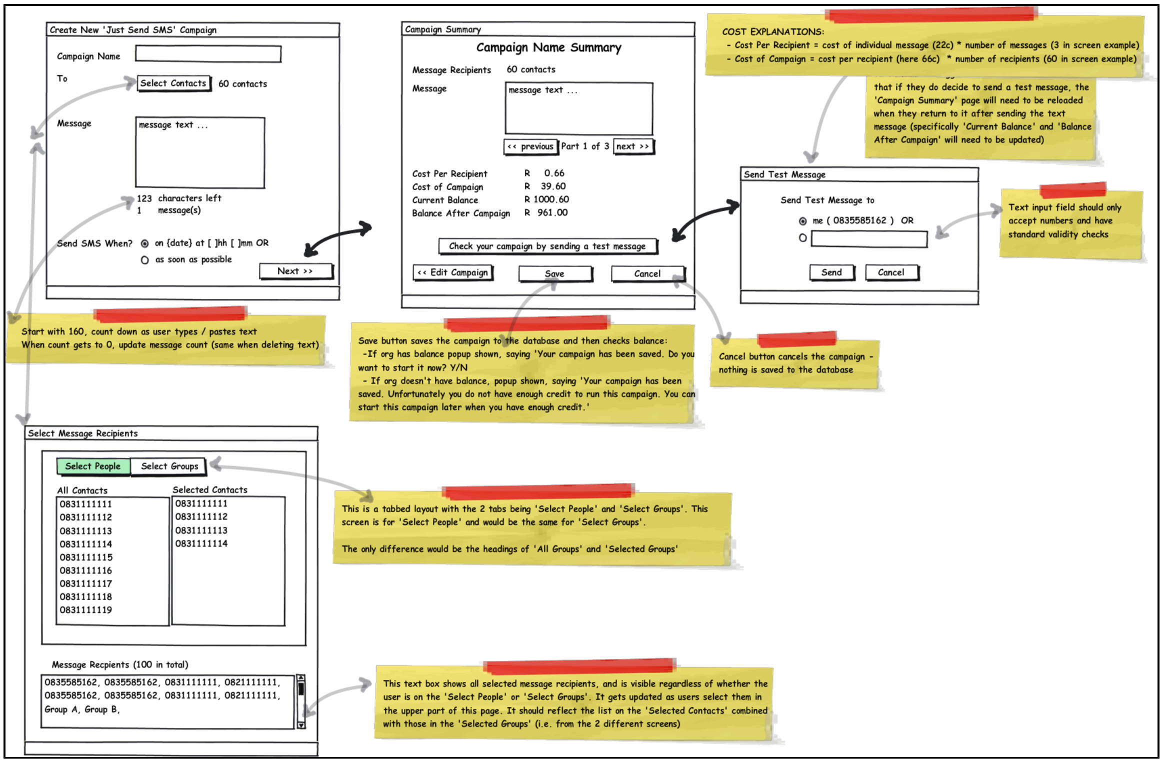


Redesign of GUI (Based on team discussions Mon 13 Sept):

Minor change - only on the last screen - re showing summary in 'SMS Credits' instead of SA Rand currency.

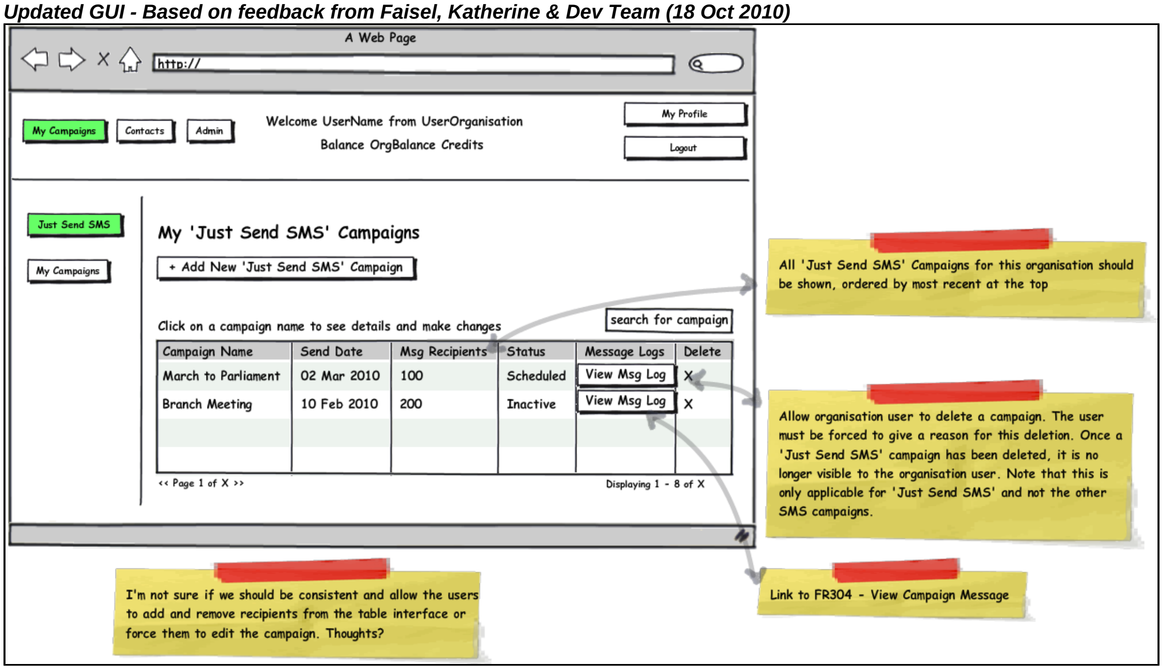


Original GUI

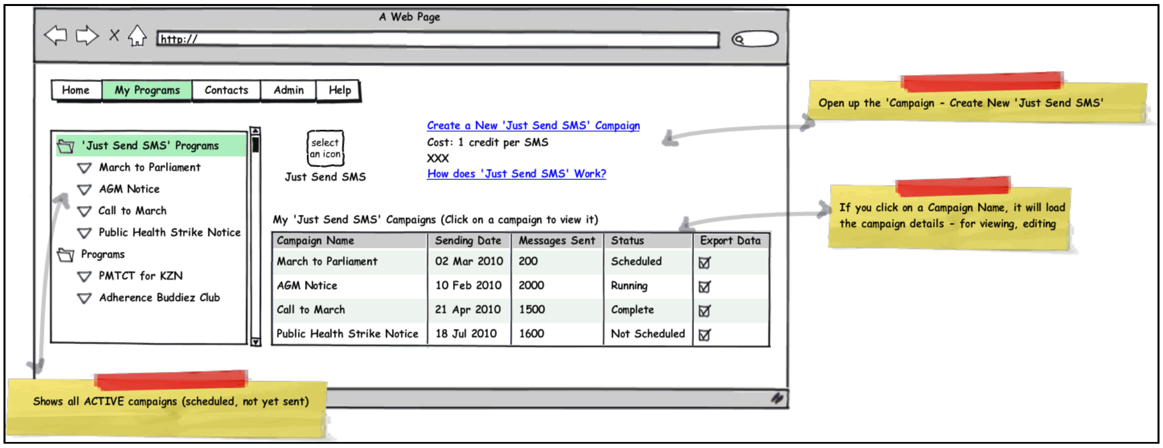


GM302 View My 'Just Send SMS' Campaigns

Updated GUI - Based on feedback from Faisel, Katherine & Dev Team (18 Oct 2010)

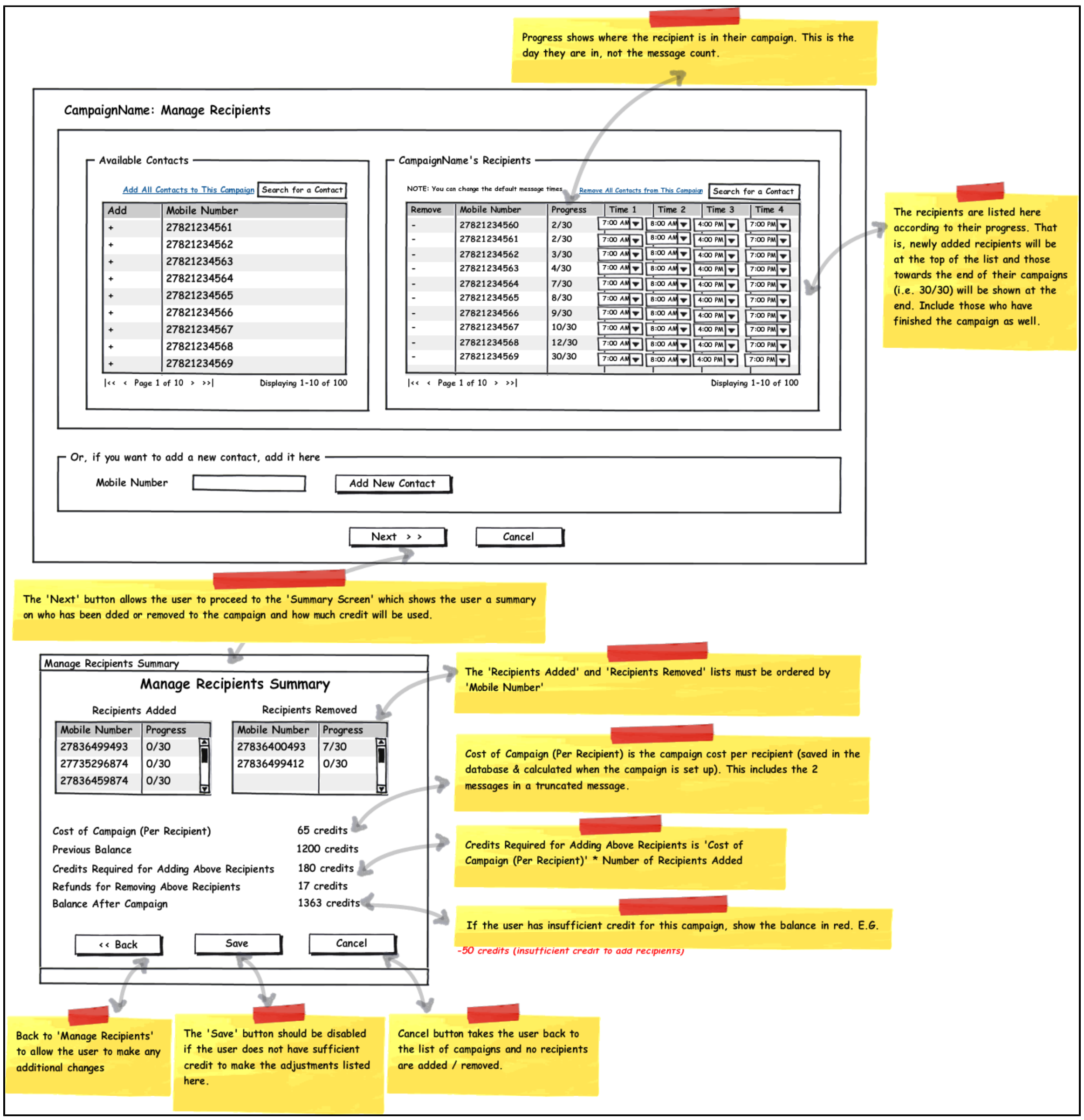


Original GUI

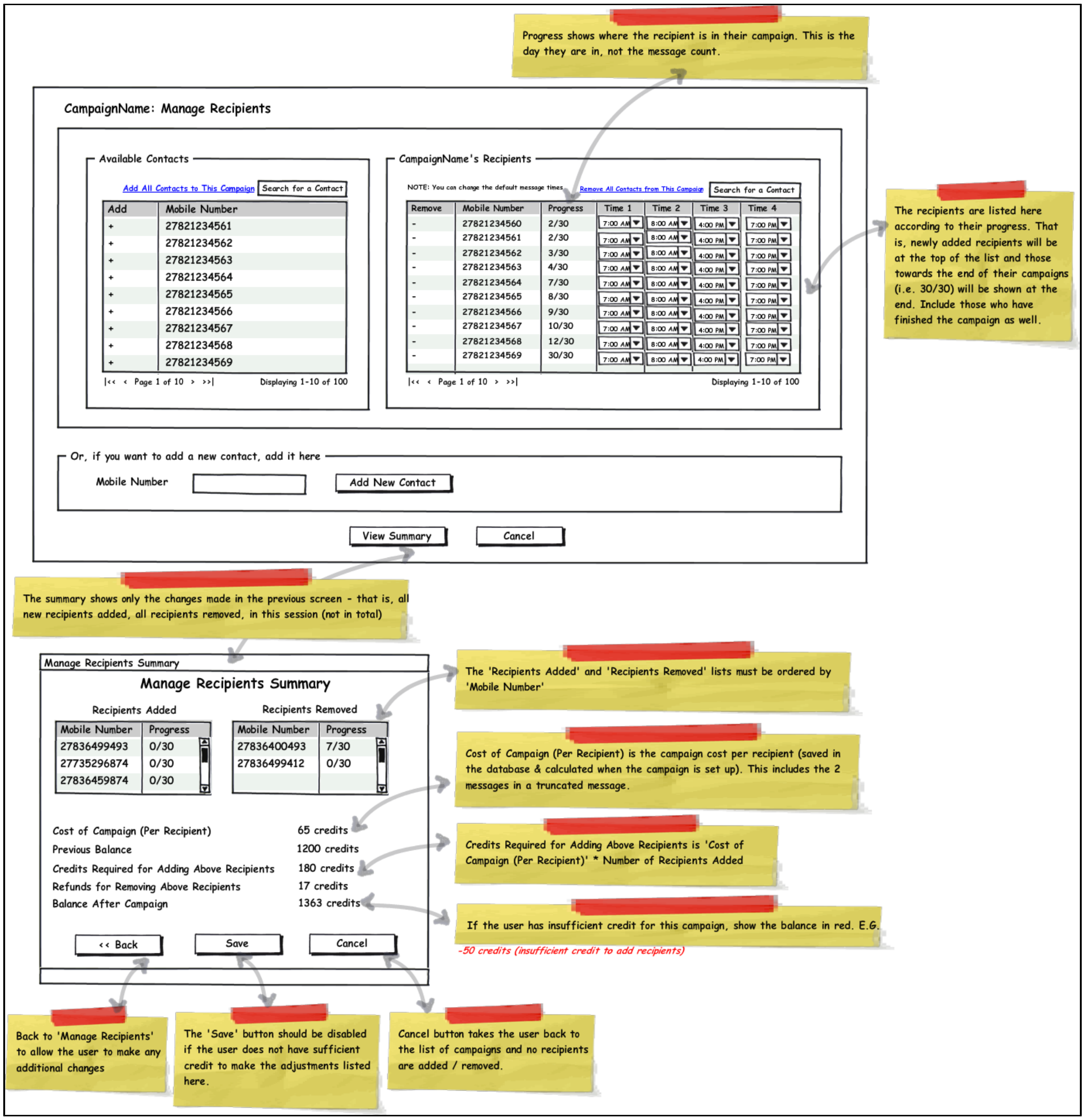


GM311 312 Add and Remove Recipients to and from a Campaign

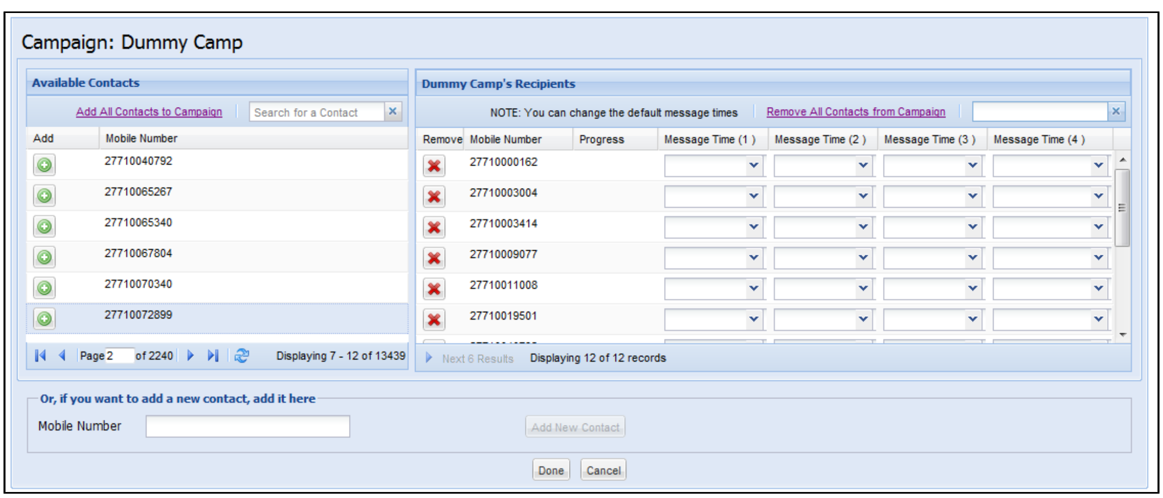
Updated GUI (20 Apr 2011)



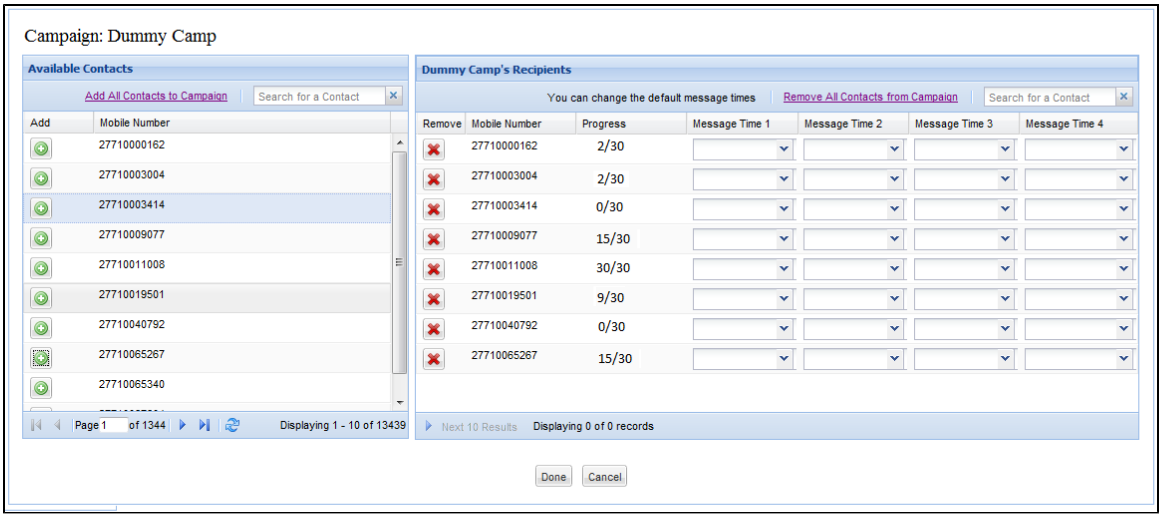
Updated GUI (13 Dec 2010)



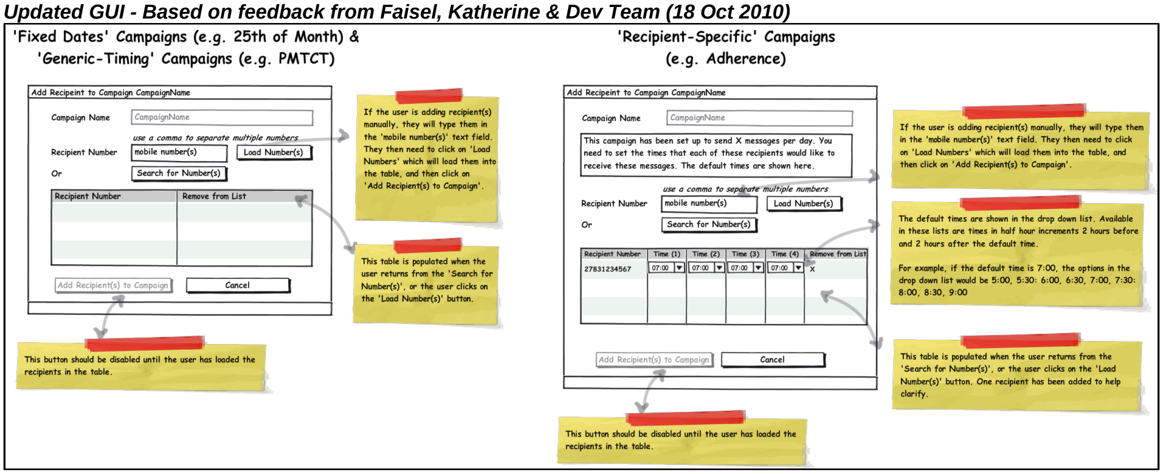
Updated GUI - (22 Nov 2010)



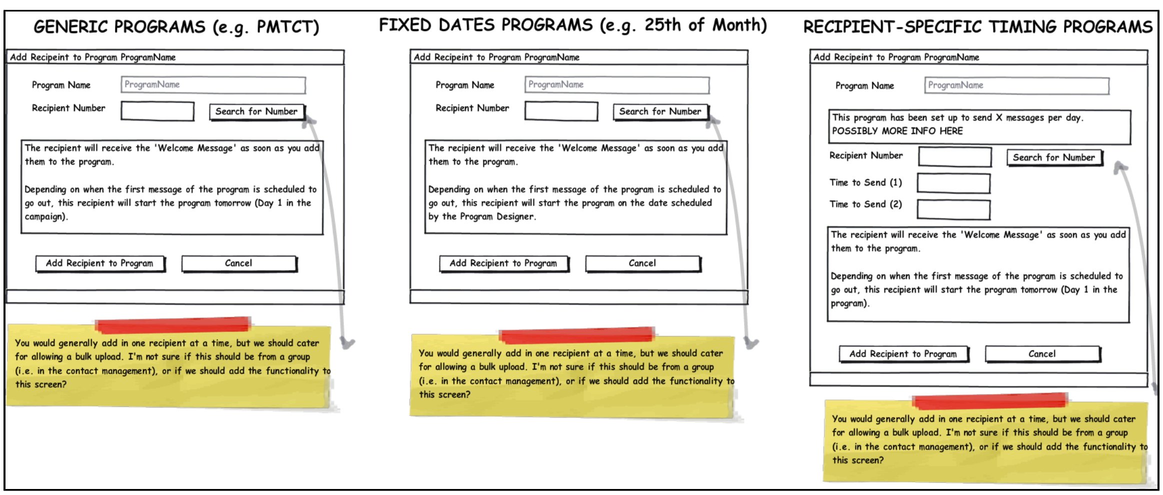
Updated GUI - Based on feedback from Dev & BA Team (22 Nov 2010)



Updated GUI - Based on feedback from Faisel, Katherine & Dev Team (18 Oct 2010)

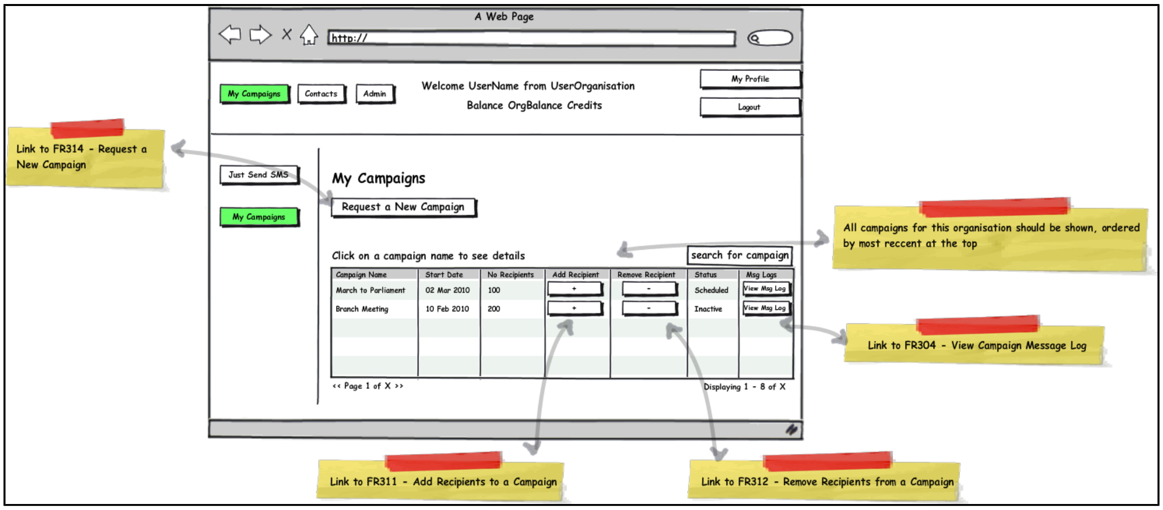


Original GUI

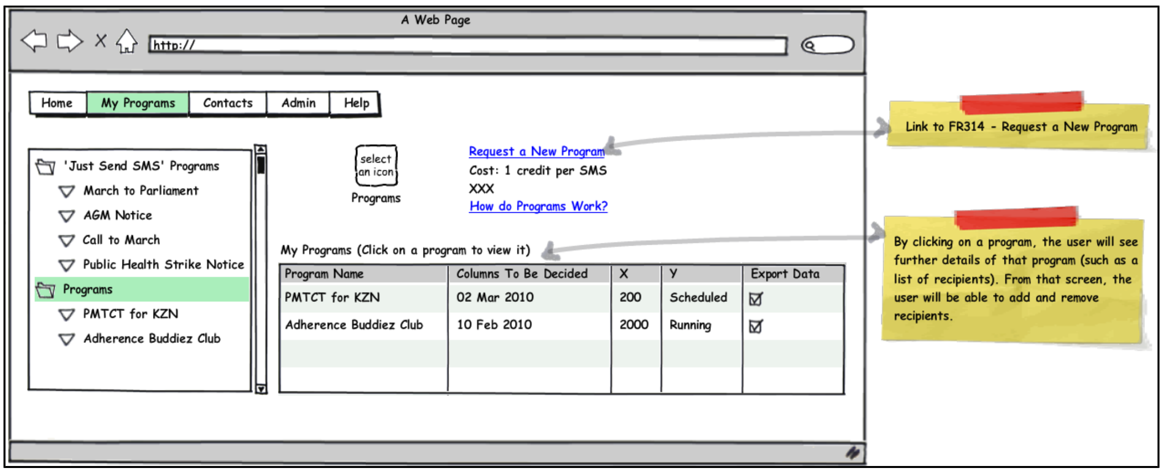


GM313 View My Campaigns

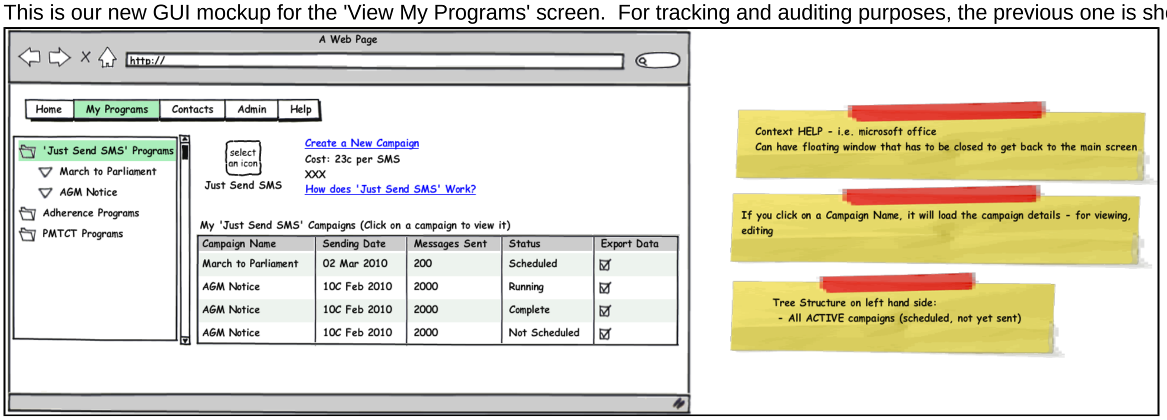
Updated GUI - Based on feedback from Faisel, Katherine & Dev Team (18 Oct 2010)



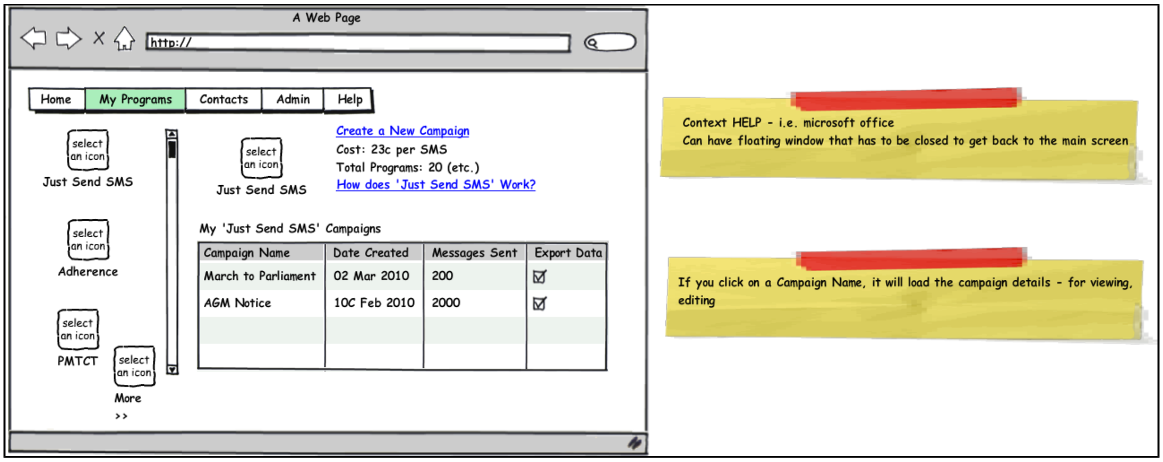
23 Sept: Updated GUI



This is our new GUI mockup for the 'View My Programs' screen. For tracking and auditing purposes, the previous one is shown below.



This was our **first draft** at the 'View My Programs' GUI Mockup. It has been replaced by the GUI mockup above.



GM314 Request a New Campaign - Email Template

The format of the email sent to the email address saved in the ***Campaign request email address*** setting (available in 'Settings' button from Admin)

Subject Line: Communicate - Request New Campaign

Alert from Communicate

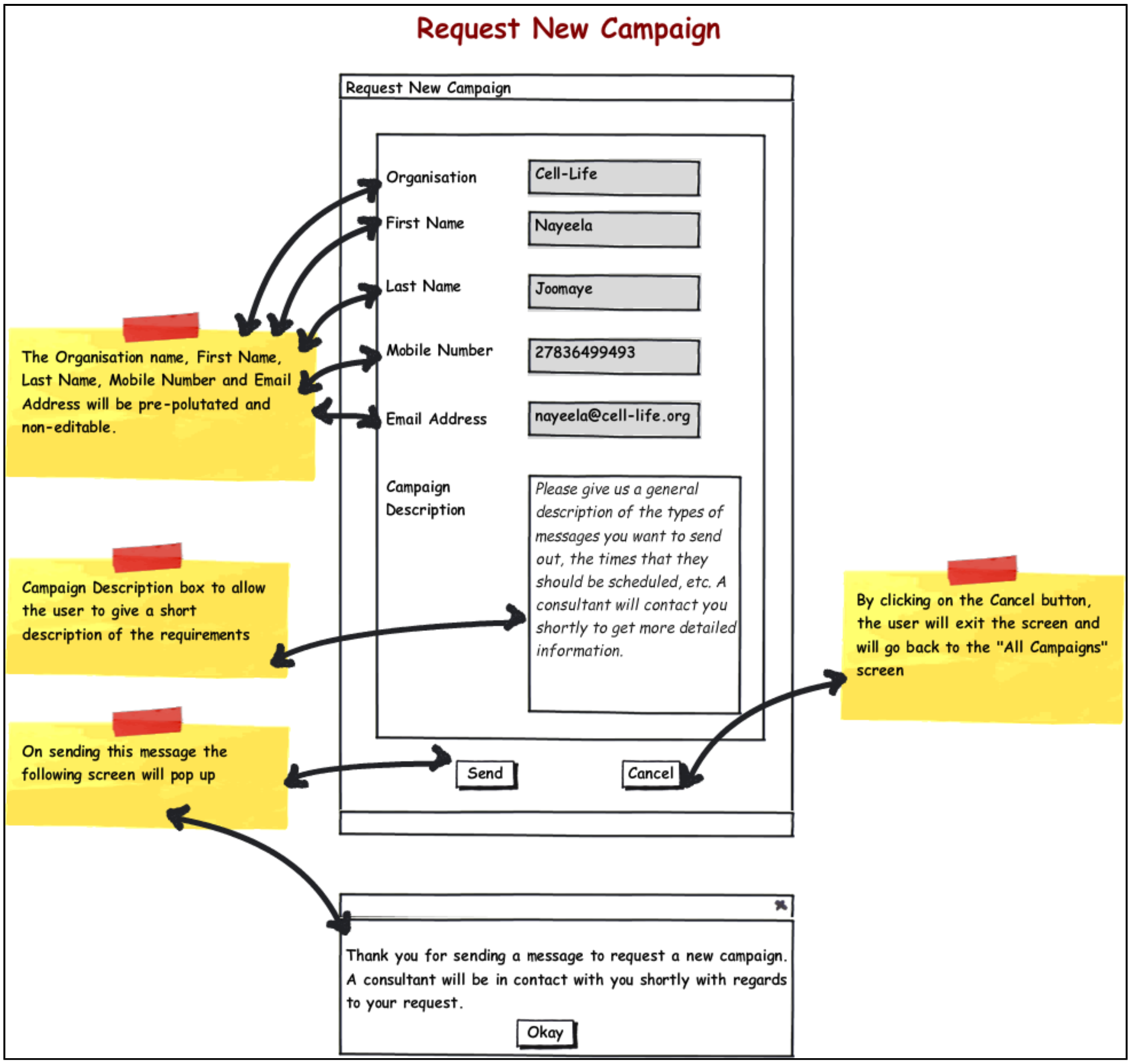
Dear Admin,

A Communicate user has made a request for a new campaign:

- Organisation: organisationName
- First Name: firstName
- Surname: surname
- Mobile Number: mobileNumber
- Email: emailAddress
- Campaign Description: campaignDescription

GM314 Request New Campaign

http://jira.cell-life.org/browse/MOBILISR-185



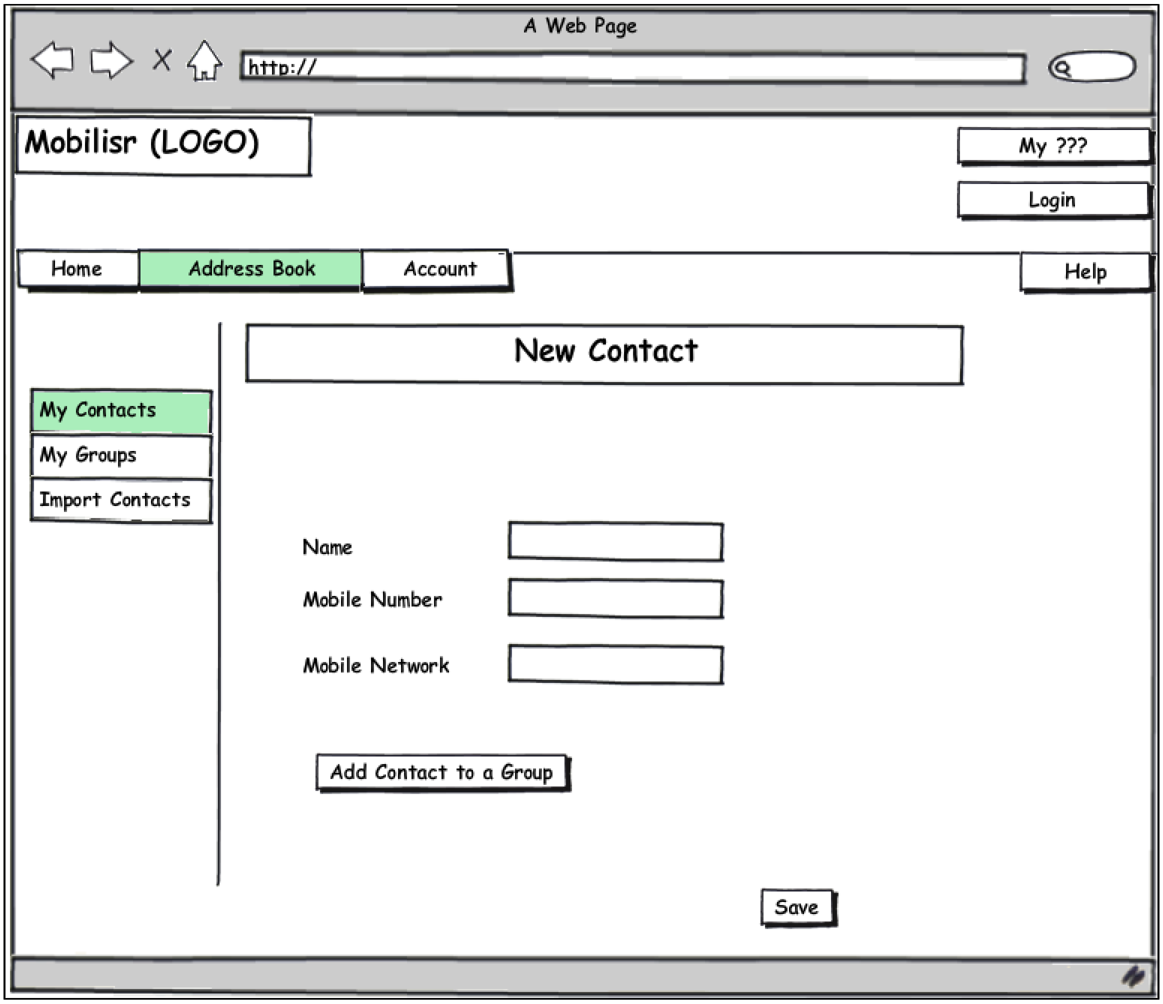
GM322 Email Organisation if Credit is Below Organisation's Threshold - Email Template

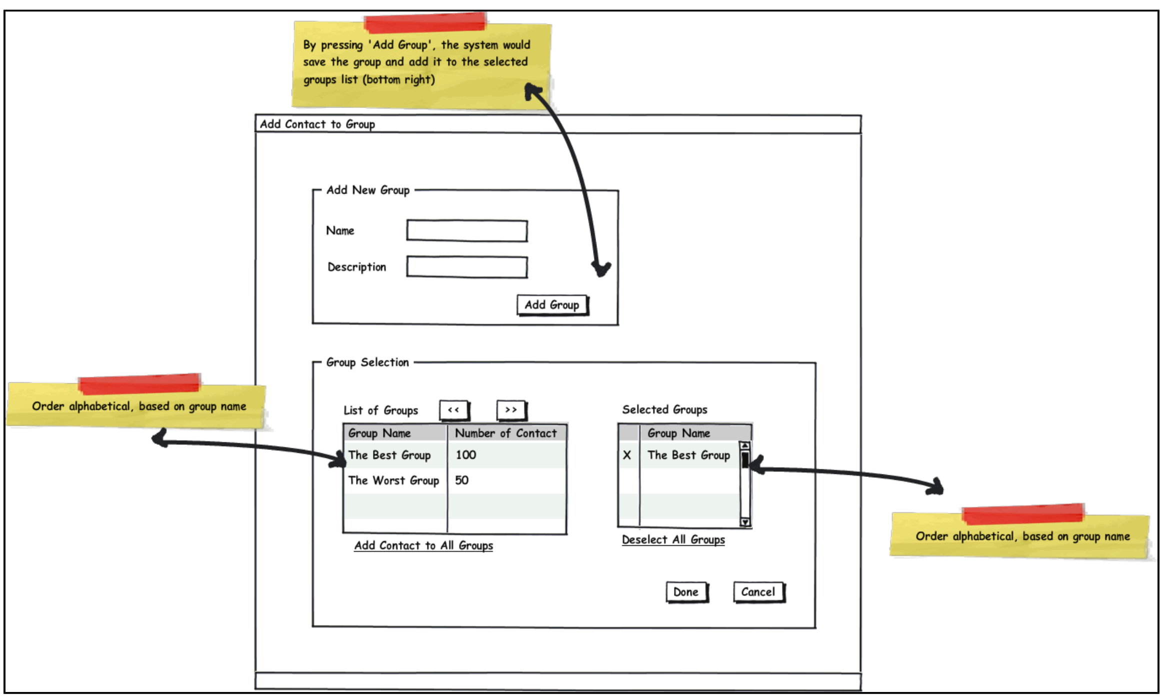
Hi <insert Organisation Name>,

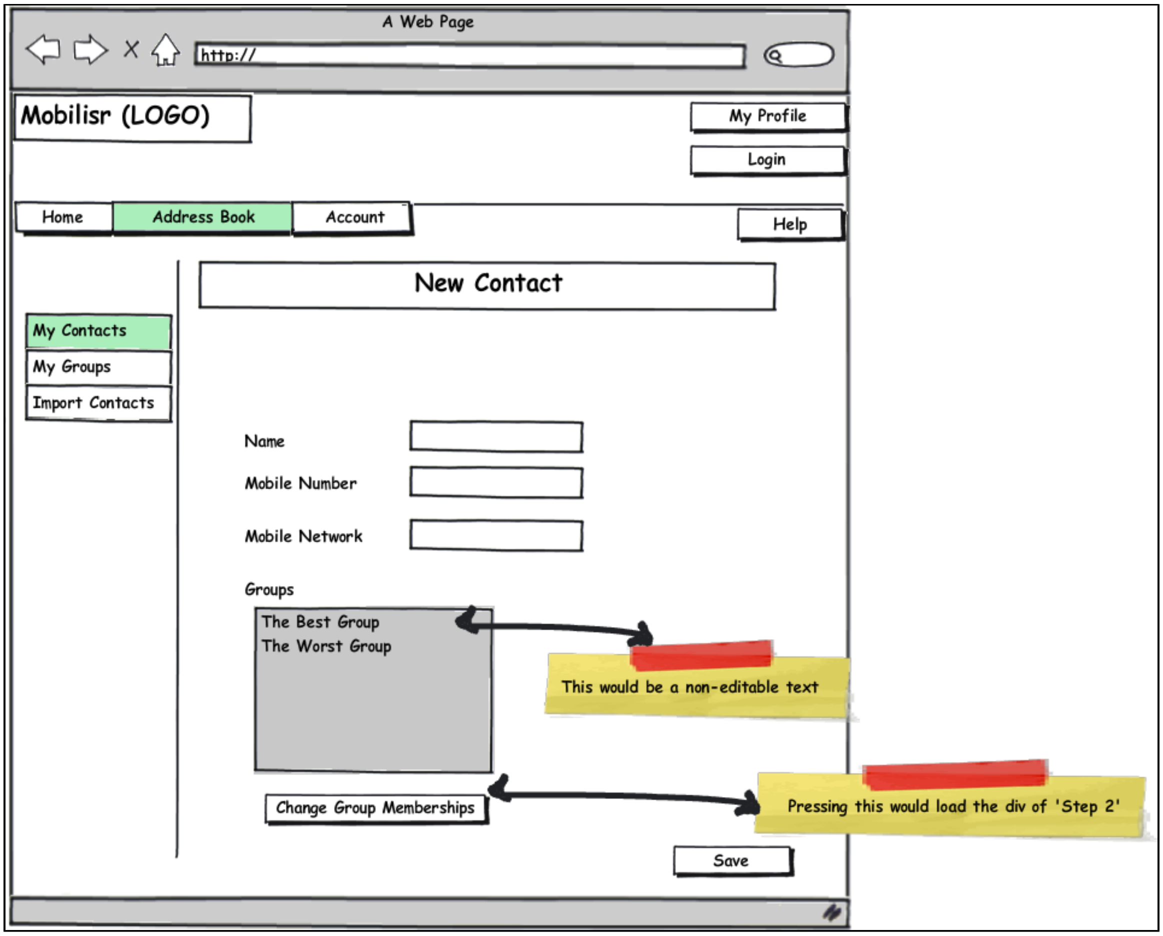
You are running low on SMS credits in Mobilisr (current balance is creditBalance). If you want to continue using the system, please load more credits as soon as possible to ensure all your messages are sent in time.

Thanks and Regards,
The Mobilisr Team

GM401 Add New Contact

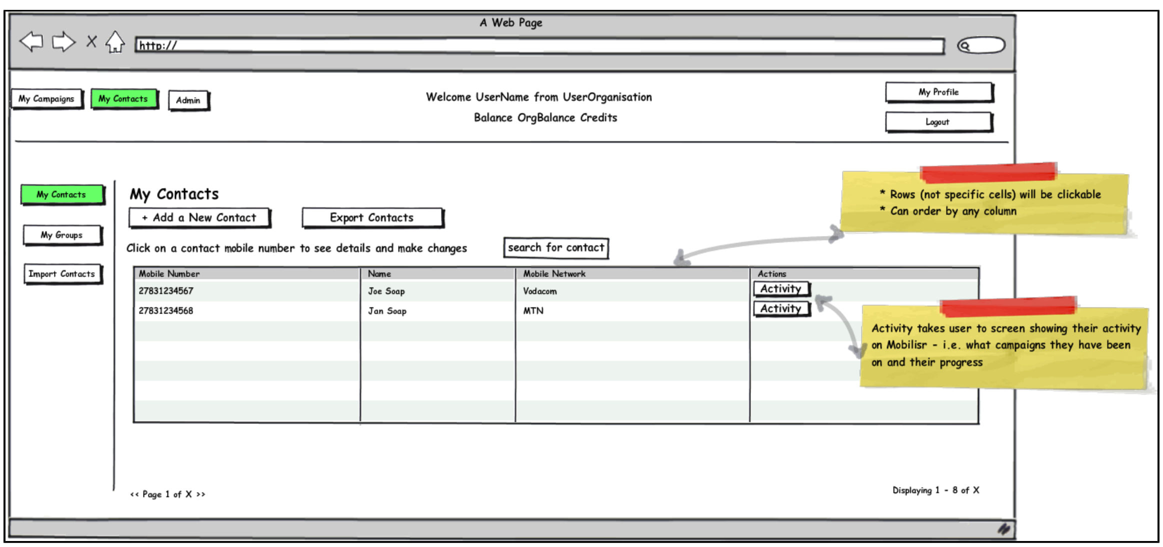

A Web Page
http://
Mobilisr (LOGO)
My ???
Login
Home
Address Book
Account
Help
New Contact
My Contacts
My Groups
Import Contacts
Name
Mobile Number
Mobile Network
Add Contact to a Group
Save


By pressing 'Add Group', the system would save the group and add it to the selected groups list (bottom right)
Add Contact to Group
Add New Group
Name
Description
Add Group
Group Selection
List of Groups
<<
>>
Selected Groups
Group Name
Number of Contact
The Best Group
100
The Worst Group
50
Group Name
X
The Best Group
Add Contact to All Groups
Deselect All Groups
Done
Cancel
Order alphabetical, based on group name
Order alphabetical, based on group name

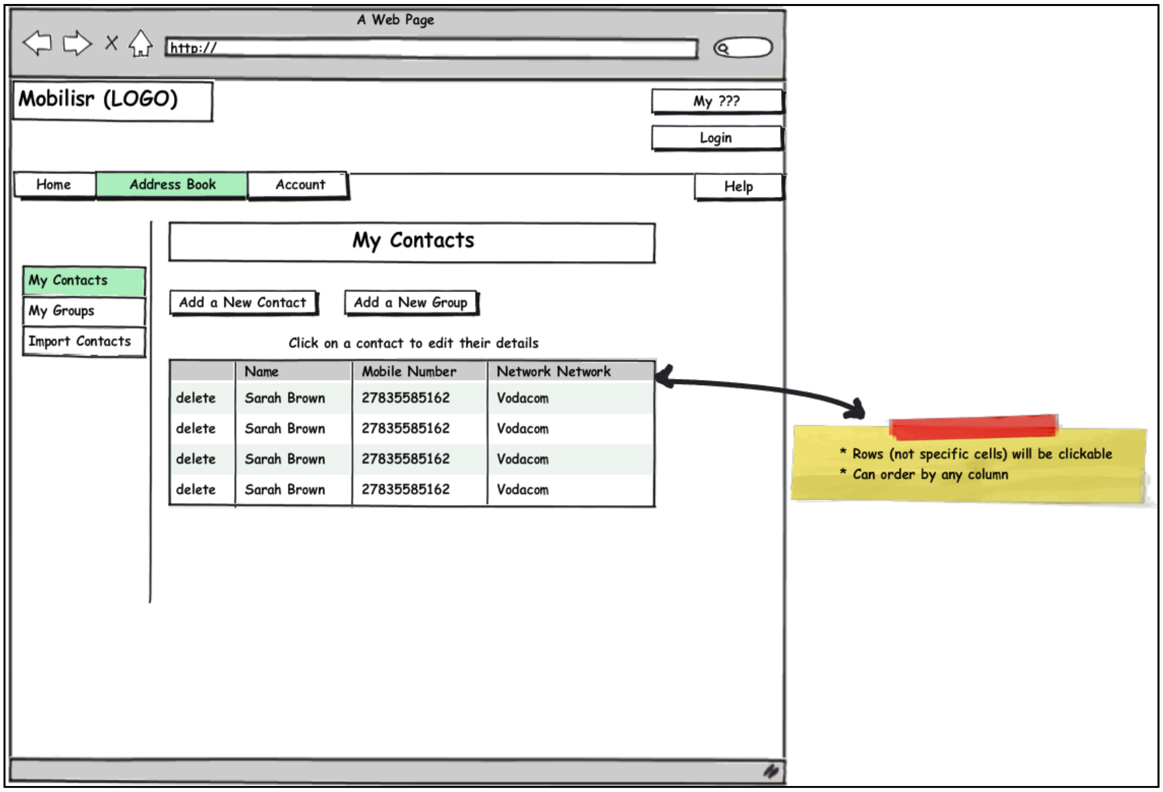


GM402 View My Contacts

Updated GUI (After months of dev)



Original Design

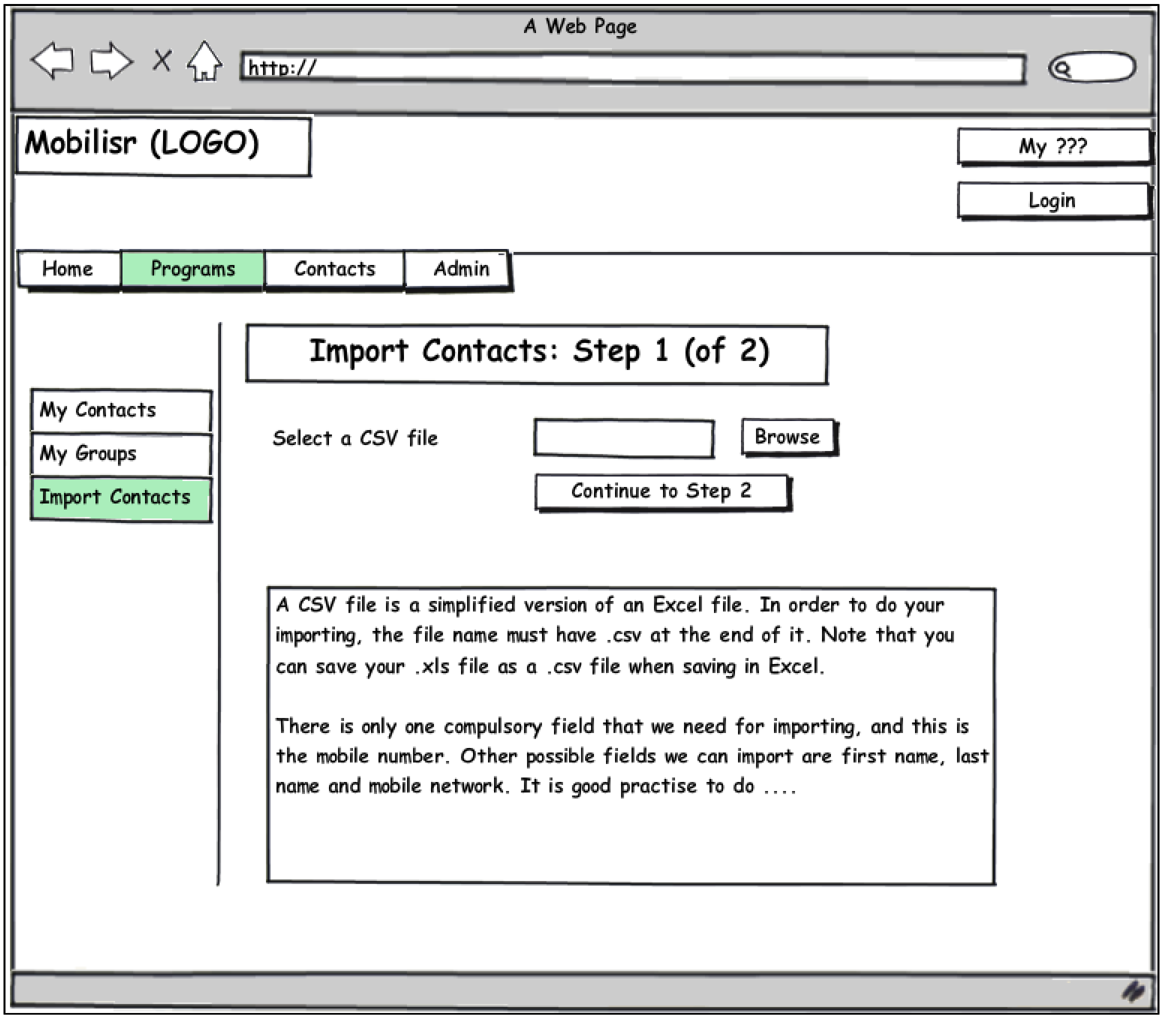


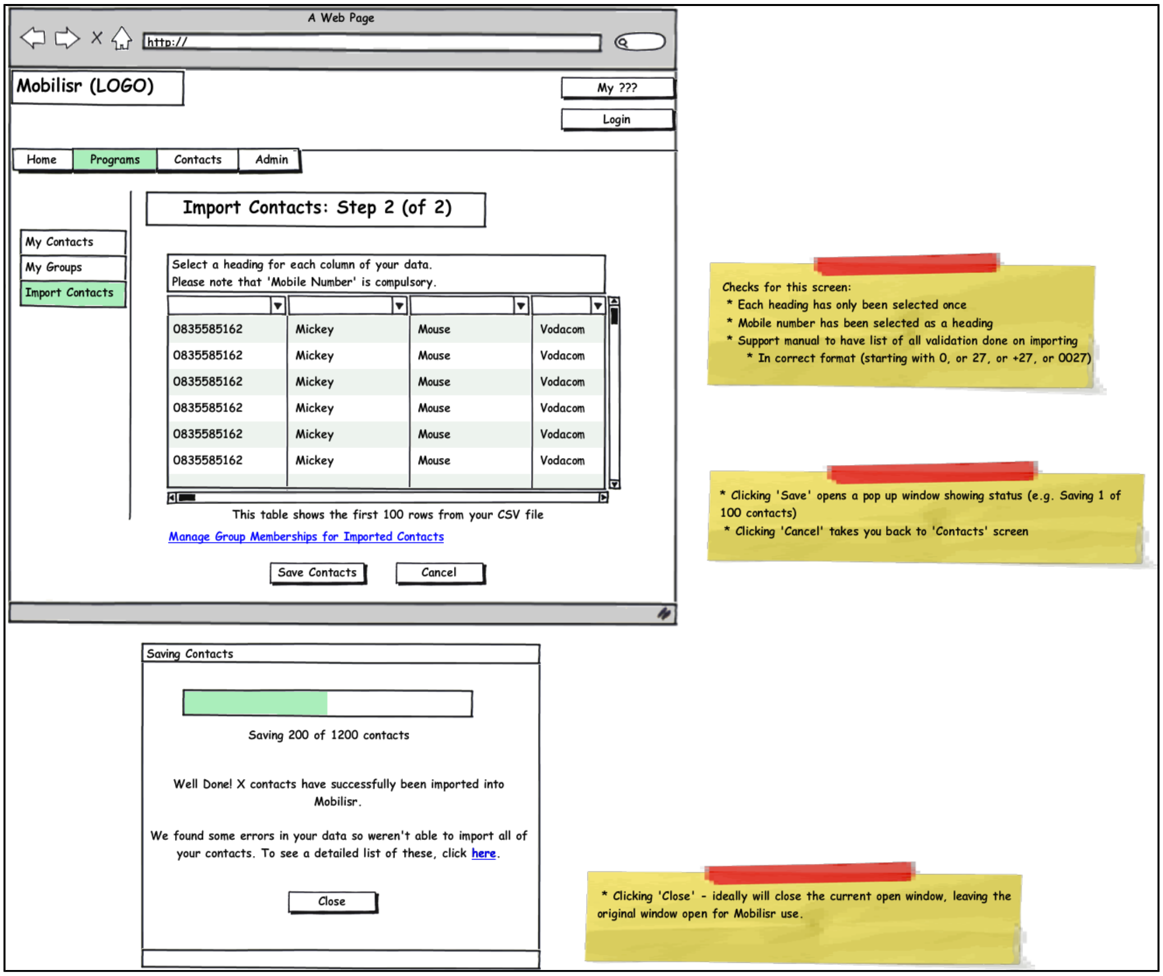
GM404 Export My Contacts

See attached document for Excel Export Template

The format of the filename should be: OrganisationName - My Contacts Export (2011.05.30).csv

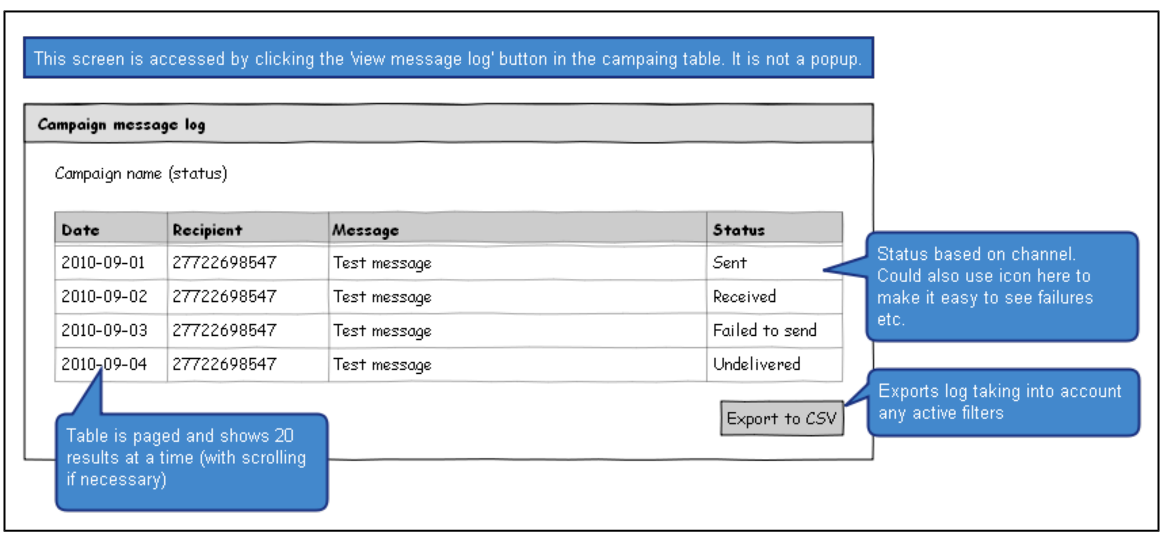
GM421 Import Contacts


A Web Page
http://
Mobilisr (LOGO)
My ???
Login
Home
Programs
Contacts
Admin
Import Contacts: Step 1 (of 2)
My Contacts
My Groups
Import Contacts
Select a CSV file
Browse
Continue to Step 2
A CSV file is a simplified version of an Excel file. In order to do your importing, the file name must have .csv at the end of it. Note that you can save your .xls file as a .csv file when saving in Excel.
There is only one compulsory field that we need for importing, and this is the mobile number. Other possible fields we can import are first name, last name and mobile network. It is good practise to do ....

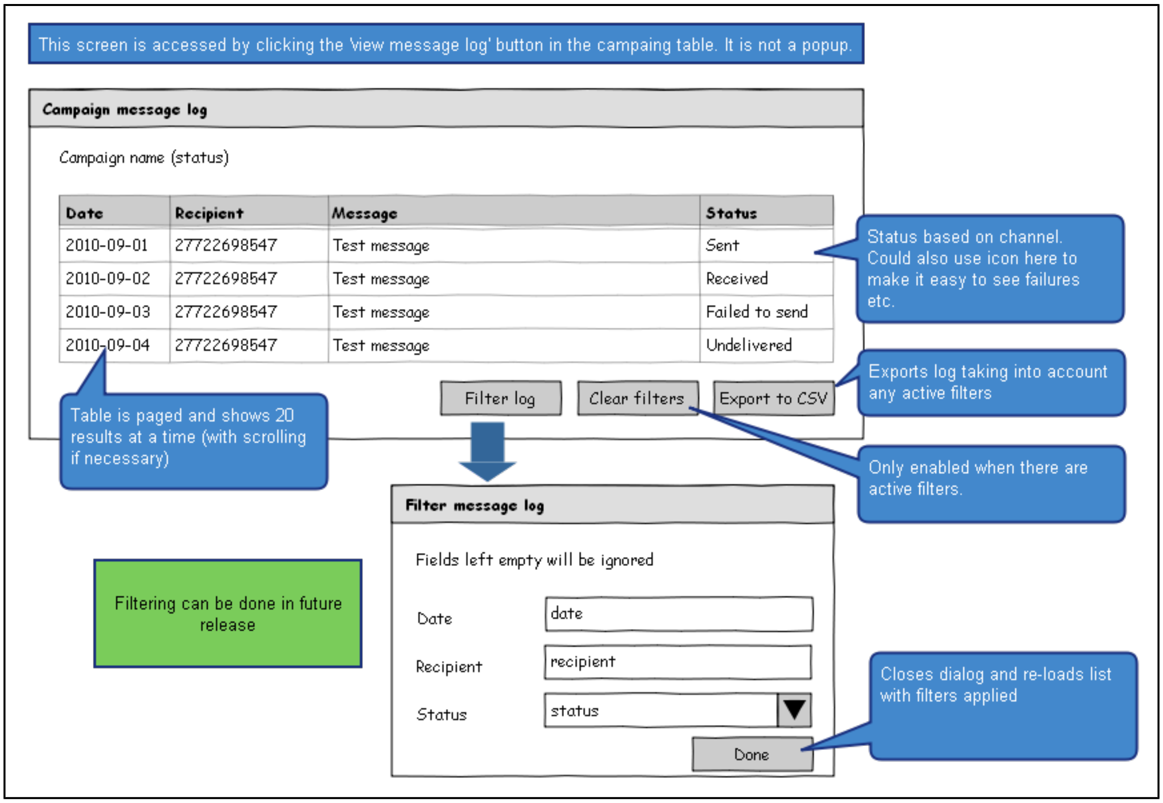


GM501 View Campaign Message Log

Without filtering

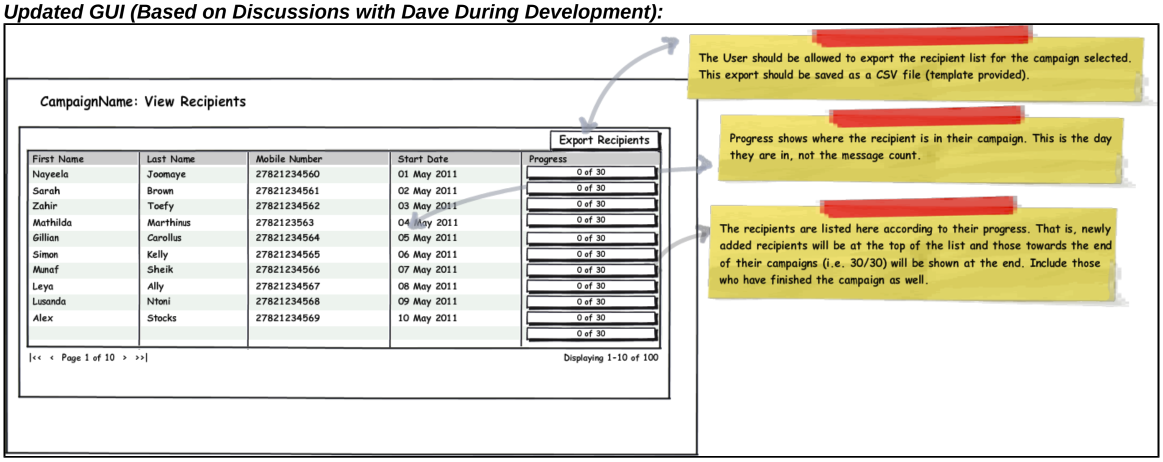


With filtering

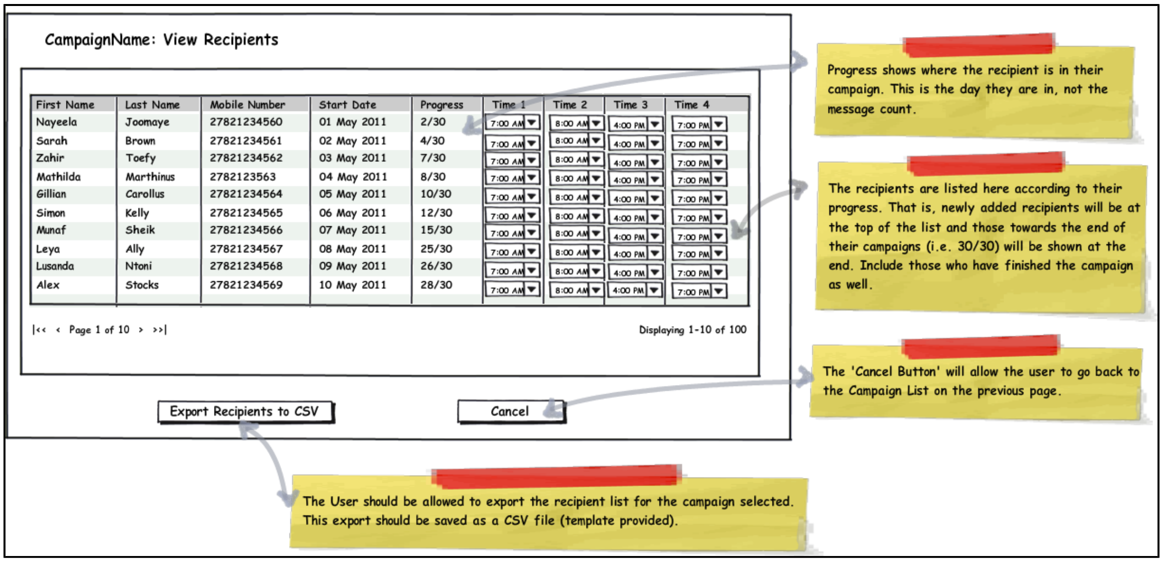


GM502 View Recipients in a Campaign (with Export)

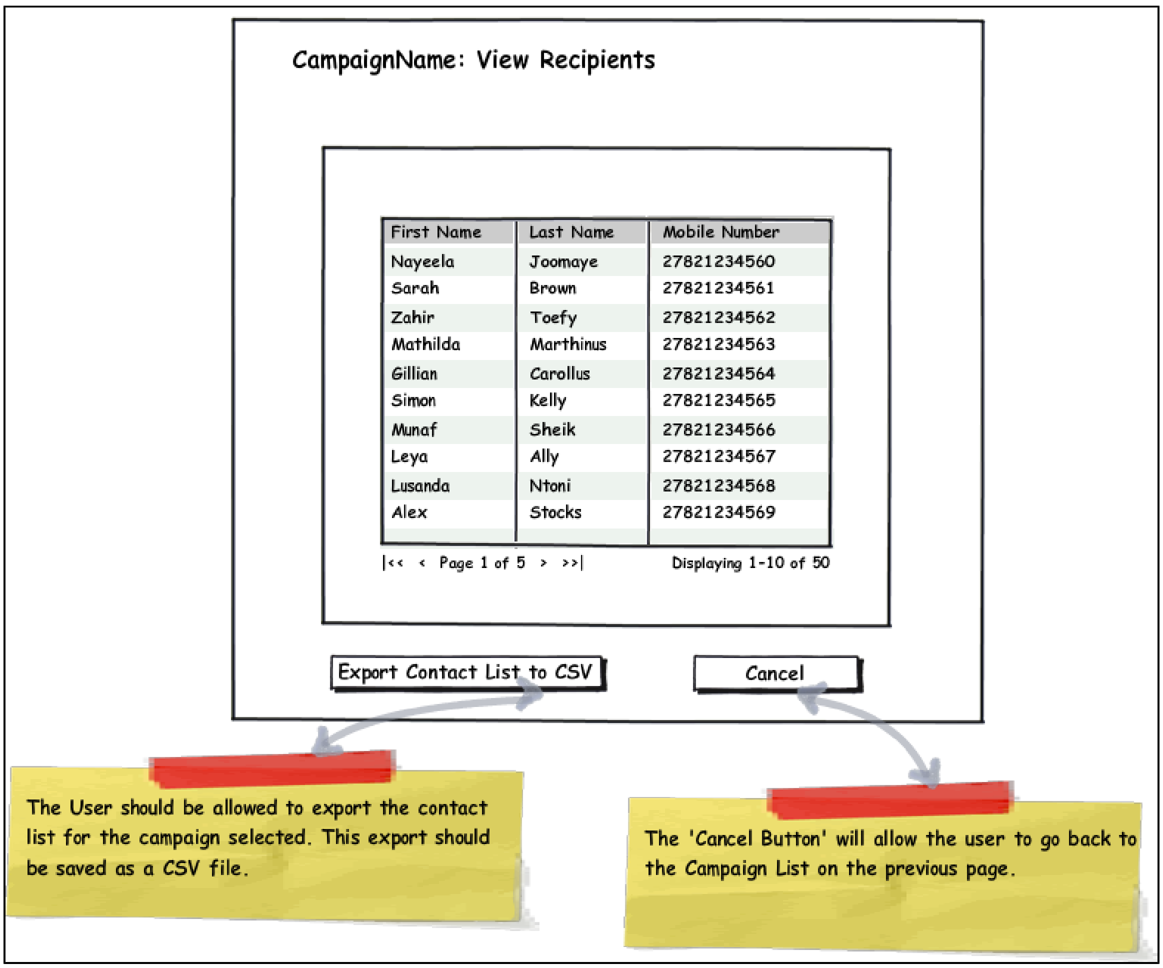
Updated GUI (Based on Discussions with Dave During Development):



Original GUI:



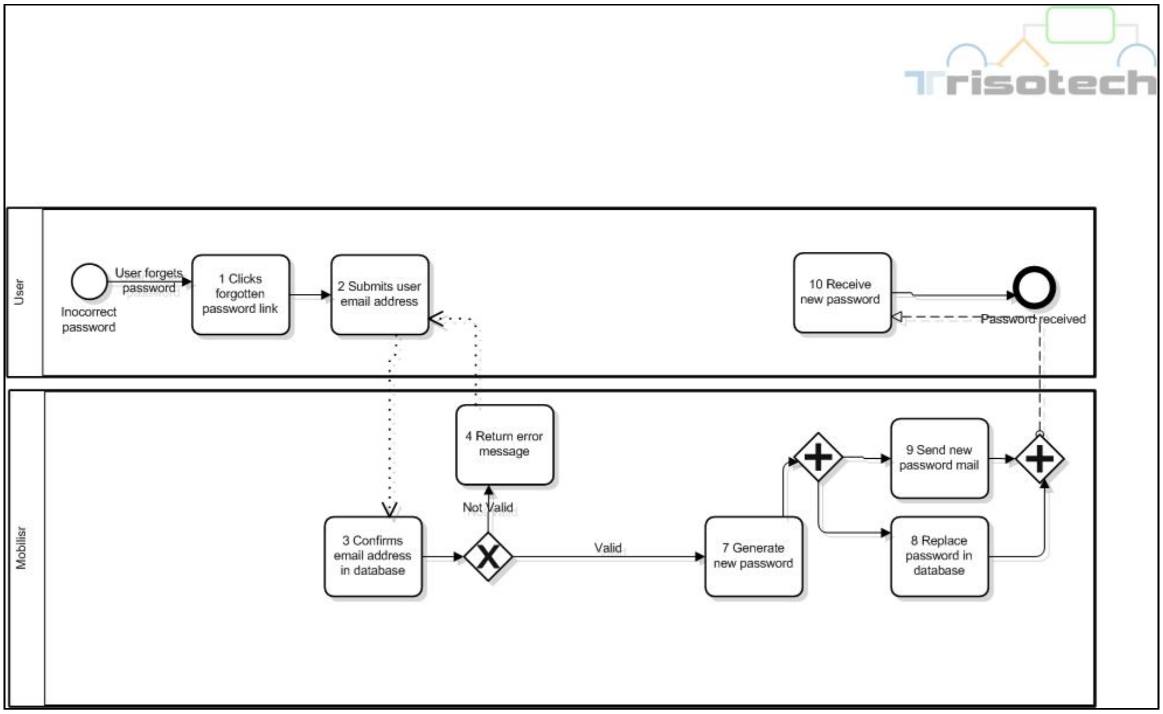
GM503 View Recipients in a 'Just Send SMS' Campaign (with Export)



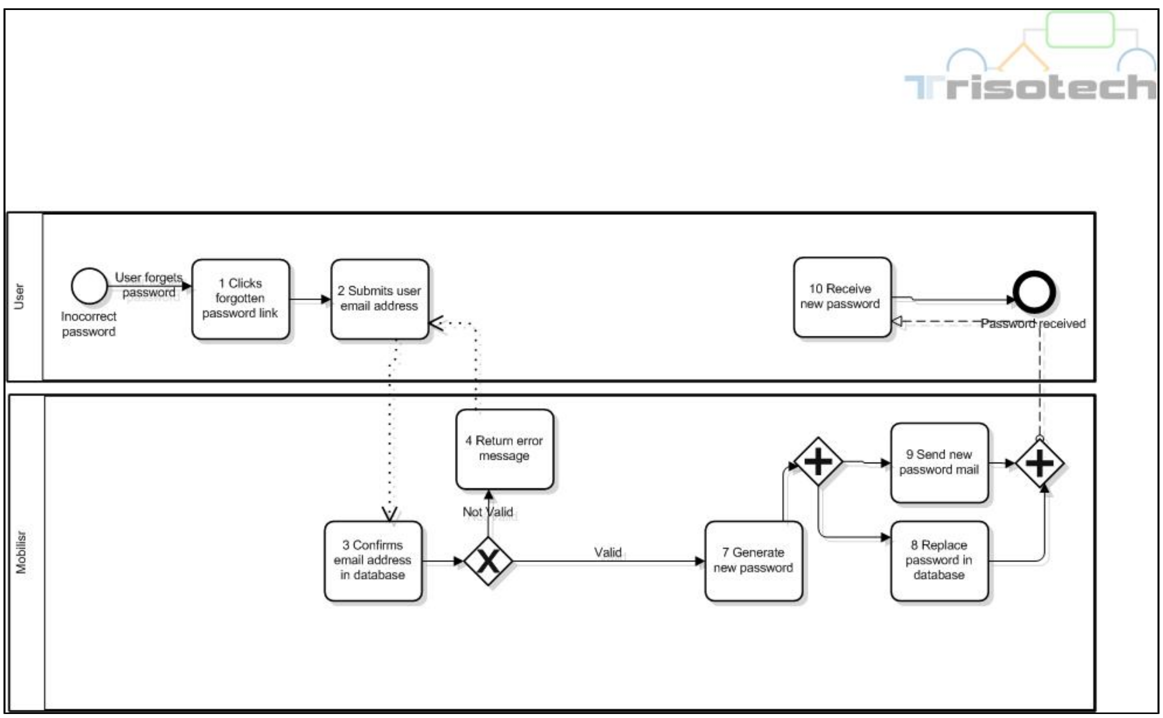
Mobilisr Process Diagrams

PD102 Forgotten Password

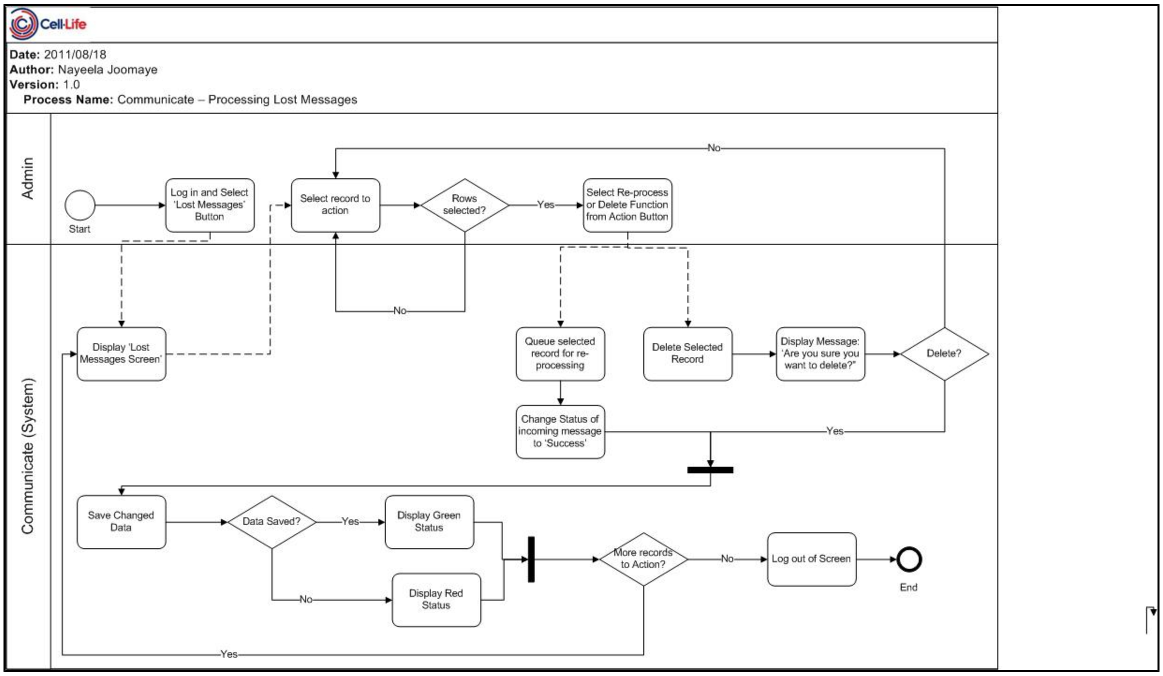
Updated process



Previous process



PD270 Process Lost Messages



Mobilisr Requirement Descriptions

FR101 Login

Description

Allow user to log in to the system

Business Rules & Error Messages

Business Rule	Business Rule Description	Error Message
BR101A	Username and Password fields must not be not empty	The username or password is incorrect, please try again.
BR101B	Username must exists in the database	The username or password is incorrect, please try again.
BR101C	Password must match the one stipulated by the user in the database	The username or password is incorrect, please try again.

FR102 Forgotten Password

Business Rule	Business Rule Description	Error Message
BR102A	Only pre existing users are able to reset a password, new user will have to request administrator to add them to the system.	NA
BR102B	An email address is only considered valid if it already exists in the mobilisr database and contains the usual email validation checks.	No user with that email address could be found.

FR103 Logout

Description

Allow user to logout from application

Business Rules & Error Messages

Business Rule	Business Rule Description	Error Message
BR103A	User should be able to view and click the logout button from any screen which will always logout the user.	NA
BR103B	If user closes the webpage (by clicking on the 'X' button), the user should automatically be logged out (for security reasons).	NA

FR111 Update or View My Profile

Description

Allow the logged in user the ability to update their username, first name, last name, mobile number, email and password.

Business Rules & Error Messages

Business Rule	Business Rule Description	Error Message
BR111A	The new username must be checked and must be a unique username	The username you have chosen has already been taken. Please try another one.
BR111B	The email address chosen must be valid	The email address you have chosen is not in the correct format.
BR111C	The mobile number must be checked to ensure that it is valid	The mobile number that you have entered is not valid.
BR111D	The old password must match the one stipulated by the user in the database	Incorrect Password

FR121 Balance Management

Description

Maintain the organisation balance at various points of the campaign lifecycle.

Business Rules & Error Messages

Business Rule	Business Rule Description	Business Rule Action	Error Message	Technical Action / Outcome
BR121A	User schedules a campaign	If the organisation has sufficient balance then the appropriate amount is reserved from the organisation account. (credits reserved = <number of contacts> * <number of messages per contact>).	You do not have sufficient credits to schedule this campaign.	A ClientTransaction gets created for the organisation: - transactionAmount = the amount to be reserved - transactionMessage = "RESERVE AMOUNT" - transactionOrigin = campaign identifier - transactionSource = user identifier

BR121B	User cancels / stops a campaign	1. Campaign is running: Campaign is marked as 'stopped' and once all contacts have received all their messages (in the case of relative campaigns) any remaining reserved amounts for the campaign is cleared. 2. Campaing is not running: Any reserved amounts for the campaing are cleared.		1. Once the campaign is completed go to 2 2. Any client transactions associated with the campaign are updated: - transactionMessage = "RESERVE CLEARED"
BR121C	User adds contacts to a campaign	If the organisation has sufficient balance then an amount is reserved from the organisation account equal to <number or contacts> * <number of messages per contact>	You do not have sufficient credits to add contacts to this campaign.	A ClientTransaction gets created for the organisation: - transactionAmount = the amount to be reserved - transactionMessage = "RESERVE AMOUNT" - transactionOrigin = campaign identifier - transactionSource = contact MSISDN
BR121D	Messages get sent for a campaign	The organisation account is debited with the appropriate number of credits and the reserved amounts associated with the campaign are reduced or cleared.		A ClientTransaction gets created for the organisation: - transactionAmount = the amount to be debited (number of messages sent) - transactionMessage = billing message - transactionOrigin = campaign identifier - transactionSource = WASP identifier
BR121E	WASP updates status of messages with errors after being sent (e.g. not delivered).	The organisation account is credited with the appropriate amount.		A ClientTransaction gets created for the organisation: - transactionAmount = the amount to be credited (number of messages with errors) - transactionMessage = "Refund for messages undelivered (msisdn)" - transactionOrigin = campaign identifier - transactionSource = WASP identifier

Current transaction process

1. When action happens e.g. schedule campaign, add contact to campaign a transaction is created as follows:

Message	Cost	Reserved Used
RESERVE AMOUNT	10	0

2. When the messages get sent a new transaction is created and the reserve transaction is updated:

Message	Cost	Reserved Used
RESERVE AMOUNT	10	1
e.g. Message sent	-1	0

3. Once all messages have been sent the reserve transaction is marked as cleared:

Message	Cost	Reserved Used
RESERVE CLEARED	10	10
e.g. Message sent	-1	0

4. If the campaign is stopped or the contact is removed from the campaign the reserve transaction is also marked as cleared:

Message	Cost	Reserved Used
RESERVE CLEARED	10	5
e.g. Message sent	-1	0

(only 5 out of the 10 were used)

Current balance is calculated as follows:

```
( sum(cost) where message != RESERVE* ) - ( sum(cost-reserveused) where message =
RESERVE AMOUNT )
```

New transaction process

1. When action happens e.g. schedule campaign, add contact to campaign a transaction is created as follows:

ID	Parent ID	Message	Cost	Reserved
1		RESERVE		3

2. When the messages get sent a new transaction is created to show the reserved amount has been used and to debit the org balance

ID	Parent ID	Message	Cost	Reserved
1		RESERVE		3
2	1	e.g. message sent	-1	-1

3. Once all messages have been sent the sum of the reserved column should be equal to 0:

ID	Parent ID	Message	Cost	Reserved
1		RESERVE		3
2	1	e.g. message sent	-1	-1
3	1	e.g. message sent	-1	-1
4	1	e.g. message sent	-1	-1

4. If the campaign is stopped or the contact is removed from the campaign a new transaction is created to 'refund' the remaining reserved amount:

ID	Parent ID	Message	Cost	Reserved
1		RESERVE		5
2	1	e.g. message sent	-1	-1
3	1	e.g. message sent	-1	-1
4	1	UNRESERVE		-3

(only 2 out of the 5 were used so 3 are refunded)

Current balance is calculated as follows:

```
sum(cost) - sum(reserved)
```

FR203 - Deactivate an Organisation

Description

Allow a user with the MANAGE_ORGANISATION permission to deactivate / Void an organisation.

Business Rules & Error Messages

Business Rule	Business Rule Description	Error Message
BR203A	The user must exist in the system	N.A
BR203B	Only users with permission = MANAGE_ORGANISATION are allowed to deactivate / void an organisation.	NA
BR203C	The organisation must have been created.	N.A
BR203D	Users from a deactivated / voided organisation should not be able to login	Your organisation's account has been disabled. Please contact your organisation administrator for more details.
BR203E	A user cannot deactivate / void the organisation that he belongs to. If the user attempts to deactivate his own organisation the following error message should be displayed.	Unauthorised Action: Please be aware that you cannot delete the organisation that you belong to.
BR203F	Users from a deactivated / voided organisation should not be displayed in the user's list	N.A
BR203G	A confirmation message needs to be displayed upon deactivation..	Please be aware that the organisation's account will be disabled and users from the organisation will not be able to log in. Are you sure you want to continue?
BR203H	Organisations that have been deactivated / voided should not appear in the organisation list. A button will be available for users to see a list of the organisations that have been deactivated / voided.	N.A

BR203I	An organisation cannot be deactivated / voided if the organisation has active campaigns.	N.A
BR203J	Campaigns cannot be created for an organisation that has been deactivated / Voided	N.A

FR211 Add New User

Description

Allow admin user to add a new user to the system

Business Rules & Error Messages

Business Rule	Business Rule Description	Error Message
BR211A	Username length >= 6	The number of characters in a Username must be 6 or more
BR211B	Username length <= 20	The number of characters in a Username must not exceed 20
BR211C	Password length >= 6	The number of characters in a Password must be 6 or more
BR211D	Password length <= 20	The number of characters in a Password must not exceed 20
BR211E	Include all the other fields here	
BR211F	Each user must enter a unique username	The username entered already exists. Please enter another.

FR212 Update or View User's Details

Description

Allow admin to update or view a user's details.

Business Rules & Error Messages

Business Rule	Business Rule Description	Error Message
BR211A	Username length >= 6	The number of characters in a Username must be 6 or more
BR211B	Username length <= 20	The number of characters in a Username must not exceed 20
BR211C	Password length >= 6	The number of characters in a Password must be 6 or more
BR211D	Password length <= 20	The number of characters in a Password must not exceed 20
BR211E	Include all the other fields here	
BR211F	User must exist in the system	

FR213 Deactivate User

Description

Allow a user with the MANAGE_USERS permission to deactivate a user.

Business Rules & Error Messages

Business Rule	Business Rule Description	Alert Title	Alert Message	Alert Buttons
BR213A	The user must exist in the system		N.A	
BR213B	Only users with permission = MANAGE_USERS are allowed to deactivate / void an organisation.		NA	
BR213C	Users that have been deactivated should not be able to login		Your account has been disabled. Please contact your organisation administrator for more details.	
BR213D	A logged in user cannot deactivate himself. If the logged in user attempts to deactivate himself, the following error message should be displayed.		You are not allowed to delete your own account.	
BR213E	Deactivated Users should not be displayed in the user's list unless the correct filter has been applied to the list i.e. "All" or "Inactive"		N.A	
BR213F	A confirmation message needs to be displayed upon deactivation..		Are you sure you want to delete user username? \n\nNote that you can reactivate this user later by selecting 'Inactive' in the filter above the table, and then pressing 'Reactivate User'.	Yes, Cancel

FR223 Delete Role

Description

Allow a user with the MANAGE_ROLES permission to delete a role.

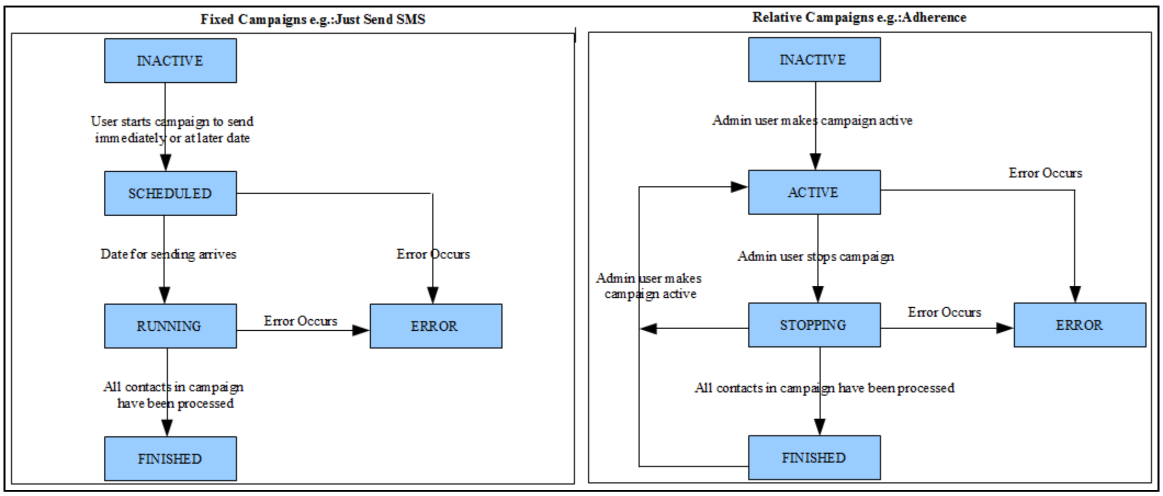
Business Rules & Error Messages

Business Rule	Business Rule Description	Error Message
BR223A	The admin user must exist in the system	N.A
BR223B	Only users with permission = MANAGE_ROLES are allowed to delete a role.	NA
BR223C	The role must have been created.	N.A

BR223D	A role cannot be deleted if it has been assigned to users	Unauthorised Action: Please be aware that you cannot delete this role as users have already been assigned to this role.
BR223F	A role that has been deleted should not appear in the roles list	N.A

FR240 Campaign State Changes

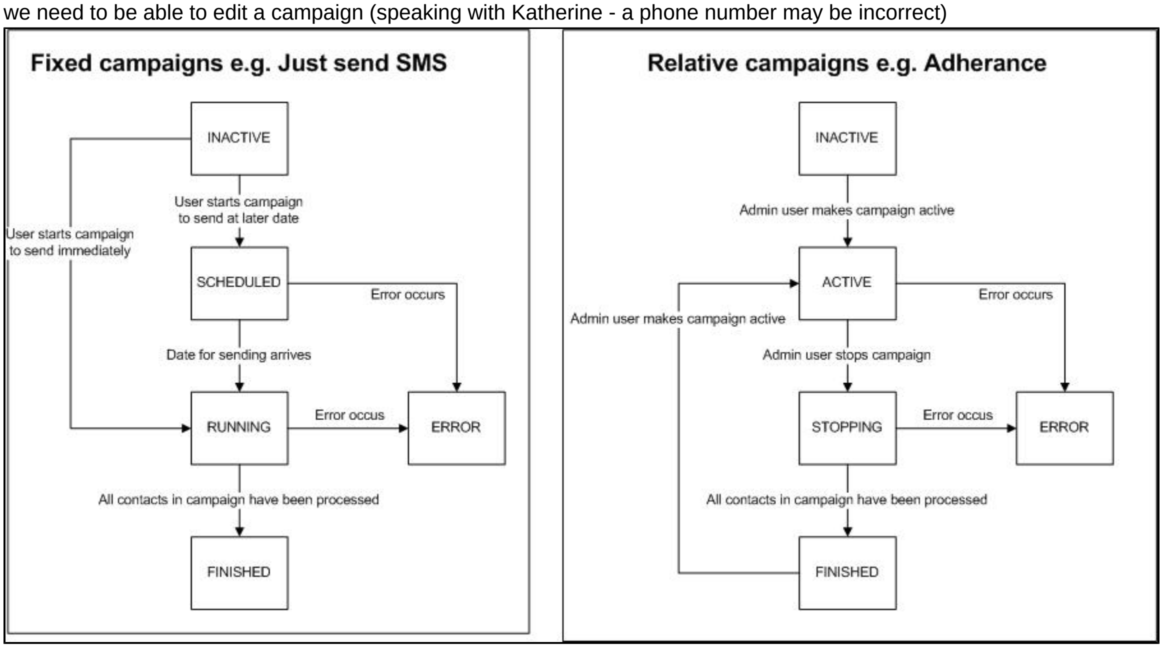
Updated (Based on Discussions with Simon & BA Team - 26 May 2011)



Updated (Based on Discussions with Simon & BA Team - 11 Mar 2011)

Need to revisit this (incomplete state - i.e. before inactive? is this needed)

we need to be able to edit a campaign (speaking with Katherine - a phone number may be incorrect)



For JustSendSMS, Campaign states are as follows:

1. INACTIVE: meaning campaign is created but not started -> Can move to RUNNING (send asap) or SCHEDULED (send later date)

2. SCHEDULED: meaning campaign is scheduled to run on particular date and time -> Can move to ERROR

3. RUNNING: means the campaign is currently running (actual time of sending) -> Can move to ERROR

4. FINISHED: means the campaign has finished sending the message(s) to the campaign recipients

During Campaign creation (Admin side)

Initial (Incomplete) ---------------------------------> Inactive
When user presses "Finish" button that time, it can be determined if campaign has all the complete information. If yes (: InActive), If not (: Incomplete)

InActive -----------------------> Active
When user presses "Active" button on the list of campaigns UI and vice versa (to de-activate a campaign). In active , the campaign is basically RUNNING.

The other states (**Scheduled, Scheduled Error, Running, Finished**) are purely for JustSendSMS, while states (**Incomplete, Inactive, Active, Running**) are for relative/generic campaigns.

State Changes

Description	Status
1. Admin begins the creates new campaign process	Incomplete
2. Admin saves partially completed campaign	Incomplete
3. Admin completes the "Create a campaign" process	Complete
4. Admin clicks start button to begin the campaign (only for completed campaigns)	Active
5. User is then able to view and manage recipients	Active
6. Admin clicks "Stop" at request of user	Inactive
7. Admin clicks "Start" button to restart the campaign	Active

FR241 Create New Campaign

Description

The admin user must be able to create a new campaign. This can be creating a new one from scratch, or set one up based on an existing campaign. There are 4 steps in this process:
* Step 1: Select Campaign Type or Import)

- Generic - e.g. PMTCT
- Fixed - e.g. 25th of Every Month
- Recipient-Specific - e.g. Adherence

* Step 2: Campaign Details
* Step 3: Welcome Message (and Questions for Recipient-Specific)
* Step 4: Messages and Schedules

Business Rules & Error Messages - Step 1 (Select Campaign Type or Import)

Business Rule	Business Rule Description	Error Message
BR241-1A	Only Administrators can create campaigns for organisations	N.A.
BR241-1B	User can import any campaign - i.e. it can be from any organisation (including their own), and can be of any type. User can not import if there are no existing campaigns.	N.A.

Business Rules & Error Messages - Step 2 (Campaign Details)

Business Rule	Business Rule Description	Error Message
BR241-2A	Campaign Name Length >= 6	The number of characters in a campaign name must be 6 or more.
BR241-2B	Campaign name must be valid	The campaign name can only contain letters, numbers, spaces, underscores, dashes and apostrophes.
BR241-2C	Each campaign must have a unique campaign name	The campaign name is already in use - please try another.
BR241-2D	Compulsory fields (campaign name and organisation)	Compulsory fields cannot be left blank

Business Rules & Error Messages - Step 3 (Welcome Message & Questions)

Business Rule	Business Rule Description	Error Message
BR241-3A	RECIPIENT-SPECIFIC ONLY: Messages have to follow their schedules. Message 2 cannot be scheduled before Message 1 etc.	The times that the messages go out have to be in chronological order.
BR241-3B	RECIPIENT-SPECIFIC ONLY: The times available for messages to be sent are available in a drop down list, in half hour increments. This list starts at 00:00, and ends with 11.30pm.	N.A.
BR241-3C	RECIPIENT-SPECIFIC ONLY: If a campaign has been saved, and the user moved from Step 4 to Step 3 by pressing the 'Back' button on Step 4, allow the user to change the answers to their questions. The following business rules apply: • If the user changes the 2 number fields (i.e. number of messages per day, or length of campaign), then inform the user that their saved messages and schedules will be replaced.	• You have changed the campaign duration and/or the number of messages per day. Because of this, the messages and schedules that you have already saved (in Step 4) will be deleted. You will need to capture these messages again.
BR241-3D	RECIPIENT-SPECIFIC ONLY: If a campaign has been saved, and the user moved from Step 4 to Step 3 by pressing the 'Back' button on Step 4, allow the user to change the answers to their questions. The following business rules apply: • Allow the user to change the times that the messages should be sent out. This should NOT overwrite the actual messages they have already saved (in Step 4).	N.A.

BR241-3E	RECIPIENT-SPECIFIC ONLY: If a campaign has been saved, and the user moved from Step 4 to Step 3 by pressing the 'Back' button on Step 4, allow the user to change the answers to their questions. The following business rules apply: • Allow the user to change the welcome message. This should NOT overwrite the actual messages they have already saved (in Step 4).	N.A.

Business Rules & Error Messages - Step 4 (Messages & Schedules)

Business Rule	Business Rule Description	Error Message
BR241-4A	RECIPIENT-SPECIFIC ONLY: As shown in the GUI, the user isn't able to add or remove messages from this screen as it is all based on the questions answered in Step 3.	N.A.
BR241-4B	GENERIC ONLY: Messages have to be scheduled in chronological order. That is, Message 2 cannot be scheduled before Message 1 etc.	*The error message depends on the GUI layout and how validation will be done*
BR241-4C	GENERIC ONLY: The times available for messages to be sent are available in a drop down list, in half hour increments. This list starts at 00:00, and ends with 11.30pm.	N.A.

FR243 Update a Campaign

Description

The admin user must be able to edit a campaign. There are 4 steps in this process:
* Step 1: Select Campaign Type or Import)

- Generic - e.g. PMTCT
- Fixed - e.g. 25th of Every Month
- Recipient-Specific - e.g. Adherence

* Step 2: Campaign Details: In this step, the admin user will be allowed to edit the campaign details
* Step 3: Welcome Message (and Questions for Recipient-Specific)
* Step 4: Messages and Schedules

Note that if a campaign is in INACTIVE state, allow the admin user to edit any fields within the campaign.

However, when the campaign moves to an ACTIVE state, implement restrictions on what they are able to edit (see business rules below).

Business Rules & Error Messages - Step 1 (Select Campaign Type or Import)

Business Rule	Business Rule Description	Error Message
BR243-1A	Only admin users can edit campaigns for organisations	N.A.
BR243-1B	Allow admin user to change the campaign type if state = INACTIVE	N.A.

BR243-1C	Do not allow a user to edit the type of campaign. That is, if an adherence-style campaign has been created, the user should not be able to change it to a PMTCT-style campaign.	The campaign type cannot be changed. Please create a new campaign if you need to change the type.

Business Rules & Error Messages - Step 2 (Campaign Details)

Business Rule	Business Rule Description	Error Message
BR243-2A	Campaign Name Length >= 6 Allow admin user to change the campaign name regardless of campaign state	The number of characters in a campaign name must be 6 or more.
BR243-2B	Campaign Name must be valid Allow the admin user to change the campaign name regardless of campaign state	The campaign name can only contain letters, numbers, spaces, underscores, dashes and apostrophes.
BR243-2C	Campaign Name must have a unique campaign name Allow the admin user to change the campaign name regardless of campaign state	The campaign name is already in use - please try another.
BR243-2D	Compulsory fields (campaign name and organisation)	Compulsory fields cannot be left blank
BR243-2E	Organisation: Allow admin user to change the organisation if campaign state = INACTIVE. If the campaign is in any other state, do not allow the admin user to change the organisation (i.e. disable the drop down list).	N.A

Business Rules & Error Messages - Step 3 (Welcome Message & Questions)

Business Rule	Business Rule Description	Error Message
BR241-3A	Allow the admin user to change the welcome message regardless of campaign state. This should NOT overwrite the actual messages they have already saved (in Step 4).	If campaign state = INACTIVE, don't provide any error message to the user. If campaign state = any other state, provide user with the following error message: You are about to change the welcome message. Any recipient added after you have clicked 'Save' will receive this new welcome message. Click 'OK' should you wish to proceed with this operation.
BR241-3B	RECIPIENT-SPECIFIC ONLY: If state = INACTIVE, allow the admin user to change the number of days, the amount per day and the appropriate drop down lists for Time 1, Time 2, Time 3 and Time 4 (depending on the amount per day selection)	N.A

BR241 - 3C	RECIPIENT-SPECIFIC ONLY: If state = ACTIVE, disable the number of days AND amount per day drop down lists. The appropriate drop down lists for Time 1, Time 2, Time 3 and Time 4 should be disabled and uneditable.	N.A
BR241 - 3D	Warning message to inform the user that the message text content will be deleted if they have clicked "Save" or "Next" and then proceeded to change the messages per day or number of messages.	Error Message: "You have changed the message details after clicking Save. Should you wish to proceed, the message text will be deleted. If your message has been deleted please go back to step 4 to export the Campaign Messages."

Business Rules & Error Messages - Step 4 (Messages & Schedules)

Business Rule	Business Rule Description	Error Message
BR241-4A	RECIPIENT-SPECIFIC ONLY: As shown in the GUI, the user isn't able to add or remove messages from this screen as it is all based on the questions answered in Step 3.	N.A.
BR241-4B	GENERIC ONLY: Messages have to be scheduled in chronological order. That is, Message 2 cannot be scheduled before Message 1 etc.	*The error message depends on the GUI layout and how validation will be done*
BR241-4C	GENERIC ONLY: The times available for messages to be sent are available in a drop down list, in half hour increments. This list starts at 00:00, and ends with 11.30pm.	N.A.
BR241-4D	RECIPIENT-SPECIFIC ONLY: If the state is INACTIVE, ACTIVE, STOPPING OR FINISHED allow the user to edit the information (Times and Message schedule) on the screen.	N.A

FR244 Stop a Campaign

Description

Admin users should be allowed to stop a campaign on request from the organisation. This would not delete it from the system, but change its state. By stopping a campaign, the organisation user will not be able to add any more recipients. The existing recipients would complete their set of messages.

Business Rules & Error Messages

Business Rule	Business Rule Description	Error Message
BR244A	Only Admin Users are alowed to stop campaigns. This feature should only be visible from the admin section and be hidden from the end user.	NA
BR244B	Campaigns can only be stopped if they are "Activate"	NA

BR244C	A campaign cannot be stopped if it is running, ie while the system is busy sending the days campaign messages. Once the messages have been sent then only will the admin user be able to stop the campaign.	NA
BR244D	Once a campaign is stopped the status should change to "Stopping" until every recipient have received all the messages. No other recipient can be added during that period. Once all the recipients have received the messages then the campaign status changes to "Finished"	

FR245 Delete a Campaign

Description

The admin user is able to delete a campaign that is no more being used by the organisation. Deleting the campaign will remove the campaign from the Campaign List. Campaigns that were created but have never had contacts added to the campaign can be removed from the database once the admin user clicks on the delete button

Business Rules & Error Messages

Business Rule	Business Rule Description	Error Message
BR245A	Only Admin Users are alowed to delete campaigns. This feature should only be visible from the admin section and be hidden from the end user.	NA
BR245B	Admin User can only delete finished campaigns	This campaign is still active and cannot be deleted.
BR245C	Only campaigns that have never had any contacts added can be deleted from the database.	NA
BR245D	A confirmation message needs to be displayed when deleting.	Please be aware that the campaign will be permanently deleted from the system. Are you sure you want to continue?

FR247 Import Campaign Messages and Schedules

Description

The admin user must be able to import data (message and schedules) from a CSV file prepared earlier. The user will follow Steps 1, 2 and 3 of the 'Create New Campaign' wizard, but on the 4th and final step, will have the option to import the messages schedules from a CSV file.

The file contents will be used to populate the table on Step 4.

Business Rules & Error Messages

Business Rule	Business Rule Description	Error Message
BR247A	Campaign data can only be imported using the format as per the import template (available as attachment to GM247)	N.A.

BR247B	If user clicks on the 'Import Campaign Data' button and they have already captured messages and their schedules, inform them that the existing messages will be deleted and replaced by the data in the CSV import file.	The messages and schedules you have captured will be replaced by the new messages in the import file. Are you sure you want to continue?
BR247C	RECIPIENT-SPECIFIC ONLY: If CSV import file contains more messages than duration*msgs per day (as specified in Step 3), the additional messages will be discarded (with warning message to user). The user must be allowed to confirm whether they want to proceed before the actual import takes place (saves unnecessary processing of import).	Based on the questions you answered in Step 3, we need X messages for this campaign. The import file you've provided has more than this, so only the first X messages will be imported. Are you sure you want to continue?
BR247D	RECIPIENT-SPECIFIC ONLY: The order in which the messages are listed in the CSV file will be the order in which they are shown in the table, and hence, saved in the campaign.	N.A.
BR247E	RECIPIENT-SPECIFIC ONLY: From the CSV file, only the message contents will be imported into the campaign. That is, the recipient-specific import will only take the message contents and IGNORE any times and/or dates/days which may be specified in the Excel file. The times and days when the messages should be sent out will be based on the times and days specified in Step 3 (answers to questions). Inform the user during the import process, if the campaign type is 'recipient-specific'	Note that only the message content (actual text) will be imported, and not any times and dates. (The times and dates you specified in Step 3 will be used.)
BR247F	GENERIC ONLY: From the CSV file, the message content, days and times will be imported into the campaign. Basic error checking should be done during the import. This includes: • Column 2 (Day to Send) contains numbers only • Column 3 (Time to Send) in suitable 24 hour format • All three columns are compulsory • Do not allow the user to have blank rows in their import	How these error messages will be shown to the user depends on how validity will be developed. • The second column (day that the message should be sent) needs to contain numbers only • The third column (time to send the message) needs to be in 24 hour format (such as 23.30pm) • All three columns are compulsory - that is, you need to specify the message text, day and time for each message in the campaign. • You are not allowed to have blank lines in your CSV file.

BR247G	GENERIC ONLY: The order in which the messages are listed in the CSV file is NOT related to the order in which the messages will be saved in the campaign. That is, the table will be populated based on the ordering inferred from columns 2 and 3 in the CSV file. That is, you will need to reorder the messages in the table, so that they are sorted chronologically. Note that it is fine if there is more than 1 message scheduled to go out at the same time (no need to check for this).	N.A.

FR248 Export Campaign Messages and Schedules

Description

The admin user is able to export the campaign data to a CSV file. The data export will be the organisation name, the campaign name, the message texts, the message days and the times for all the messages to be sent.

Business Rules & Error Messages

Business Rule	Business Rule Description	Error Message
BR248A	Any campaign can have their data exported regardless of their current state eg active/inactive/finished.	N.A.
BR248B	The export campaign data function can only be done from within the Admin screen	

FR251 View All 'Just Send SMS' Campaigns

Description

The admin user must be able to view all 'Just Send SMS' campaigns that have been created. This includes all campaigns, in any state, for all organisations.

Business Rules & Error Messages

Business Rule	Business Rule Description	Error Message
BR251A	Show all campaigns from all organisations, in any state	N.A.

FR253 Delete a Just Send SMS Campaign

Description

The admin user must be able to delete a Just Send SMS Campaign where the status of the campaign = Finished or Inactive

Business Rules & Error Messages

Business Rule	Business Rule Description	Error Message
BR253A	Create Permission = MANAGE_CAMPAIGNS for Admin Users.	N.A.
BR253B	Only Admin users can assign role / permission = MANAGE_CAMPAIGNS.	N.A

BR253C	Only Admin users with role / permission = MANAGE_CAMPAIGNS assigned can delete a Just Send SMS Campaign.	N.A
BR253D	The 'Just Send SMS' Button should be accessible from the left hand-side button panel in the Admin Console.	N.A
BR253E	All the Just Send SMS Campaigns irrespective of Status should be listed in the grid when the Admin User clicks on the 'Just Send SMS Campaign' button.	N.A
BR253F	The Grid should contain 5 columns as follows: Campaign Name, Send Date, Recipients, Status, Actions.	N.A
BR253G	The Grid row size should be scalable to accomodate a maximum of 25 rows scrollable per page.	N.A
BR253H	The red Delete Button (represented as a red cross) should only be visible to admin users with assigned role / permission = MANAGE_CAMPAIGNS.	N.A
BR253I	The red Delete button (represented as a red cross) should only be visible when the Just Send SMS Campaign's Status = Finished or Inactive.	N.A
BR253J	The red Delete button (represented as a red cross) should NOT be visible when the Just Send SMS Campaign's Status = Scheduled or Active.	N.A
BR253K	The "Campaign Name" column should display the actual name of the Just Send SMS Campaign.	N.A
BR253L	The "Send Date" column should contain the date that the Just Send SMS Campaign was sent.	N.A
BR253M	The "Recipients" column should contain the number of Recipients that were added to the Just Send SMS Campaign.	N.A
BR253N	The "Status" column should contain the current status of the Just Send SMS Campaign (i.e. Inactive, Scheduled, Active or Finished).	N.A
BR253O	The "Action" column should contain the actions that the Admin User can perform on a selected Just Send SMS Campaign (i.e. View Message Log, View Campaign Summary, View Campaign Recipients, Delete Campaign).	N.A

BR253P	Cursor hover on red Delete button (represented as a red cross) displays the following tool tip: "Click to delete this campaign".	N.A
BR253Q	If Admin User clicks on the red Delete button (represented as a red cross), the system displays message box - content ***"Are you sure you wish to delete this campaign?*** (Buttons Yes / No)".	N.A
BR253R	If Admin User selects "Yes" system deletes selected campaign and refreshes screen grid. The deleted campaign should not be visible in the screen grid.	N.A
BR253S	If Admin User selects "No" system returns to teh screen grid where all the Just Send SMS Campaigns are displayed.	N.A
BR253T	If the deleting action has been perfeormed with success, a green status bar should be displayed at the top of the screen with the following message: "Campaign deleted successfully"	N.A
BR253U	The deleted campaign should NOT be deleted permanently from the system.	N.A
BR253V	The deleted campaign should be accessible and displayed in the screen grid if the Admin User changes the filter settings to show 'Deleted' Just Send SMS Campaigns.	N.A
BR253W	System must allow for multiple iterations of the above delete function either until user exits screen or database of Just Send SMS Campaign records is depleted.	N.A

FR261 Create New Filter

Description

The admin user must be able to create a new filter to allow incoming messages to be received.

Business Rules & Error Messages

Business Rule	Business Rule Description	Error Message		
BR261A	Only Admin Users can create a new filter where assigned permission = MANAGE_FILTER	N.A.		
BR261B	No restrictions on Filter Name Length i.e. length should not exceed the database limit for characters.	N.A		

BR261D	Each Filter must have a unique Filter Name	The Filter Name is already in use, please enter another Filter Name.
BR261E	The Channel must already exist	N.A
BR261F	Compulsory fields must be completed (Filter Name, Filter Type, Channel)	Highlight the field in red and display the following error message: Please complete fields marked with *

FR262 Edit an Existing Filter

Description

The admin user must be able to edit an existing filter

Business Rules & Error Messages

Business Rule	Business Rule Description	Error Message		
BR262A	Only Admin Users can edit an existing filter where assigned permission = MANAGE_FILTER	N.A.		
BR262B	The admin user should be allowed to edit the following fields: Organisation, Filter Name, Filter Type, Channel	N.A		
BR262C	The admin user should be allowed to add or delete actions	N.A		
BR262D	The rules as per FR261 Create New Filter should apply	N.A		

FR263 View all filters

Description

The admin user must be able to view all the filters created

Business Rules & Error Messages

Business Rule	Business Rule Description	Error Message
BR263A	Admin User with permission = MANAGE_FILTER should be allowed to view all filters created for all organisations	N.A.

FR264 View Messages on a Filter

Description

The admin user must be able to view messages on a specific filter.

Business Rules & Error Messages

Business Rule	Business Rule Description	Error Message
BR264A	Admin User with permission = MANAGE_FILTER should be allowed to view messages on a specific filter	N.A.

FR265 Delete a Filter

Description

The admin user must be able to an existing filter

Business Rules & Error Messages

Business Rule	Business Rule Description	Error Message
BR265A	Admin User with permission = MANAGE_FILTER should be allowed to view delete an existing filter for all organisations	N.A.
BR265B	Once a filter is deleted, the filter should be void and any new messages that are sent to the filter that has been marked as 'Deleted' should be placed in the 'Lost and Found' Inbox	N.A

FR270 Process Lost messages

Description

The admin user must be able to view all lost messages and decides on an action for these lost messages

Business Rules & Error Messages

Business Rule	Business Rule Description	Error Message
BR270A	Create Permission = MANAGE_Lost_Messages for Admin Users	N.A.
BR270B	Only Admin users can assign role / permission = MANAGE_LOST_MESSAGES	N.A
BR270C	The "Lost Messages" Button should only be visible to admin users with assigned role / permission = MANAGE_LOST_MESSAGES	N.A
BR270D	Only Admin users with role / permission = MANAGE_LOST_MESSAGES assigned can access / edit lost messages	N.A
BR270E	The "Lost Messages" Button should appear in the Button menu bar on system	N.A
BR270F	The Sub Header for screen should read ***"Sel ect (Tick) the rows you wish to action then select either Re-process or Delete"***	N.A

BR270G	The "Select All" and "De-select All" functionality only applies to records visible on screen (in grid)	N.A
BR270H	The Grid should contain 5 columns as follows:Select (Tick boxes); Date Received; Channel / Receiver; Message Content; Status.	N.A
BR270I	The Grid row size should be a maximum of 75 rows scrollable.	N.A
BR270J	Only records with no match to any applicable filter should appear in the grid	N.A
BR270K	Only records with no match to any existing channel should appear in the grid.	N.A
BR270L	The "Message Content" column should display the actual content of received sms.	N.A
BR270M	The "Status" column should contain the status flag colour = Red (Failed)	N.A
BR270N	Cursor hover on Status flag displays reason for failed status - (Either "No match to any filter" or "No match to any channel")	N.A
BR270O	If user clicks "Re-process" then selected records are queued to system for processing.The status of the message should change from "Failure" to "Success"	N.A
BR270P	If user clicks "Delete" system displays message box - content ***"Are you sure you wish to permanently delete these messages?*** (Buttons Yes / No)"	N.A
BR270Q	If user selects "Yes" system deletes selected records and refreshes screen grid from balance of Lost Messages database.	N.A
BR270R	If user selects "No" system returns to previous screen (Prior to selecting "Delete" option - i.e. Rows STILL ticked)	N.A
BR270S	If the action has been perfeormed with success, a green tab should be displayed at the top of the screen with the following message: "Action performed successfully"	N.A
BR270T	If the action has failed to perform, a red tab should be displayed at the top of the screen with the following message: "Error: This action has failed to perform. Please re-try"	N.A
BR270U	System must allow for multiple iterations of the above functions either until user exits screen or database of lost messages records is depleted.	N.A

FR301 Create New 'Just Send SMS' Campaign

Description

Allow a logged in user to create a new 'Just Send SMS' campaign. Note that all users will be able to create a new 'Just Send SMS' campaign.

Business Rules & Error Messages

Business Rule	Business Rule Description	Error Message
BR301A	Campaign Name length >= 6	The number of characters in a Campaign Name must be 6 or more
BR301B	Campaign Name must be Valid	The Campaign Name can contain only letters, numbers, spaces, underscores and dashes
BR301C	Each Campaign must have a unique Campaign Name	The Campaign entered already exists. Please enter another.
BR301D	All the users that have a vaild username and password must be able to create a new ' Just Send SMS Campaign'	N/A
BR301E	The number of characters available per message should start at 160 and as user types, the count should get to 0 where the message count is then updated.	N/A
BR301F	Users are only able to schedule messages not less than 15mins from the current time.	Send time must be atleast 15 minutes from now.

FR305 Unschedule a 'Just Send SMS' Campaign

Business Rule	Business Rule Description	Error Message
BR253A	The Campaign should be in the 'Scheduled' state to be unscheduled	None
BR253B	The Campaign cannot be unscheduled 10 minutes prior to the time that the Campaign is scheduled for	"This campaign cannot be unscheduled. Only campaigns that have been scheduled for a particular date and time can be unscheduled"

FR311 Add an existing contact to a Campaign

Business Rule	Business Rule Description	Error Message
BR311A	On selecting 'Add an existing contact', the 'Available Contacts' List should be displayed.	N.A
BR311B	The contact numbers for the recipient as well as First Name and Last Name (If applicable) should be listed under 'Available Contacts'.	N.A
BR311C	Only contacts that belong to a particular organisation should be listed under 'Available Contacts'	N.A
BR311D	The Grid row size for the 'Available Contacts' grid should be scalable to accomodate a maximum of 75 rows scrollable per page.	N.A
BR311E	The Organisation User should be able to page through the contacts listed under 'Available Contacts'	N.A

BR311F	The Organisation Usershould be able to search for a contact by entering the mobile number of the contact into the search box.	N.A
BR311G	A green Add button should be displayed against each contact.	N.A
BR311H	Cursor hovers over green Add button against a contact should read: "Click to add this contact to this campaign".	N.A
BR311I	The Organisation User should be able to click on the green Add button to Add a contact to the campaign.	N.A
BR311J	On adding the contact and if the Campaign = Flexi Campaign, a message box should pop up that allows the Organisation User to edit the Message Times. The message box should read: '**Do you wish to edit the times of your messages**? (Buttons Yes / No)'. All message times are editable in half hour increments.	N.A
BR311K	If Organisation User selects "Yes" system displays pop-up box that allows the staff to edit the message times for that Contact.	N.A
BR311L	The Organisation User should be allowed to select a time between 01:00 a.m and 11:00 pm for the same date	N.A
BR311M	The Message Time must be available in half hour increments i.e. 10:00, 10:30, 11:00	N.A
BR311N	The Message Time for Message 2 should be greater than Message 1. The time for Message 3 should be greater than the time for Message 2. The time for Message 4 should be greater than the time for Message 3	Error Message should read: "**Unique times must be chosen for each message that the recipient needs to receive.** **Starting from Message 1, the times for each message must be in chronological order.**"
BR311N	The message box that allows the editing of message times should have a check box that allows the user to apply the same edited message times to all the contacts that will be added in that session.	N.A
BR311O	If Organisation User selects "No" system displays message box with the following content: '**The default time for this campaign will be applied to all the messages**'.	N.A
BR311P	Once the message time has been chosen (default time or edited time), the contact number should be displayed in the grid holding the recipients added to the campaign.	N.A

BR311Q	A green status bar should be displayed every time the Organisation User adds a contact. The status bar should read: '**Contact successfully added. Total Number of Recipients in this Campaign is xx (running total of number of recipients should be inserted)**'	N.A

FR311 Manage Recipients

Description

The staff of an organisation must be able to add or remove recipients from a campaign which belongs to the organisation.

Business Rules & Error Messages

Business Rule	Business Rule Description	Error Message		
BR311A	Create Permission = MANAGE_RECIPIENTS for Staffs.	N.A.		
BR311C	The 'Manage Recipient' Button under the 'Actions' Column in the Campaign List Grid should be visible to staff with Permission = MANAGE_RECIPIENTS.	N.A		
		Only the Staff with role / permission = MANAGE_RECIPIENTS can add or remove recipients from a campaign.		
	The staff should be have the following be able to choose from the following actions: Add a Contact from Available Contacts, Add All Contacts from Available Contacts, Add a Group, Bulk Import of Contacts, Bulk Removal of Contacts, Remove All Contacts			
BR311H	The contact numbers for the recipient as well as First Name and Last Name (If applicable) should be listed under 'Available Contacts'.	N.A		
	Only contacts that belong to a particular organisation should be listed under 'Available Contacts'			

BR311I	The Grid row size for the 'Available Contacts' grid should be scalable to accomodate a maximum of 75 rows scrollable per page.	N.A
	The Staff should be able to page through the contacts listed under 'Available Contacts'	
BR311J	The Staff should be able to search for a contact by entering the mobile number of the contact into the search box.	N.A
	All existing groups should be displayed under 'Available Groups'	
	Only groups that belong to a particular organisation should be listed under 'Available groups'	
	The Grid row size for the 'Available Groups' grid should be scalable to accomodate a maximum of 75 rows scrollable per page.	
	The Staff should be able to page through the groups listed under 'Available Groups'	
BR311K	A green Add button should be displayed against each contact or group.	N.A
BR311L	Cursor hovers over green Add button against a contact should read: "Click to add this contact to this campaign"	N.A
	Cursor hovers over green Add button against a group should read: "Click to add this group to this campaign"	
BR311M	The staff should be able to click on the green Add button to Add a contact or group to the campaign.	N.A

	A contact number that has been added to a campaign is referred to as a recipient.	
	The grid holding the recipients that have been added to the campaign should contain the following 6 colums: Mobile Number, Progress, Message Time (1), Message Time (2), Message Time (3), Message Time (4).	
BR311O	On adding the contact and if the Campaign = Flexi Campaign, a message box should pop up that allows the staff to edit the Message Times. The message box should read: '**Do you wish to edit the times of your messages**? (Buttons Yes / No)'. All message times are editable in half hour increments.	N.A
	If Staff selects "Yes" system displays pop-up box that allows the staff to edit the message times for that Contact. All message times are editable in half hour increments.	
	The message box that allows the editing of message times should have a check box that allows the user to apply the same edited message times to all the contacts that will be added in that session.	
	If Staff selects "No" system displays message box with the following content: 'The default time for this campaign will be applied to all the messages'.	

	Once the message time has been chosen (default time or edited time), the contact number should be displayed in the grid holding the recipients added to the campaign.	
	A green status bar should be displayed every time the Staff adds a contact. The status bar should read: 'Contact successfully added. Total Number of Recipients in this Campaign is xx (running total of number of recipients should be inserted)	
	On adding a group, all the contact numbers that belong to the group should be added to the campaign. The contact number should be displayed in the grid holding the recipients added to the campaign.	
BR311Q	A green status bar should be displayed every time the Staff adds a group. The status bar should read: 'Group successfully added. Total number of Contacts added is xx (Total number of contacts in groups) Total Number of Recipients in this Campaign is xx (running total of number of recipients should be inserted).	N.A
BR311S	A red button should be displayed against each recipient added so that those recipients can be removed if need be by the Staff.	N.A
BR311T	Cursor hovers over red Remove button should read: "Click to remove recipient from this campaign"	N.A

BR311U	On removing a recipient, the system displays message box - content ***" Are you sure you wish to remove this recipient?*** (Buttons Yes / No)".	N.A
BR311V	If Staff selects "Yes" system deletes selected recipient and refreshes screen grid. The deleted recipient should not be visible in the screen grid.	N.A
BR311W	If Staff selects "No" system returns to the screen grid where all the recipients that have been added are displayed.	N.A
BR311X	The Staff should be able to remove all recipients at once by Selecing "Remove All" or Remove selected recipients by importing a CSV file with the mobile numbers that need to be removed from the campaign.	N.A
BR311Z	On removing all recipients, the system displays message box - content ***"Are you sure you wish to remove all recipients?*** (Buttons Yes / No)". The following rules should then follow: BR311V and BR311W	N.A
BR311AA	On removing selected recipients, the system displays message box - content ***"Are you sure you wish to remove the selected recipients?*** (Bu ttons Yes / No)". The following rules should then follow: BR311V and BR311W	N.A
BR311AB	The Staff should be able to add recipients by adding an existing group.	N.A
BR311AC	On adding the group, the numbers on that group should be displayed in the other side of the N.Agrid on the screen.	N.A

BR311AD	A green status bar should be displayed every time the Staff adds a group The status bar should read: Group Contacts successfully added. Total Number of Recipients in this Campaign is xx (running total of number of recipients should be inserted)	N.A
BR311AE	The Staff should be able to remove a recipient by removing an existing group.	N.A
BR311AF	On removing a recipient, the system displays message box - content ***" Are you sure you wish to remove this group?*** (Buttons Yes / No)". The following rules should then follow: BR311V and BR311W	N.A
BR311AG	The Staff should be able to remove all groups at once by Selecing "Remove All" or Remove selected groups by importing a CSV file with the mobile numbers that need to be removed from the campaign.	N.A
BR311AH	On removing all groups, the system displays message box - content ***" Are you sure you wish to remove all groups?*** (Buttons Yes / No)". The following rules should then follow: BR311V and BR311W.	N.A
BR311AI	On removing selected groups, the system displays message box - content ***"Are you sure you wish to remove the selected groups?*** (Buttons Yes / No)". The following rules should then follow: BR311V and BR311W.	N.A

BR311AJ	The Staff must be able to add a new contact by providing the Mobile Number (Compulsory), First and Last Names (Optional) and click on 'Add New Contact' button. This action should be followed by rule BR311O and BR311P.	N.A
BR311AK	The Staff must be able to import contacts by using the Bulk Recipients Import Function. This functionality will allow the Staff to import a CSV File containing the contact numbers of the recipients. The recipients added through this functionality whould be displayed in the screen grid and automatically added to the available contacts for the organisation. This action should be followed by rule BR311O and BR311P.	N.A
BR311AL	The Staff should click on 'Done' to once all the recipients have been added or removed. The Manage Recipient Screen will then close and the Staff will be taken to the screen where all Campaigns for his organisation are displayed.	N.A
BR311AM	The Recipients added should receive the Welcome Message for that Campaign (if applicable) once the Staff clicks ''Done'	N.A

FR312 Remove Recipients from a Campaign

Business Rule	Business Rule Description	Error Message
BR312A	A recipient can only be removed from a campaign once it has been added to the campaign.	None
BR312B	Recipients can be removed at any time during an active campaign.	None

BR312C	Recipients who have been removed must not receive any messages that have been scheduled for future dates. This includes all messages scheduled ANY TIME after the time that the recipient is removed (e.g. Say the recipient is removed at 11.00am and they are scheduled to receive a message at 11.30am, they will not receive that message).	None
BR312D	Upon removing a recipient, the balance that has been reserved for the future messages that the recipient would have received should be unreserved and made available to the organisation.	None

FR314 Request New Campaign

Business Rule	Business Rule Description	Error Message
BR314A	The Organisation name, First Name, Last Name, Mobile Number and Email Address must be exported from the User's profile and pre-populated when the user requests a new campaign. These fields should also be non-editable.	None
BR314B	When the user clicks the "Send" Button, an email will be sent to the dedicated admin user at Cell-Life notifying him of the request.	None

FR321 - Alert Users in Banner if Credit is Below Organisation's Balance Threshold

Description

Alert the logged in User if the credit balance for the User's organisation is below the organisation balance threshold. A red banner will be displayed on the organisation's dashboard to serve as a reminder to load credits. The red banner will cease to display once the organisation has loaded credits.

Definition of Balance Threshold: The Balance Threshold is the Credit Value Level agreed upon with the organisation that will trigger the red banner to remind the user that the credit balance has dropped to below the balance threshold.

Business Rules & Error Messages

Business Rule	Business Rule Description	Error Message
BR321A	Display red banner as soon as the credit balance has dropped below the balance threshold.	None
BR321B	Display red banner until the user has loaded credits.	None

Alert the logged in User if the credit balance for the User's organisation is below the organisation balance threshold. A red banner will be displayed on the organisation's dashboard to serve as a reminder to load credits. The red banner will cease to display once the organisation has loaded credits.

FR322 - Email Organisation if Credit is Below Organisation's Balance Threshold

Description

Email the organisation if the credit balance for the organisation is below the organisation balance threshold. The balance alert email will be sent as soon as the available credit balance drops below the balance threshold. The email will be sent once until the organisation has loaded credit. The credit balance must then be evaluated against the balance threshold so that the balance alert email can be sent again if the credit balance drops to below the balance threshold.

Business Rules & Error Messages

Business Rule	Business Rule Description	Error Message
BR322A	The credit balance is calculated as follows: Balance Available - Reserved Balance	None
BR322B	The credit balance must be evaluated against the balance threshold each time that the user 'Add' or 'Remove' Recipients to and from a campaign therefore reserving and unreserving credits.	None
BR322C	The balance alert email will be sent once until the user has loaded more credits.	None
BR322D	The balance alert email should be sent to the email address supplied in the Oganisation's Profile.	None
BR322E	The red banner which displays a warning message to remind the user to load credits should be visible on the organisation's dashboard.	None

FR401 Add New Contact

Business Rule	Business Rule Description	Error Message
BR401A	Mobile number should be a compulsory field that the user has to complete	The mobile number has not been entered. Please complete before moving on to the next step.
BR401B	The Mobile number has to be not more or less than 10 digits	The mobile number entered is invalid. The number should be 10 characters in length.
BR401C	The mobile number text field can only accept numeric characters.	The mobile number entered is invalid. Only numeric numbers will be accepted.
BR401D	Mobile number must be in international format	Please enter the mobile number in the correct format eg 27827654321
BR401E	Mobile number has to be unique	This Contact has already exists, Please confirm the Contact Details."

FR402 Update or View Contact Details

Description

Allow user to update the details of the contact.

Business Rule	Business Rule Description	Error Message
BR402A	Mobile number should be a compulsory field that the user has to complete	The mobile number has not been entered. Please complete before moving on to the next step.
BR402B	The Mobile number has to be not more or less than 10 digits	The mobile number entered is invalid. The number should be 10 characters in length.

BR402C	The mobile number text field can only accept numeric characters.	The mobile number entered is invalid. Only numeric numbers will be accepted.
BR402D	Mobile number must be in international format	Please enter the mobile number in the correct format eg 27827654321
BR402E	Mobile number has to be unique	This Contact has already exists, Please confirm the Contact Details."

FR411 Add New Group

Description

Allow user to add a new group to the system. The user would need to specify the contacts that should be members of the group.

Business Rules & Error Messages

Business Rule	Business Rule Description	Error Message
BR411A	A contact group can contain many "contacts"	N/A
BR411B	Each "contact" can only appear once in each contact group	The contact you are trying to add already belongs to this contact group
BR411C	The name field cannot be left blank	N/A save button will not be available
BR411D	The name entered has to be unique	A contact group has already been created with the same name. Please choose a new name for the contact group

FR412 Update or View Group's Details

Description

Allow user to update / view the details of a group. This includes adding more contacts to the group, deleting contacts from a group and changing the name of the group.

Business Rules & Error Messages

Business Rule	Business Rule Description	Error Message
BR411A	A contact group can contain many "contacts"	N/A
BR411B	Each "contact" can only appear once in each contact group	The contact you are trying to add already belongs to this contact group
BR411C	The name field cannot be left blank	N/A save button will not be available
BR411D	The name entered has to be unique	A contact group has already been created with the same name. Please choose a new name for the contact group

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FR421 Import Contacts

Description

Allow the user to import contacts into the system

Business Rules & Error Messages

Business Rule	Business Rule Description	Error Message
BR421A	The Contact List to be uploaded should be in a CSV format.	The file you have uploaded is not a CSV file. Please ensure that your Contact List is saved as .csv.

FR 600 Report handling

Edit /delete reports:

Create role / permission Admin "edit reports"
Create role / permission User "edit own reports"
Create role / permission Admin "delete reports"
Create role / permission User "delete own reports"
ONly users with permission edit reports may edit reports
Only users with permission to delete reports may delete reports
Users with permission to delete reports may only delete users own reports
Users with permission to edit reports may only edit users own reports
Admin users with permission may delete all reports
Admin users with permission may edit all reports
Launch screen for edit / delete function is "Previously generated reports" accessed from either admin or user roles
Add icon to column "actions" on screen to reflect Editing function
Icon positioned between existing "Download" and "delete" icons
ON icon hover - tooltip legend to read "Click to edit report parameters"
User clicks icon - Popup screen displays relevant report parameters
Report parameters NOT applicable to the report are NOT displayed in popup
Popup screen includes buttons "Save" and "Cancel" at foot.
Popup screen header reads "Make the changes you wish then click save"
User edits report parameters - clicks "save"
System updates report parameters as edited by user
System displays Green status bar above grid "New report parameters saved" reverts to launch screen
Allow for multiple iterations until user exits function.
User clicks "cancel" system reverts to function launch screen - no data changed

Suspend Reports:

launch screen for function is Reports screen accessed from Admin or user roles
Add icon to column "actions" on screen to reflect "Suspend" function
Icon positioned between new "Edit" and existing "delete" icons
On icon hover - tooltip legend to read "Click to suspend report generation"
User clicks icon system displays Popup window - Header "select the date and click "Save"
Popup contains label "Suspend until" and field with date function
Popup screen includes buttons "Save" and "Cancel" at foot.
User selects - date system inserts selected date in date field - user clicks save
System suspends report generation until selected date
System displays Green status bar above grid "Report suspended until (selected Date)"
User selects cancel system reverts to function launch screen - no data changed

Report Handling (Scheduling, Editing, Deleting)

Test FR

Description

The admin user must be able to create a new filter to allow incoming messages to be received.

Business Rules & Error Messages

Business Rule	Business Rule Description	Error Message

BR261A	Only Admin Users can create a new filter where assigned permission = MANAGE_FILTER	N.A.		
BR261B	No restrictions on Filter Name Length i.e. length should not exceed the database limit for characters.	N.A		
BR261D	Each Filter must have a unique Filter Name	The Filter Name is already in use, please enter another Filter Name.		
BR261E	The Channel must already exist	N.A		
BR261F	Compulsory fields must be completed (Filter Name, Filter Type, Channel)	Highlight the field in red a nd display the following error message: Please complete fields marked with *		

Mobilisr Test Cases

__TC201 Add Organisation - TODO

Check that an organisation is added by a user.
Check that confirmation is provided when organisation is added
Check that the balance given to the org is correct

Prerequisites

1. Login as admin or other user

Test Data

Organisation Details

- Organisation Name : Testers
- Credit balance : 500
- Reason : enter any reason

Steps

1. Login to Mobilsr
2. Click on the Admin button
3. Click on the 'Add New Organisation' button
4. Enter Testers in the 'Name' Field
5. Click on the Account tab
6. Enter '500' in the 'Credit Account" field
7. Enter the reason in the text box
8. Click on the 'Save' button to complete the process

Notes & Questions

1.

__TC401B Add New Contact - Failure (NO Longer needed - ZT to check)

Check that an organisation is added by a user.
Check that confirmation is provided when organisation is added
Check that the balance given to the org is correct

Prerequisites

1. Login as admin or other user

Test Data

Contact Details

- Mobile number : 0821234567
- Mobile number : 0/82720861
- Mobile number : 082523
- Mobile number : 27821234567

Steps

1. Login to Mobilsr
2. Click on the Contacts button
3. Click on the 'Add New Contact' button
4. Enter the "Test Data" in the respective text fields
5. Do not complete any optional fields
6. Attempt to click on the 'Save' button to complete the process

Notes & Questions

1. When entering the test mobile number the field should be bordered in red with an explanation that explains the error
2. The Save button should remain greyed out
3. If the compulsory field is not entered or not completed correctly, then the the user should be unable to use the "Manage Contact's for a Group" link

TC101 Login

Check that a username and password is accepted and logs user into the system.

Prerequisites

1. Login as demo (username demo, password demo)
2. Create an organisation ('Test Organisation')
3. Create a user (First Name = Test, Last Name = User, Username = TestUser, Password = Password, Organisation = 'Test Organisation')
4. Run the Use Case UC101 Login (observing the business rules referenced below)

Test Matrix

Test Scenario	Test Data	Outcome	Comments (include link to Jira ticket if failure)
TC101A - Success	Username = Test User Password = Password		
TC101B - Username Incorrect	Username = TestUser Password = Password		
TC101C - Password Incorrect	Username = Test User Password = password		
TC101D - Username Blank	Username = Password = password		
TC101E - Password Blank	Username = Test User Password =		

Reference to Business Rules (FR101 Login)

FR101 Login

Business Rules & Error Messages

Business Rule	Business Rule Description	Error Message
BR101A	Username and Password fields must not be not empty	The username or password is incorrect, please try again.
BR101B	Username must exists in the database	The username or password is incorrect, please try again.
BR101C	Password must match the one stipulated by the user in the database	The username or password is incorrect, please try again.

TC102 Forgotten Password

Check that mobilisr is able to generate a new password.

Prerequisites

1. User account created with email address : User details John Doe, Username :jdoe , Password 123456 , Email : tester's own email address

Test Matrix

Test Scenario	Test Data	Outcome	Comments (include link to Jira ticket if failure)
TC102A - incorrect email address	• upport@cell-life.org (enter and incorrect mail address) confirm that email fails validation and that correct error message is displayed	passed	
TC102B - new password generated	• Confirm that reset confirmatio mail has been sent to the supplied email address • Confirm receipt of new password mail • Login with new password Perform test multiple times to confirm that a new random password has been created each time	passed passed passed passed	
TC102C - Links in mail work	Confirm that the reset password link and the return to mobilisr login screen link works in the mail and in a browser.	passed	graphics displayed differently in Chrome compared to Firefox

Reference to Business Rules (FR102 Forgotten Password)

FR102 Forgotten Password		
Business Rule	**Business Rule Description**	**Error Message**
BR102A	Only pre existing users are able to reset a password, new user will have to request administrator to add them to the system.	NA
BR102B	An email address is only considered valid if it already exists in the mobilisr database and contains the usual email validation checks.	No user with that email address could be found.

TC103 Logout

Check that a username and password is accepted and logs user into the system.

Prerequisites

1. Login as admin or any other user account
2. Run the Use Case UC101 Login
3. Run the Use Case UC103 Logout (observing the business rules referenced below)

Test Matrix

Test Scenario	Test Data	Outcome	Comments (include link to Jira ticket if failure)
TC103A - Success	None (any logged in user)	User is successfully logged out	

Reference to Business Rules (FR103 Logout)

FR103 Logout

Business Rules & Error Messages

Business Rule	Business Rule Description	Error Message
BR103A	User should be able to view and click the logout button from any screen which will always logout the user.	NA
BR103B	If user closes the webpage (by clicking on the 'X' button), the user should automatically be logged out (for security reasons).	NA

TC111 Update or View My Profile

Check that a user can update or view his profile

Prerequisites

1. The User must be logged into the system

2. The User must exist in the system

Test Data

Username: Kamilah

New Password: Sunshine

Test Matrix

Test Scenario	Test Data	Outcome	Comments (include link to Jira ticket if failure)
TC101A - Viewing User	None	Success	
TC101B - Updating User's Username	Enter Username as displayed above	Success	
TC101C - Password Setting	Enter Password and confirm	Success	
TC101D - Character length limit	Enter data as per business rules	Success	
TC101E - Enter a password that is less than 6 characters	Enter 'Sun'	Correct Error message displayed Success	
TC101F - Enter a Username that is less than 6 characters	Enter 'K'	Correct Error message displayed Success	

Reference to Business Rules (FR212 Update or View User's Details)

FR212 Update or View User's Details

Business Rules & Error Messages

Business Rule	Business Rule Description	Error Message
BR211A	Username length >= 6	The number of characters in a Username must be 6 or more
BR211B	Username length <= 20	The number of characters in a Username must not exceed 20
BR211C	Password length >= 6	The number of characters in a Password must be 6 or more
BR211D	Password length <= 20	The number of characters in a Password must not exceed 20
BR211E	Include all the other fields here	
BR211F	User must exist in the system	

TC201 Add New Organisation

Prerequisites

1. Login as user with admin rights

Test Matrix

Test Scenario	Test Data	Outcome	Comments (include link to Jira ticket if failure)

TC401A - Success	Name : Test Group Tel: 011 123 4567 Email: Info@site.org Click Save Check confirmation message	ok	
TC401B - Failure : Name already exists	Name : "Enter a org name that already exists" As soon as user moves to a different field the name field should be highlighted in red to indicate an error. If the user tries to save the organisation with the incorrect name then a message will appear in red stating that the name already exists.	failed	MOBILISR-80 : Creating an orginisation- System saves orgnisation when moving to different tab
TC401C - Failure : No special characters allowed in org name	Name: Test1*Group) As soon as user moves to a different field the name field should be highlighted in red to indicate an error. If the user tries to save the organisation with the incorrect name then a message will appear in red stating that the name already exists.	failed	

TC202 Update or View Organisation's Details

Prerequisites

1. Login as user with admin rights

Test Matrix

Test Scenario	Test Data	Outcome	Comments (include link to Jira ticket if failure)
TC401A - Success	Name : Test Group Tel: 011 123 4567 Email: Info@site.org Click Update Check confirmation message	pass	
TC401B - Failure : Name already exists	Name : "Enter a org name that already exists" As soon as user moves to a different field the name field should be highlighted in red to indicate an error. If the user tries to save the organisation with the incorrect name then a message will appear in red stating that the name already exists.	pass	

TC401C - Failure : No special characters allowed in org name	Name: Test1*Group) As soon as user moves to a different field the name field should be highlighted in red to indicate an error. If the user tries to save the organisation with the incorrect name then a message will appear in red stating that the name already exists.	pass	
TC401D - Success : Add Credit to organisation		pass	
TC401E - Success : Debit account from organisation		pass	
TC401F - Failure : Account not debited/Credited	When adding a new org with now credit , Check if the debit account option is available	pass	

TC211 Add New User

Check that a user can be added to Mobilisr

Prerequisites

1. The Administrator must be logged into the system

2. The User must belong to an organisation

Test Data

First Name: Nayeela

Last Name: Joomaye

Username: nayeela1234

Password: kamilah2009

Organisation: Sarah's Org

Test Matrix

Test Scenario	Test Data	Outcome	Comments (include link to Jira ticket if failure)
TC101A - Adding a User	Enter Test Data as displayed above	Success	
TC101B - Not entering First Name	Enter Test Data as displayed above, omitting First Name	Success	
TC101C - Password Setting	Enter Password and confirm	Success	
TC101E - No duplicate username allowed	Re-enter the same test data after saving	Success	
TC101f - Character length for username and password	Enter data based on business rules	Success	

Reference to Business Rules (FR211 Add New User)

FR211 Add New User

Business Rules & Error Messages

Business Rule	Business Rule Description	Error Message
BR211A	Username length >= 6	The number of characters in a Username must be 6 or more
BR211B	Username length <= 20	The number of characters in a Username must not exceed 20
BR211C	Password length >= 6	The number of characters in a Password must be 6 or more
BR211D	Password length <= 20	The number of characters in a Password must not exceed 20
BR211E	Include all the other fields here	
BR211F	Each user must enter a unique username	The username entered already exists. Please enter another.

TC212 Update or View User's Details

Check that a user's details can be updated.

Prerequisites

1. The Administrator must be logged into the system

2. The User must exist in the system

Test Data

First Name: Kamilah

New Password: Sunshine

Test Matrix

Test Scenario	Test Data	Outcome	Comments (include link to Jira ticket if failure)
TC101A - Viewing User	None	Success	
TC101B - Updating User's First Name	Enter First Name as displayed above	Success	
TC101C - Password Setting	Enter Password and confirm	Success	
TC101D - Character length limit	Enter data as per business rules	Success	

Reference to Business Rules (FR212 Update or View User's Details)

FR212 Update or View User's Details		

Business Rules & Error Messages

Business Rule	Business Rule Description	Error Message
BR211A	Username length >= 6	The number of characters in a Username must be 6 or more
BR211B	Username length <= 20	The number of characters in a Username must not exceed 20
BR211C	Password length >= 6	The number of characters in a Password must be 6 or more
BR211D	Password length <= 20	The number of characters in a Password must not exceed 20
BR211E	Include all the other fields here	
BR211F	User must exist in the system	

TC213 Deactivate User

Check that the logged in user

Prerequisites

1. The user must exist in the system
2. The admin user must have the MANAGE_USERS permission
3. The admin user must be logged into the system

Test Data

NA

Test Matrix

Test Scenario	Test Data	Outcome	Comments (include link to Jira ticket if failure)
TC213A - Delete a User	Complete UC213		
TC213B - Removed from User's list	Confirm that user no longer is visible in the user's list Perform search for campaign name		
TC213C - Log in as a user without the MANAGE_USERS permission and attempt to delete a user			

TC241A Create New Campaign (Recipient Specific)

Check that a user can Create a New Recipient-Specific Campaign

Prerequisites

1. The User must be logged into the system
2. The User must be an administrator

Test Data
Campaign Name: CMT Campaign

Organisation Name: CMT
Campaign Description: Generic campaign to inform contacts on HIV
No of messages : 3 then test with 4
Message1: This is a test message 1
Message2: This is a test message 2
Message3: This is a test message 3
Message4: This is a test message 4
Times: 10am 11 am 12 pm 1pm

Test Matrix

Test Scenario	Test Data	Outcome	Comments (include link to Jira ticket if failure)
TC241A.1 - Creating Campaign	Perform use case UC241A, UC241B	pass	
TC241A.2 - Compulsory fields not completed	Omit Campaign Name Click Next Ignore Organisation drop down list Click Next Next button should be greyed out until all compulsory fields have been entered	pass	
TC241A.3 - Entering a Campaign Name shorter than 6 characters	Enter Campaign Name as 'CMT'	pass	
TC241A.4 - Entering a Campaign Name that already exist	Enter the same Campaign Name after creating a Campaign with the name as displayed above	pass	
TC241A.5 - Test back/Save	At each screen check that the user is able to navigate back to the previous screen using the back button. The user should also be allowed to save information which would add the campaign to the list with a status as incomplete.		

TC241A.6 - amount of messages per day	step 3 : select 3 messages per day and check that the message 4 schedule has been deactivated step 3 : select 4 messages per day and check that the message 4 schedule has been activated	pass	
TC241A.7 - Confirm schedule rules	• attempt to schedule message 2 at an earlier time than message 1. System should not allow the user to choose a time earlier than the one set in message 1. • attempt to schedule the last message at 12 am.		

FR241 Create New Campaign

Business Rules & Error Messages - Step 1 (Select Campaign Type or Import)

Business Rule	Business Rule Description	Error Message
BR241-1A	Only Administrators can create campaigns for organisations	N.A.
BR241-1B	User can import any campaign - i.e. it can be from any organisation (including their own), and can be of any type. User can not import if there are no existing campaigns.	N.A.

Business Rules & Error Messages - Step 2 (Campaign Details)

Business Rule	Business Rule Description	Error Message
BR241-2A	Campaign Name Length >= 6	The number of characters in a campaign name must be 6 or more.
BR241-2B	Campaign name must be valid	The campaign name can only contain letters, numbers, spaces, underscores, dashes and apostrophes.
BR241-2C	Each campaign must have a unique campaign name	The campaign name is already in use - please try another.
BR241-2D	Compulsory fields (campaign name and organisation)	Compulsory fields cannot be left blank

Business Rules & Error Messages - Step 3 (Welcome Message & Questions)

Business Rule	**Business Rule Description**	**Error Message**
BR241-3A	RECIPIENT-SPECIFIC ONLY: Messages have to follow their schedules. Message 2 cannot be scheduled before Message 1 etc.	The times that the messages go out have to be in chronological order.
BR241-3B	RECIPIENT-SPECIFIC ONLY: The times available for messages to be sent are available in a drop down list, in half hour increments. This list starts at 00:00, and ends with 11.30pm.	N.A.
BR241-3C	RECIPIENT-SPECIFIC ONLY: If a campaign has been saved, and the user moved from Step 4 to Step 3 by pressing the 'Back' button on Step 4, allow the user to change the answers to their questions. The following business rules apply: • If the user changes the 2 number fields (i.e. number of messages per day, or length of campaign), then inform the user that their saved messages and schedules will be replaced.	• You have changed the campaign duration and/or the number of messages per day. Because of this, the messages and schedules that you have already saved (in Step 4) will be deleted. You will need to capture these messages again.
BR241-3D	RECIPIENT-SPECIFIC ONLY: If a campaign has been saved, and the user moved from Step 4 to Step 3 by pressing the 'Back' button on Step 4, allow the user to change the answers to their questions. The following business rules apply: • Allow the user to change the times that the messages should be sent out. This should NOT overwrite the actual messages they have already saved (in Step 4).	N.A.
BR241-3E	RECIPIENT-SPECIFIC ONLY: If a campaign has been saved, and the user moved from Step 4 to Step 3 by pressing the 'Back' button on Step 4, allow the user to change the answers to their questions. The following business rules apply: • Allow the user to change the welcome message. This should NOT overwrite the actual messages they have already saved (in Step 4).	N.A.

Business Rules & Error Messages - Step 4 (Messages & Schedules)

Business Rule	Business Rule Description	Error Message
BR241-4A	RECIPIENT-SPECIFIC ONLY: As shown in the GUI, the user isn't able to add or remove messages from this screen as it is all based on the questions answered in Step 3.	N.A.
BR241-4B	GENERIC ONLY: Messages have to be scheduled in chronological order. That is, Message 2 cannot be scheduled before Message 1 etc.	*The error message depends on the GUI layout and how validation will be done*
BR241-4C	GENERIC ONLY: The times available for messages to be sent are available in a drop down list, in half hour increments. This list starts at 00:00, and ends with 11.30pm.	N.A.

TC241B Create New Campaign (Generic)

Check that a user can create a new Generic campaign

Prerequisites

1. The User must be logged into the system
2. The User must be an administrator

Test Data
Campaign Name: CMT Campaign
Organisation Name: CMT
Campaign Description: Generic campaign to inform contacts on HIV
No of messages : 3 then test with 4
Message1: This is a test message 1
Message2: This is a test message 2
Message3: This is a test message 3
Message4: This is a test message 4
Times: 10am 11 am 12 pm 1pm

Test Matrix

Test Scenario	Test Data	Outcome	Comments (include link to Jira ticket if failure)
TC241A - Creating Campaign	perfom use case UC241B		
TC241B - Compulsory fields not completed	Omit Campaign Name Click Next Ignore Organisation drop down list Click Next Next button should be greyed out until all compulsory fields have been entered		

TC241C - Entering a Campaign Name shorter than 6 characters	Enter Campaign Name as 'CMT'				
TC241D - Entering a Campaign Name that already exist	Enter the same Campaign Name after creating a Campaign with the name as displayed above				
TC241E - Test back/Save	At each screen check that the user is able to navigate back to the previous screen using the back button. The user should also be allowed to save information which would add the campaign to the list with a status as incomplete.				
TC301I - Confirm schedule rules	• attempt to schedule message 2 at an earlier time than message 1. System should not allow the user to choose a time earlier than the one set in message 1. • attempt to schedule the last message at 12 am.				

The page FR241 Create a New Campaign could not be found.

TC241C Create New Campaign (Fixed)

Check that a user can Create a Fixed Date campaign

Prerequisites

1. The User must be logged into the system
2. The User must be an administrator

Test Data
Campaign Name: CMT Campaign
Organisation Name: CMT
Campaign Description: Generic campaign to inform contacts on HIV
No of messages : 3 then test with 4
Message1: This is a test message 1
Message2: This is a test message 2

Message3: This is a test message 3
Message4: This is a test message 4
Times: 10am 11 am 12 pm 1pm

Test Matrix

Test Scenario	Test Data	Outcome	Comments (include link to Jira ticket if failure)
TC241A - Creating Campaign	perfom use case UC241C		
TC241B - Compulsory fields not completed	Omit Campaign Name Click Next Ignore Organisation drop down list Click Next Next button should be greyed out until all compulsory fields have been entered		
TC241C - Entering a Campaign Name shorter than 6 characters	Enter Campaign Name as 'CMT'		
TC241D - Entering a Campaign Name that already exist	Enter the same Campaign Name after creating a Campaign with the name as displayed above		
TC241E - Test back/Save	At each screen check that the user is able to navigate back to the previous screen using the back button. The user should also be allowed to save information which would add the campaign to the list with a status as incomplete.		

TC301I - Confirm schedule rules	• attempt to schedule message 2 at an earlier time than message 1. System should not allow the user to choose a time earlier than the one set in message 1. • attempt to schedule the last message at 12 am.		

The page FR241 Create a New Campaign could not be found.

TC241D Import a Campaign

Check that a user can import a campaign

Prerequisites

1. The User must be logged into the system
2. The User must be an administrator

Test Data
Campaign Name: CMT Campaign
Organisation Name: CMT
Campaign Description: Choose an existing Campaign

Test Matrix

Test Scenario	Test Data	Outcome	Comments (include link to Jira ticket if failure)
TC241A - Importing a Campaign	perfom use case UC247		
TC241B - Compulsory fields not completed	Omit Campaign Name Click Next Ignore Organisation drop down list Click Next Next button should be greyed out until all compulsory fields have been entered		
TC241C - Entering a Campaign Name shorter than 6 characters	Enter Campaign Name as 'CMT'		

TC241D - Entering a Campaign Name that already exist	Enter the same Campaign Name after creating a Campaign with the name as displayed above				
TC241E - Test back/Save	At each screen check that the user is able to navigate back to the previous screen using the back button. The user should also be allowed to save information which would add the campaign to the list with a status as incomplete.				
TC241F - no templates to import	User cannot import if no previous campaigns have been created to choose from.				

FR241 Create New Campaign

Business Rules & Error Messages - Step 1 (Select Campaign Type or Import)

Business Rule	Business Rule Description	Error Message
BR241-1A	Only Administrators can create campaigns for organisations	N.A.
BR241-1B	User can import any campaign - i.e. it can be from any organisation (including their own), and can be of any type. User can not import if there are no existing campaigns.	N.A.

Business Rules & Error Messages - Step 2 (Campaign Details)

Business Rule	Business Rule Description	Error Message
BR241-2A	Campaign Name Length >= 6	The number of characters in a campaign name must be 6 or more.
BR241-2B	Campaign name must be valid	The campaign name can only contain letters, numbers, spaces, underscores, dashes and apostrophes.
BR241-2C	Each campaign must have a unique campaign name	The campaign name is already in use - please try another.
BR241-2D	Compulsory fields (campaign name and organisation)	Compulsory fields cannot be left blank

Business Rules & Error Messages - Step 3 (Welcome Message & Questions)

Business Rule	Business Rule Description	Error Message
BR241-3A	RECIPIENT-SPECIFIC ONLY: Messages have to follow their schedules. Message 2 cannot be scheduled before Message 1 etc.	The times that the messages go out have to be in chronological order.
BR241-3B	RECIPIENT-SPECIFIC ONLY: The times available for messages to be sent are available in a drop down list, in half hour increments. This list starts at 00:00, and ends with 11.30pm.	N.A.
BR241-3C	RECIPIENT-SPECIFIC ONLY: If a campaign has been saved, and the user moved from Step 4 to Step 3 by pressing the 'Back' button on Step 4, allow the user to change the answers to their questions. The following business rules apply: • If the user changes the 2 number fields (i.e. number of messages per day, or length of campaign), then inform the user that their saved messages and schedules will be replaced.	• You have changed the campaign duration and/or the number of messages per day. Because of this, the messages and schedules that you have already saved (in Step 4) will be deleted. You will need to capture these messages again.
BR241-3D	RECIPIENT-SPECIFIC ONLY: If a campaign has been saved, and the user moved from Step 4 to Step 3 by pressing the 'Back' button on Step 4, allow the user to change the answers to their questions. The following business rules apply: • Allow the user to change the times that the messages should be sent out. This should NOT overwrite the actual messages they have already saved (in Step 4).	N.A.
BR241-3E	RECIPIENT-SPECIFIC ONLY: If a campaign has been saved, and the user moved from Step 4 to Step 3 by pressing the 'Back' button on Step 4, allow the user to change the answers to their questions. The following business rules apply: • Allow the user to change the welcome message. This should NOT overwrite the actual messages they have already saved (in Step 4).	N.A.

Business Rules & Error Messages - Step 4 (Messages & Schedules)

Business Rule	Business Rule Description	Error Message
BR241-4A	RECIPIENT-SPECIFIC ONLY: As shown in the GUI, the user isn't able to add or remove messages from this screen as it is all based on the questions answered in Step 3.	N.A.
BR241-4B	GENERIC ONLY: Messages have to be scheduled in chronological order. That is, Message 2 cannot be scheduled before Message 1 etc.	*The error message depends on the GUI layout and how validation will be done*
BR241-4C	GENERIC ONLY: The times available for messages to be sent are available in a drop down list, in half hour increments. This list starts at 00:00, and ends with 11.30pm.	N.A.

TC244 Stop a Campaign

Check that a user can import a campaign

Prerequisites

1. Admin User needs to login
2. Campaign needs to have been created
3. Campaign needs to be active

Test Matrix

Test Scenario	Test Steps	Outcome	Comments (include link to Jira ticket if failure)
TC244A - Stop a Campaign	perfom use case UC244	pass	
TC244B- Should not stop campaigns that are not active	stop an inactive campaign stop a finish campaign stop a campaign in a "stopping state"	pass	none of the steps should be possible if it is then list tickets here.
TC244C - end user cannot stop a campaing	Confirm that the stop button is not available for the end user	pass	
TC244D - business rules	Test that all rules are being adhered	pass	

FR244 Stop a Campaign

Business Rules & Error Messages

Business Rule	Business Rule Description	Error Message
BR244A	Only Admin Users are alowed to stop campaigns. This feature should only be visible from the admin section and be hidden from the end user.	NA
BR244B	Campaigns can only be stopped if they are "Activate"	NA
BR244C	A campaign cannot be stopped if it is running, ie while the system is busy sending the days campaign messages. Once the messages have been sent then only will the admin user be able to stop the campaign.	NA
BR244D	Once a campaign is stopped the status should change to "Stopping" until every recipient have received all the messages. No other recipient can be added during that period. Once all the recipients have received the messages then the campaign status changes to "Finished"	

TC245 Delete a Campaign

Check that a user can delete or disable a campaign

Prerequisites

1. The User must be logged into the system

2. The User must belong to an organisation

3. A campaign must have been created

Test Data

NA

Test Matrix

Test Scenario	Test Data	Outcome	Comments (include link to Jira ticket if failure)
TC245A - Delete a Campaign	Complete UC245		
TC245B - Removed from list	Confirm that campaign no longer is visible in the campaign list Perform search for campaign name		

TC245C - Database deletion	Confirm that the business rules have been adhered to for deleting of Campaigns. Check that the campaign name is deleted from the campaigns table.(Simon)		
TC245D - active	Confirm that active campaigns cannot be deleted or disabled		

FR245 Delete a Campaign

Business Rules & Error Messages

Business Rule	Business Rule Description	Error Message
BR245A	Only Admin Users are alowed to delete campaigns. This feature should only be visible from the admin section and be hidden from the end user.	NA
BR245B	Admin User can only delete finished campaigns	This campaign is still active and cannot be deleted.
BR245C	Only campaigns that have never had any contacts added can be deleted from the database.	NA
BR245D	A confirmation message needs to be displayed when deleting.	Please be aware that the campaign will be permanently deleted from the system. Are you sure you want to continue?

TC247 Import Campaign Messages and Schedules

Check that a user can import a campaign

Prerequisites

1. The User must be logged into the system
2. The User must be an administrator

Test Data
Campaign Name: CMT Campaign
Organisation Name: CMT
Campaign Description: Choose an existing Campaign

Test Matrix

Test Scenario	Test Data	Outcome	Comments (include link to Jira ticket if failure)
TC247A - Importing a Campaign	perfom use case UC247		

TC247B - Schedules	Confirm that the welcome message is as entered in the import template Confirm the schedule data is correct as indicated in the import template				
TC247C - Message content	Confirm that the message content is exactly as indicated in the import template				
TC247D - test messages	Click test message and confirm that messages are sent to desired contacts				
TC247E - Test back/Save	At each screen check that the user is able to navigate back to the previous screen using the back button. The user should also be allowed to save information which would add the campaign to the list with a status as incomplete.				

The page FR247 Import Campaign Data from CSV File could not be found.

TC248 Export Campaign Messages and Schedules

Check that a user can export campaign data

Prerequisites

1. The User must be logged into the system
2. The User must be an administrator

3. Campaign should have created

Test Data
NA

Test Matrix

Test Scenario	Test Data	Outcome	Comments (include link to Jira ticket if failure)
TC248A - Export Campaign data	perfom use case UC248	pass	
TC248B - Message content	Check that messages are complete	pass	

TC251 Update or View All 'Just Send SMS' Campaigns

Check that the administrator can view / edit 'Just Send SMS' Campaigns

Prerequisites

1. The Administrator must be logged into the system

2. The User must belong to an organisation

3. Campaigns should be created by multiple organisations

Test Matrix

Test Scenario	Test Data	Outcome	Comments (include link to Jira ticket if failure)
TC251A - success- View all campaigns	• click on the Admin section • select the "Just Send SMS" button from sidebar • User should be able to see campaigns created from different orgs	Success	
TC251B - Success- Edit campaigns name	• Change the campaign name to a new unique campaign	Success	
TC251C - Success - Edit contacts	• change the contacts	Success	
TC251D - Success - Edit message	• edit message of completed/inactive campaign	Success	
TC251E - Success - Change Scheduled time and date	• Schedule a new date in the future	Success	

Reference to Business Rules (FR301 Create New 'Just Send SMS' Campaign)

FR301 Create New 'Just Send SMS' Campaign		

Business Rules & Error Messages

Business Rule	Business Rule Description	Error Message
BR301A	Campaign Name length >= 6	The number of characters in a Campaign Name must be 6 or more
BR301B	Campaign Name must be Valid	The Campaign Name can contain only letters, numbers, spaces, underscores and dashes
BR301C	Each Campaign must have a unique Campaign Name	The Campaign entered already exists. Please enter another.
BR301D	All the users that have a vaild username and password must be able to create a new ' Just Send SMS Campaign'	N/A
BR301E	The number of characters available per message should start at 160 and as user types, the count should get to 0 where the message count is then updated.	N/A
BR301F	Users are only able to schedule messages not less than 15mins from the current time.	Send time must be atleast 15 minutes from now.

TC253 - Unschedule a 'Just Send SMS' Campaign

Check that a scheduled campaign can be unscheduled

Prerequisites

1. The Campaign should be in the 'Scheduled' state to be unscheduled

2. The Campaign cannot be unscheduled 10 minutes prior to the time that the Campaign is scheduled for

Test Matrix

Test Scenario	Test Data	Outcome	Comments (include link to Jira ticket if failure)
TC253A - Allow the user to unschedule a campaign 10 minutes before the scheduled time. Campaign is in the scheduled state	None	Success	

TC253B - Allow the user to unschedule a campaign 5 minutes before the scheduled time. Campaign is in the scheduled state	None	Success					
TC253C - Allow the user to unschedule a campaign that is not in the "Scheduled" State	None	Success	Add a descriptive message to let the user know that the campaign cannot be unscheduled. Issue number on Jira: Mobilisr-178				

TC301 Create New 'Just Send SMS' Campaign

Check that a user can create a new 'Just Send SMS' Campaign

Prerequisites

1. The User must be logged into the system

2. The User must belong to an organisation

Test Data

Campaign Name: CMT Campaign

Short Campaign Name: CMT

Recipient Mobile Number: 27847162740

Invalid Mobile Number: 0847162740

Group Name: Nayeela

Date: 05/11/2010

Time: 10:00 a.m

Test Matrix

Test Scenario	Test Data	Outcome	Comments (include link to Jira ticket if failure)
TC301A - Creating Campaign	Enter Campaign Name, Select Recipient, Schedule	Success	
TC301B - Not entering Campaign Name	Omit Campaign Name	Error message correctly displayed. Success	

TC301C - Entering a Campaign Name shorter than 6 characters	Enter Campaign Name as 'CMT'	Error message correctly displayed. Success			
TC301D - Entering a Campaign Name that already exist	Enter the same Campaign Name after creating a Campaign with the name as displayed above	Error message correctly displayed. Success			
TC301E - Adding a new mobile number	Enter mobile number as displayed in the test data above	Success			
TC301F - Adding an invalid mobile number	Enter mobile number as displayed in the test data above	Error message correctly displayed. Success			
TC301G- Sending Campaign as soon as possible	Schedule Campaign to be sent now	Success			
TC301H- Sendaing Campaign at a later date	Enter date and time as displayed above	Success			

Reference to Business Rules (FR301 Create New 'Just Send SMS' Campaign)

FR301 Create New 'Just Send SMS' Campaign

Business Rules & Error Messages

Business Rule	Business Rule Description	Error Message
BR301A	Campaign Name length >= 6	The number of characters in a Campaign Name must be 6 or more
BR301B	Campaign Name must be Valid	The Campaign Name can contain only letters, numbers, spaces, underscores and dashes
BR301C	Each Campaign must have a unique Campaign Name	The Campaign entered already exists. Please enter another.
BR301D	All the users that have a vaild username and password must be able to create a new ' Just Send SMS Campaign'	N/A
BR301E	The number of characters available per message should start at 160 and as user types, the count should get to 0 where the message count is then updated.	N/A
BR301F	Users are only able to schedule messages not less than 15mins from the current time.	Send time must be atleast 15 minutes from now.

TC302 View My 'Just Send SMS' Campaigns

Prerequisites

1. The logged in user must not be an administrator.

2. The user must belong to an organisation

Test Matrix

Test Scenario	Test Data	Outcome	Comments (include link to Jira ticket if failure)
TC302A - Success- View all campaigns	• Select the 'My Campaigns' button at the top of the screen • Select the 'Just Send SMS' button from sidebar • User should be able to see all 'Just Send SMS' campaigns created for their organisation	Success	

TC303 Update My 'Just Send SMS' Campaign

Prerequisites

1. The logged in user must not be an administrator.

2. The user must belong to an organisation

Test Matrix

Test Scenario	Test Data	Outcome	Comments (include link to Jira ticket if failure)
TC303A - Success- Edit campaigns name	• Select the 'My Campaigns' button at the top of the screen • Select the 'Just Send SMS' button from sidebar • Change the campaign name to a new unique campaign	Success	
TC303C - Success - Edit contacts	• Select the 'My Campaigns' button at the top of the screen • Select the 'Just Send SMS' button from sidebar • Change the contacts	Success	
TC303D - Success - Edit message	• Select the 'My Campaigns' button at the top of the screen • Select the 'Just Send SMS' button from sidebar • Edit message of completed/inactive campaign	Success	
TC303E - Success - Change Scheduled time and date	• Schedule a new date in the future	Success	

TC311 - Add Recipient to a Campaign

Check that a recipient can be added to a Campaign

Prerequisites

1. The Campaign must have been created by the Admin user and the Campaign must be in the "Active" state

Test Matrix

Test Scenario	Test Data	Outcome	Comments (include link to Jira ticket if failure)
TC311A - Success - View Message Times to ensure that they are pre-loaded and editable	None	Success	
TC311B - Success - Allow the user to select a time between 01:00 a.m and 11:00 pm for the same date	None	Success	
TC311C - View Message Time to ensure that they are available in half hour increments i.e. 10:00, 10:30, 11:00	None	Success	
TC311D - User selects a time for Message 3. The time selected is less than the time of Message 2	Enter 1:00 a.m for Message 3	Success	
TC311E - Add recipient to the campaign	Enter Mobile Number: 083 649 9493	Success	
TC311F - Omit mobile number of recipient when adding recipient to a campaign	None	Success	

TC311G - Ensure that the mobile number of the recipient added last is shown fist in the list	None	Success	

TC312 - Remove Recipients from a Campaign

Check that a recipient can be removed from a Campaign

Prerequisites

1. The Campaign must have been created by the Admin user and the Campaign must be in the "Active" state
2. The recipent must have been added to the campaign

Test Matrix

Test Scenario	Test Data	Outcome	Comments (include link to Jira ticket if failure)
TC311E - Remove recipient from the campaign	None	Success	
TC311F - View Summary of Campaign to ensure that the recipient has been removed	None	Success	
TC311G - View Balance to ensure that the balance has been unreserved	None	Success	

TC401 Add New Contact

Prerequisites

1. Login as admin or other user

Test Data

Contact Details

- Mobile number : 0821234567
- First Name : John
- Last Name : Doe
- Mobile Network : network X

Test Matrix

Test Scenario	Test Data	Outcome	Comments (include link to Jira ticket if failure)
TC401A - Success	Mobile number : 27821234567 First Name : John Last Name : Doe Mobile Network : network x		

TC401B - Failure : Mobile number not entered	Mobile number is left blank when user moves on to next field			
TC401C - Failure : Invalid mobile number length	278212345678 2782123456			
TC401D - Failure : Invalid Character	2782/234567 2782.234567 test using any number that contains a non numeric character			
TC401E - Failure : Invalid mobile format	082 123 4567			
TC401F - Failure : contact already exists	Enter a mobile number that has already been added	fail	[http://jira.cell-life.org/browse/MOBILISR-93	http://jira.cell-life.org/browse/MOBILISR-93] | h3. **Reference to Business Rules**

FR401 Add New Contact		
Business Rule	**Business Rule Description**	**Error Message**
BR401A	Mobile number should be a compulsory field that the user has to complete	The mobile number has not been entered. Please complete before moving on to the next step.
BR401B	The Mobile number has to be not more or less than 10 digits	The mobile number entered is invalid. The number should be 10 characters in length.
BR401C	The mobile number text field can only accept numeric characters.	The mobile number entered is invalid. Only numeric numbers will be accepted.
BR401D	Mobile number must be in international format	Please enter the mobile number in the correct format eg 27827654321
BR401E	Mobile number has to be unique	This Contact has already exists, Please confirm the Contact Details."

TC402 Update or View Contact's Details

prerequisites

1. Login as admin or other user

Test Data

Contact Details

- Mobile number : 0821234567
- First Name : Doe
- Last Name : John
- Mobile Network : network_K

Test Matrix

Test Scenario	Test Data	Outcome	Comments (include link to Jira ticket if failure)
TC402A - Success : all fields changed	Mobile number : 27821234567 First Name : John Last Name : Doe Mobile Network : network x	pass	
TC402B - Failure : Mobile number not entered	Mobile number is left blank when user moves on to next field	pass	
TC402C - Failure : Invalid mobile number length	278212345678 Check that it still doesn't allow user to save incorrect number 2782123456	pass	
TC402D - Failure : Invalid Character	2782/234567 082.234567 test using any number that contains a non numeric character	pass	
TC402E - Success : Name field changed	Change First Name only First Name - Doe	pass	
TC402F -Success : Edit Last Name	Last Name - John	pass	
TC402G - Success : Edit Network	Mobile Network - Network_K	pass	
TC402H - Failure : Adding an Existing Contact	Enter a mobile number that has already been added	fail	http://jira.cell-life.org/browse/MOBILISR-93
TC402I - Failure : Mobile number not in international format	0821234567	pass	

Reference to Business Rules

FR402 Update or View Contact Details

Business Rule	Business Rule Description	Error Message
BR402A	Mobile number should be a compulsory field that the user has to complete	The mobile number has not been entered. Please complete before moving on to the next step.
BR402B	The Mobile number has to be not more or less than 10 digits	The mobile number entered is invalid. The number should be 10 characters in length.
BR402C	The mobile number text field can only accept numeric characters.	The mobile number entered is invalid. Only numeric numbers will be accepted.
BR402D	Mobile number must be in international format	Please enter the mobile number in the correct format eg 27827654321
BR402E	Mobile number has to be unique	This Contact has already exists, Please confirm the Contact Details."

TC411 Add New Group

Prerequisites

1. Login as admin or other user

Test Data

ContactGroup details

- Name = Testgroup

Test Matrix

Test Scenario	Test Data	Outcome	Comments (include link to Jira ticket if failure)
TC411A - Success	Name: Testgroup Description: enter a small description	pass	
TC411B - Success : add multiple contacts	• Select contacts available • Add a new contact to group	pass	
TC411C - Failure : Invalid name	• leave the name field blank • enter a name of a group already created	fail	mobilisr - 93
TC411D - Failure : Invalid Character	save a group name using a special character	fail	http://jira.cell-life.org/browse/MOBILISR-94?focusedCommentId=11115#action_11115
TC411E - Failure : Contact already added	• Select a contact that has already been added to the group • Add a "new contact" which is the same as one which has already been added	pass	

Reference to Business Rules

FR411 Add New Group

Allow user to add a new group to the system. The user would need to specify the contacts that should be members of the group.

Business Rules & Error Messages

Business Rule	Business Rule Description	Error Message
BR411A	A contact group can contain many "contacts"	N/A
BR411B	Each "contact" can only appear once in each contact group	The contact you are trying to add already belongs to this contact group
BR411C	The name field cannot be left blank	N/A save button will not be available
BR411D	The name entered has to be unique	A contact group has already been created with the same name. Please choose a new name for the contact group

TC412 Update or View Group's Details

prerequisites

1. User account created with admin rights
2. Group contact created

Test Data

ContactGroup Details

- Name = Testgroup

Test Matrix

Test Scenario	Test Data	Outcome	Comments (include link to Jira ticket if failure)
TC412A - change the name of the contact group	• add a space and a capital letter to the name so that "Testgroup" becomes "Test Group"	pass	
TC412B - add contacts to group after editing name and description	• click on "Manage Contacts for this Group" • add an existing contact to the group • add a new contact to the group • after saving select the contact group again to check that changes have been inplemented	pass	
TC412C - add contacts to group without editing the contact group details	• Select "Testgroup" and click on "Manage Contacts for this group.* add an existing contact to the group • add a new contact to the group • after saving select the contact group again to check that changes have been inplemented	pass	
TC412D - remove contacts from group after editing name and description	• click on "Manage Contacts for this Group" • remove contact from the group • after saving select the contact group again to check that changes have been inplemented	pass	
TC412E - remove contacts from group without editing the contact group details	• click on "Manage Contacts for this Group" • remove contact from the group • after saving select the contact group again to check that changes have been inplemented	pass	

TC412F - Assign all contacts to Contact group	• Click on the link "assign all Contacts" • check that contacts are moved across and the contacts are greyed out in the left column • Check that popup is displayed • after saving select the contact group again to check that changes have been inplemented* Assign all contacts manually to Contact Group • check that popup is displayed • after saving select the contact group again to check that changes have been inplemented	pass	
TC412G - Deselect all contacts from group	• Click on the "Deselect All Contacts" Link • Check that all contacts have be removed • after saving select the contact group again to check that changes have been inplemented	pass	

Reference to Business Rules

The page RD401 Add New Contact could not be found.

TC421 Import Contacts

Check that a user can import contacts from a CSV file into Mobilisr

Prerequisites

1. Login as Admin or other User

2. A Contact List (CSV File) must be available for importing

Test Data

Please refer to CSV file (lotsofcontacts.csv) attached

Test Matrix

Test Scenario	Test Data	Outcome	Comments (include link to Jira ticket if failure)
TC101A - Import Success	CSV File (lotsofcontactstest) attached	Success	
TC101B - Incorrect File Format	Any excel file	Success	
TC101C - Import 2 sets of contacts consecutively	2 CSV file containing contacts	Failure	User has to log out before importing the second set of contact (Mobilisr-45)

TC101D - No heading Selection before saving	No heading (Mobile Number, Last Name, First Name, Mobile network) is selected	Success	
TC101E - No duplicate mobile number allowed	Re-import CSV File (lotsofcontactstest)	Failure	The system does not check for Duplicate data before saving the numbers (Mobilisr-46)

Reference to Business Rules (FR421 Import Contacts)

FR421 Import Contacts

Business Rules & Error Messages

Business Rule	Business Rule Description	Error Message
BR421A	The Contact List to be uploaded should be in a CSV format.	The file you have uploaded is not a CSV file. Please ensure that your Contact List is saved as .csv.

TC501 View Campaign Message Logs

Check that a user can see the message logs for a campaign that they have access to.

Prerequisites

1. The Administrator must be logged into the system

2. The User must belong to an organisation

3. Campaigns should be created by multiple organisations

Test Matrix

Test Scenario	Test Data	Outcome	Comments (include link to Jira ticket if failure)
TC331A - Success - View all Message Logs	• Send a message to mobile number and confirm message sent successfully to recipient • Send a message to a mobile number that does not exist and confirm message sending failed Check that message is unchanged	Success	

Mobilisr Use Cases

UC101 Login

Use Case Number	UC101
Use Case Name	Login
Goal in Context	Allow user to log in to the system
Scope	

Level	
Preconditions	
Success End Condition	User is logged in to the system
Failed End Condition	User is not logged in to the system
Primary Actor	User
Trigger	
MAIN SUCCESS SCENARIO	1. Load the URL (http://dev.cell-life.org/mobilisr/mobilisr.html) 2. Enter username 3. Enter password 4. Click 'Login' button
EXTENSIONS	
SUB-VARIATIONS	
Superordinate Use Cases	
Subordinate Use Cases	
Secondary Actors	
OPEN ISSUES	1. Only one instance of a user can be logged in at one point in time. That is, the system should not allow the same user details to be used at the same time. The system should check that the user details entered, are not currently in use at this time, and inform the user if this is the case.

UC102 Forgotten Password

Use Case Number	UC102
Use Case Name	Forgotten Password
Goal in Context	Provide user with new password
Scope	
Level	
Preconditions	User is already a user on the system
Success End Condition	User received new password
Failed End Condition	Email address not found in database
Primary Actor	User
Trigger	User forgets password
MAIN SUCCESS SCENARIO	1. Load the URL (http://dev.cell-life.org/mobilisr/mobilisr.html) 2. Click the link "Forgotten Password" 3. Enter Email address 4. Click 'Submit' button 5. Receive Email with new password
EXTENSIONS	
SUB-VARIATIONS	3. Enter Email address (Incorrect Email) 4. click submit 5. Receive error message

Superordinate Use Cases	
Subordinate Use Cases	
Secondary Actors	
OPEN ISSUES	1. Only one instance of a user can be logged in at one point in time. That is, the system should not allow the same user details to be used at the same time. The system should check that the user details entered, are not currently in use at this time, and inform the user if this is the case.

UC103 Logout

Use Case Number	UC103
Use Case Name	Logout
Goal in Context	Allow user to logout of the system from any screen
Scope	
Level	
Preconditions	User should be logged in already
Success End Condition	User is able to log out of the system
Failed End Condition	User is unable to logout of the system
Primary Actor	User
Trigger	User is done using the system. Another user want's to log on to the system with their details
MAIN SUCCESS SCENARIO	1. Load the URL (http://dev.cell-life.org/mobilisr/mobilisr.html) 2. Enter username 3. Enter password 4. Click 'Login' button
EXTENSIONS	
SUB-VARIATIONS	
Superordinate Use Cases	
Subordinate Use Cases	
Secondary Actors	
OPEN ISSUES	1. Only one instance of a user can be logged in at one point in time. That is, the system should not allow the same user details to be used at the same time. The system should check that the user details entered, are not currently in use at this time, and inform the user if this is the case.

UC111 Update or View My Profile

Use Case Number	UC111
Use Case Name	Update or View My Profile
Goal in Context	Allow the logged in user the ability to update their username, first name, last name, mobile number, email and password.

Scope	
Level	
Precondition	1. The User must be logged in to the system. 2. The User must exist in the system already.
Success End Condition	The User has succesfully updated or viewed his profile.
Failed End Condition	The User has failed to update or view his profile.
Primary Actor	User
Trigger	1. User details have changed and require updating. 2. The User needs to view his details.
Input	The User's new details
Main Success Scenario	1. Click 'My profile' button 2. Update required fields with new details 3. If password needs to be changed, tick the 'change my password' checkbox. a. Enter old password b. Enter new password c. Confirm new password 4. Click 'Done' button
Subvariations (Alternate Course of Action)	2 – 3 If the user does not want to update his profiles, he can click on the 'Cancel' button to cancel the operation at each of these steps.
Extensions	N/A
Superordinate Use Cases	UC101 Login
Subordinate Use Cases	N/A
Secondary Actors	N/A
Open Issues	N/A

UC201 Add New Organisation

Use Case Number	UC401
Use Case Name	Add New Organisation
Goal in Context	Allow the administrator to add a new organisation to the system
Scope	
Level	
Precondition	1. The Administrator must be logged in to the system.
Success End Condition	The Administrator has succesfully added a new organisation to the system
Failed End Condition	The Administrator has failed to add a new user to the system.
Primary Actor	User with Admin rights
Trigger	A new Organisation has to be added to the system
Input	Organisations details : Compulsory: Name (Unique) Optional: Tel , email

Main Success Scenario	1. Click 'Admin' button 2. Click 'Add New Organisation' button 3. Enter the organisation's Name and/or the optional fields 4. Click 'Save' button 5. Check green succes message on org list screen
Subvariations (Alternate Course of Action)	3.1 – 7 If the user does not want to add a new organisation, he can click on the 'Cancel' button to cancel the operation at each of these steps. 4. click on the Accounts Tab and enter 100 in the Credit Account field 4.1 click on the Accounts Tab and enter 100 in the Debit Account field
Extensions	N/A
Superordinate Use Cases	UC101 Login
Subordinate Use Cases	N/A
Secondary Actors	N/A
Open Issues	N/A

UC203 - Deactivate an Organisation

Use Case Number	UC203
Use Case Name	Deactivate an organisation
Goal in Context	Allow a user with the MANAGE_ORGANISATION permission to deactivate / Void an organisation.
Scope	
Level	
Precondition	1. The user must exist in the system. 2. The user must have the MANAGE_ORGANISATION permission. 3. The user must be logged into the system 4. The organisation must have been previously created.
Success End Condition	The user has successfully deactivated / voided an organisation.
Failed End Condition	The Administrator has failed to deactivate / void an organisation.
Primary Actor	User with permission = MANAGE_ORGANISATION
Trigger	An organisation's account needs to be deactivated / voided.
Input	
Main Success Scenario	1. Click 'Admin' button 2. Click 'Organisations' button 3. View list of organisations 4. Click on the delete icon (red x) in the Actions column next to the appropriate organisation
Subvariations (alternate course of action)	N/A
Extensions	N/A
Superordinate Use Cases	UC101 Login
Subordinate Use Cases	N/A

Secondary Actors	N/A
Open Issues	N/A

UC211 Add New User

Use Case Number	UC211
Use Case Name	Add New User
Goal in Context	Allow the administrator to add a new User to the system
Scope	
Level	
Precondition	1. The Administrator must be logged in to the system. 2. The User must belong to an organisation.
Success End Condition	The Administrator has succesfully added a new user to the system
Failed End Condition	The Administrator has failed to add a new user to the system.
Primary Actor	Administrator
Trigger	A new User has to be added to the system
Input	User's details (First Name, Last Name, Username, Password, Organisation)
Main Success Scenario	1. Click 'Admin' button 2. Click 'Add New User Button' button 3. Enter User's First Name, Last Name and Username 4. Click 'Set Password' button 5. Enter Password and confirm Password 6. Select Organisation 7. Click 'Save Contacts' button
Subvariations (Alternate Course of Action)	3.1 – 7 If the user does not want to add contacts, he can click on the 'Cancel' button to cancel the operation at each of these steps.
Extensions	N/A
Superordinate Use Cases	UC101 Login
Subordinate Use Cases	N/A
Secondary Actors	N/A
Open Issues	N/A

UC212 Update or View User's Details

Use Case Number	UC212
Use Case Name	Update or View User's Details
Goal in Context	Allow the administrator to update or view user's details
Scope	
Level	
Precondition	1. The Administrator must be logged in to the system. 2. The User must exist in the system already.

Success End Condition	The Administrator has succesfully updated or viewed a user.
Failed End Condition	The Administrator has failed to update or view a user.
Primary Actor	Administrator
Trigger	1. User details have changed and require updating 2. The administrator needs to view the details of a particular user
Input	The User's new details
Main Success Scenario	1. Click 'Admin' button 2. Click ‘Users’ button 3. Search for User from the User's list 4. Click on the User 5. Update required fields with new details 6. Click ‘Save Contacts’ button
Subvariations (Alternate Course of Action)	3.1 – 6 If the user does not want to add contacts, he can click on the ‘Cancel’ button to cancel the operation at each of these steps.
Extensions	N/A
Superordinate Use Cases	UC101 - Login
Subordinate Use Cases	N/A
Secondary Actors	N/A
Open Issues	N/A

UC213 Deactivate User

Use Case Number	UC213
Use Case Name	Deactivate a User
Goal in Context	Allow an admin user with the MANAGE_USERS permission to deactivate a user
Scope	
Level	
Precondition	1. The user must exist in the system 2. The admin user must have the MANAGE_USERS permission 3. The admin user must be logged into the system
Success End Condition	The admin user has successfully deactivated a user
Failed End Condition	The admin user has failed to deactivate a user
Primary Actor	Admin User with permission = MANAGE_USERS
Trigger	An user's account needs to be deactivated / voided.
Input	
Main Success Scenario	1. Click 'Admin' button 2. Click 'Users' button 3. View list of users 4. Click on the delete icon (red x) in the Actions column next to the appropriate organisation
Subvariations (alternate course of action)	N/A

Extensions	N/A
Superordinate Use Cases	UC101 Login
Subordinate Use Cases	N/A
Secondary Actors	N/A
Open Issues	N/A

UC223 - Delete Role

Use Case Number	UC223
Use Case Name	Delete a role
Goal in Context	Allow an admin user with the MANAGE_ROLES permission to delete a role
Scope	
Level	
Precondition	1. The role must have been created in the system 2. The admin user must have the MANAGE_ROLES permission 3. The admin user must be logged into the system 4. The role must not have been assigned to any users
Success End Condition	The admin user has successfully deleted a role
Failed End Condition	The admin user has failed to delete a role
Primary Actor	Admin User with permission = MANAGE_ROLES
Trigger	A role needs to be deleted
Input	
Main Success Scenario	1. Click 'Admin' button 2. Click 'Roles' button 3. View list of roles 4. Click on the 'Delete selected role' button
Subvariations (alternate course of action)	N/A
Extensions	N/A
Superordinate Use Cases	UC101 Login
Subordinate Use Cases	N/A
Secondary Actors	N/A
Open Issues	N/A

UC241A Create New Campaign (Recipient Specific)

Use Case Number	UC241A
Use Case Name	Create New Campaign (Recipient Specific)
Goal in Context	Allow user to create an sms campaign aimed at specific recipients
Scope	
Level	

Precondition	1. The Administrator must be logged in to the system. 2. Organisations should have been previously created 3. Campaign details to be created and sent to Administrator 4. User is in the Admin Section of mobilisr
Success End Condition	The Administrator has succesfully created a campaign
Failed End Condition	The Administrator has failed to create a campaign
Primary Actor	Administrator
Trigger	Client requests creation of a new SMS campaign
Input	Campaign details: Entered as indicated in 'Campaign Request Form'
Main Success Scenario	1. Click 'Campaigns’ button 2. Click ‘Create New Campaign’ button 3. Select the appropriate Campaign Type (Recipient Specific) and click 'Next' 4. Enter Campaign name 5. Select Organisation from drop down list 6. Click Next button to go to the next screen 7. Provide standard welcome message to inform contact that they have been added to the campaign 8. Complete questions as answered in 'Campaign Request Form' and click 'Next' 9. Click on the message row to Edit the mesage 10. Enter message content then click 'Save' 11. Click finish button which will display the campaign in both the admin view and the 'My Campaigns" view
Subvariations (alternate course of action)	1-12 The user can click on the ‘Cancel’ button to cancel the operation at each of these steps. 2-12 User able to save the work currently entered in campaign by clicking 'Save' at each of these steps 4-12 The users can click on the 'Back' button to review what was entered in the previous screens at each of the indicated steps 9 When the user is at Step 4 the user can click on the import campaign data button 10 The user then selects the appropriate CSV file with the campaign data then clicks import 11 The messages, days and times will all be imported and the user can click "Save" button to save the campaign. 11.1 After step 11 the user has the option to send a test message 11.1 User can repeate steps 9-11 to add multiple messages to campaign
Extensions	N/A
Superordinate Use Cases	[UC101 Login]
Subordinate Use Cases	N/A
Secondary Actors	N/A
Open Issues	N/A

UC241B Create New Campaign (Generic)

Use Case Number	UC241B

Use Case Name	Create New Campaign (Generic)
Goal in Context	Allow user to create an sms campaign where the schedules is predetermined by the organisation
Scope	
Level	
Precondition	1. The Administrator must be logged in to the system. 2. Organisations should have been previously created 3. Campaign details to be created and sent to Administrator 4. User is in the Admin Section of mobilisr
Success End Condition	The Administrator has succesfully created a campaign
Failed End Condition	The Administrator has failed to create a campaign
Primary Actor	Administrator
Trigger	Client requests creation of a new SMS campaign
Input	Campaign details: Entered as indicated in 'Campaign Request Form'
Main Success Scenario	1. Click 'Campaigns' button 2. Click 'Add New Campaign' button 3. Select the appropriate Campaign Type (Generic) and click 'Next' 4. Enter Campaign name 5. Select Organisation from drop down list 6. Click Next button to go to the next screen 7. Enter "welcome to campaign message" then click 'Next' 8. User clicks on the 'Add new message' link 9. Enter message 10. Select day and time then click 'Save' 11. Click Finish
Subvariations (alternate course of action)	1-11 The user can click on the 'Cancel' button to cancel the operation at each of these steps. 2-11 User able to save the work currently entered in campaign by clicking 'Save' at each of these steps 4-12 The users can click on the 'Back' button to review what was entered in the previous screens at each of the indicated steps 8 When the user is at Step 4 the user can click on the import campaign data button 9 The user then selects the appropriate CSV file with the campaign data then clicks import 10 The messages, days and times will all be imported and the user can click "Save" button to save the campaign. 11.1 After step 11 the user has the option to send a test message 11.1 User can repeate steps 9-11 to add multiple messages to campaign
Extensions	N/A
Superordinate Use Cases	[UC101 Login] [FR201 add organisation]
Subordinate Use Cases	N/A
Secondary Actors	N/A
Open Issues	N/A

UC241C Create New Campaign (Fixed)

Use Case Number	UC241C
Use Case Name	Create New Campaign (Fixed)
Goal in Context	Allow user to create an sms campaign that is sent on specific dates in that campaign
Scope	
Level	
Precondition	1. The Administrator must be logged in to the system. 2. Organisations should have been previously created 3. Campaign details to be created and sent to Administrator 4. User is in the Admin Section of mobilisr
Success End Condition	The Administrator has succesfully created a campaign
Failed End Condition	The Administrator has failed to create a campaign
Primary Actor	Administrator
Trigger	Client requests creation of a new SMS campaign
Input	Campaign details: Entered as indicated in 'Campaign Request Form'
Main Success Scenario	1. Click 'Campaigns' button 2. Click 'Create New Campaign' button 3. Select the appropriate Campaign Type (Fixed) and click 'Next' 4. Enter Campaign name 5. Select Organisation from drop down list 6. Select the "design from scratch" radio button (default) 7. Click Next button to go to the next screen 8. Enter "welcome to campaign message" then click 'Next' 9. User clicks on the 'Add new message' link 10. Enter message 11. Select "date to send" and time then click 'Save' 12. Click Finish
Subvariations (alternate course of action)	1-12 The user can click on the 'Cancel' button to cancel the operation at each of these steps. 2-12 User able to save the work currently entered in campaign by clicking 'Save' at each of these steps 4-12 The users can click on the 'Back' button to review what was entered in the previous screens at each of the indicated steps 9 When the user is at Step 4 the user can click on the import campaign data button 10 The user then selects the appropriate CSV file with the campaign data then clicks import 11 The messages, days and times will all be imported and the user can click "Save" button to save the campaign. 11.1 After step 11 the user has the option to send a test message 11.1 User can repeate steps 9-11 to add multiple messages to campaign
Extensions	N/A
Superordinate Use Cases	[UC101 Login]

Subordinate Use Cases	N/A
Secondary Actors	N/A
Open Issues	N/A

UC241D Import a Campaign

Use Case Number	UC241D
Use Case Name	Import a campaign
Goal in Context	Allow user to import a campaign template from existing campaigns
Scope	
Level	
Precondition	1. The Administrator must be logged in to the system. 2. Organisations should have been previously created 3. Campaign details to be created and sent to Administrator 4. Previous campaigns should have been created
Success End Condition	The Administrator has successfully imported a campaign
Failed End Condition	The Administrator has failed to import a campaign
Primary Actor	Administrator
Trigger	Client requests creation of a new SMS campaign
Input	Campaign details: Entered as indicated in 'Campaign Request Form'
Main Success Scenario	1. Click 'Campaigns’ button 2. Click ‘Create New Campaign’ button 3. Click Import Campaign from the left hand side of the screen 4. Enter the campaign name 5. Select the organisation 6. Select the appropriate campaign to import then click "import Campaign". 7. Click the "Add new message" link 8. Enter message content then click 'Save'.
Subvariations ()	1-8 If the user does not want to add contacts, he can click on the ‘Cancel’ button to cancel the operation at each of these steps. 2-8 User able to save the work currently entered in campaign by clicking 'Save' at each of these steps 7 When the user is at Step 4 the user can click on the import campaign data button 8 The user then selects the appropriate CSV file with the campaign data then clicks import 9 The messages, days and times will all be imported and the user can click "Save" button to save the campaign.
Extensions	N/A
Superordinate Use Cases	[UC101 Login]
Subordinate Use Cases	N/A
Secondary Actors	N/A
Open Issues	N/A

UC243 Update a Campaign

Use Case Number	UC243
Use Case Name	Update a Campaign
Goal in Context	Allow admin update a campaign
Scope	
Level	
Precondition	1. The Administrator must be logged in to the system. 2. Organisations should have been previously created 3. Campaign details to be created and sent to Administrator 4. User is in the Admin Section of Mobilisr 5. Campaigns should have been previously created
Success End Condition	The Administrator has successfully edited a campaign
Failed End Condition	The Administrator has failed to edit a campaign
Primary Actor	Administrator
Trigger	Client requests a change to an existing SMS campaign
Input	Campaign details: Entered as indicated in 'Campaign Request Form'
Main Success Scenario	1. Click 'Campaigns' button 2. View list of campaigns created 3. Select and click on the appropriate campaign name 4. The user is taken to step 4 of the create a campaign process 5. The user can edit the screen or click 'Back' to edit the previous screen 6. User clicks on the 'Add new message' link 7. Enter message 8. Select day and time then click 'Save' 9. Click Finish
Subvariations (alternate course of action)	4-9 If the user does not want to add contacts, he can click on the 'Cancel' button to cancel the operation at each of these steps. 4-9 User able to save the work currently entered in campaign by clicking 'Save' at each of these steps 4-9 The users can click on the 'Back' button to review what was entered in the previous screens at each of the indicated steps 5 User can click on which step to edit by clicking on the appropriate step button on the left hand side of the screen 5 When the user is at Step 4 the user can click on the import campaign data button 6 The user then selects the appropriate CSV file with the campaign data then clicks import 7 The messages, days and times will all be imported and the user can click "Save" button to save the campaign. 8.1 After step 11 the user has the option to send a test message
Extensions	N/A
Superordinate Use Cases	[UC101 Login]
Subordinate Use Cases	N/A

Secondary Actors	N/A
Open Issues	N/A

UC244 Stop a Campaign

Use Case Number	UC244
Use Case Name	Stop a Campaign
Goal in Context	Allow admin to stop an active campaign
Scope	
Level	
Precondition	1. The Administrator must be logged in to the system. 2. Organisations should have been previously created 3. Campaign details to be created and sent to Administrator 4. User is in the Admin Section of Mobilisr 5. Campaigns should have been previously created 6. A campaign must be in the active state
Success End Condition	The Administrator has successfully stopped a campaign
Failed End Condition	The Administrator has failed to stop a campaign
Primary Actor	Administrator
Trigger	Client requests to stop the current campaign
Input	Email confirmation to stop campaign
Main Success Scenario	1. Click 'Campaigns' button 2. View list of campaigns created 3. Click on the stop icon (red square) in the Actions column next to the appropriate campaign
Subvariations (alternate course of action)	N/a
Extensions	N/A
Superordinate Use Cases	[UC101 Login] [UC201] [UC244]
Subordinate Use Cases	N/A
Secondary Actors	Client
Open Issues	N/A

UC245 Delete a Campaign

Use Case Number	UC245
Use Case Name	Delete a Campaign
Goal in Context	Allow admin to delete a campaign from the database
Scope	
Level	

Precondition	1. The Administrator must be logged in to the system. 2. Organisations should have been previously created 3. Campaign details to be created and sent to Administrator 4. User is in the Admin Section of Mobilisr 5. Campaigns should have been previously created 6. A campaign must be in the inactive state
Success End Condition	The Administrator has successfully disabled a campaign and is no longer in the campaign list
Failed End Condition	The Administrator has failed to delete a campaign
Primary Actor	Administrator
Trigger	Campaign was incorrectly created
Input	
Main Success Scenario	1. Click 'Campaigns' button 2. View list of campaigns created 3. Click on the delete icon (red x) in the Actions column next to the appropriate campaign
Subvariations (alternate course of action)	N/a
Extensions	N/A
Superordinate Use Cases	[UC101 Login] [UC201 Add Organisation] [UC241 Create New Campaign]
Subordinate Use Cases	N/A
Secondary Actors	Client
Open Issues	N/A

UC247 Import Campaign Messages and Schedules

Use Case Number	UC247
Use Case Name	Import Campaign Messages and Schedules
Goal in Context	Allow user to import a messages and schedules from a CSV file
Scope	
Level	
Precondition	1. The Administrator must be logged in to the system. 2. Organisations should have been previously created 3. Campaign details to be created and sent to Administrator 4. Campaign data should be entered into the import template
Success End Condition	The Administrator has successfully imported the campaign data
Failed End Condition	The Administrator has failed to import a campaign
Primary Actor	Administrator
Trigger	Content manager provides sms campaign details
Input	Campaign details: As entered in Import template

Main Success Scenario	1. Step 3 of the "Create a new Campaign" 2. Click the "import campaign data" link 3. Click browse button from the poppup screen 4. select the CSV file that contains the campaing data and click open 5. no. of messages and schedule will be automatically entered as per the CSV file. Click Next 6. User is then taken to "Step 4" of the "Create a new campaign" where the campaign messages are already entered as per the CSV file. Click "Finish"
Subvariations ()	1-6 User is able to click cancel at any stage
Extensions	N/A
Superordinate Use Cases	[UC101 Login] [UC241 Create a new campaign]
Subordinate Use Cases	N/A
Secondary Actors	N/A
Open Issues	N/A

UC248 Export Campaign Messages and Schedules

Use Case Number	UC248
Use Case Name	Export Campaign Data to CSV File
Goal in Context	Allow user to export messages and schedules from a campaign to a CSV file
Scope	
Level	
Precondition	1. The Administrator must be logged in to the system. 2. Organisations should have been previously created 3. Campaign should be previously created with messages and schedules
Success End Condition	The Administrator has successfully export the campaign data
Failed End Condition	The Administrator has failed to export a campaign data
Primary Actor	Administrator
Trigger	Request from management
Input	NA
Main Success Scenario	1. On Step 4 of "Create a New Campaign" 2. Click the "Export Messages" link 3. Click to save or open from the poppup screen 4. Click "OK" to export the data
Subvariations ()	2-3 User is able to click cancel at any stage
Extensions	N/A
Superordinate Use Cases	UC101 Login UC241A Create a New Campaign - Recipient Specific UC241B Create a New Campaign - Generic UC241C Create a New Campaign - Fixed

Subordinate Use Cases	N/A
Secondary Actors	N/A
Open Issues	N/A

UC251 View All 'Just Send SMS' Campaigns

Use Case Number	UC251	
Use Case Name	View All 'Just Send SMS' Campaigns	
Goal in Context	Allow the administrator to view a list of all campaigns	
Scope		
Level		
Precondition	1. The Administrator must be logged in to the system. 2. Campaigns must have been previously creaed	
Success End Condition	The Administrator has succesfully viewed all existing campaigns	
Failed End Condition	The Administrator has failed to view all existing campaigns	
Primary Actor	Administrator	
Trigger	Client calls to change schedule time of campaign	
Input	Campaign details (Campaign Name, Message, Date and time)	
Main Success Scenario	1. Click 'Admin' button 2. Click 'Just send SMS' button on the side bar 3. View the list of campaigns created 4. Click on one of the campaigns and change the name,message and schedul e time 5. Click 'Save and Continue' button 6. In step 2 send a test message 7. Once confirmation is displayed then click schedule	
Subvariations (Alternate Course of Action)	4 – 5 If the administrator does not want to view / edit the campaign, he can click on the 'Cancel' button to cancel the operation at each of these steps. 6 - 7 The administrator can click 'Close' at any time when the administrator moves to the step 2 of the process	
Extensions	N/A	
Superordinate Use Cases	[UC101 Login	mobilisr:UC101 Login]
Subordinate Use Cases	N/A	

Secondary Actors	N/A
Open Issues	N/A

UC252 Update Existing 'Just Send SMS' Campaign

Use Case Number	UC251	
Use Case Name	View All 'Just Send SMS' Campaigns	
Goal in Context	Allow the administrator to view a list of all campaigns	
Scope		
Level		
Precondition	1. The Administrator must be logged in to the system. 2. Campaigns must have been previously creaed	
Success End Condition	The Administrator has succesfully viewed all existing campaigns	
Failed End Condition	The Administrator has failed to view all existing campaigns	
Primary Actor	Administrator	
Trigger	Client calls to change schedule time of campaign	
Input	Campaign details (Campaign Name, Message, Date and time)	
Main Success Scenario	1. Click 'Admin' button 2. Click 'Just send SMS' button on the side bar 3. View the list of campaigns created 4. Click on one of the campaigns and change the name,message and schedul e time 5. Click 'Save and Continue' button 6. In step 2 send a test message 7. Once confirmation is displayed then click schedule	
Subvariations (Alternate Course of Action)	4 – 5 If the administrator does not want to view / edit the campaign, he can click on the 'Cancel' button to cancel the operation at each of these steps. 6 - 7 The administrator can click 'Close' at any time when the administrator moves to the step 2 of the process	
Extensions	N/A	
Superordinate Use Cases	[UC101 Login	mobilisr:UC101 Login]
Subordinate Use Cases	N/A	
Secondary Actors	N/A	

Open Issues	N/A

UC261 Create New Filter

Use Case Number	UC261
Use Case Name	Create New Filter
Goal in Context	Allow the Admin user with permission = MANAGE_FILTER to create a new Filter
Scope	
Level	
Precondition	1. The Admin User must be logged in to the system. 2. The channel for the filter must have been created.
Success End Condition	The Admin user has succesfully created a new filter
Failed End Condition	The Admin user has failed to create a new filter
Primary Actor	Admin user
Trigger	Messages need to be received by Communicate and has to be directed on a specific channel and filter
Input	Filter details (Organisation Name, Filter Name, Filter Type, Channel, Actions)
Main Success Scenario	1. Click 'Admin' button 2. Click 'Filters' button 3. Click 'Create New Filter' button 4. Enter Organisation Name, Filter Name, Filter Type, Channel 5. Click 'Add a New Filter Action' 6. Select Action and configure action 7. Click 'Save' button
Subvariations (Alternate Course of Action)	3 – 7 If the Admin user does not want to create a new filter, he can click on the 'Cancel' button to cancel the operation at each of these steps. 4.1 If the Filter Type i not available in the drop-down list, the admin user must cancel the operation and go back to the 'Create New Channel' functionality.
Extensions	N/A
Superordinate Use Cases	UC101 Login
Subordinate Use Cases	N/A
Secondary Actors	N/A
Open Issues	N/A

UC262 Edit an Existing Filter

Use Case Number	UC262
Use Case Name	Edit an Existing Filter
Goal in Context	Allow the Admin user with permission = MANAGE_FILTER to edit an existing Filter

Scope	
Level	
Precondition	1. The Admin User must be logged in to the system. 2. The filter must have been created.
Success End Condition	The Admin user has succesfully edited an existing filter
Failed End Condition	The Admin user has failed to edited an existing filter
Primary Actor	Admin user
Trigger	The admin user needs to edit an existing filter
Input	Filter details (Organisation Name, Filter Name, Filter Type, Channel, Actions) and Actions to be added or deleted.
Main Success Scenario	1. Click 'Admin' button 2. Click 'Filters' button 3. Select the filter from the list of filters displayed 4. Edit the fields/Actions that need to be changed 5. Click 'Save' button
Subvariations (Alternate Course of Action)	4-- 7 If the Admin user does not want to create a new filter, he can click on the 'Cancel' button to cancel the operation at each of these steps. 4.1 If the Filter Type i not available in the drop-down list, the admin user must cancel the operation and go back to the 'Create New Channel' functionality.
Extensions	N/A
Superordinate Use Cases	UC101 Login
Subordinate Use Cases	N/A
Secondary Actors	N/A
Open Issues	N/A

UC263 View all filters

Use Case Number	UC263
Use Case Name	View all Filters
Goal in Context	Allow the Admin user with permission = MANAGE_FILTER to view all filters created for all organisations
Scope	
Level	
Precondition	1. The Admin User must be logged in to the system. 2. The filter must have been created.
Success End Condition	The Admin user has succesfully viewed all filters
Failed End Condition	The Admin user has failed to view all filters
Primary Actor	Admin user
Trigger	Admin User needs to view all filters created
Input	N/A

Main Success Scenario	1. Click 'Admin' button 2. Click 'Filters' button 3. View all filters displayed
Subvariations (Alternate Course of Action)	N/A
Extensions	N/A
Superordinate Use Cases	UC101 Login
Subordinate Use Cases	N/A
Secondary Actors	N/A
Open Issues	N/A

UC264 View Messages on a filter

Use Case Number	UC264
Use Case Name	View messages on a filter
Goal in Context	Allow the Admin user with permission = MANAGE_FILTER to view messages on a filter
Scope	
Level	
Precondition	1. The Admin User must be logged in to the system. 2. The filter must have been created.
Success End Condition	The Admin user has succesfully viewed messages on the selected filter
Failed End Condition	The Admin user has failed to view messages on the selected filter
Primary Actor	Admin user
Trigger	Admin User needs to view messages on the selected filter
Input	N/A
Main Success Scenario	1. Click 'Admin' button 2. Click 'Filters' button 3. Click 'View Inbox' button for the required filter
Subvariations (Alternate Course of Action)	N/A
Extensions	N/A
Superordinate Use Cases	UC101 Login
Subordinate Use Cases	N/A
Secondary Actors	N/A
Open Issues	N/A

UC265 Delete a Filter

Use Case Number	UC265
Use Case Name	Delete an Existing Filter

Goal in Context	Allow the Admin user with permission = MANAGE_FILTER to delete an existing Filter
Scope	
Level	
Precondition	1. The Admin User must be logged in to the system. 2. The filter must have been created.
Success End Condition	The Admin user has succesfully deleted an existing filter
Failed End Condition	The Admin user has failed to deleted an existing filter
Primary Actor	Admin user
Trigger	The admin user needs to delete an existing filter
Input	N/A
Main Success Scenario	1. Click 'Admin' button 2. Click 'Filters' button 3. Click on the red cross under Filter Management against the filter that needs to be deleted 4. Click 'OK' when the confirmation message pops up
Subvariations (Alternate Course of Action)	3-4 If the Admin user does not want to delete an existing filter, he can click on the 'Cancel' button to cancel the operation at each of these steps.
Extensions	N/A
Superordinate Use Cases	UC101 Login
Subordinate Use Cases	N/A
Secondary Actors	N/A
Open Issues	N/A

UC301 Create New 'Just Send SMS' Campaign

Use Case Number	UC301
Use Case Name	Create New 'Just Send SMS' Campaign
Goal in Context	Allow a logged in user to create a new 'Just Send SMS' campaign.
Scope	
Level	
Precondition	1. The User must be logged in to the system. 2. The User must belong to an organisation.
Success End Condition	The User has succesfully created a 'Just Send SMS' Campaign
Failed End Condition	The User has failed to create a 'Just Send SMS' Campaign
Primary Actor	User
Trigger	The user has to send an sms to a recipient(s)
Input	Campaign details (Campaign Name, Recipent(s) mobile number, Message, Date and time if sms is to be sent at a later stage)

Main Success Scenario	1. Click 'Just Send SMS' button 2. Click 'Add New 'Just Send SMS Campaign'' button 3. Enter Campaign's Name 4. Select Recipients from contact list or group list 5. Type the message in the message box 6. Schedule SMS 7. Click 'Save and Continue' button 8. View Campaign Summary 9. Click 'Schedule' Button 10. The system will prompt the user to start the campaign. Click 'Yes' Button.
Subvariations (Alternate Course of Action)	3 – 6 If the user does not want to create a 'Just send SMS Campaign', he can click on the 'Cancel' button to cancel the operation at each of these steps. 4.1 If the recipient number is not on the contact list, the user has to enter the new mobile number in the box provided to add a new contact. If the group to be added is not in the group list, the user has to enter a new group name and add contacts to the group. 6.1 If the message must be sent at a later stage, the user has to schedule the sms by selecting a later date and time. 8.1 User is able to send a test message before scheduling the campaign, The user will then click on "Sen test message" button
Extensions	N/A
Superordinate Use Cases	UC101 Login
Subordinate Use Cases	N/A
Secondary Actors	N/A
Open Issues	N/A

UC303 Update My 'Just Send SMS' Campaign

Use Case Number	UC303
Use Case Name	Update My 'Just Send SMS' Campaigns
Goal in Context	Allow the administrator to update a 'Just Send SMS' campaign that has already been created for their organisation
Scope	
Level	
Precondition	1. The User must be logged in to the system. 2. Campaigns must have been previously created by a user in that organisation
Success End Condition	The User has successfully updated an existing campaign
Failed End Condition	The User has failed to update an existing campaign
Primary Actor	User
Trigger	Content of campaign has changed
Input	Campaign details (Campaign Name, Message, Date and time)

Main Success Scenario	1. Click 'My Campaigns' button 2. Click 'Just send SMS' button on the side bar 3. View the list of campaigns created 4. Click on one of the campaigns and change the name, message and/or schedule time 5. Click 'Save and Continue' button 6. In Step 2, send a test message 7. Once confirmation is displayed then click schedule
Subvariations (Alternate Course of Action)	4 – 5 If the user does not want to add contacts, he can click on the 'Cancel' button to cancel the operation at each of these steps. 4 - 5 User is unable to edit campaign as the campaign is already running. The user then clicks cancel to return to the list of campaigns 6 - 7 User can click 'Close' at any time when the user moves to the step 2 of the process
Extensions	N/A
Superordinate Use Cases	UC101 Login
Subordinate Use Cases	N.A.
Secondary Actors	N.A.
Open Issues	N.A.

UC305 Unschedule a 'Just Send SMS' Campaign

Use Case Number	UC305
Use Case Name	Unschedule a 'Just Send SMS' Campaign
Goal in Context	Allow user to unshedule a 'Just Send SMS' Campaign
Scope	N/A
Level	N/A
Preconditions	1. The Campaign should be in the 'Active' state to be unscheduled 2. The Campaign cannot be unscheduled 10 minutes prior to the time that the Campaign is scheduled for
Success End Condition	User is able to unschedule the campaign
Failed End Condition	User is unable to unschedule the campaign
Primary Actor	User
Trigger	The campaign needs to be unscheduled
Input	Select the campaign to be unscheduled
Main Success Scenario	1. Login to Mobilsr 2. Click on the 'My Campaigns' button at the top of the screen. 3. Click on the 'Just Send SMS' button on the left hand side of the screen. 4. Select a campaign from the list of Campaigns that is in the ACTIVE state. 5. Click on 'Unshedule' button
Subvariations (Alternate Course of Action)	None
Extensions	N/A
Superordinate Use Cases	UC101 Login

Subordinate Use Cases	N/A
Secondary Actors	N/A
Open Issues	N/A

UC311 Add Recipients to a Campaign

Use Case Number	UC311
Use Case Name	Add Recipients to a Campaign
Goal in Context	Allow user to add recipients to a campaign
Scope	N/A
Level	N/A
Preconditions	The Campaign must have been created by the Admin user and the Campaign must be in the "Active" state
Success End Condition	User is able to add recipients to the campaign
Failed End Condition	User is unable to add recipients to the campaign
Primary Actor	User
Trigger	Recipients need to be added to the campaign
Input	Select Recipients from contact list or input recipient's mobile number
Main Success Scenario	1. Login to Mobilsr 2. Click on the 'My Campaigns' button 3. Select Campaign from the list of Campaigns 4. Click on 'Manage Recipients' Button 5. Select Recipients from pre-polutated contact list 6. Click on the 'Green plus' icon to add a recipient 7. Adjust the time of each message to be sent out according to ther recipients' preferences 8. Click on the 'Done' button once all the recipients have been added
Subvariations (Alternate Course of Action)	5.1 If the recipient is not in the contact list, the recipient can be added manually by adding their mobile number and clicking on the 'Add New Contact' button
Extensions	N/A
Superordinate Use Cases	UC101 Login UC241A Create New Campaign (Recipient Specific) UC241B Create New Campaign (Generic) UC241C Create New Campaign (Fixed)
Subordinate Use Cases	N/A
Secondary Actors	N/A
Open Issues	N/A

UC312 Remove Recipients from a Campaign

Use Case Number	UC312
Use Case Name	Remove Recipients from a Campaign

Goal in Context	Allow user to remove recipients from a campaign
Scope	N/A
Level	N/A
Preconditions	1. The Campaign must have been created by the Admin user and the Campaign must be in the "Active" state 2. The recipent must have been added to the campaign
Success End Condition	User is able to remove recipients from the campaign
Failed End Condition	User is unable to remove recipients from the campaign
Primary Actor	User
Trigger	Recipients need to be removed from the campaign
Input	N/A
Main Success Scenario	1. Login to Mobilsr 2. Click on the 'My Campaigns' button 3. Select Campaign from the list of Campaigns 4. Click on 'Manage Recipients' Button 5. Click on the 'Red Cross' icon to remove a recipient 6. Click on the 'Done' button once all the recipients have been added
Subvariations (Alternate Course of Action)	5.1 If a recipient that has been removed needs to be re-added to the campaign, the user can search for the recipient in the contact list and follow the procedure for adding a recipient (UC311 Add Recipients to a Campaign)
Extensions	N/A
Superordinate Use Cases	UC101 Login UC241A Create New Campaign (Recipient Specific) UC241B Create New Campaign (Generic) UC241C Create New Campaign (Fixed) UC311 Add Recipients to a Campaign
Subordinate Use Cases	N/A
Secondary Actors	N/A
Open Issues	N/A

UC314 Request New Campaign

Use Case Number	UC314
Use Case Name	Request New Campaign
Goal in Context	Allow user to request a new campaign
Scope	N/A
Level	N/A
Preconditions	The user must be logged in
Success End Condition	User is able to request a new campaign
Failed End Condition	User is unable to request a new campaign
Primary Actor	User

Trigger	The user needs a new campaign to be created
Input	Enter description of the new campaign in the "Campaign Description" box
Main Success Scenario	1. Login to Mobilsr 2. Click on the 'My Campaigns' button 3. Click on the 'Request New Campaign' button 4. Enter the description of the new campaign in the "Campaign Description" box 5. Click on the 'Send' button. An email will be sent to the dedicated admin user at Cell-Life informing him of the new request. 6. Click on the "Okay" button to close the Thank You message.
Subvariations (Alternate Course of Action)	4.1 If the user does not want to request a new campaign, the user can click on the 'Cancel' button to exit the screen at any time.
Extensions	N/A
Superordinate Use Cases	UC101 Login
Subordinate Use Cases	N/A
Secondary Actors	N/A
Open Issues	N/A

UC401 Add New Contact

Use Case Number	UC401
Use Case Name	Add New Contact
Goal in Context	Allow user to add a new contact to the mobilisr system
Scope	
Level	
Preconditions	User account has been created for the user.
Success End Condition	User is able to add a new contact to the list
Failed End Condition	User is unable to add a contact
Primary Actor	User
Trigger	
MAIN SUCCESS SCENARIO	**Steps** 1. Login to Mobilsr 2. Click on the Contacts button 3. Click on the 'Add New Contact' button 4. Enter the "Test Data" in the respective text fields 5. Click on the 'Save' button to complete the process
EXTENSIONS	
SUB-VARIATIONS	
Superordinate Use Cases	
Subordinate Use Cases	

Secondary Actors	
OPEN ISSUES	

UC402 Update or View Contact's Details

Use Case Number	UC402
Use Case Name	Update or View Contact's Details
Goal in Context	Allow user to edit a contact that has already been added to the Mobilisr system
Scope	
Level	
Preconditions	User account has been created for the user.
Success End Condition	User is able to view and update contacts in the list
Failed End Condition	User is unable to edit a contact
Primary Actor	User
Trigger	
MAIN SUCCESS SCENARIO	**Steps** 1. Login to Mobilsr 2. Click on the Contacts button 3. View the list of contacts previously created 4. Select one of the contacts which should open a screen with contact's details 5. Edit the necessary fields. 6. Click on the "Update" button 7. Check that confirmation is given.
EXTENSIONS	
SUB-VARIATIONS	
Superordinate Use Cases	
Subordinate Use Cases	
Secondary Actors	
OPEN ISSUES	

UC411 Add New Group

Use Case Number	UC411
Use Case Name	Add New Group
Goal in Context	Allow user to add a new group which contains multiple contacts for group messaging to the mobilisr system
Scope	
Level	
Preconditions	User account has been created for the user.

Success End Condition	User is able to add a new contact group to the display list and is accessible
Failed End Condition	User is unable to add a contact group
Primary Actor	User
Trigger	New group requested by client/organisation
MAIN SUCCESS SCENARIO	**Steps** 1. Login to Mobilsr 2. Click on the Contacts button 3. Click on the 'My Groups' button 4. Click on the 'Add new Contact Group' 5. Enter the "Test Data" in the respective text fields 6. Click the 'Manage Contacts for this Group" link 7. Add contacts to the group and click done 8. Click on the 'Save' or "Update" button to complete the process 9. View confirmation when returned back to the group list
EXTENSIONS	
SUB-VARIATIONS	
Superordinate Use Cases	
Subordinate Use Cases	
Secondary Actors	
OPEN ISSUES	

UC412 Update or View Group's Details

Use Case Number	UC412
Use Case Name	Update / View Group's Details
Goal in Context	Allow user to update a contact group. User is able to add or delete contacts from the group or change the group details.
Scope	
Level	
Preconditions	User account has been created for the user. Contact Group has been created
Success End Condition	User is able to add or delete contacts from a group
Failed End Condition	User is unable to edit the contact group
Primary Actor	User
Trigger	New contact to be added/deleted

MAIN SUCCESS SCENARIO	**Steps** 1. Login to Mobilsr 2. Click on the Contacts button 3. Click on the existing Groups previously created 4. Edit the Contact group name by adding "1a" next to the name 5. Click the 'Manage Contacts for this Group" link 6. Remove contacts from the group and click done 7. Click on the 'Save' or "Update" button to complete the process 8. View confirmation when returned back to the group list
EXTENSIONS	
SUB-VARIATIONS	
Superordinate Use Cases	
Subordinate Use Cases	
Secondary Actors	
OPEN ISSUES	

UC421 Import Contacts

Use Case Number	UC421
Use Case Name	Import Contacts
Goal in Context	Allow user to import contacts to the system
Scope	
Level	
Precondition	1. User must be logged in to the system. 2. User must have contacts available.
Success End Condition	User has imported contacts into the system.
Failed End Condition	User has not been able to import contacts into the system
Primary Actor	User
Trigger	User has to add contacts into the system
Input	Contact List (A CSV file that contains the name and contact details of people that the User would like to add to the system)
Main Success Scenario	1. Click ‘Contact’ button 2. Click ‘Import Contacts’ button 3. Browse for CSV contact file 4. Click ‘Continue to Step 2’ button 5. Select Heading for each column that has been displayed (i.e. Not Applicable, First Name, Last Name, Mobile Number, Mobile Network) 6. Click ‘Save Contacts’ button
Subvariations (Alternate Course of Action)	6.1 – 10 If the user does not want to add contacts, he can click on the ‘Cancel’ button to cancel the operation at each of these steps.
Extensions	N/A
Superordinate Use Cases	UC101 - Login

Subordinate Use Cases	N/A
Secondary Actors	N/A
Open Issues	N/A

UC501 View Campaign Message Logs

Use Case Number	UC501
Use Case Name	View Campaign Message Logs
Goal in Context	User able to check status of messages sent
Scope	
Level	
Precondition	1. The User must be logged in to the system. 2. Campaigns must have been previously created by that user
Success End Condition	The User has successfully viewed the status of the message sent
Failed End Condition	The user was unable to view the message status
Primary Actor	User
Trigger	Campaign has been scheduled and completed
Input	NA
Main Success Scenario	1. Click 'My Campaign' button 2. Click 'Just send SMS' button on the side bar 3. View the list of campaigns created 4. Select the campaign to view and click the "Message log" button 5. View the status, the recipients and message
Subvariations (Alternate Course of Action)	
Extensions	N/A
Superordinate Use Cases	[UC101 Login UC301
Subordinate Use Cases	N/A
Secondary Actors	N/A
Open Issues	N/A

Process to Follow When Updating Functional Requirements Tables

This is the process that is followed by BAs when updating the different sections in the tables on the 'Functional Requirements' page on Confluence:

- BA does GUI Mock-up and adds to Confluence (consistently named, and placed in the 'GUI Mockups' folder - accessible from the

'Functional Requirements'page)

- (If required) BA gets approval from dev team and product manager
- BA does Use Case(s) for that requirement and adds to Confluence (consistently named, and placed in the 'Use Cases' folder - accessible from the 'Functional Requirements' page)
- BA does Requirement Description (including business rules) and adds to Confluence (consistently named, and placed in the 'Requirement Description' folder - accessible from the 'Functional Requirements' page)
- Completion of these initial tasks is communicated to dev team (usually during the SPRINT planning sessions)
- Development starts
- Development is completed, ready for testing
- BA writes test case and adds to Confluence (consistently named, and placed in the 'Test Cases' folder - accessible from the 'Functional Requirements' page)
- BA does the testing
- If all tests pass, update the Test (BA/Dev) cell with “done”
- If any test fails, log ticket on Jira. Then update the **Test (BA/Dev)** cell with “awaiting dev #123” with the correct Jira ticket number.
- When the bug has been fixed (receive email from Jira), re-run the test cases and depending on outcome, mark as “done” or “awaiting dev #124”, etc

Mobilisr Informational Requirements

JasperReports (IR100)

Req No	Req Name	Req Description	Report Mockup
IR100	Consecutive Message Failure Report	This report shows the JasperReports user which contacts have not received a specific number of consecutive messages in a campaign. Note that initially only internal Cell-Life staff will be able to access this report, so there is no need to add any user restrictions. As with other JasperReports, the user should be able to export this to Excel, PDF and others.	IR100
IR101	Credit Summary Report	This report shows the JasperReport user information regarding all organisation's message credits within a specified time period.	IR101

Mobilisr Reports for Organisational Users (IR200)

Note that these reports will be accessible in Mobilisr, not JasperReports

Req No	Req Name	Req Description	Report Mockup

IR201	Financial Transaction Report	This report is accessible to both organisational and admin users and shows their financial transactions during a time period. It shows the opening balance, all credits loaded (with reference numbers) as well as all credits used during the time period (broken down into the campaigns on which they were spent)	IR201

These requirements will often be gathered from stakeholders rather than users. It is also more demanding and difficult for the analyst to obtain these requirements accurately, because it invariably requires much more in depth business knowledge.

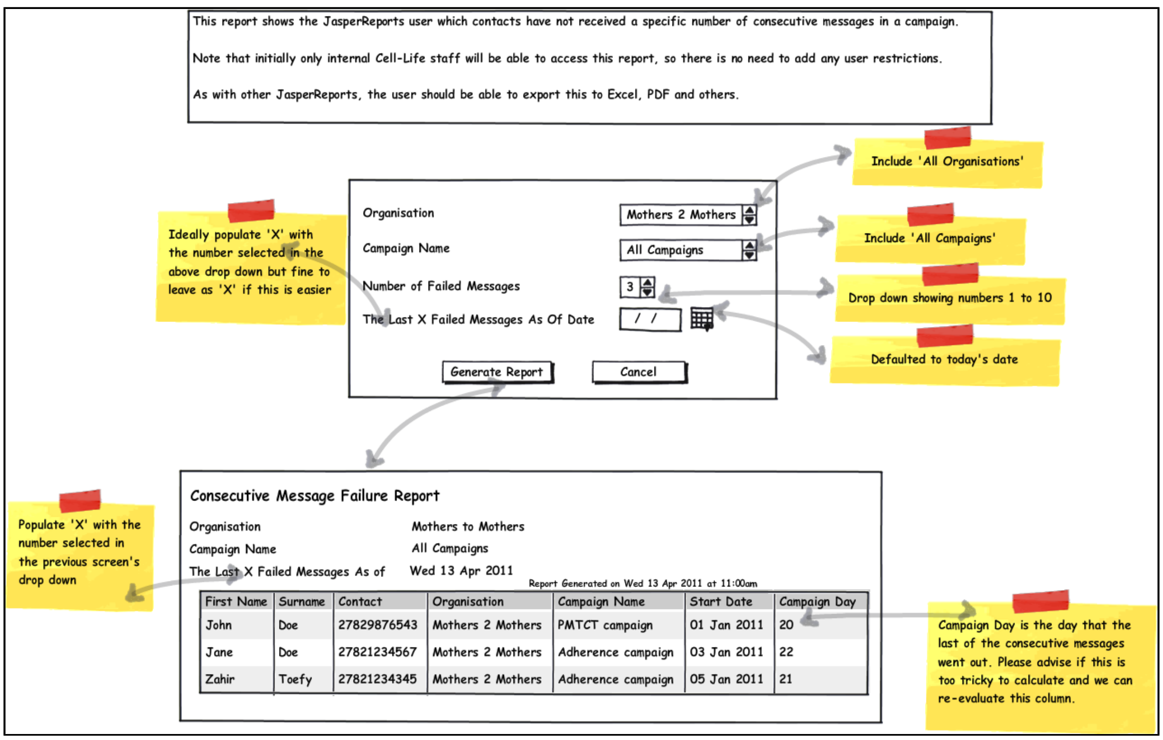
Consider enquiries, management reports, operational reports, control report, pre-printed documents, user-interfaces (screens).

Types of reports include operational reports, management reports, exception reports, control reports

_Reuse this page

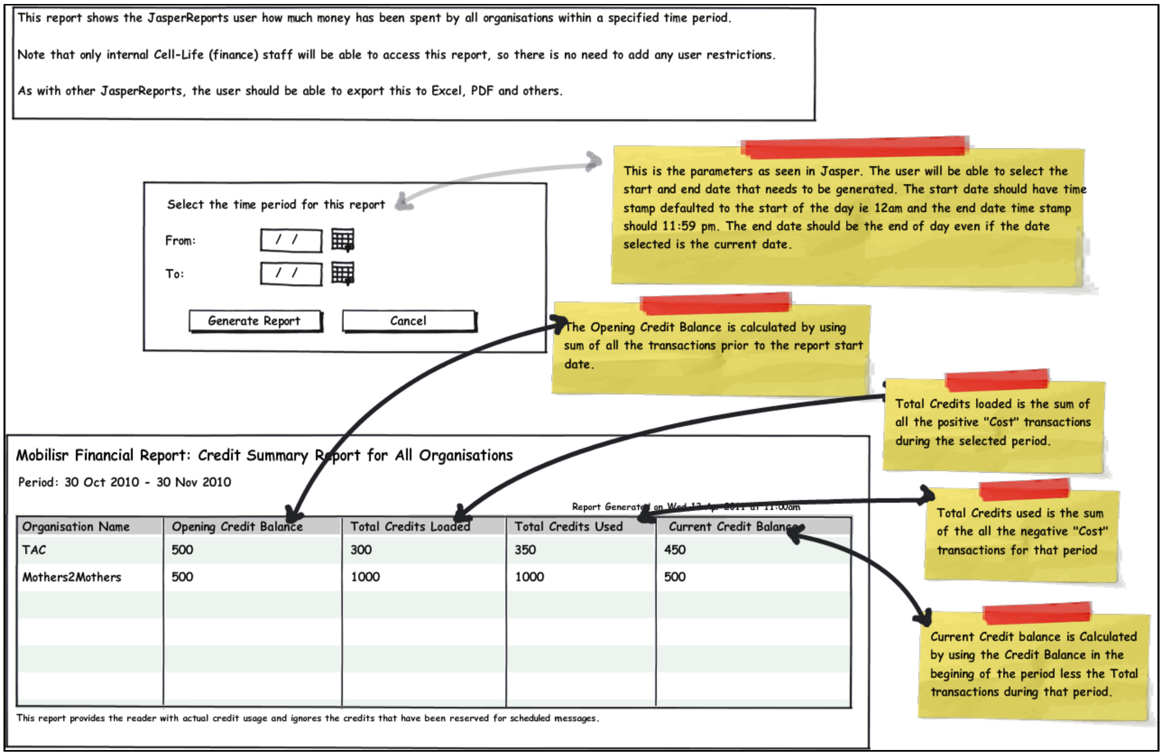
reuse this page

IR100 Consecutive Message Failure Report



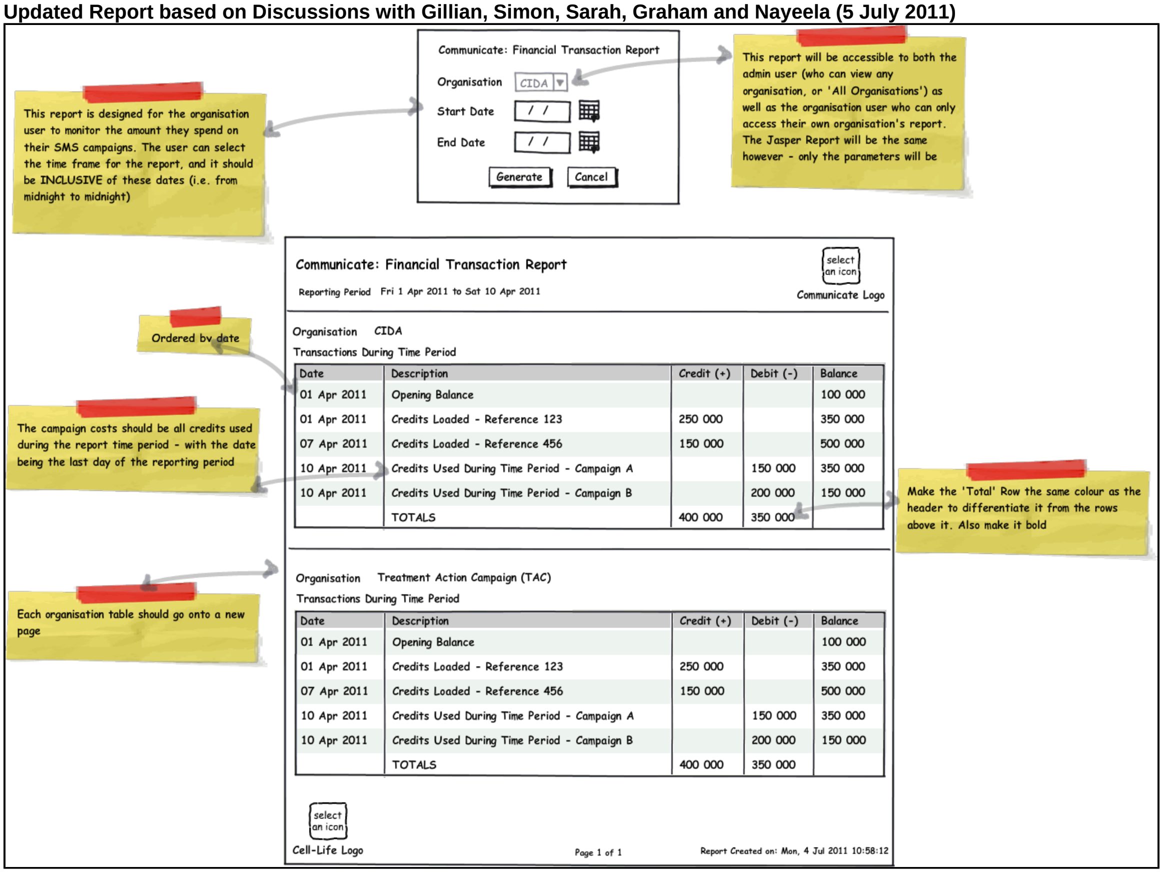
IR101 Credit Summary Report

Latest Update (based on discussions with Gillian regarding time stamps):

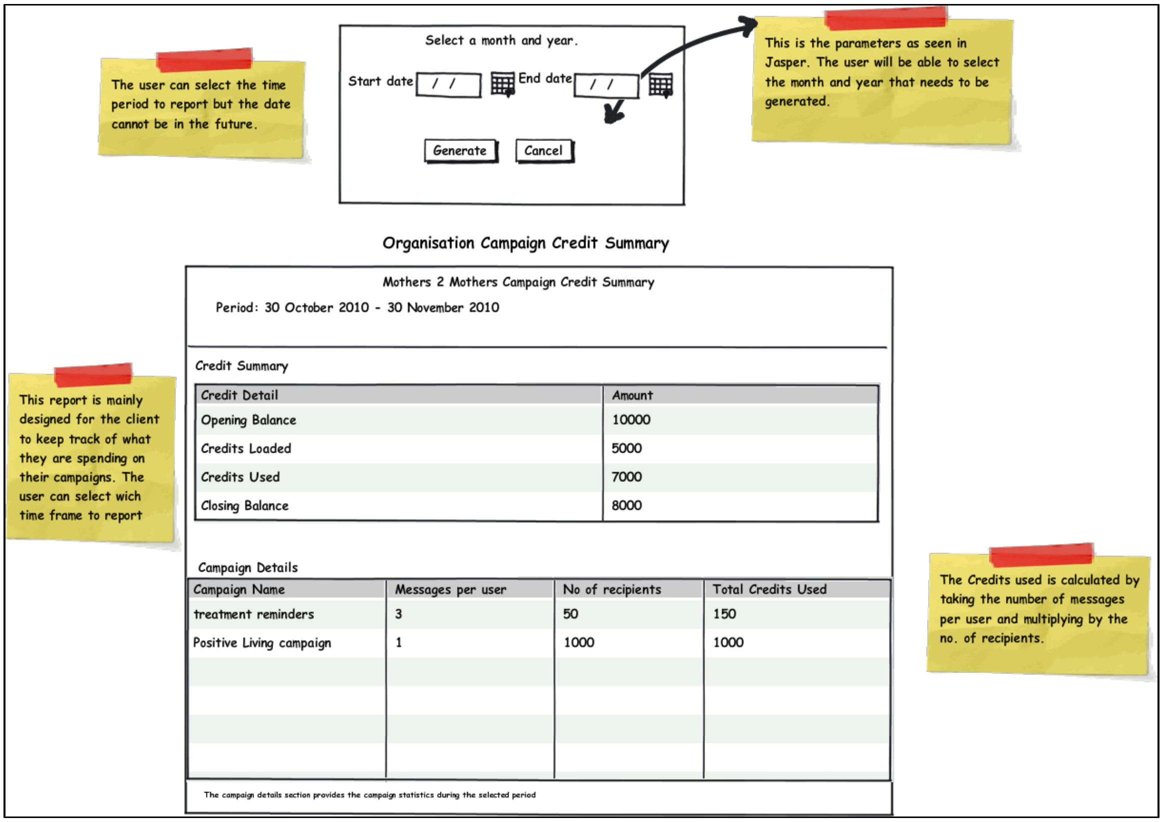


IR201 Financial Transaction Report

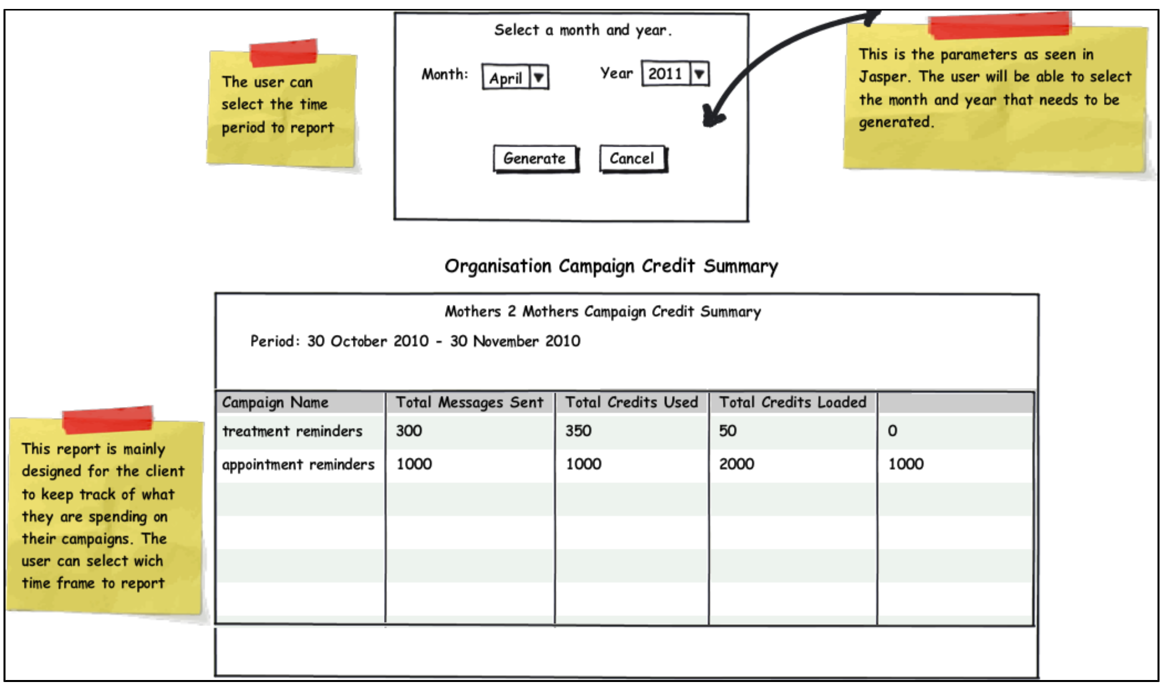
Updated Report based on Discussions with Gillian, Simon, Sarah, Graham and Nayeela (5 July 2011)



updated Report based on workshop with Simon,Zahir and David



Previous mockup



REST API Requirements

- Overview
- Changelog
- Campaigns
    - API-01 Get Campaigns
    - API-02 Get Campaign details
    - API-03 Add contacts to campaign
    - API-04 Remove contact from campaign
    - API-05 Create new 'Just send SMS' campaign
    - API-06 Get the message logs for a campaign
- Groups
    - Get list of groups
    - Add a group
    - Remove a group
    - Get group details
    - Get contacts in a group
    - Remove a contact from a group
- Contacts
    - Create new contact
    - Get a contacts details
    - API-07 Update a contacts details
    - API-08 Get messages sent to a contact
- Other
    - Get organization balance
    - Errors

No spec
Partial spec
Spec complete
Implementation complete

General notes

• {baseurl} refers to the API base URL
  ◦ For v1 of the API the base URL is **http://communicate.cell-life.org/api/**
  ◦ For v2 of the API the base URL is **http://communicate.cell-life.org/api//v2**
• The schema for the XML data can be found here: API schema
• All operations must be authenticated using Basic Access Authentication with a valid Communicate username and password.
• The Client is only allowed access to information owned by the authenticated user and may be restricted according to that user's permissions. If access is restricted a '401 Unauthorized' response will be given.
• Unless otherwise specified all dates and times are in ISO 8601 format as follows:
  ◦ Date: YYYY-MM-DD
  ◦ Datetime: YYYY-MM-DDThh:mm:ss+hh:mm
  ◦ Time: hh:mm:ss+hh:mm
• Incorrect query parameters are ignored i.e. date=2011-24-24 is ignored, type=unrecognised_type is ignored

Overview

CURRENT PRODUCTION VERSION: V1

This spec outlines a list of REST web services offered by Communicate. The services allow external applications to communicate with Communicate and perform similar functions to what normal users can do. The status of the spec can be seen by the color of the star next to it. The ones marked complete are complete to the best of my knowledge but may change slightly in the future.

{baseurl}

- For v1 of the API the base URL is **http://communicate.cell-life.org/api/**
- For v2 of the API the base URL is **http://communicate.cell-life.org/api//v2**

Note: When new methods are added to the API they can be accessed via any of the API URL's. The version URL's are required where existing methods or data representation changes.

Changelog

v2

- CampaignType names changed:
  - RELATIVE changed to DAILY
  - GENERIC changed to FLEXI
- Added methods
  - API-06 Get the message logs for a campaign
  - API-08 Get the message logs for a contact

Campaigns

API-01 Get Campaigns

SINCE V1

Get a list of all the campaigns accessible to the authenticated user. The list may be filtered and paged.

URL	{baseurl}/campaigns	
Method	GET	
Query parameters	type=	Filter by type

	status=	Filter by status
	offset=	The offset for the first record to retrieve
	limit=	The number of records being requested (default = 50, max = 200)
Returns	200 OK & PagedList XML	
	401 Unauthorized	

For more details on datatypes see

- API schema
- PagedList, Campaign, status, type

server response to GET

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<list total="3" offset="0" limit="10">
    <campaign>
        <id>73</id>
        <name>name 1</name>
        <description>description 1</description>
        <type>RELATIVE</type>
        <status>SCHEDULED</status>
        <startDate>2011-02-15T10:27:00+02:00</startDate>
        <cost>611</cost>
        <timesPerDay>13</timesPerDay>
        <duration>47</duration>
    </campaign>
    <campaign>
        <id>24</id>
        <name>name 2</name>
        <description>description 2</description>
        <type>GENERIC</type>
        <status>RUNNING</status>
        <startDate>2011-02-15T10:27:00+02:00</startDate>
        <cost>67</cost>
        <duration>40</duration>
    </campaign>
    <campaign>
        <id>56</id>
        <name>name 3</name>
        <description>description 3</description>
        <type>FIXED</type>
        <status>FINISHED</status>
        <startDate>2011-02-15T10:27:00+02:00</startDate>
        <cost>10</cost>
    </campaign>
</list>
```

API-02 Get Campaign details

SINCE V1

URL	{baseurl}/campaigns/[id]

Method	GET
Returns	200 OK & Campaign XML
	401 Unauthorized
	404 Not Found

For more details on datatypes see

- API schema
- Campaign, status, type

server response to GET


```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<campaign>
    <id>73</id>
    <name>name 1</name>
    <description>description 1</description>
    <type>RELATIVE</type>
    <status>SCHEDULED</status>
    <startDate>2011-02-15T10:27:00+02:00</startDate>
    <cost>611</cost>
    <timesPerDay>13</timesPerDay>
    <duration>47</duration>
</campaign>
```


API-03 Add contacts to campaign

SINCE V1

URL	{baseurl}/campaigns/[id]/contacts
Method	POST
Request Body	Contact XML StartDate is optional.
Returns	200 OK & PagedList XML containing errors for contacts that were not processed (contacts MSISDN is invalid)
	401 Unauthorized
	400 Bad request (if posted data cannot be parsed)
	403 Forbidden (if Campaign is not in RUNNING state or Organization does not have sufficient balance)
	404 Not Found (if campaign is not found)
	415 Unsupported Media Type & ErrorList XML (if ContactList is empty, ContactList contains objects other than contacts)

For more details on datatypes see

- API schema
- PagedList, Contact, Error, ErrorCode

POST data

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<list>
    <contact>
        <firstName>firstName1</firstName>
        <lastName>lastName1</lastName>
        <msisdn>2785654789d</msisdn>
  <startDate>2014-01-25</startDate> <!--startDate is optional-->
    </contact>
    <contact>
        <firstName>firstName2</firstName>
        <lastName>lastName2</lastName>
        <msisdn>+27723214569</msisdn>
  <startDate>2014-01-25</startDate> <!--startDate is optional-->
    </contact>
    <contact>
        <firstName>firstName3</firstName>
        <lastName>lastName3</lastName>
        <msisdn>27834569856</msisdn>
  <startDate>2014-01-25</startDate> <!--startDate is optional-->
    </contact>
</list>
```

Server response to POST data

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<list>
    <error>
        <errorCode>INVALID_MSISDN</errorCode>
        <message>Contacts mobile number (2785654789d) is invalid</message>
    </error>
</list>
```

API-04 Remove contact from campaign

SINCE V1

URL	{baseurl}/campaigns/[campaignId]/contacts/[msisdn]
Method	DELETE
Returns	204 No Content
	401 Unauthorized
	403 Forbidden if Campaign is not in RUNNING state
	404 Not Found (if campaign is not found)

API-05 Create new 'Just send SMS' campaign

URL	/api/campaigns

Method	POST
Request Body	Campaign XML
Returns	201 Created & Location
	401 Unauthorized
	409 Conflict (if a campaign already exists with the same name)
	415 Unsupported Media Type & ErrorList XML

For more details on datatypes see

- API schema
- Campaign, Message, Contact, Error, ErrorCode

POST Data

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<campaign>
    <name>name 1</name>
    <description>description 1</description>
    <messages>
        <message>
            <date>2011-02-15</date>
            <time>11:58:00+02:00</time>
            <text>message text1</text>
        </message>
    </messages>
    <contacts>
        <contact>
            <msisdn>27784569852</msisdn>
            <firstName>firstName1</firstName>
            <lastName>lastName1</lastName>
        </contact>
        <contact>
            <msisdn>27834569856d</msisdn>
        </contact>
    </contacts>
</campaign>
```

- If message date and time are not present or the date is in the past it is assumed that the message should be sent immediately after the campaign is started.
- If only the message date is not present it is assumed that the message should be send at the next occurrence of the message time after the campaign is started.
- If only the message time is not present it is defaulted to 00:00:00

Server response to POST

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<list>
    <error>
        <errorCode>INVALID_MSISDN</errorCode>
        <message>Contacts mobile number (27834569856d) is invalid</message>
    </error>
</list>
```

API-06 Get the message logs for a campaign

SINCE V2

URL	{baseurl}/campaigns/[id]/messages	
Method	GET	
Query parameters	status=	Filter by SmsStatus
	start=	Only include messages on or after this date
	end=	Only include messages on or before this date
	offset=	The offset for the first record to retrieve
	limit=	The number of records being requested (default = 100, max = 500)
Returns	200 OK & PagedList XML	
	401 Unauthorized	
	404 Not Found (if campaign is not found)	

For more details on datatypes see

- API schema
- MessageStatus, SmsStatus, Error, ErrorCode

Message Status list

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?><list total="253" offset="100"
limit="1">
  <messageStatus>
    <id>549</id>
    <msisdn>27845554545</msisdn>
    <datetime>2011-06-06T10:00:25+02:00</datetime>
    <status>TX_SUCCESS</status>
  </messageStatus>
</list>
```

Groups

Get list of groups

Add a group

Remove a group

Get group details

Get contacts in a group

Remove a contact from a group

Contacts

Create new contact

Get a contacts details

API-07 Update a contacts details

SINCE V1

URL	{baseurl}/contacts/[msisdn]	
Method	PUT (or POST)	
Returns	200 OK	
	401 Unauthorized	
	404 Not Found (if contact is not found)	
	415 Unsupported Media Type & ErrorList XML (if new MSISDN is invalid)	

For more details on datatypes see

- API schema
- Contact, Error, ErrorCode

PUT Data

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<contact>
    <msisdn>27784569852</msisdn>
    <firstName>firstName1</firstName>
    <lastName>lastName1</lastName>
</contact>
```

Server response on error

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<list>
    <error>
        <errorCode>INVALID_MSISDN</errorCode>
        <message>Contacts mobile number (0728452) is invalid</message>
    </error>
</list>
```

API-08 Get messages sent to a contact

SINCE V2

URL	{baseurl}/contacts/[msisdn]/messages	
Method	GET	
Query parameters	status=	Filter by SmsStatus
	start=	Only include messages on or after this date

	end=	Only include messages on or before this date
	offset=	The offset for the first record to retrieve
	limit=	The number of records being requested (default = 100, max = 500)
Returns	200 OK & PagedList XML	
	401 Unauthorized	
	404 Not Found (if contact is not found)	

For more details on datatypes see

- API schema
- MessageStatus, SmsStatus, Error, ErrorCode

Message Status list

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?><list total="253" offset="100"
limit="1">
  <messageStatus>
    <id>549</id>
    <msisdn>27845554545</msisdn>
    <datetime>2011-06-06T10:00:25+02:00</datetime>
    <status>TX_SUCCESS</status>
  </messageStatus>
</list>
```

Other

Get organization balance

Errors

All post methods may return '415 Unsupported Media Type' along with an ErrorList XML.

For more details on datatypes see

- API schema
- PagedList, Error, ErrorCode

Server response to POST data


```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<list>
    <error>
        <errorCode>INVALID_MSISDN</errorCode>
        <message>msisdn 27787344468 is invalid</message>
    </error>
    <error>
        <errorCode>INVALID_MSISDN</errorCode>
        <message>msisdn 27520790697 is invalid</message>
    </error>
    <error>
        <errorCode>INVALID_MSISDN</errorCode>
        <message>msisdn 27600182949 is invalid</message>
    </error>
</list>
```


Template Non-Functional Requirements & Solution Constraints

- 1.1 Compliance & Standards
- 1.2 Operational Requirements
- 1.3 Technology and Portability Requirements
- 1.4 Usability requirements
- 1.5 Security requirements
    - 1.5.1 Access control
    - 1.5.2 Privacy of information requirements
- 1.6 Supportability/Maintainability
- 1.7 Scalability
    - 1.7.1 Expected user volume
    - 1.7.2 Expected Transaction or data volumes
- 1.8 Performance Requirements
    - 1.8.1 Response times
    - 1.8.2 Throughput
- 1.9 Documentation Requirements
- 1.10 Reliability, solution availability & Integrity
- 1.11 Recoverability
- 1.12 Archiving Requirements

The non-functional requirements include aspects of the system that usually relate to quality or qualitative requirements   These requirements are potentially very numerous!

Non-functional requirements generally apply to the system as a whole. However, if any of these apply to a specific functional requirements identified in the previous section, they may be described in the context of that requirement.   (For example, if a specific functional item needs special legal compliance, or a specific response time, then this should be defined in the detailed requirements for that function, rather than here).

1.1 Compliance & Standards

This section documents any applicable standards, (and the specific sections of any such standards which apply to the system being described). For example, this could include legal, quality and regulatory standards, industry standards for usability, interoperability, internationalization, operating system compliance, etc.

Delete any areas which do not apply, and create others where needed.

- Legal or Industry Standards
- Licensing Requirements (defines any licensing enforcement requirements or other usage restriction requirements which may affect, or be required in, the solution.)
- Legal, Copyright & Other Notices (describes any necessary legal disclaimers, warranties, copyright notices, patent notice, trademarks, or logo compliance issues, if applicable. For example, where part or all of the solution requires the use of material, architectures, or software owned by third parties.)

1.2 Operational Requirements

Consider and define any requirements that relate to

- the demographics of the user base
- the geography of where the solution will be used (in the field?)
- the physical climate (especially in outdoors usage of peripherals)
- the language, culture, and educational level prevalent in the operational environment
- the currency

1.3 Technology and Portability Requirements

Where the solution must conform to an existing platform or technology, this should be stated. Normally this will be a requirement, where the solution is required to operate on the existing (legacy) platforms, or where the solution will need to interface to other software, hardware, or network products.

This could include

- Compatibility requirements
- Hardware constraints, including input devices etc
- Software constraints
- Protocol constraints
- Operating platform constraints (will the solution be required to run in different platforms

Example:

The software solution must run in the existing Windows NT 4 LAN environment. Existing SQL Server database, and client PC platforms will not be changed or upgraded, and the solution must be compliant with these environments.

1.4 Usability requirements

This section should include all of those requirements that affect usability. This will also consider ergonomics that take into account the qualifications and abilities of the people who will eventually use the system.

Requirements may relate to aspects such as:

- User Interface
- Language support
- Level of help required (including tutorials, wizards, context sensitive help)
- Operating environment in which components of the solution will operate (e.g. will it be used by unskilled people in an industrial setting, it may be used by elderly or disabled users)
- safety and environmental requirements, if applicable

- the level of fault-tolerance (error handling) required in the interface

Example

All interface designs for the GUI interface must conform to IBM’s CUA standards, or the GUI standards published by Microsoft for Windows 95.

1.5 Security requirements

This section describes both the requirements for access to the system and the requirements for the protection of information (privacy)

1.5.1 Access control

Define who has access to the product, what they can access and how this can be done. Can be extended to define user profiles, certain functions, data or operations that are restricted

Tools that can be used:

Security Matrix

Req ID	Functional item or data	Users (or profiles) & Access rights		
Clerical	Manager			
07.13	Create new policy	RW	R	

1.5.2 Privacy of information requirements

Relates to the protection of sensitive information.

1.6 Supportability/Maintainability

This section indicates any requirements that will enhance the supportability or maintainability of the system being built, including coding standards, naming conventions, class libraries, maintenance access, maintenance utilities. It will more usually be described in the system or technical specification, but there may be requirements identified at the functional specification stage.

1.7 Scalability

Requirements for growth in total and concurrent users, data volumes, transaction volumes, peripherals (terminals, printers and other interface technologies) . Also include the volumes of transactions, users, transactions etc.

1.7.1 Expected user volume

Describe the quantity, expected frequency distribution, mean, peak, growth rate of the number of concurrent users

1.7.2 Expected Transaction or data volumes

Describe the quantity, expected frequency distribution, mean, peak, growth rate of the number of transactions of various types, or database files

Tools that can be used:

- Performance matrix

Example

Req ID	Functional item	Volumes		
Mean	Peak	Growth		
31.21	Record cash sales	15000 (p.w.)	4000 (Saturday a.m.) 2500 (Friday 2-4.30 p.m.)	18% p.a.

Entity code	Data Entity	Volumes		
Mean	Peak	Growth		
O23	ORDER	20000 per month	50000 (December)	15% p.a.

1.8 Performance Requirements

The performance characteristics of the system should be outlined in this section.

- Response time for a transaction(average, maximum)
- Throughput (e.g., transactions per second)
- Capacity (e.g., the number of customers or transactions the system can accommodate)
- Degradation modes (what is the acceptable mode of operation when the system has been degraded in some manner)

1.8.1 Response times

The solution must be able to provide a reasonable response time in the context of the number of users, the volume of data being accessed, the distribution of the underlying system, data and document repositories. Can refer to computer response times (usually), or the response time for a particular business process.

Tools that can be used:

- Performance matrix

Example

Req ID	Functional item or entity	Minimum response time
27.12	Process new order	30 sec

1.8.2 Throughput

The solution must also provide reasonable throughput on batch processes like Bulk printing, Archiving, backup and recovery, Batch processing

1.9 Documentation Requirements

Describes type and extent of documentation that is required in the system. Includes the requirements, if any, for on-line user documentation, help systems, help about notices, etc.

May include technical documentation, operational documentation, user documentation, training material, maintenance instructions.

1.10 Reliability, solution availability & Integrity

Requirements for reliability and availability of the system should be specified here.

Suggestions:

- Availability – specify % of time available (xx.xx%), hours of use, maintenance access, degraded mode operations etc.
- Mean Time Between Failures (MTBF) – this is usually specified in hours, but it could also be specified in terms of days, months, or years.
- Mean Time To Repair (MTTR) – how long is the system allowed to be out of operation after it has failed?.
- Accuracy/tolerance – specify precision (resolution) and accuracy (by some known standard) that is required in the systems output.
- Maximum bugs or defect rate – usually expressed in terms of bugs/KLOC (thousands of lines of code), or bugs per function-point.
- Bugs or defect rate – categorized in terms of minor, significant, and critical bugs: the requirement(s) must define what is meant by a “critical” bug (e.g., complete loss of data, complete inability to use certain parts of the functionality of the system).]
- Hours of operation/availability (e.g. 24x7)

1.11 Recoverability

Describe the requirements for recoverability from a business perspective.

Is there a requirement for, Back-ups, Duplicate sites or duplicate processing, Redundancy ,Built in fault tolerance

Define a Disaster Recovery Plan, or ensure that this solution will be included in organizational DRP

What manual backup is required should there be a technical failure (possibly manual procedures with paper documentation)

1.12 Archiving Requirements

Describe the retention period for data.

Describe the requirements for closing off or access to prior period processing, the number of years of history to be kept (on-line?), what methods of archiving are required, whether paper documentation must be held (in the event of scanning), where archives are to be held, media to be held for archiving.

Wish List

1. Message retry and failover
    a. In the case when a message can't be sent to the WASP re-queue the message and try again.
    b. If a particular WASP keeps failing try another WASP - could use prefix hierarchy to configure this i.e. WASP for 2781 is failing so use WASP for 27 instead
2. Ability to send sms's by uploading a spreadsheet of numbers and text
    a. Support have had to send individual sms's to lots of people (with refund vouchers for the CIDA project). To do this they have to create hundreds of JustSMS campaigns manually. If they could just upload a spreadsheet where each row has the message text and a number to send the message to it would save them a lot of time and effort.
3. Add connectivity for RouteSMS http://www.routesms.com
4. Create table with daily statistics for quick stats querying
    a. Total number of messages IN/OUT group by organisation, campaign / filter
5. Caching
    a. Searches are getting slow, especially on Contacts. Caching or similar should be implemented e.g. lucene
6. Modify API so that it doesn't reject a whole post if one MSISDN is invalid
    a. Add a parameter to allow strict processing (reject if any MSISDN is invalid)
7. Cater for different time zones
8. Implement browser history
    - Would allow using the 'Back' and 'Forward' button in the browser as well as direct navigation to specific pages.
9. The Communicate system should allow an Admin user function to specify a channel to be used for a campaign as opposed to only having a default selection of "cheapest channel" (Vicki Donation from Wasp)
10. Count incoming messages for filter
11. Filter actions log - per incoming message keep a log of what actions were executed and their status to display to the user.
12. The system screen design needs to be extended to include a "Status Bar" which gives dynamic feedback to users regarding user activities in the system.
13. Ability to send WAP Push SMS's
    - This would be useful for support especially when deploying the Capture Mobile client to users.
14. Create the concept of an organisational admin user
    - An 'admin' user of the organisation should be able to edit their organisation's details
    - Should be able to add new users to their organisation and configure existing users including user roles and permissions
15. limit cost of filter (deactivate filter if more than X messages received)
16. remove contact from ALL campaigns
    - For any particular contact the user should be able to remove the contact from any campaigns they are on.
17. The system should allow users to service multiple organisations. This would probably best be served via a "Drop down" Select Organisation box for those who have multiple organisations assigned to their User Accounts. We would have to create a "Many to Many" Organisations to Users relationship in the Db.
18. Allow users to view ALL messages sent (per org) to enable tracking of failures

SMS Channels and PCM Lines

Content:

- How to add a PCM line to Tweedledee
- Troubleshooting Incoming SMS/PCM Failure
- Cell Life Communicate Channels
- PCM Alternatives

Also see:

PCM Line Architecture

Channels

List of PCM Lines (If you can't access this, ask DIné or Dagmar for access).

How to add a PCM line to Tweedledee

IMPORTANT NOTE WHEN WORKING WITH TWEEDLEDEE: When restarting, unplug the modems, then start sms3 (by running sudo /etc/init.d/sms3 start) and only plug the modems in AFTER THAT.

Steps to go through:

1. Edit the spreadsheet, adding the new number and other sim card details. Spreadsheet: https://docs.google.com/a/cell-life.org/spreadsheet/ccc?key=0AhLg6NrlFskddFdjeHJmVDliWGZXbnNEWlZGSzBHOWc&usp=sharing
2. Insert the sim card into the modem (first removing the old sim card if necessary).
3. Write down the number of the modem (eg. 6.2.4.2) and the phone number.
4. Edit the config file on Tweedledee (/etc/smsd.conf), adding the number to the DEVICES list and also to the corresponding usb port (eg. device=/dev/serial/by-path/pci-0000:00:1d.7-usb-0:6.2.4.2:1.0-port0)
5. Unplug the modem, and plug it back in again.
6. Check the logs to see that there are no errors. (/var/log/smsd/smsd.log)

Then add both a channel, and a filter to Communicate.

Troubleshooting Incoming SMS/PCM Failure

For Telfree Incoming SMSs

These are on the following lines:

- 27877519192
- 27877540000 - 27877540999
- 27870422001 - SA HIV Clinicians Society Line (SAHIV-ClinSoc-StockOut)

1. Check the Telfree dashboard, by going to https://sms.telfree.com/received_messages_reports. (The password is in the password database.)
2. If you can see the SMS's here, then the issue is on Cell Life's side.

If you CAN'T see the SMS's here, then you need to contact Telfree. 087 750 0000 - choose option 2 for tech support and speak to Stephen (stephen@telfree.co.za).

For escalation also contact Ruan Malan - ruan@telfree.co.za / 082 944 8094.

For Integrat Incoming SMSs

These are currently on the following shortcodes:

- 30060
- 43740 (JHHSA MMC)

1. Go to http://redbox.integrat.co.za/login.php (password in the database) and check the incoming message logs (Tracking and Logs -> Transaction Logs IN).
2. This will help determine whether messages are coming in to Integrat.
3. There is also a helpful XHG test you can do to test the interface under "My account -> Account information".
4. If they are not coming through to Cell Life, you can check the apache access logs on Trevor to see whether they are being sent through, and what the problem is. The messages should be posted to communicate.cell-life.org/api/incoming/integrat.

For support you can email ticketman@integrat.co.za or reginald.khumalo@integrat.co.za for escalation.

The call center is 011 062 1400, although they can't provide much help in my experience.

Other incoming SMSs:

Check the Cell Life Communicate Channels page for more info on these channels.

For PCM Lines

1. SSH to tweedledee (you will need a login and a key to do this)

```
ssh username@tweedledee
```

2. Check the log to see if the PCM Line is up. If the log message does not say "OK" at the end, there is probably an error with the line.

```
$ sudo less /var/log/smsd/smsd.log
```

3. If it is down, you can try and restart the sms server.

```
$ sudo /etc/init.d/sms3 restart
```

4. If this doesn't work, stop the sms server (FIRST!) and then unplug the two cables.

```
$ /etc/init.d/sms3 stop
```

5. Start the sms server (FIRST!) and then plug the cables back in.

```
$ /etc/init.d/sms3 start
```

6. If some lines are still down, restart again (step 3).

7. If that doesn't work, try step 4 and 5 again.

8. If that doesn't work, cry and scream and bang your head on the desk. Also eat some chocolate. Then start over.

Cell Life Communicate Channels

This page contains information about current channels on http://communicate.cell-life.org/.

Outgoing SMS Channels

Currently only one outgoing channel is enabled, this is with AAT.

- Generic SMPP

Legacy channels are:

- Integrat HTTP (out-integratHttp)
- Telfree HTTP (out-telfreeHttp)

Incoming SMS Channels

For troubleshooting, go HERE.

Several PCM Lines (see numbers HERE)

For shortcodes, have a look HERE.

PCM Alternatives

Reversed Billed Shortcodes from AAT

AAT offer reverse billing on shortcodes.

Cost: R500 per month for the line, as well as 50c per message (except on Cell C where reverse billing is not possible).

Networks: Vodacom, MTN, 8ta (not Cell C).

Reversed billed USSD

Networks: Vodacom, MTN(???)

USSD documentation from MTN that indicates they support reverse billing

USSD billing document from Vodacom

From Alan:

1. USSD Reverse Billing is commercially live with Vodacom. (***134***)
2. CellC have started to offer this in the ***130*** range which they now operate as a Reverse Billed line.
3. As such MTN, CellC and 8ta do not offer ***134*** yet.

Free USSD

Networks: Cell-C, not on 8ta who charges 20c per session

USSD Push (NI Push)

Under investigation with AAT

Article written by Alan

Vodacom document

Cell-C document

Release Notes

Communicate 2.15 Release Notes

Communicate 2.14 Release Notes

Communicate 2.13 Release Notes

Communicate 2.12 Release Notes

Communicate 2.10 and 2.11 Release Notes

Communicate 2.9 release notes

Communicate 2.8 release notes

Communicate 2.7 release notes

Communicate 2.6 release notes

Communicate 2.5 release notes

Communicate 2.4 release notes

Communicate 2.3 release notes

Communicate 2.3 release notes

Changes in this version

- Incoming message filtering
    - Per channel
    - Keyword
    - Regular expression
- Incoming message actions
    - Email
    - Auto reply
    - Auto forward
    - Forward to group
    - Add / remove from group
    - Add /remove from champaign
- Lost message processing
- Report scheduling
- Improvements to contact export - include list of campaigns the contact is on
- Support for SMPP protocol for sending and receiving messages
- Validation of messages for appropriate characters
- Ability to create new incoming channels
- New reports
- Filtering of message logs by date, msisdn, status
    - Export of filtered data
- Enable non-admin to manage their campaigns
- Improved permissions
- Manage groups for contact from contact list
- Manage contacts for group from group list
- View / export message logs for contact
- Support for international dial codes
- Send email notification when crediting organisation balance
- Improve Roles and Permissions functionality
- Auto expire messages after 10 days (configurable via setting)

Upgrade notes

- Settings now use Pconfig framework
    - All existing settings have been deleted. Changes to default values need to be made via the Settings interface
- MSISDN validation supports multiple countries via the *numberinfo*database table.
    - After deployment rows need to be added for support countries.
- Location of generated reports has changed
    - Old location {COMMUNICATE_HOME}/reports
    - New location {COMMUNICATE_HOME}/report/generated
- Report API has changed and is not compatible previously generated reports

    - Delete all generated reports.
- New properties in properties file:

```
tellfree.smpp.host=localhost
tellfree.smpp.port=8065
tellfree.smpp.username=
tellfree.smpp.password=

log.error.email_enable=false
log.error.email_to=logs@cell-life.org
```

Full list of tickets closed for this release

Bug

- Error rendering macro 'jira' : Unable to determine if sort should be enabled.
- Error rendering macro 'jira' : Unable to determine if sort should be enabled.
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Improvement

- Error rendering macro 'jira' : Unable to determine if sort should be enabled.
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Story

- Error rendering macro 'jira' : Unable to determine if sort should be enabled.
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BA Task

- Error rendering macro 'jira' : Unable to determine if sort should be enabled.
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Technical task

- Error rendering macro 'jira' : Unable to determine if sort should be enabled.
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- Error rendering macro 'jira' : Unable to determine if sort should be enabled.
- Error rendering macro 'jira' : Unable to determine if sort should be enabled.

Error rendering macro 'jiraissues' : Unable to contact site specified: jira.cell-life.org

Communicate 2.4 release notes

Changes in this version

- Redesign of Manage Recipients
  - Allow editing contact details including message times (for DAILY campaigns)
  - Bulk add: Allow the user to add contacts from a group or by importing a CSV file.
  - Bulk remove: allow the user to remove all campaign contacts in a group or by importing a CSV file.
  - Allow searching of campaign recipients
- Redesign of Just SMS feature
  - Makes use of the new Manage Recipients
  - Simpler user interface
- Keep track of ALL contacts ever added to a campaign.
  - Instead of deleting campaign contacts when they are removed from a campaign we now record the date they were removed. This allows users to see everyone who was ever on a campaign and when they were removed.
  - When adding contacts to a campaign who were previously removed from the campaign users have the option of resetting their progress or allowing them to continue from where they left off.
- Notification Emails
  - Admin users now have the ability to send notification emails to Organisation contacts (and users). This will make it easy to send out broadcast notifications e.g. upgrade notice.
- Channel activation and deactivation dates

Upgrade notes

- One new setting has been included to allow control over the mail service.

  - *Enable mail queue processing* (default value = true)
    This is a boolean setting that will enable or disable processing of the mail queue.

- Two new properties have been added as a safeguard for testing and development environments

- enableMailSending (defatul value = false)
  Setting the value to false will cause the MailService to process mail as usual but without actually sending the mail.

- simulateMessageSending (defatul value = true)
  When this is set to true all messages will be routed to a simulation channel which marks the messages as being sent

Full list of tickets closed for this release

Error rendering macro 'jiraissues' : Unable to contact site specified: jira.cell-life.org

Communicate 2.5 release notes

Changes in this version

- WASP settings moved from communicate.properties file to the database.
- Finer grain permissions for Channel Management:
  - View channels
  - Create IN channels
  - Edit IN channels
  - Activate / deactive IN channels
  - Create OUT channels
  - Edit OUT channels
  - Activate / deactivate OUT channels
- Finer grain permissions for Filters
  - View filters
  - Edit filters
  - Activate / deactivete filters
  - (Admin) View all filters
  - (Admin) Create new filters
  - (Admin) Edit all filters
  - (Admin) Activate / deactivete all filters
- Add ability to void message filters to prevent them from appearing in the list
- Enable user with appropriate permissions to debit organisation accounts
- Improved interface for filtering by organisation on appropriate lists (users, campaigns, filters)
- Improved interface for showing 'deleted' items
- Split interface into multiple modules to improve loading time
- API Key authentication for access to API methods

Upgrade notes

- Before upgrading add the following properties to the *communicate.properties* file (consult Telfree if unsure of what the values should be):

New properties

```
tellfree.smpp.source_address
tellfree.smpp.service_type
tellfree.smpp.system_type
```

- Once the upgrade is successful you can remove the following properties from the *communicate.properties* file:

Properties moved to the database

```
integrat.mt.username
integrat.mt.password
integrat.mt.posturl
integrat.mt.tag
integrat.mt.servicecode

tellfree.mt.posturl
tellfree.mt.username
tellfree.mt.password

tellfree.smpp.host
tellfree.smpp.port
tellfree.smpp.username
tellfree.smpp.password
tellfree.smpp.source_address
tellfree.smpp.service_type
tellfree.smpp.system_type
```

- After upgrading users who used to be able to View filters and Activate / deactivete filters filters will no longer be able to. Roles need to be edited to allow access to filters.
- Users who previously had permission `Manage Filters` now have all the *admin* filter permissions.

Full list of tickets closed for this release

- Insert JIRA Isses marcro here

Bug

Improvement

Story

Communicate 2.6 release notes

Version 2.6.4

- Fixed MOBILISR-515 Integrat API cannot handle HEX content-type
- Fixed MOBILISR-505 Communicate truncating text.

Version 2.6.0

- filter message filter logs list by message direction (IN / OUT)
- numbers that return 'Invalid address' errors from the WASP are marked as invalid
- outgoing message routing is based on number prefix matching (see Message Processing)
- outgoing channel activation based on active NumberInfo's

Communicate 2.7 release notes

Version 2.7

- MOBILISR-520 - Fixed the issue with organization balances being out of synch
- MOBILISR-521 - Can now export a contact group
- MOBILISR-539 - Stopping a campaign fixes/improvements
- MOBILISR-538 - Can order columns in Lost Messages

- MOBILISR-544 - Can view contacts in a group
- MOBILISR-545 - Contact Group Export - Backend
- MOBILISR-516 - Email action can now send to multiple recipients
- MOBILISR-529 - Fixed import users final report when there were errors
- MOBILISR-529 - Fixed import users hanging progress bar - totalRecords was calculated incorrectly

Communicate 2.8 release notes

Version 2.8

- Fixed MOBILISR-553 - Add monitoring to new campaign opt-out functionality
- Fixed MOBILISR-551 - Jenkins unable to upload artifact to Nexus
- Fixed MOBILISR-542 - Implement Opt Out on "STOP" Reply
- Fixed MOBILISR-543 - Develop Integration for Sending SMSs via AAT

Communicate 2.9 release notes

Version 2.9

- Fixed MOBILISR-558 and MOBILISR-552 - New Communicate reports for Campaign Subscriber, Campaign Subscriber Credit and Duplicate Subscribers.

Test notes for Release 2.9

- Fixed MOBILISR-558 and MOBILISR-552 - New Communicate reports for Campaign Subscriber, Campaign Subscriber Credit and Duplicate Subscribers.

  Tested on Dev Server

  Expected outcome
  Response: All Reports generate with with updated columns and accurate data

  Actual outcome
  Response: All Reports generate with with updated columns and accurate data

Communicate 2.10 and 2.11 Release Notes

- Fixed MOBILISR-571 MessageHandlingException on Integrat packet
- Fixed MOBILISR-562 Error with "Remove from all Campaigns" Filter

Test notes for Release 2.10 & 2.11

- **Fixed MOBILISR-571 MessageHandlingException on Integrat packet**

  Tested on dev server

  From a REST Client, post this packet - http://pastebin.com/nwpGu705 - to http://sol.cell-life.org/communicate//api/incoming/integrat?apikey=O8qWVLo7iOoZwsi97gqk

  Expected Result:
  Response 200 OK

  Actual Result:
  Response 200 OK

- **Fixed MOBILISR-562 Error with "Remove from all Campaigns" Filter**

  Tested on dev server

Sent stop sms to 2783930102616628

Expected Result:

Response Receive a sms to verify that I have been unsubscribed

Actual Result:
Response Receive a sms to verify that I have been unsubscribed

The campaign shows that I have been removed

- **Bulk contact import directly to campaigns**

Tested on Dev Server
Imported Bulk contacts directly to a campaign
Expected Result: Contacts import successfully
Actual Outcome: Contacts import successfully
*When creating the import csv the columns have to be in the following order first name, last name, mobile number

Communicate 2.12 Release Notes

- Fixed MOBILISR-518: implemented AAT IN channel handler
- Fixed MOBILISR-582: EU iquit: modify subscribe to campaign REST service

Test adding contacts through rest client for ticket https://www.cell-life.org/jira/browse/MOBILISR-582

Tested the functionality for JIRA ticket https://www.cell-life.org/jira/browse/MOBILISR-582

Test on http://sol.cell-life.org/communicate/communicate.html

- 200 OK & PagedList XML containing errors for contacts that were not processed (contacts MSISDN is invalid
  Result ok
- 401 Unauthorized
  Result ok
- 400 Bad request (if posted data cannot be parsed)
  Result ok
- 403 Forbidden (if Campaign is not in RUNNING state or Organization does not have sufficient balance)
  Result ok
- 404 Not Found (if campaign is not found)
  Result ok
- 415 Unsupported Media Type & ErrorList XML (if ContactList is empty, ContactList contains objects other than contacts)
  Result ok

Testing complete functionality for JIRA ticket https://www.cell-life.org/jira/browse/MOBILISR-582 successful.

Communicate 2.13 Release Notes

- MOBILISR-591, MOBILISR-593, MOBILISR-594 EU iquit: Campaign Linking
- MOBILISR-590 EU iquit: Add "Link" Property to the Communicate UI
- INTERNAL-445 - implemented pancea mobile short code integration
- MOBILISR-602 Message times not changing correctly for linked campaigns.

Test notes for release notes

1. If they weren't previously added to the first campaign, then add them to the first campaign.

Pass

2. If they are currently active in the campaign (or one of the linked campaigns), then do nothing (or do whatever the application currently does and indicate that on the ticket)

Pass

3. If they were previously added to the campaign, and it is not indicated that they should start where they left off (restartExisting parameter for the AddToCampaignAction), then the linked campaign should be checked (this will be recursive).

Iquit requirements for the linked campaigns are that if a user opts out in the middle of a campaign and then opts back in he/she should be added to the beginning of the next campaign

4. If the restartExisting parameter has been ticked, then allow the user to continue on the campaign (or linked campaign) they were previously on.

Iquit requirements for the linked campaigns are that if a user opts out in the middle of a campaign and then opts back in he/she should be added to the beginning of the next campaign

5. If the user has been on all the linked campaigns and there is no final linked campaign, then do nothing (or at least what the system currently does when the user re-subscribes to a campaign they have already completed + please document)

Pass

6. If the final campaign links back to the first campaign, and the user has already received messages from all campaigns, then allow them to restart the first campaign.

Pass

Communicate 2.14 Release Notes

- Fixed issue where panceamobile sends msisdns with +27
- #MOBILISR-620: fixed campaign subscribers credit report
- Fixed MOBILISR-617 Problem with Welcome Message Triggers

Test notes

Tested the fixes below:

- Fixed issue where panceamobile sends msisdns with +27
- #MOBILISR-620: fixed campaign subscribers credit report
- Fixed MOBILISR-617 Problem with Welcome Message Triggers

Added 2 users at the same time to a campaign: both received welcome messages

Added a user to campaign via panacea shortcode: User's msisdn was added with the +27

Generated a campaigh subscriber credit report for the organisation Cell-Life: Out of all the campaigns one had subscribers still awaiting messages and it showed the credit required to send for those users

All fixes have passed

Ready for deployment to prod

Communicate 2.15 Release Notes

- Cleaned up SMPP Gateway log messages.
- IDART-434 AR: Add msg status check in Communicate. (For the Appointment Reminders service).
- IDART-433 AR: Add stop after x failures in Communicate. (For the Appointment Reminders service).

Database Changes:

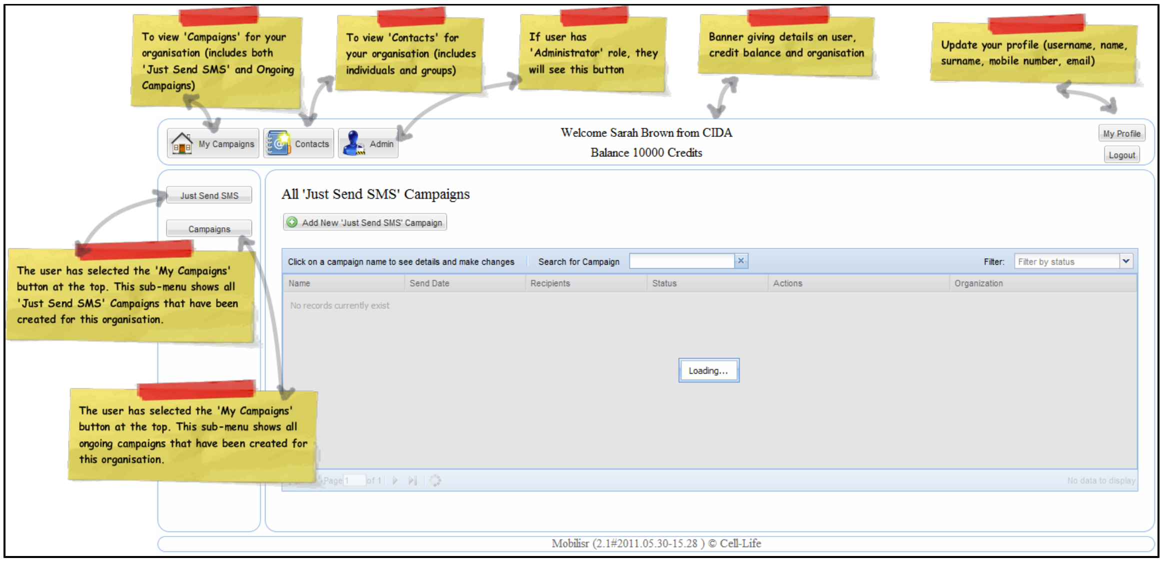
Added the column retriesBeforeInvalid to the organization table. The default value is 0.

No properties were added to the properties file.

Communicate Support Manual

Welcome to Communicate

After logging in, you will see the following page.



But What Are Campaigns?

Communicate is based on the idea of **Campaigns**. A campaign is a group of one or more messages sent out to one or more recipients. In Communicate, we have two broad categories of campaigns.

1. 'Just Send SMS' Campaigns

A 'Just Send SMS' Campaign is a single message (can be concatenated SMSs - i.e. an SMS longer than the 160 character limit of a single SMS) that is sent out to one or more recipients at a specific time. It is **once-off** in that, after the campaign has run it can not be reused. The user has a choice of sending the SMS as soon as possible, or to schedule it at a later date and time.

2. Ongoing Campaigns

Ongoing campaigns are multiple messages (can be concatenated) that are sent out to recipients over a user-specified time period. Examples of ongoing campaigns are a 30-day adherence campaign.

We have two types of ongoing campaigns: They are similar but have slightly different methods in terms of frequencies and durations.

Daily Campaigns

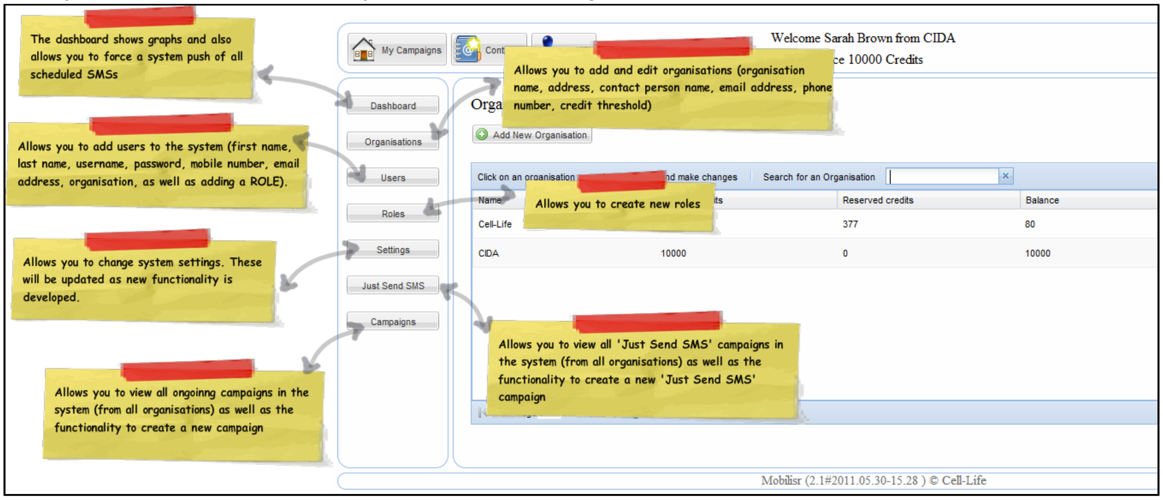
These are the strictest types of campaigns in terms of frequencies and durations. The administrator specifies the duration of the campaign (in terms of days), as well as the daily frequency (e.g. three times a day). Another distinguishing feature of these types of campaigns, is the recipient can choose what time they would like to receive their daily messages. A practical example of the use of this campaign would be a twice daily adherence campaign, which would last 30 days. The recipient would be able to choose what time they want to receive their adherence SMS (usually to coincide with the time they take their medication).

Flexi Campaigns

These types of campaigns have more flexibility in terms of frequencies and durations. The administrator specifies the times and days to send the SMSs and this is flexible. That is, on the first day you want to send 3 messages at 10am, 12pm and 5pm. On day 4 you want to send 1 message at 1pm, on day 5, two SMSs at 11am and 4pm. The recipient can't choose what times to get the messages, it's up to the person designing the campaign.

What Can the Admin (i.e. Cell-Life) User Do?

When you click on the 'Admin' button, you will see the following screen:



All the screens are self-explanatory! Explore :-)

What Can the Organisation (i.e. Client) User Do?

The client user has limited functionality in Communicate. They can:

- Change Login Details (through the 'Update My Profile')
- Change their password (through a password reset feature)
- Add and remove contacts and groups (through 'My Contacts' button)
- Create a new '**Just Send SMS**' Campaign - write the message, add and remove recipients, schedule it, unschedule it.
- In Ongoing Campaigns, they can add and remove recipients, and see reports (through the Campaigns button under 'My Campaigns').
- In Ongoing Campaigns, request a new campaign from Cell-Life

Communicate Reporting

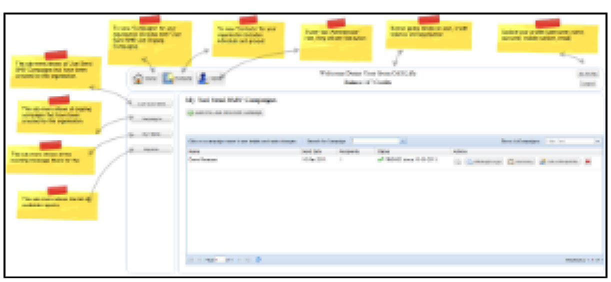
The client user will in time be able to generate reports of their account.

To date, four reports have been created (additional reports added as they are required and developed):

- Financial Transactions (shows quantity of credits used, refunded and loaded onto an organisation's account in a specified time period)
- Consecutive Message Failures (shows which recipients phones are not receiving SMSs)
- Credit Summary
- Campaign Credit Summary

User Manual

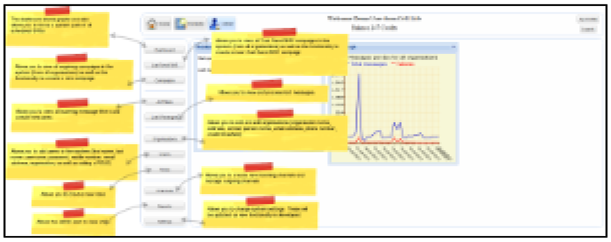
After logging in, you will see the following page.



Admin vs Client Users

What Can the Admin (i.e. Cell-Life) User Do?

When you click on the 'Admin' button, you will see the following screen:



Channels
Message Filters

All the screens are self-explanatory! Explore :-)

What Can the Organisation (i.e. Client) User Do?

The client user has limited functionality in Communicate. They can:

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- In Ongoing Campaigns, they can add and remove recipients, and see reports (through the Campaigns button under 'My Campaigns').
- In Ongoing Campaigns, request a new campaign from Cell-Life

Campaigns

But What Are Campaigns?

Communicate is based on the idea of Campaigns. A campaign is a group of one or more messages sent out to one or more recipients. In Communicate, we
have two broad categories of campaigns.

1. 'Just Send SMS' Campaigns

A 'Just Send SMS' Campaign is a single message (can be concatenated SMSs) that is sent out to one or more recipients at a specific time. It is once-off in that, after the campaign has run it can not be reused. The user has a choice of sending the SMS as soon as possible, or to schedule it at a later date and time.

2. Ongoing Campaigns

Ongoing campaigns are multiple messages (can be concatenated) that are sent out to recipients over a user-specified time period. Examples of ongoing campaigns are a 30-day adherence campaign.
Within ongoing campaigns, we have a further three types of campaigns. They are all similar but have slightly different methods in terms of frequencies and durations.

Daily Campaigns

These are the strictest types of campaigns in terms of frequencies and durations. The administrator specifies the duration of the campaign (in terms of days), as well as the daily frequency (e.g. three times a day). Another distinguishing feature of these types of campaigns, is the recipient can choose what time they would like to receive their daily messages. A practical example of the use of this campaign would be a twice daily adherence campaign, which would last 30 days. The recipient would be able to choose what time they want to receive their adherence SMS (usually to coincide with the time they take their medication).

Flexi Campaigns

These types of campaigns have more flexibility in terms of frequencies and durations. The administrator specifies the times and days to send the SMSs and this is flexible. That is, on the first day you want to send 3 messages at 10am, 12pm and 5pm. On day 4 you want to send 1 message at 1pm, on day 5, two SMSs at 11am and 4pm. The recipient can't choose what times to get the messages.

Channels

A Channel is a route that messages can take in or out of Communicate.

A channel has the following fields:

- **Name:** The name field can be any text but should be used wisely to make it clear what the channel is for. Some examples may be *"Short code 32759"* or *"PCM 27717555555 of Client A"*.
- **Channel Number / Shortcode:** The shortcode is the number to which people will be sending the message. (for IN channels only)
- **Type:** IN or OUT
- **Status:** Not working at the time of writing.
- **Date activated**
- **Date deactivated**
- **Handler:** This is the name of the component that will be used to process the messages (i.e. the WASP connector)
- **Handler Config:** This is the configuration that will be used give to the channel handler to use

See Channel.java and ChannelManagerImpl.java to see how the channels are managed.

Incoming channels

For troubleshooting, go HERE.

Incoming channels represent numbers that people can send messages to which will be delivered to Communicate.

Creating new incoming channels most likely will involve some external configuration e.g. getting a WASP to route message from a shortcode to Communicate or setting up a new PCM line.

Note: For channels that are re-used it would be a good idea to create a new channel for each client / project and de-activate the old channel. This enables the messages for each project to be kept separate

Message Filters

Incoming message process

Message filters are used to process incoming messages. When a message is routed to Communicate it passes through a number of stages:

1. The message gets added to the incoming message queue
2. If there is an incoming channel with the same number as the number the message was sent to:
    a. Check each message filter belonging to that channel and if a filter matches the message:
        i. Assign the message the organisation belonging to the filter.
        ii. Process any actions associated with the filter.
    b. If there is no message filter that matches the messages:
        i. Give the message the 'filter fail' status.
3. If there is no active incoming channel that with the same number as the number the message was sent to:
    a. Give the message the 'channel fail' status.

Message filter types

- Match All Filter
  This filter will match any message that arrives on its Channel. Only one Match All Filter is allowed per Channel and is always matched last for incoming messages.

- Keyword Filter
  This filter will match any message whose first word is the same and the filter's keyword. You can have as many keyword filters on a channel as you like as long as they have unique keywords.

- Regex Filter
  This is an advanced filter that will match the message against a regular expression. It is up to the user to make sure that there are no other filters active on the channel that may also match.

Message filter actions

Each message filter can have a number of actions. These actions get executed whenever a message is matched by the filter.

See Actions Javadoc

Developer Resources

Getting started

- 1. Get the code
- 2. (optional) Configure your local maven settings to use a nexus proxy
- 3. Create Communicate database
    - Create Application database called 'communicate' and user/password 'communicate/communicate'
    - Test database called 'mobtest' and user/password 'mobtest/mobtest'
- 4. Create Communicate properties file
- 5. Compiling and Running the Application
- 6. Login
- 7. Setup for Eclipse

1. Get the code

Install Subversive SVN Client.

Check out the code from the Communicate SVN repository at http://svn.cell-life.org/svn/mobilisr/mobilisr/trunk (you should check out about 10 different projects).

2. (optional) Configure your local maven settings to use a nexus proxy

Edit the <userhome>/.m2/settings.xml and add a mirror as follows (adjust paths to match your environment):

```
<settings xmlns="http://maven.apache.org/SETTINGS/1.0.0"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://maven.apache.org/SETTINGS/1.0.0
                      http://maven.apache.org/xsd/settings-1.0.0.xsd">
...
 <mirrors>
  <mirror>
    <id>nexus</id>
    <mirrorOf>*</mirrorOf>
    <url>http://my.nexus.repo/public/repo</url>
  </mirror>
 </mirrors>
...
</settings>
```

3. Create Communicate database

Create Application database called 'communicate' and user/password 'communicate/communicate'

1. Login to MySQL using Command Prompt

```
mysql -u root -p
```

2. Create new Database

```
create database communicate;
```

3. Create new User

```
CREATE USER 'communicate'@'localhost' IDENTIFIED BY 'communicate';
```

4. Assign User Access Rights (assuming that the application and database are running on the same machine)

```
grant all on communicate.* to communicate@localhost;
```

Test database called 'mobtest' and user/password 'mobtest/mobtest'

5. Create new Database

```
create database communicate_test;
```

6. Assign User Access Rights (assuming that the application and database are running on the same machine)

```
grant all on communicate_test.* to communicate@localhost;
```

4. Create Communicate properties file

Communicate reads its database settings from a properties file which it locates by reading the COMMUNICATE_HOME environment variable which must point to folder containing a file called communicate.properties. The properties should contain the following properties:

```
live.jdbc.url=jdbc:mysql://localhost:3306/communicate
test.jdbc.url=jdbc:mysql://localhost:3306/communicate_test

jdbc.driver=com.mysql.jdbc.Driver
jdbc.user=root
jdbc.password=
hibernate.dialect=org.celllife.mobilisr.util.CustomMysqlDialect
hibernate.show_sql=false

mailSender.username=user@gmail.com
mailSender.password=password
mailSender.host=smtp.gmail.com
mailSender.protocol=smtps
mailSender.from=user@gmail.com
mailSender.port=587
mail.smtp.auth=true
mail.smtp.starttls.enable=true
mail.debug=false


log.error.email_enable=false
log.error.email_to=somebody@gmail.com

enableMailSending = false
simulateMessageSending = true
```

NOTE: Change <username> and <password> with your own mysql username and password, created above.

5. Compiling and Running the Application

Run "**mvn clean install**" from the *mobilisr.parent* project (include -DskipTests=true to skip the unit tests). This should download all the required libraries, build the modules and copy the dependencies to your maven folder (.m2/).

Upon Build Succesfull, navigate to *org.celllife.mobilisr.web* directory and run the maven command **"mvn gwt:run"** which should start up your application.

6. Login

You should now be able to log in to Communicate at http://127.0.0.1:8888/.

The default username and password is:

- username = admin
- password = admin

7. Setup for Eclipse

From the *mobilisr.parent* project run **"mvn eclipse:eclipse"** to generate the eclipse .project and .classpath files.

System docs

- Coding Standards Basis
- Logging
    - On the server
        - Log email appender
    - On the client

Other pages in this section

Expand all   Collapse all

Coding Standards Basis

The Mobilisr java coding standards follow the Coding Conventions for the Java Programming Language, published by Sun Microsystems, with local modifications as listed here: Coding standard basics.

Logging

On the server

Communicate uses SLF4j backed by logback for doing application logging. The log configuration files are called logback.groovy and are written using the Groovy language. Refer to the logback documentation for more information (Logback Groovy, Logback configuration).

Method trace logging is provided by the *org.celllife.mobilisr.aspect.LoggingAspect* Aspect in conjunction with the *org.celllife.mobilisr.annotation.Loggable* annotation. These work in conjunction to log method calls and exceptions. Below is an example of how to use the Loggable annotation:

Loggable example

```
@Loggable(LogLevel.TRACE)
public String demoMethod(String param) {
    // do something
    return "something was done";
}
```

Log email appender

There is an email appender configured that will email certain log message to the email address configured in the *communicate.properties* file. This appender filters log messages based on a log Marker (see Logback Filters). Any log message that is marked with a marker called *NOTIFY_ADMIN* will be emailed.

To make it easier to use this marker there is a method in LogUtil for creating the marker.

On the client

In the client code the GWT logging framework is used. See the documentation online for more information: GWT logging

See Actions Javadoc

Automated Web Tests (Functional Tests)

Background

The only way to verify the functional requirements of a software application are completely satisfied is to use the application *as a user would* (including environment variations, e.g. architecture, OS, browser, phase-of-moon, etc). In the case of web applications, this means pointing your web browser to the newly deployed build, and running through all the actions a user would normally perform, as well as trying a number of things that a user shouldn't be able to do, to check if the system provides a reasonable level of protection against bad input.

Doing this manually gets old pretty fast. Automated web application test frameworks attempt to remove some of the pain by enabling you to drive the browser from code. This means you can write a set of tests that completely exercise your application (as a user would), which you can run as often as you like.

Framework Options

There are a number of free/open-source options, including:

- Selenium (http://seleniumhq.org)
- Watir (http://watir.com)
- Windmill (http://www.getwindmill.com)
- Sahi (http://sahi.co.in)

Considerations

- Want to run web tests on Hudson (daily?) as part of a continuous integration process.
- Multiple browser support (most likely just on Windows, on multiple platforms is nice-to-have).
- Full-featured (scripting) language rather than proprietary language.
- Would prefer a language that developers are familiar with (Java) or is "easy" (Python, Ruby).
- Active community – so decent resources for getting help, best practices, etc.

> See Bret Pettichord's keynote address at SeleniumConf 2011 for some interesting insights:
> http://www.seleniumconf.com/videos/
> http://www.youtube.com/watch?v=s_CUPs6xAWw

We will use Selenium

- Tests can be written in Java (as well as Python, Ruby and others), which means the tests can make use of the existing application code if necessary.
- We can use JUnit to run the tests, which gives us all the advantages of JUnit (setup/teardown, reporting, etc).
- We can use Maven, Surefire/Failsafe to build and execute the tests from Hudson.
- Multiple browsers supported.
- We can use Selenium Grid to execute tests in multiple browsers on multiple machines. This gives us a) speed - can run tests in parallel, b) browser compatibility checks.

Selenium (as used at Cell-Life for Communicate)

Running web tests locally

- For Communicate, tests live in `org.celllife.communicate.webtest`
- Since webtests run against a deployed application, the "live" database connection settings used by the application need to be overridden to avoid polluting/nuking the normal live DB. In addition, the webtests themselves manipulate the database directly via DBUnit. Thus, the system property *propertiesOverride* must be passed to both the application and the test, with the location of a override.properties file. Well-behaved tests that manipulate the database should throw a run-time exception if this property is not set.
- Since it does not seem possible to pass system properties to the application when running under GWT/Jetty, we use Cargo to deploy a local Tomcat instance, and set the system property via webtest pom.xml to `${project.basedir}/communicate_override.properties`
- By default tests run against `http://dev.cell-life.org:8181/communicate` (defined by `TEST_URL` in *CommonHelper.java*). This should be overridden by setting `-DtestUrl=http://127.0.0.1:8181/communicate`

What this means (or How to actually run the web tests locally)

- Install Tomcat (install on Biko?)

- Edit your Maven .m2/settings.xml and set a *tomcat.home* property in your profile to point to your Tomcat installation:
  Click here to expand...

```
<profiles>
    <profile>
        <id>profile-1</id>
        <activation>
            <activeByDefault>true</activeByDefault>
        </activation>
        <properties>
            <tomcat.home>d:/tomcat</tomcat.home>
        </properties>
    </profile>
</profiles>
```

- Edit `communicate_override.properties` in *org.celllife.communicate.webtest* to point to your webtest database, if necessary.
- At the command prompt, change to the `org.celllife.communicate.webtest` folder, and execute `mvn cargo:run`
- Point your web browser to `http://127.0.0.1:8181/communicate/` to verify the deployment. In particular check the application is running against the correct database.
- In Eclipse, select the test class you want to run (e.g. `LoginTest.java` and edit the *VM arguments* of the *run configuration*

```
-DtestUrl=http://127.0.0.1:8181/communicate
-DpropertiesOverride=communicate_override.properties
```

- Execute the test with JUnit (`Alt+ Shift+ X, T`)
- By default the test will run against a local Firefox instance, so you'll need to install Firefox (3.x recommended for now). The alternative is to specify a Selenium Hub via the system property *seleniumHubUrl*
- Alternatively, to run all the tests execute `mvn verify -DtestUrl=http://localhost:8181/communicate` (*propertiesOverride* is defined in the pom.xml so doesn't need to be be specified on the command-line, unless you wish to use a different file than the default.)

The Grid

Setting up the hub

Setting up a node

- http://code.google.com/p/selenium/downloads/detail?name=selenium-server-standalone-2.0rc3.jar
- Copy the Selenium server standalone jar (`selenium-server-standalone-2.0rc2`) to a suitable location, e.g. `C:\Selenium`.
- `java -jar selenium-server-standalone-2.0rc2.jar -role webdriver -hub http://<hubIP_address>:4444/grid/register -port 5556 -browser browserName=firefox,maxInstances=3,platform=windows -maxConcurrent 1`
- Reference: http://code.google.com/p/selenium/wiki/Grid2

Running web tests on Hudson

Writing web tests

Reference

- http://code.google.com/p/selenium/wiki/PageObjects

Changing the datamodel

When making changes to the database schema there are a number of places where changes need to made:

1. Communicate hibernate classes
    - All tables in the Communicate database have corresponding Hibernate classes in the *domain* project. Any changes to the

database structure need have corresponding changes made to the Java data model.

2. Liquibase changelogs
    - Liquibase is used to manage the changes to the MySQL database. Each change is represented as a new *changeset* element in one of the changelog files.
    - The changelogs files are in the *domain* project and are named as follows:

db.changelog-X.X.xml where X.X is the version when the changelog was created.

1.
    - All changes should appear in the appropriate version changelog.
2. Dbunit test datasets.
    - Each project that runs database tests (domain, service.core, webtest, performance) uses Dbunit to set the database to a known initial state before each test. The test datasets are in files called dbunit-dataset.xml. These XML files should not be edited directly but rather use the *CreateDomainTestData*, *CreateServiceTestData*, *CreateWebTestData* and *CreatePerformanceTestData* class es to generate these files.

Coding standard basics

The Mobilisr java coding standards follow the Coding Conventions for the Java Programming Language, published by Sun Microsystems, with local modifications as listed below.

3.1.1 - Beginning Comments

```
/*
* Copyright 2010 Cell-Life. All rights reserved.
*
* Software distributed on an "AS IS" basis, WITHOUT WARRANTY OF ANY KIND,
* either express or implied.
*
* Created
* @author
*/
```

4.1 - Line Length

Maximum line length: 120 characters.

5.3 NLS Comments

Pentaho uses the Eclipse convention for commenting lines with embedded strings that should not be flagged by the compiler as non-externalized strings. That convention is as follows:

For each non-externalizable string, there will be an end-of-line comment (//) in the following form:

```
//$NON-NLS-x$
```

Items not covered by the Sun Guide

Abbreviations and acronyms should not be uppercase when used as name.

exportXmlAsFile(); // NOT: exportXMLAsFile();

As you can see by the above example, Xml is preferred to XML because of what happens when it's connected to the next word in the method. This leads to readability issues.

All names and comments should be in English

English is the preferred language for international development.

Variables with a large scope should have long names, variables with a small scope can have short names

Using i, j, k, etc. is fine for scratch variables, but shouldn't be used for class variables.

Use plurals on names representing a collection of objects

```
int[] values;
List points;
```

Language abbreviations should be avoided

This makes the code less accessible to community members in other countries. Average is comprehensible or can be looked up in an English-French dictionary - but Avg isn't comprehensible to many, and can't be looked up anywhere.

```
computeAverage(); // NOT: compAvg();
```

Domain phrases shouldn't be spelled out

In contrast to the above rule, domain-specific phrases that are known by their acronym/abbreviation should be kept as abbreviations. Examples:

Use: xml, not extensibleMarkupLanguage
Use: roi, not returnOnInvestment
Use: cpu, not CentralProcessingUnit

Ignored caught exceptions must be specified as ignored

If an exception is ignored, the exception name should be ignored, and it should include a comment.

```
} catch (SQLException ignored} {
// Ignored because the connection may be closed here
}
```

Type conversions should be explicit

Don't rely on implicit type conversion - this communicates to the reader that the developer is aware of the type conversion (and that it wasn't accidental).

```
floatValue = (int) intValue; // NOT: floatValue = intValue;
```

Attach array specifiers to the type not the variable

```
char[] a = new char[20]; // NOT: char a[] = new char[20]
```

Class variables should be declared private

This prevents variables from being manipulated in ways that break encapsulation. Possible exceptions are for inner classes that are used for structured storage.

Data model

How to make changes to the data model

When making changes to the database schema there are a number of places where changes need to made:

1. Hibernate classes
    - All tables in the Communicate database have corresponding Hibernate classes in the *domain* project. Any changes to the database structure need have corresponding changes made to the Java data model.
2. Liquibase changelogs
    - Liquibase is used to manage the changes to the MySQL database. Each change is represented as a new *changeset* element in one of the changelog files.
    - The changelogs files are in the *domain* project and are named as follows: **db.changelog-X.X.xml** where *X.X* is the version when the changelog was created.
    - All changes should appear in the appropriate version changelog.
3. Dbunit test datasets.
    - Each project that runs database tests (domain, service.core, webtest, performance) uses Dbunit to set the database to a known initial state before each test. The test datasets are in files called dbunit-dataset.xml. These XML files should not be edited directly but rather use the *CreateDomainTestData*, *CreateServiceTestData*, *CreateWebTestData* and *CreatePerformanceTestData* class es to generate these files.

GXT Notes

"The lyfe so short, the crafte so long to lerne" – Chaucer (q. Hippocrates)

As found in GXT 2.1.1 (in no particular order)

- Don't use **setAutoWidth(true)** – browser dependent behaviour.
- **TimeFields** don't autobind. They have to be manually bound with a **TimeFieldBinding**.
- Adding widgets to a *RowLayout* with margins seems to waste space below the bottom widget.
  See EntityCreateTemplateImpl (r1727)
- Tooltips don't display for disabled buttons. Have tried `ToolTipConfig config = new ToolTipConfig(text); config.setEnabled(true);` after calling disable(), but this doesn't seem to work. If you figure out how to display tooltips for disabled buttons, write so here.
- **Labels** - GXT uses a label element to render Label widgets. It seems (in Firefox at least) margins are ignored on this element. (GWT uses a div element and doesn't have this problem.) Since it is not good practice to mix GXT and GWT components, if you need margins on a GXT Label widget, you should probably add it to a LayoutContainer, and set margins on that.

JasperReports

This page contains information about how we use JasperReports in Communicate for creating static reports.

Overview

Reports are created using iReport and the JRXML files are stored in the *org.celllife.mobilisr.web/src/main/resources/reports* folder. In addition to the JRXML file there is also an xml file that tells Communicate how to present the report on the interface. This file contains the name of the report, a reference to the compiled report file as well as a list of parameters. It can also contain other properties such as permissions required to view the report.

The report parameter XML files use the Pconfig framework.

Example report parameter spec

```
<?xml version="1.0" encoding="UTF-8" standalone="no"?>
<pconfig xmlns="http://www.cell-life.org/schemas/pconfig"
 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xsi:schemaLocation="http://www.cell-life.org/schemas/pconfig
http://www.cell-life.org/schemas/pconfig/pconfig-1.0.xsd">
 <label>Test report</label>
 <resource>path/to/reportfile.jasper</resource>
 <parameters>
  <date label="Start date" name="startDate" allowPast="true" allowFuture="false"
   tooltip="date tooltip"/>
  <integer label="Ingeger param" name="integer-param" max="10" defaultValue="17" />
  <text label="Mobilie number" name="msisdn" regex="^27[1-9][0-9]{8}$"
   errorMessage="Regex error message" defaultValue="nullValue" />
  <entity entityClass="org.celllife.pconfig.model.Pconfig" label="Entity param"
   name="entity-param" displayProperty="name" valueProperty="id" valueType="Integer"
   searchFields="name,id" defaultValue="%"/>
  <boolean label="Include test data" name="include-test" defaultValue="true" />
  <label label="Note" value="this a a note" />
 </parameters>
 <properties>
         <map xmlns="" xmlns:ns2="http://www.cell-life.org/schemas/pconfig">
            <permissions>VIEW_ADMIN_REPORTS</permissions>
        </map>
    </properties>
</pconfig>
```

See

- Pconfig Javadoc
- Examples in web project

Message processing

- Outgoing Message Routing
- Incoming message processing
    - Message filter types
    - Message filter actions

Communicate uses Spring Integration to manage the flow of messages in and out of the system.

- Incoming message processing: incomingMessageContext.xml
- Outgoing message processing: outgoingMessageContext.xml

Outgoing Message Routing

Messages are routed to a Channel based on the number prefix. The ChannelSelector class compares the destination number to all the configured NumberInfo prefixes and selects the channel from the first one to match.

If no prefixes match the destination number then the message is marked as QUEUE_FAIL.

e.g.

If the configured NumberInfo prefixes are:

- 278 -> channel A
- 2771 -> channel B
- 27 -> channel C
- 2772 -> channel D

After sorting the list would be (first to be tested at top):

- 2772 -> channel D
- 2771 -> channel B
- 278 -> channel A
- 27 -> channel C

The following numbers would match as shown:

- 2771x -> B (matched by 2771)
- 2772x -> D (matched by 2772)
- 2773x -> C (matched by 27)
- 279xx -> C (matched by 27)
- 278xx -> A (matched by 278)

This allows configuring general channels with exceptions e.g. all *27 -> A* but any *278 -> B*

Incoming message processing

Message filters are used to process incoming messages. When a message is routed to Communicate it passes through a number of stages:

1. The message from the WASP (or wherever the message originates) is transformed into a common format (SmsMo) and placed in the incoming message queue
2. The IncomingMessageProcessor then transforms the message into an SmsLog and saves it to the database.
3. Each message is then passed to the FilterActionRunnerwhich processes the message according the the following rules (run in a separate thread):
    a. If there is an incoming channel with the same number (shortCode) as the number the message was sent to:
        i. Check each message filter belonging to that channel and if a filter matches the message:
            1. Assign the message the organisation belonging to the filter.
            2. Process any actions associated with the filter.
        ii. If there is no message filter that matches the messages:
            1. Give the message the '*filter fail*' status.
    b. If there is no active incoming channel that with the same number as the number the message was sent to:
        i. Give the message the '*channel fail*' status.

Message filter types

Message filters are processed in order of rank. The rank for each filter type is taken from the RANK property of the Filter Descriptor (a Pconfig). The filter types in order of rank are:

- Keyword Filter
  This filter will match any message whose first word is the same and the filter's keyword. You can have as many keyword filters on a channel as you like as long as they have unique keywords. The keyword for a keyword filter can also be a comma separated list of

keywords. If any of the keywords match then the filter is considered to have matched.

- Regex Filter
  This is an advanced filter that will match the message against a regular expression. It is up to the user to make sure that there are no other filters active on the channel that may also match.

- Match All Filter
  This filter will match any message that arrives on its Channel. Only one Match All Filter is allowed per Channel and is always matched last.

Message filter actions

Each message filter can have a number of actions. These actions get executed whenever a message is matched by the filter.

Currently supported actions are:

- Add to Campaign
- Remove from Campaign
- Add to Group
- Remove from Group
- AutoReply
- Forward message to number list
- Forward message to group
- Send email

Pconfig framework

The Pconfig (Parameterised configuration) framework is a simple set of Java classes that can be used to create a configuration consisting of a set of typed parameters and untyped properties. An example use is for creating report parameter configurations.

The code for the object model uses JAXB to allow serialization of the Java objects to XML.

Object model

See the JavaDocs for more detail.

Main classes

- Pconfig
  - This is the core class that represents a configuration. It contains a List of typed parameters and a map of properties. All properties are stored as String values with String keys.
- FilledPconfig
  - This class is used to represent a Pconfig that has been *'filled'* or *'generated'*. It contains a Pconfig whose parameter values have been set. It also has additional fields to record when it was created and the location of the 'generated' resource e.g. a report PDF.
- ScheduledPconfig
  - This class is similar to the FilledPconfig but represents a *'scheduled'* configuration. It too contains an Pconfig with parameter values.

Parameter classes

- BooleanParameter
  - Represents a boolean value
- DateParameter
  - Represents a date value
- IntegerParameter
  - Represents an integer value
- StringParameter
  - Represents a string value
- LabelParameter
  - Is a string typed parameter that is intended to display as a label and not a field to the user. It can be used to give more information to the user.
- EntityParameter
  - Represents a 'entity' value. An entity in this context is meant to mean an object stored in a database but could refer to any object

that is retrievable based on a property name and value. e.g. an Organisation may be retrieved from a database by searching for a property called *'id'* with a value of *'63'*.

For examples see:

- Existing report parameter configurations in XML
- The getConfigDescriptor() methods of the Action classes.

Serialization of Pconfig

There are two ways the Pconfig objects are serialised at present:

1. To XML via JAXB (see MarshallingTest.java)
2. To YAML (see YamlUtils.java)

Display of Pconfig

In the Communicate web project we have created a number of classes to generate interfaces based on a Pconfig object.

- PconfigDialog.java
- PconfigParamterFieldFactory.java
- PconfigScheduleWizard.java

Performance testing

1. Run mvn:cargo run from org.celllife.communicate.performance folder
2. PerformanceTests.java in Eclipse
3. Run the test you wish and observe the log output for statistics such as "Messages processed: total 9645, pre second 94"

Technology

- Web Front End Interfaces: GWT (http://code.google.com/webtoolkit/) and Ext-GWT (http://www.sencha.com) with JSP
- Web Framework: Spring (http://www.springsource.org/)
- Persistence Layer: Hibernate (http://www.hibernate.org/), Gilead (http://noon.gilead.free.fr/gilead/), Liquibase (http://www.liquibase.org/)
- Database: MySQL (http://www.mysql.com/)
- Unit Testing: JUnit (http://www.junit.org/) , DB Unit (http://www.dbunit.org/) and Benerator (http://databene.org/)
- Scheduling - Quartz (http://www.quartz-scheduler.org/),
- Batch processing (limited use) - Spring Batch (http://static.springframework.org/spring-batch),
- DAO layer - Hibernate General DAO (http://code.google.com/p/hibernate-generic-dao/)
- Message routing and processing - Spring integration (http://www.springsource.org/spring-integration)

Mobilsir Release Dashboard

Iteration	23 Feb - 08 Mar	Estimate	Status	Comments
1	Client crud			
	Channel crud			
	Login			
2	**10 Mar - 22 Mar**			
	Assign channel to client and vice versa			
	AJAX form validation - need BA info re user experience			Remains: 1. CSS Styling
	Basic interface layout (Faisel to deliver design by 11 March)			
	Internationalisation (code / jsp level, english only)			

	Concurrent account login (max 4)			
	Error message if max users exceeded at login			
3	**23 Mar - 03 May**			**Mobilisr SPRINT Planning - 23 March 2010**
	Research and document interface technology choices / decision (GWT, JSP tags libs, JSF etc)	2d		
	Implement validation for clients and channels	2d		
	Basic interface layout (carried over from last sprint)	3d		
	Build and deploy on dev	2d		
	Add "Client Account" tab to client interface	0.5d		
	In Channel handler (Integrat)			needs work
	Out Channel handler (Integrat)			needs work
	Keyword trigger			
4	**03 May - 17 May** **31 May - 14 June**			

Mobilisr SPRINT Planning - 17 May 2010|
Mobilisr - SPRINT Planning 31 May 2010

	Build and deploy on dev			
	Implement validation for clients and channels			
	Contact crud (include validation)			
	Group crud (include validation)			
	Add contact to group and visa versa			
	Error message if concurrent modification (e.g. 2 ppl edit same contact at same time)			
	Lost and found			
	Basic sms interface			

	Relay trigger handler			
	RelaySMS program dash			
	RelaySMS program monitoring			
	RelaySMS program workflow			
	Basic report dashboard			
	Add "Client Account" tab to client interface			

Program's

- Send an SMS
    - Broadcast message (with or without scheduling)
- Receive an SMS
    - automated response e.g Info line, Contacts line
    - Subscription list (incoming users get added to a group) automated response
    - Citizen Journalism (incoming sms's get posted on web or something)
    - Call me back (users sms's in and organization calls them back) (could forward to email - batch email)
- PMTCT
- Adherance
- RelaySMS

Notes from SPRINT Planning Meetings

2010.12.15 - Mobilisr SPRINT Planning

From Dec 15th to 7th (Next SPRINT Planning on 10th Jan):
Note that the most important campaigns are Recipient-Specific and Generic. Fixed can be excluded from next release if we decide.
 * Demo of current status on Wed 15th
 * Changes to 'Create New Campaign' for 'Generic' type (PMTCT) - Munaf
 * Changes to 'Manage Recipients' for Generic (no customising times) - Vikram
FR102 Forgotten Password
FR242   View All Campaigns
FR243 Update a Campaign
FR244 Stop a Campaign
FR247 Import & Export campaign data from a CSV file
FR241 Import an Existing Campaign
FR303 Delete / Deactivate My 'Just Send SMS' Campaign
From Dec 15th to 7th (Next SPRINT Planning on 10th Jan):

Note that the most important campaigns are Recipient-Specific and Generic. Fixed can be excluded from next release if we decide.

 * Demo of current status on Wed 15th

 * Changes to 'Create New Campaign' for 'Generic' type (PMTCT) - Munaf

 * Changes to 'Manage Recipients' for Generic (no customising times) - Vikram

FR102 Forgotten Password

FR242   View All Campaigns

FR243 Update a Campaign

FR244 Stop a Campaign

FR247 Import & Export campaign data from a CSV file

FR241 Import an Existing Campaign

FR303 Delete / Deactivate My 'Just Send SMS' Campaign

2010.08.23 - Mobilisr SPRINT Planning

Update

Munaf - almost finished 'Update My Profile', minor edits, almost done.

Vikram - balance deduction, fixing some errors, putting in unit testing

Notes from meetings with Faisel (in red text below)

Plan Forward

Create a program from the interface (as generic as possible)

Admin user creates a program

Program exists of basic components - contact management, outgoing messages, based on 'Just Send SMS', 'Adherence', 'PMTCT' (incoming - enrolling in the PMTCT study).

BAs work on specing out the system for Adherence, PMTCT in next two weeks.

Devs - Munaf working on BI validation, Vikram continue with unit testing.

Have a workshop this week to discuss and brainstorm the GUI mockups (include Katherine & Faisel).

Program contact management

General contact management allows users to create and edit contacts and groups as they please. - AGREED

When you create a campaign for a particular program a program group is created to store all the contacts for that campaign. Adding and removing contacts from this group reserves or un-reserves credit from the clients account. This group is managed as part of the campaign management and not part of the normal group management.- After further discussions with Faisel, this is the case for the PMTCT and Adherence type of programs, but not for the 'Just send SMS' program. Just send SMS is a very different program to the other programs. 'Just Send SMS' is designed for mass messaging, whereas the others are designed for individuals who systematically join a campaign. Systematic enrollment in the study would put the cellphone number into the campaign-specific group (and also add them to the general list of contacts)

Later - had meeting with Faisel - and expressed need to 'pause' a campaign (if you don't have enough credit) - can discuss this on our Thursday workshop.

Balance management

Should the balance be stored as rands and cents or as credits:

1. Balance stored as rands and cents
    - User / org buys R100 credit.
    - User sends messages at whatever rate we configure (e.g. 23c) and the credit is deducted.
    - At some time later we change the price to 25c.
    - Now the user's credit is 'worth' less because each message they send is charged at the new rate.
2. Balance stored as credits- THIS IS THE AGREED SCENARIO WE NEED TO MODEL#* User buys R100 worth of credit @ 23c (current rate) so gets 100/0.23 'credits'
    - User sends messages and each message 'costs' 1 credit.
    - Later CL up's the rate to 0.25c.
    - User's credit isn't affected, they still have the same number of SMS's to send.

    - When user buys R100 more credit they buy at the new rate so get R100/0.25 'credits'.
3. What happens when we start doing USSD or LBS, how to we charge for those services?- WE WILL HAVE SMS CREDITS, AND USSD CREDITS (FAISEL TO THINK THROUGH HOW USSD CREDIT WILL WORK, BUT AT THIS POINT, WE KNOW THAT SMS'S WILL BE VIEWED AS CREDITS#* have different types of credit for each
    - store balance as rands and cents

When does credit get reserved, debited etc.

1. Reserved
    a. When a user schedules a campaign
    b. When a contact is added to a campaign group
2. Unreserved
    a. When a campaign is cancelled
    b. When a contact is removed from a campaign group
3. Deducted
    a. After sending a batch of messages for a campaign
4. Refunded
    a. After a callback from the WASP indicating that a message was not delivered
5. Faisel would like to introduce a "Credit Limit" per organisation (say 10 000 messages that they're allowed to go into credit with)## Once users go into their credit limit, someone gets sent an email (likely the product manager).## Also discussed an SMS going to the user / all users in the organisation (who to pay for this)

2010.08.18 - Mobilisr SPRINT Planning

Program contact management

General contact management allows users to create and edit contacts and groups as they please.

When you create a campaign for a particular program a program group is created to store all the contacts for that campaign. Adding and removing contacts from this group reserves or un-reserves credit from the clients account. This group is managed as part of the campaign management and not part of the normal group management.

Balance management

Should the balance be stored as rands and cents or as credits:

1. Balance stored as rands and cents
    - User / org buys R100 credit.
    - User sends messages at whatever rate we configure (e.g. 23c) and the credit is deducted.
    - At some time later we change the price to 25c.
    - Now the user's credit is 'worth' less because each message they send is charged at the new rate.
2. Balance stored as credits
    - User buys R100 worth of credit @ 23c (current rate) so gets 100/0.23 'credits'
    - User sends messages and each message 'costs' 1 credit.
    - Later CL up's the rate to 0.25c.
    - User's credit isn't affected, they still have the same number of SMS's to send.
    - When user buys R100 more credit they buy at the new rate so get R100/0.25 'credits'.
3. What happens when we start doing USSD or LBS, how to we charge for those services?
    - have different types of credit for each
    - store balance as rands and cents

When does credit get reserved, debited etc.

1. Reserved
    a. When a user schedules a campaign
    b. When a contact is added to a campaign group
    #Unreserved
    c. When a campaign is cancelled
    d. When a contact is removed from a campaign group
2. Deducted
    a. After sending a batch of messages for a campaign
3. Refunded
    a. After a callback from the WASP indicating that a message was not delivered

2010.07.27 - Mobilisr SPRINT Planning

Topic of Discussion: Program, Channel and SMS Model Behaviour

CHANNEL

1. Introduce ChannelProperties column in the Channel Table that holds wasp related account information

2. Application only uses one outgoing channel

PROGRAM

1. States (Schedulaed, Running, Finished)

2. For programs scheduled for future running, those don't get immediatly scheduled, but a master job gets scheduled which upon its time kicking in turn starts scheduling the data centric to the programme for running through quartz)

3. Program Behaviour

a) Step 1: CREATE UI

b) Step 2: RECIECPT UI (Depending on balance, allows button visibilities(SCHEDULE, RUN NOW, REQUEST BALANCE, SAVE, etc)

c) Step 3: Depending upon Step 2, appropiate UI shown

4. Program's XML stores cron expr or date expr

5. Look at Quartz API for DB Querying

SMS Model Behaviour

1. Google collections partition for data splitting

2. Apache HTTPClient for use in SMS Sending

3. Error's stored during scheduling or running mode in Client Alert table

a) UI to be discussed for Client Alerts

2010.07.12 - Mobilisr SPRINT Planning

SCOPE FOR NEXT SPRINT:

- **BAs (continue from previous sprint):**
  - Screen designs for the 'Just send SMS' scenario - basics done, now need 'Create New Campaign'
  - Screen design for the 'Welcome Page' - decided to put this on hold as we develop the different programs and other screens (as it will change later)
  - Logo Designer came through last week - He's created a few examples but this is on hold pending budget issues. Faisel to forward through the templates he's received.
  - Functional Requirements List + Use/Test Cases (Sarah to have this complete by next SPRING) - All current functionality and list of outstanding
  - Minor edits from Jira ticket (awaiting examples text from BAs)
  - Faisel negotiating with Vodacom internal WASP
  - BA to test: Assign Groups: 'All groups have been added' discussion: Rather have a pop up after they've clicked on the 'Assign All Groups' to 123456789
- **Devs:**
  - Groups List - include number of contacts within a group (not sure how we will do this yet, investigate performance issues)
  - Simon to look at Zahir's tickets re updating and leaving a screen
  - Vikram to finish 'Import Contacts' - including groups

Demo (from Vikram):

- Show all assigned groups on the right hand side (not the message of 'all contacts have been added'). Showing the paginated section (that is, it would look like the screen on the left hand side).
- Discussion around after a user has added every group individuallly. Technically difficult.
- "Or, if you need to add a new group, add it here". "Or, if you need to add a new contact, add it here"
- Change 'Add Contact to a Group' - 'Manage Contact's Group Memberships'
- Change 'Add Group to a Contact' - Manage Group's Contacts'

This SPRINT:

- **Import Contacts:**
  - Pop up window
  - See Vikram's print out diagram (to be scanned in)
- Ideas for next next sprint:
  - Welcome Page
  - My Profile
  - My Programs

Backlog:

- Porting to other countries (11 digits, example). Will add validation rules per country. Validation for cellphone number - Your country would be part of your profile. Currently hardcoded to "+27" and automatically assigned to number upon save.
- Ability to send MMS - logos, images (requested by MSF, would require develop costs, not part of this year's work

2010.06.28 - Mobilisr SPRINT Planning

SCOPE FOR NEXT SPRINT:

- **BAs (continue from previous sprint):**
  - Screen designs for the 'Just send SMS' scenario (initial meeting held, further brainstorming required)
  - Screen design for the 'Welcome Page' - decided to put this on hold as we develop the different programs and other screens (as it will change later)
  - Logo Designer came through last week - He's created a few examples but this is on hold pending budget issues. Faisel to forward through the templates he's received.
  - Functional Requirements List + Use/Test Cases (Zahir) - Contacts & Groups
  - Minor edits from Jira ticket (awaiting examples text from BAs)
- **Devs:**
  - Groups List - include number of contacts within a group (not sure how we will do this yet)

Demo (from Vikram):

- Assign Groups: 'All groups have been added' discussion: Rather have a pop up after they've clicked on the 'Assign All Groups' to 123456789
- Show all assigned groups on the right hand side (not the message of 'all contacts have been added'). Showing the paginated section (that is, it would look like the screen on the left hand side).
- Discussion around after a user has added every group individuallly. Technically difficult.
- "Or, if you need to add a new group, add it here". "Or, if you need to add a new contact, add it here"
- Change 'Add Contact to a Group' - 'Manage Contact's Group Memberships'
- Change 'Add Group to a Contact' - Manage Group's Contacts'

This SPRINT:

- **Import Contacts:**
  - Pop up window
  - See Vikram's print out diagram (to be scanned in)
- Ideas for next next sprint:
  - Welcome Page
  - My Profile
  - My Programs

General Notes:

- Ability to send MMS (requested by MSF, would require develop costs, not part of this year's work)

- Validation for cellphone number - Your country would be part of your profile. Currently hardcoded to "+27" and automatically assigned to number upon save.

2010.06.14 - Mobilisr SPRINT Planning

SCOPE FOR NEXT SPRINT:

- **BAs (continue from previous sprint):**
  - Screen designs for the 'Just send SMS' scenario (initial meeting held, further brainstorming required)
  - Screen design for the 'Welcome Page' - decided to put this on hold as we develop the different programs and other screens (as it

    - will change later)
    - Logo Designer came through last week - He's created a few examples but this is on hold pending budget issues.
- **Devs:**
    - Minor edits from Jira ticket (awaiting examples text from BAs)
    - Contacts & Groups (GUIs already completed)
    - Groups List - include number of contacts within a group

General Notes:

- "Add Contact To Group" - "Assign Groups for Contact '083 5585 162' "
- "List of Groups" - "Available Groups"
- "Selected Groups" - "0835585162's Groups "
- "Add Contact to All Groups" - "Assign All Groups to Contact 0835585162"
- Validation for cellphone number - Your country would be part of your profile. Show the flag, default to "+27" - greyed out.

Investigate from WASP what happens to messages that get failed to get sent: Cost point of view, Types of error messages

- Won't get charged for a message that doesn't get delivered. An error message is sent back (log file). We'd have to do processing on log to get acual error condition.

2010.05.17 - Mobilisr SPRINT Planning

Programs

- "Just Send an SMS"
    - Broadcast message (with or without scheduling)
    - Once off
- Receive an SMS
    - Automated response e.g Info line, Contacts line
    - Subscription list (incoming users get added to a group) automated response
    - Citizen Journalism (incoming sms's get posted on web or something)
    - Call me back (users sms's in and organization calls them back) (could forward to email - batch email)
- PMTCT
- Adherance
- RelaySMS

Send an SMS

- Call to events – call to a calendar – needs to be scheduled
- Scheduled or Instant
- Broadcast SMS / Just Send an SMS / Send an SMS /
- With tooltip – needs an informational blurb

Receive an SMS

- Info Line – person sends keyword to 082 xxx, you'll get one SMS back (info, something about the place, etc.)
    - Shuttleworth created an mnovel from incoming messages – citizen journalism. Post it on a website. Excel file export.
    - Subscription: Get added to a group - to get regular newsletters
    - Contact Line: TAC sends contact details of a branch.
    - Call Me Back Service: HIV911 – if you can't see this page, or don't know how to get this info – send a PCM and we'll get back to you. Forward could be an email.
- All have automatic responses – they may vary.

PMTCT Program – driving as a sale

- Based on Katherine's methodology
- Both sending messages as well as receiving ("distraught mother
- When adding a new person to the program, you'd need to set the start and stop date related to the person

1. Enter the cellphone number / search for the person / etc (load the patient including cellphone number)

2. Tick which schedules they should get (up to 10) - Choose which areas they should get messages in:

- New to ARVs (schedules within these - some would have 1, some would have multiple)
- Changes to drugs

- supportive message
- drug reminders for babies (may have more scheduled - e.g. NVP6 and 6+)

Adherence Messaging

- Sending out daily messaging to people on ARVs
- When adding a new person to the program, you'd need to set the start and stop date related to the person
- For a month after they've started their ARVs.
- Want to add more people at a later date.
- Could use a calendar.

Storyboards – Break down all the identified scenarios at BA meeting on Thurs 27th May.

- PMTCT
- Adherence
- Call me back service
- Incoming – auto response

Balance:

- Should be non-editable, and changed to 'Current Balance'
- Add a new tab called 'Account'
- Balance must be in a currency (ZAR)
- Debit, Credit, Reason, User, Amount
    - Alert when airtime has been loaded - via email to client and product manager

General:

- Switch 'Cancel' and 'Submit' buttons through-out

Organisation:

- Change spelling from Organization to Organisation

TASKS for the next SPRINT:

- Finish organisation, user and role interface (see Balance above)
- Define permissions
- Contacts / Groups
- Confirm password
- Get feedback from BAs regarding scenario storyboards

2010.05.31 - Mobilisr SPRINT Planning

SCOPE FOR NEXT SPRINT:

- **BAs:**
    - Screen designs for the 'Just send SMS' scenario
    - Screen design for the 'Welcome Page'
    - Logo Designer coming this week (budget has been approved)
- **Devs:**
    - Minor edits from Jira ticket
    - Contacts & Groups (GUIs already completed)
    - Groups List - include number of contacts within a group

General Notes:

- Should be able to save things half way through (e.g. PMTCT change it halfway through it for example)
- Reporting: Go into a program, look for the stats/report/log:
- Investigate from WASP what happens to messages that get failed to get sent:
    - Cost point of view

    - Types of error messages
- Cell-Life Internal Reporting System for admin console (not high priority) - Pentaho may be useful here (drill down by date ranges, organisations, etc.)
- Organisations have access to Programs - likely another tab in the 'Organisation' screen
- Programs must be associated with Organisations
    - e.g. users must be able to see what other users in the organisation are doing
- Need to track user actions:
    - which user created a program,
    - who updated it, and what time
    - who sent it and what time

2010.03.23 - Mobilisr SPRINT Planning

- No login / logout buttons
- Need GUI from Faisel
- No formatting, styles, CSS yet
- Client – Create New Client
    - Remove colons
    - Two spaces after a label text before putting in the *
    - Password – needs to type it in twice
    - Reset – change to 'change password'
    - Agree that password will never be shown (support may have problems with this)
    - Search results – look into other options
    - Deleting a client – don't really want to delete a client's records / data. Perhaps they haven't paid and you want to disable their account. Marking as active / inactive
    - Table needs to be updated to include status (green tick?)
    - Unique username
    - Remove balance from Details tab and create a new tab called 'Account Summary' – can't just change it. Rather need to credit / debit it, with a 'Notes' section. ZAR (put this)
        - Credit (ZAR)
        - Debit (ZAR)
        - Balance (ZAR)
        - Reason for Transaction (ZAR)
    - Discussion regarding general paradigm of screen design: Client Overview (debit / credit, link to edit, assign channel, edit permissions)
- SB to get the mockups for the GUI (was meant to be done in the last sprint)
- Mobile numbers stored in the database – e.g. 27835585162. area code + number (system will trim the preceeding 0 if 0835585162

Sprint to Come

- Contacts: Groups / People – adding people to groups, etc. From the user point of view (not admin)
    - GUIS for contacts (CRUD + list) & groups (CRUD + list)
- AJAX form validation for CRUD for persons/groups/clients/etc
- Implementing the validation in clients and channels
- Concurrent modification - error message
- Research & document the choices made for interface technologies (GWT – emit), (JSP & tag libraries) – there are others. Simon wants justification for choosing one tech.
    - Can do this without the GUI
- Automated build & deployment onto the dev server
- Next Sprint is 'Creating a Program' (BAs need to give input here – a lot of work is required here) First one is relay SMS. Speak with Katherine about the requirements here. Ask for her to attend next BA meeting. HIVAN (currently using BulkSMS) for counselling and services, PhuzaWize and one other.

__Reuse!

Mobilisr (v2) Programs (High Level)

1. Adherence Module

- Tools Used: Scheduled SMS
- Content: Based on regimens (drugs)
- Example: A patient is sent a twice daily reminder (morning and evening) at a specific time (7am & 7pm or 8am & 8pm, etc.) to remind them to take their drugs.

- Possibly include bland messaging
- Likely that this will be for a set period of time (e.g. when they are starting a new regimen, when they are starting ARVs for the first time, etc.)

2. Çall to Events Module

- Tech Used: Once off SMS
- Example: A once off SMS sent to all TAC members informing them of a march happening at a certain time and location
- Scheduling should also be available (e.g. I want to send this at 9am on 3rd April 2010)

3. PMTCT (Prevention of Mother to Child Transmission) Module

- Tech Used: Scheduled SMS
- Content: Based on regimen and other info
- Some patients start on PMTCT (Zidovudine - AZT) at I think, 28 weeks into their pregnancies
- Many patients only find out they are HIV+ at the actual birth
- Patients are discharged within a day of having their baby and often don't get any support
- Naturally, the LTFU (lost to follow up) for these patients is very high
- The purpose of this module is to use SMSés to keep patients in the system, give them support, etc.
- Katherine is busy with a research study to see the effects of such an SMS campaign
- Key times in the PMTCT program which are related to this module are:
    - Birth (possibly SMS the day after)
    - 6 weeks (baby gets HIV test)
    - 10 weeks (baby gets another HIV test)
    - 14 weeks (baby gets third HIV test)
- Content: Encouraging messages (new mother issues, general health issues, general HIV info, importance of tests for baby, importance of medicine for baby, babyfeeding methods, appointment reminders - possibly 1 week before, 1 day before)

4. Citizen Journalism Module

- Clients involved in this: Shuttleworth Foundation
- Allow concatenated SMSes
- Tech: Likely keyword (also discussed a 'normal'SMS, emit form, form on a mobi site)
- Allow citizens to report on issues - for example 'Send 30060 followed by your message about the quality of service received at this clinic to the following number

5. M&E / Info Service Module:

- There was some discussion about these two being separate applications, but at this point, we're not sure
- Tech: USSD
- Average 2 to 5 minute interaction
- M&E: Mini Survey from the general public
- Info Service: Newsletters (RHRU have used this in the past) & Branch Info (TAC have done this)

6. Relay SMS Module:

- Distributed SMS from an individual to a closed group
- one to one
- one to many
- Tech: Keyword SMS has been suggested but hasn't been confirmed

7. Location Based Services (LBS) Module:

- Find your nearest clinic, service, etc.
- Can be moved to other sectors, such as legal?
- Must be linked to an external database (for example, HIVAN have database of services offered in different locations)
- Tech: USSD / SMS

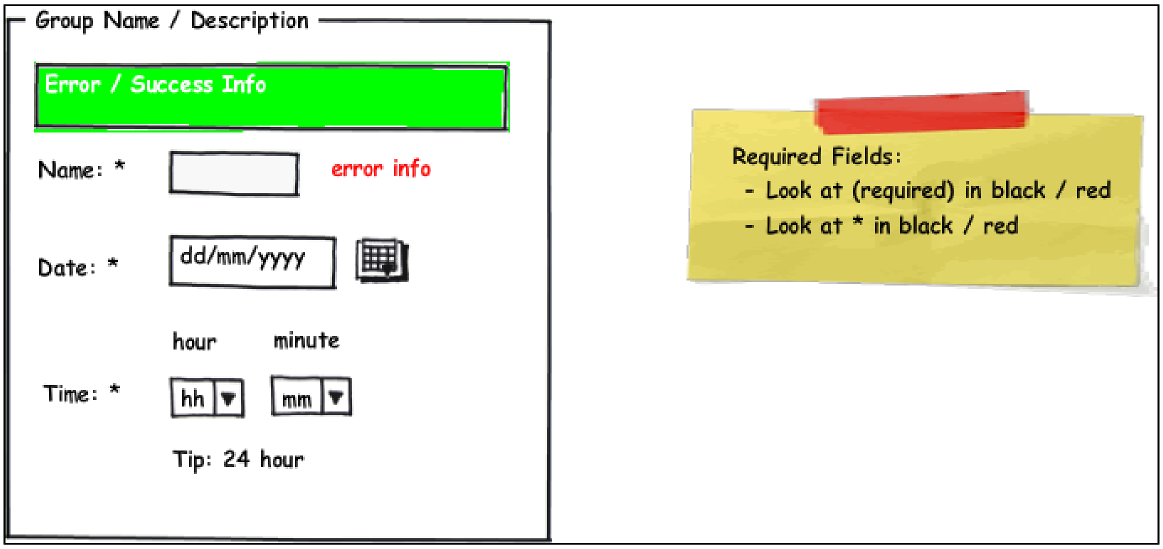
GENERAL FUNCTIONALITY ACROSS MODULES

- Login, Logout
- See Account Activity
- Groups
- Contacts (include gender, date of birth?)
- Reports

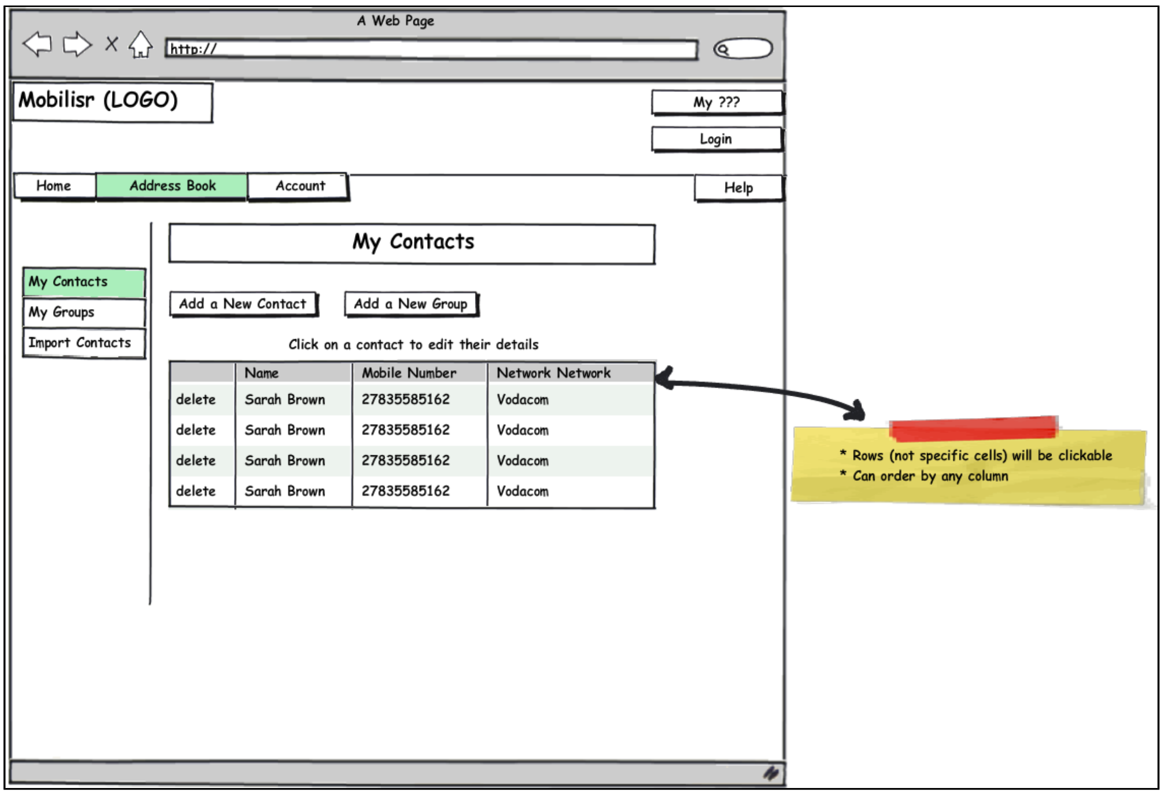
Basic use cases

- Form Validation
- Address book
- Add new contact
    - Step 1
    - Step 2
    - Step 3
- Send SMS
    - Basic (without scheduling)
    - Advanced (with scheduling)
- Billing options
- Configure system to receive SMS for client

Form Validation

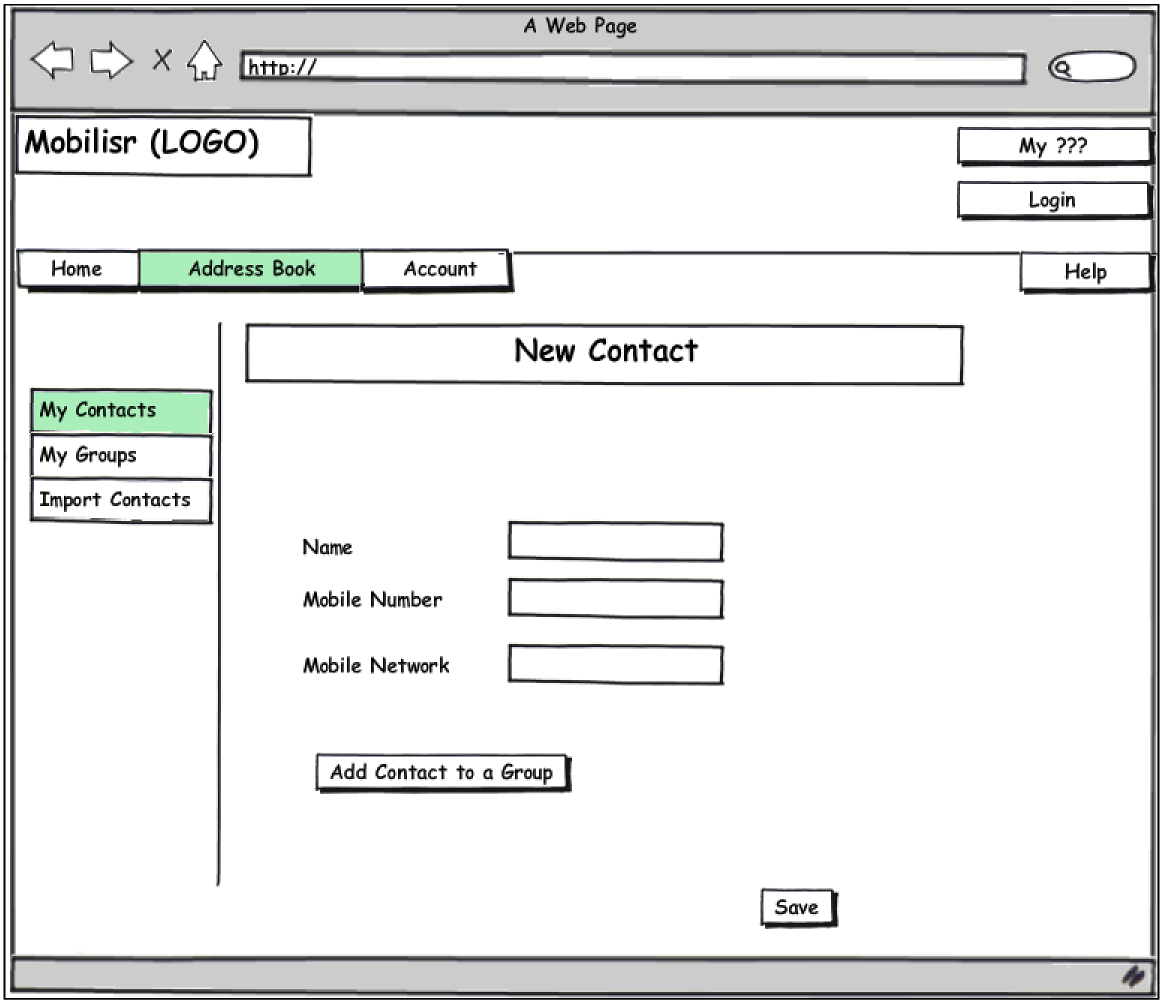


Address book



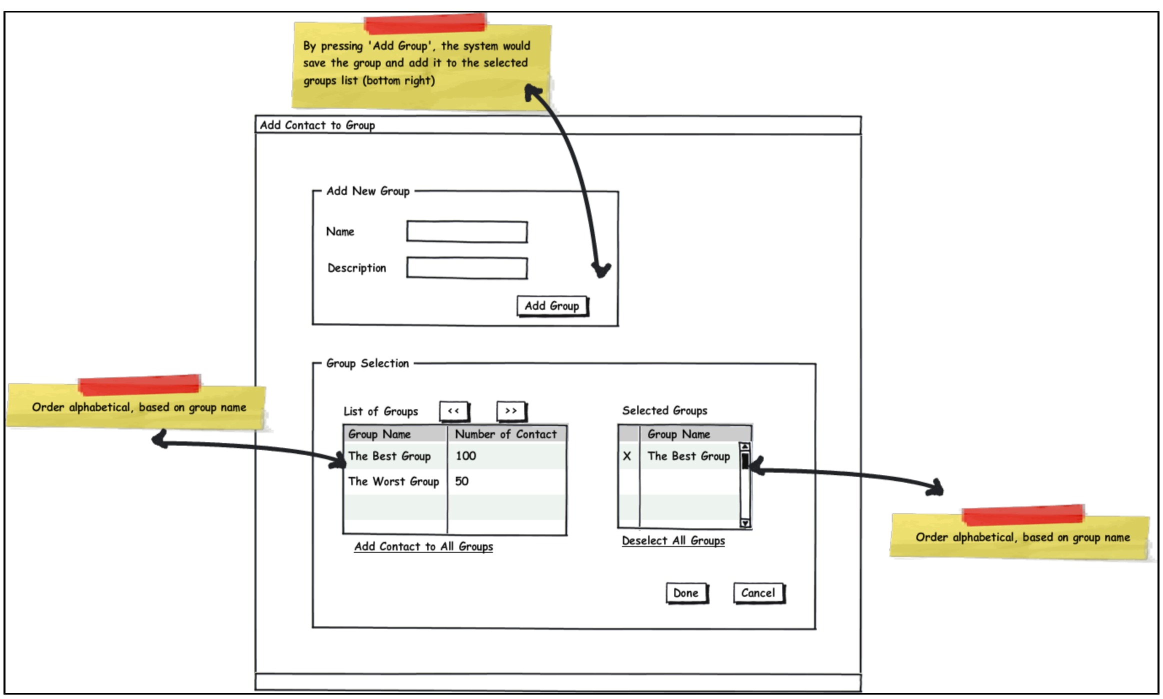
Add new contact

Step 1



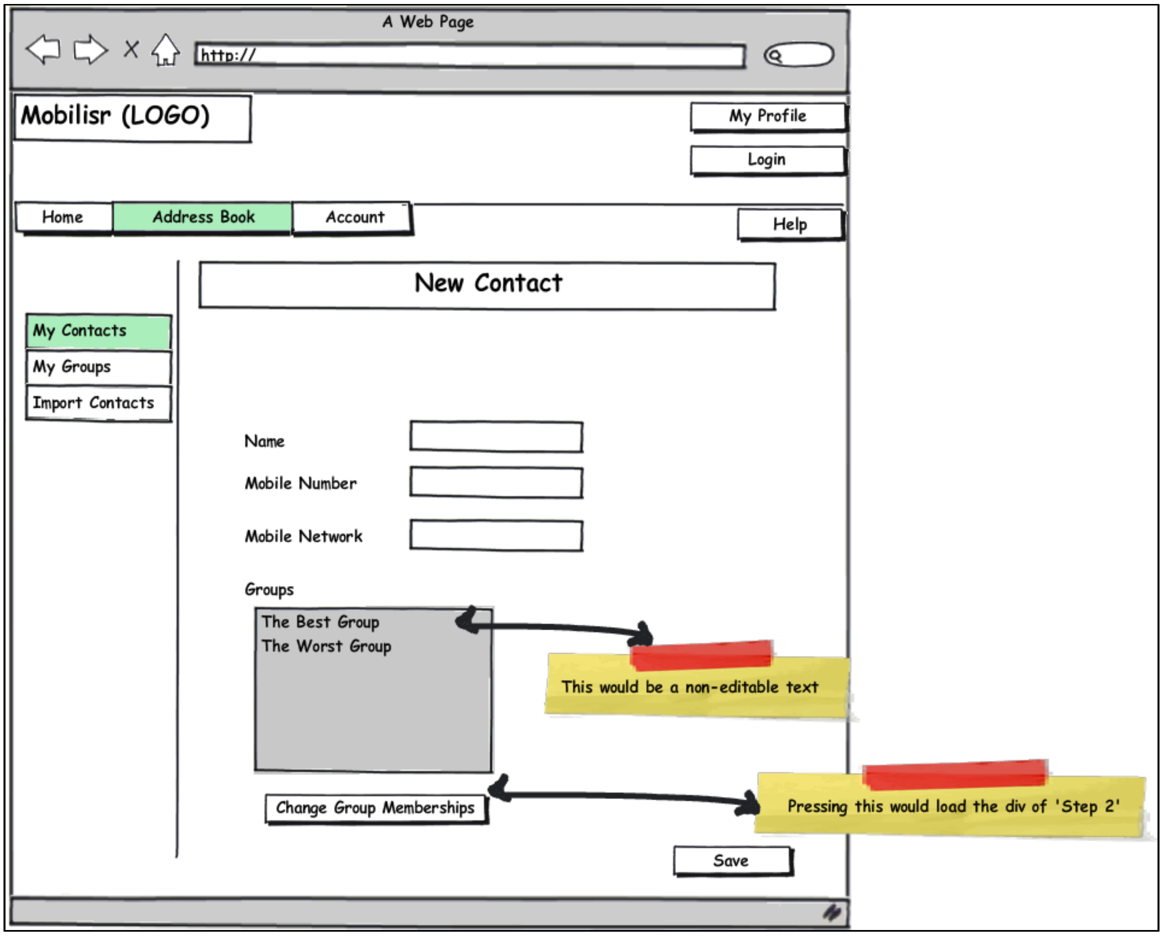
A Web Page
http://
Mobilisr (LOGO)
My ???
Login
Home
Address Book
Account
Help
New Contact
My Contacts
My Groups
Import Contacts
Name
Mobile Number
Mobile Network
Add Contact to a Group
Save

Step 2



By pressing 'Add Group', the system would save the group and add it to the selected groups list (bottom right)
Add Contact to Group
Add New Group
Name
Description
Add Group
Group Selection
Order alphabetical, based on group name
List of Groups
<<
>>
Group Name
Number of Contact
The Best Group
100
The Worst Group
50
Add Contact to All Groups
Selected Groups
Group Name
X
The Best Group
Deselect All Groups
Order alphabetical, based on group name
Done
Cancel

Step 3



Send SMS

Basic (without scheduling)

User

1. Logs in
2. Selects "Send SMS" option
3. Types in message
4. Selects users / groups to send message to
5. AND / OR
6. Types in numbers to send message to
7. Clicks Send

Result in system

1. Deducts the cost of the sms from the clients balance
2. Sends the sms
3. Adds any new contacts to the users contact list

Advanced (with scheduling)

User

1. Logs in
2. Selects "Send SMS" option
3. Types in message
4. Selects users / groups to send message to
5. AND / OR
6. Types in numbers to send message to
7. Selects date and scheduling options for sms (needs to be defined c.f. Google calendar recurring events)
8. Presses send

Result in system

1. Deducts the cost of the sms from the clients balance? (should this only happen when the sms gets sent?)
2. Schedules the sms
3. Adds any new contacts to the users contact list

Billing options

Client accounts have credits (presumably actual Rand value e.g. R1000) given to them by Cell-Life (perhaps even self purchased at a later stage). There are two basic ways that billing can occur.

e.g client creates sms on interface and selects group with 100 ppl to send sms to. Sms is scheduled for every Tuesday for the next 6 weeks. Total messages = 6 * 100

1. Deduct on action request
   This method deducts the cost of a clients request immediately after the user has submitted the request. Using the above example, the client account is debited with full amount for all sms's to be sent *when they create the sms* (ie. 600 x cost of one sms).
2. Deduct on action execute
   This method only debits the client account when the action is actually executed. Using the above example, the client account is debited *o nly when each sms is sent* i.e. account debited with 100 x cost of one sms 6 times over next 6 weeks

Questions

What if the client does not have enough balance:

1. Deduct on action request
   Client can not create sms in the first place.
2. Deduct on action execute
   Client can create sms but sms will not be sent if not enough balance in account.

Configure system to receive SMS for client

Installing Communicate on a Server

NOTE: These instructions assume it is the first time for installing Communicate on this server. If you are upgrading to a new version, these instructions are not for you.

Step 1: Create User

Create user and home directory. NOTE: You may want to first check that neither the user nor the directory exists.

```
$ useradd communicate -d /opt/communicate
```

Step 2: Create Database

a) Create the database

```
$ mysql -u root -p
mysql$ create database communicate default character set utf8;
mysql$ create user 'communicate'@'localhost' identified by '<password>';
mysql$ grant all on communicate.* to communicate@localhost;
```

b) Save new database details in your password database.

Step 3: Install Tomcat

a) Extract tomcat 6 to /opt/communicate

```
$ cd /opt/jhhesa
$ tar xvf ~/software/apache-tomcat-6.0.37
$ mv apache-tomcat-6.0.37/ tomcat
$ chgrp -R communicate tomcat
$ chown -R communicate tomcat
```

b) Set up Tomcat to use the correct ports. You will have to check which ports are already being used by other tomcat instances.

```
$ vim /opt/communicate/tomcat/conf/server.xml
```

Change the 3 ports - each server must have unique port numbers and go up in denominations of 10):

* Server port = 8015
* Connector HTTP port = 8010
* Connector AJP port = 8019

This means (if traffic is opened on these ports) the following links are valid:
* http://prod1.cell-life.org:8010/
* ajp://prod1.cell-life.org:8019/

c) (optional) Setup Tomcat manager (requires the HTTP port to be opened)

```
$ vim /opt/communicate/tomcat/conf/tomcat-users.xml
...
  <role rolename="tomcat"/>
  <role rolename="manager-gui"/>
  <user username="tomcat" password="P@ssw0rd1" roles="tomcat,manager-gui"/>
```

Step 4: Open Ports

a) Open the ports (you will need to be root)

```
$ vim /etc/sysconfig/iptables
```

Note: editing this file directly is not correct, but the editing tool is a little tricky to use (you need to know the syntax)

for the AJP port use the following

```
-A INPUT -d 10.3.0.1 -p tcp -m state --state NEW -m tcp --dport 8009 -j ACCEPT
```

for the HTTP port use the following

```
-A INPUT -p tcp -m state --state NEW -m tcp --dport 8243 -j ACCEPT
```

to restart

```
$ /etc/init.d/iptables restart
```

Step 5: Create the Properties File

a) Create a new properties file.

```
$ vim /opt/communicate/communicate.properties
$ chgrp -R communicate /opt/communicate/communicate.properties
$ chown -R communicate /opt/communicate/communicate.properties
```

It should contain at least the following properties.

The jdbc.user and jdbs.password should be the mysql user and password you created above.

```
live.jdbc.url=jdbc:mysql://localhost:3306/communicate

jdbc.driver=com.mysql.jdbc.Driver
jdbc.user=communicate
jdbc.password=
hibernate.dialect=org.celllife.mobilisr.util.CustomMysqlDialect
hibernate.show_sql=false

mailSender.username=user@gmail.com
mailSender.password=password
mailSender.host=smtp.gmail.com
mailSender.protocol=smtps
mailSender.from=user@gmail.com
mailSender.port=587
mail.smtp.auth=true
mail.smtp.starttls.enable=true
mail.debug=false

log.error.email_enable=false
log.error.email_to=somebody@gmail.com

enableMailSending = false
simulateMessageSending = true
```

b) Edit the .bash_profile to add JAVA_HOME and COMMUNICATE_HOME

```
$ su - communicate
$ vim .bash_profile
```

Add the following:

```
JAVA_HOME=/opt/java/current
export JAVA_HOME

COMMUNICATE_HOME=/opt/communicate
export COMMUNICATE_HOME
```

Step 6 : Copy WAR file

Copy the war file to tomcat.

```
$ sudo su -
$ cp org.celllife.mobilisr.web-2.7.war /opt/communicate/tomcat/webapps/
$ mv /opt/communicate/tomcat/webapps/org.celllife.mobilisr.web-2.7.war
/opt/communicate_dev/tomcat/webapps/communicate.war
$ chown -R communicate /opt/communicate/tomcat/webapps/communicate.war
$ chgrp -R communicate /opt/communicate/tomcat/webapps/communicate.war
```

Start the tomcat server.

```
$ su - communicate
$ tomcat/bin/startup.sh
```

You should now be able to access Communicate at: http://server1.cell-life.org:8090/communicate/

(Make sure you enter your own server name and port number).

Step 7: Adding the URL

a) Go edit the apache *.conf file of your particular subdomain:

```
$ vim /etc/httpd/sites-available/subdomain.cell-life.org.conf
```

Add the ProxyPass:

```
ProxyPass /communicate ajp://localhost:8019/communicate
ProxyPassReverse /communicate ajp://localhost:8019/communicate
```

b) You can now remove the ports from the iptables, and access the webapp at http://server1.cell-life.org/communicate.

Useful Database Queries - Communicate

To find all the messages coming in to a filter:

(Replace filterId with the id of the filter eg. 13).

```
select datetime,msisdn,message from communicate.smslog where dir='IN' and
createdfor="org.celllife.mobilisr.domain.MessageFilter:{filterId}" order by datetime
desc;
```

To find Lungisa Lost messages:

```
select * from communicate.smslog where dir='IN' and createdfor='32759' and
status='RX_FILTER_FAIL' and datetime > '2014-10-06' order by datetime desc;
```

To extract contacts for a group:

```
SELECT firstname,lastname,msisdn FROM communicate.contact c,
communicate.contact_contactgroup cmap
where cmap.contactGroup_id=367
and c.id = cmap.contact_id;
```

To find messages failing due to "invalid number":

```
SELECT datetime,organization_id,msisdn,message FROM communicate.smslog where
status='WASP_FAIL' and failreason='Invalid Dest Addr' and datetime>'2013-07-01' and
LENGTH(msisdn)=11;
```

To find messages being rejected because they are to 8ta subscribers:

```
SELECT datetime,organization_id,msisdn,message FROM communicate.smslog where
status='TX_FAIL' and datetime>'2013-08-01' and failreason='Message has been rejected'
LIMIT 0,1000;
```

To find the top users of Communicate:

```
select count(*), log.organization_id, o.name FROM communicate.smslog log,
communicate.organization o
where o.id=log.organization_id
and log.datetime > '2013-10-19'
group by log.organization_id;
```

REST API Document

Overview

This spec outlines a list of REST web services offered by Communicate.

The services allow external applications to communicate with Communicate and perform similar functions to what normal users can do.

Note: When new methods are added to the API they can be accessed via any of the API URL's. The version URL's are required where existing methods or data representation changes.

Authentication

All operations must be authenticated using Basic Access Authentication with a valid Communicate username and password.

Dates

Unless otherwise specified all dates and times are in ISO 8601 format as follows:

- Date: YYYY-MM-DD
- Datetime: YYYY-MM-DDThh:mm:ss+hh:mm
- Time: hh:mm:ss+hh:mm

Parameters

'Contentent-Type' should be set to "application/xml".

Base Urls

- For v1 of the API the base URL is **http://communicate.cell-life.org/api/**
- For v2 of the API the base URL is **http://communicate.cell-life.org/api//v2**

On Sol, the baseurls are:

- http://sol.cell-life.org/communicate/api
- http://sol.cell-life.org/communicate/api/v2

Campaigns

API-01 Get Campaigns

Get a list of all the campaigns accessible to the authenticated user. The list may be filtered and paged.

URL	{baseurl}/campaigns	
Method	GET	
Query parameters	type=	Filter by type
	status=	Filter by status
	offset=	The offset for the first record to retrieve
	limit=	The number of records being requested (default = 50, max = 200)
Returns	200 OK & PagedList XML	
	401 Unauthorized	

For more details on datatypes see

- API schema
- PagedList, Campaign, status, type

server response to GET


```xml
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<list total="3" offset="0" limit="10">
    <campaign>
        <id>73</id>
        <name>name 1</name>
        <description>description 1</description>
        <type>RELATIVE</type>
        <status>SCHEDULED</status>
        <startDate>2011-02-15T10:27:00+02:00</startDate>
        <cost>611</cost>
        <timesPerDay>13</timesPerDay>
        <duration>47</duration>
    </campaign>
    <campaign>
        <id>24</id>
        <name>name 2</name>
        <description>description 2</description>
        <type>GENERIC</type>
        <status>RUNNING</status>
        <startDate>2011-02-15T10:27:00+02:00</startDate>
        <cost>67</cost>
        <duration>40</duration>
    </campaign>
    <campaign>
        <id>56</id>
        <name>name 3</name>
        <description>description 3</description>
        <type>FIXED</type>
        <status>FINISHED</status>
        <startDate>2011-02-15T10:27:00+02:00</startDate>
        <cost>10</cost>
    </campaign>
</list>
```


API-02 Get Campaign details

URL	{baseurl}/campaigns/[id]
Method	GET
Returns	200 OK & Campaign XML
	401 Unauthorized
	404 Not Found

For more details on datatypes see

- API schema
- Campaign, status, type

server response to GET


```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<campaign>
    <id>73</id>
    <name>name 1</name>
    <description>description 1</description>
    <type>RELATIVE</type>
    <status>SCHEDULED</status>
    <startDate>2011-02-15T10:27:00+02:00</startDate>
    <cost>611</cost>
    <timesPerDay>13</timesPerDay>
    <duration>47</duration>
</campaign>
```


API-03 Add contacts to campaign

URL	{baseurl}/campaigns/[id]/contacts
Method	POST
Request Body	Contact XML
Returns	200 OK & PagedList XML containing errors for contacts that were not processed (contacts MSISDN is invalid)
	401 Unauthorized
	400 Bad request (if posted data cannot be parsed)
	403 Forbidden (if Campaign is not in RUNNING state or Organization does not have sufficient balance)
	404 Not Found (if campaign is not found)
	415 Unsupported Media Type & ErrorList XML (if ContactList is empty, ContactList contains objects other than contacts)

For more details on datatypes see

- API schema
- PagedList, Contact, Error, ErrorCode

POST data


```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<list>
    <contact>
        <firstName>firstName1</firstName>
        <lastName>lastName1</lastName>
        <msisdn>2785654789d</msisdn>
    </contact>
    <contact>
        <firstName>firstName2</firstName>
        <lastName>lastName2</lastName>
        <msisdn>+27723214569</msisdn>
    </contact>
    <contact>
        <firstName>firstName3</firstName>
        <lastName>lastName3</lastName>
        <msisdn>27834569856</msisdn>
    </contact>
</list>
```


Server response to POST data


```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<list>
    <error>
        <errorCode>INVALID_MSISDN</errorCode>
        <message>Contacts mobile number (2785654789d) is invalid</message>
    </error>
</list>
```


API-04 Remove contact from campaign

URL	{baseurl}/campaigns/[campaignId]/contacts/[msisdn]
Method	DELETE
Returns	204 No Content
	401 Unauthorized
	403 Forbidden if Campaign is not in RUNNING state
	404 Not Found (if campaign is not found)

API-05 Create new 'Just send SMS' campaign

URL	/api/campaigns
Method	POST
Request Body	Campaign XML
Returns	201 Created & Location

	401 Unauthorized
	409 Conflict (if a campaign already exists with the same name)
	415 Unsupported Media Type & ErrorList XML

For more details on datatypes see

- API schema
- Campaign, Message, Contact, Error, ErrorCode

POST Data

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<campaign>
    <name>name 1</name>
    <description>description 1</description>
    <messages>
        <message>
            <date>2011-02-15</date>
            <time>11:58:00+02:00</time>
            <text>message text1</text>
        </message>
    </messages>
    <contacts>
        <contact>
            <msisdn>27784569852</msisdn>
            <firstName>firstName1</firstName>
            <lastName>lastName1</lastName>
        </contact>
        <contact>
            <msisdn>27834569856d</msisdn>
        </contact>
    </contacts>
</campaign>
```

- If message date and time are not present or the date is in the past it is assumed that the message should be sent immediately after the campaign is started.
- If only the message date is not present it is assumed that the message should be send at the next occurrence of the message time after the campaign is started.
- If only the message time is not present it is defaulted to 00:00:00

Server response to POST

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<list>
    <error>
        <errorCode>INVALID_MSISDN</errorCode>
        <message>Contacts mobile number (27834569856d) is invalid</message>
    </error>
</list>
```

API-06 Get the message logs for a campaign

URL	{baseurl}/campaigns/[id]/messages	

Method	GET	
Query parameters	status=	Filter by SmsStatus
	start=	Only include messages on or after this date
	end=	Only include messages on or before this date
	offset=	The offset for the first record to retrieve
	limit=	The number of records being requested (default = 100, max = 500)
Returns	200 OK & PagedList XML	
	401 Unauthorized	
	404 Not Found (if campaign is not found)	

For more details on datatypes see

- API schema
- MessageStatus, SmsStatus, Error, ErrorCode

Message Status list


```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?><list total="253"
offset="100" limit="1">
  <messageStatus>
    <id>549</id>
    <msisdn>27845554545</msisdn>
    <datetime>2011-06-06T10:00:25+02:00</datetime>
    <status>TX_SUCCESS</status>
  </messageStatus>
</list>
```


Contacts

API-07 Update a contacts details

URL	{baseurl}/contacts/[msisdn]	
Method	PUT (or POST)	
Returns	200 OK	
	401 Unauthorized	
	404 Not Found (if contact is not found)	
	415 Unsupported Media Type & ErrorList XML (if new MSISDN is invalid)	

For more details on datatypes see

- API schema
- Contact, Error, ErrorCode

PUT Data

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<contact>
    <msisdn>27784569852</msisdn>
    <firstName>firstName1</firstName>
    <lastName>lastName1</lastName>
</contact>
```

Server response on error

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<list>
    <error>
        <errorCode>INVALID_MSISDN</errorCode>
        <message>Contacts mobile number (0728452) is invalid</message>
    </error>
</list>
```

API-08 Get messages sent to a contact

URL	{baseurl}/contacts/[msisdn]/messages	
Method	GET	
Query parameters	status=	Filter by SmsStatus
	start=	Only include messages on or after this date
	end=	Only include messages on or before this date
	offset=	The offset for the first record to retrieve
	limit=	The number of records being requested (default = 100, max = 500)
Returns	200 OK & PagedList XML	
	401 Unauthorized	
	404 Not Found (if contact is not found)	

For more details on datatypes see

- API schema
- MessageStatus, SmsStatus, Error, ErrorCode

Message Status list

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?><list total="253"
offset="100" limit="1">
  <messageStatus>
    <id>549</id>
    <msisdn>27845554545</msisdn>
    <datetime>2011-06-06T10:00:25+02:00</datetime>
    <status>TX_SUCCESS</status>
  </messageStatus>
</list>
```

Other

Errors

All post methods may return '415 Unsupported Media Type' along with an ErrorList XML.

For more details on datatypes see

- API schema
- PagedList, Error, ErrorCode

Server response to POST data

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<list>
    <error>
        <errorCode>INVALID_MSISDN</errorCode>
        <message>msisdn 27787344468 is invalid</message>
    </error>
    <error>
        <errorCode>INVALID_MSISDN</errorCode>
        <message>msisdn 27520790697 is invalid</message>
    </error>
    <error>
        <errorCode>INVALID_MSISDN</errorCode>
        <message>msisdn 27600182949 is invalid</message>
    </error>
</list>
```

Inbound SMS Forwarding

1. Login to your Panacea Account and go to **Tools > Inbound SMS Forwarding**
2. Leave the number as Default (unless you want to choose a specific inbound number to only have those messages forwarded) and click **Edit**.
3. Paste in the URL to the file that will handle the requests that we send you and click **Save**.
4. When a message comes into your account. It'll push it to that URL via HTTP GET with the following variables.
    - **to** - The number that the inbound message was sent to.
    - **from** - The number that the inbound message was sent from.
    - **message** - The message content.
    - **charset** - The character set of the message (default is UTF-8, but 8-BIT and UTF-16BE Unicode are supported too)

- **code** - If the number the messages was sent to has a group code, it will be set here.

So for example, if someone sent a message to your number, 40000, and their number was +271113435662, their message was “Hello there!”, our server would make a request which looks like this to your server: