



RouteSms Messaging Platform



Overview

Routesms Messaging Platform™ (RMP) is built over Linux operating system . Routesms Messaging Platform can connect to various SMSCs via SMPP 3.4/3.5 protocols. This communication will be purely smpp based and client server architecture is followed in messaging platform. The client can manage the Routesms Messaging Platform with user friendly interfaces and achieve the functionalities of smpp server for handling the smooth SMS business.

Routesms Messaging Platform works as an SMS gateway for all GSM networks. It provides the vital SMS services totally based on SMPP3.4/SMPP3.5.

Routesms Messaging platform requires Linux operating system to be installed on the server where you want to run this messaging gateway.

Features of Routesms Messaging Platform™

- Work as both Pull and Push gateway
- Supports 7-bit and Unicode data
- Prefix based Routing to various destinations/countries.
- Supports delivery reports
- Log Monitoring user friendly web interfaces
- Commercial features also added for monitoring accounting information.
- Supports SMPP 3.4
- Support feature of adding multiple SMSC
- **Web client to send Single /Bulk sms.**
- Desktop client to send Single / Bulk sms
- Web admin interface to manage the server applications

System Architecture of Routesms Messaging Platform™

System Flow

- [Flow-I](#)
- [Flow-II](#)
- [Flow-III](#)

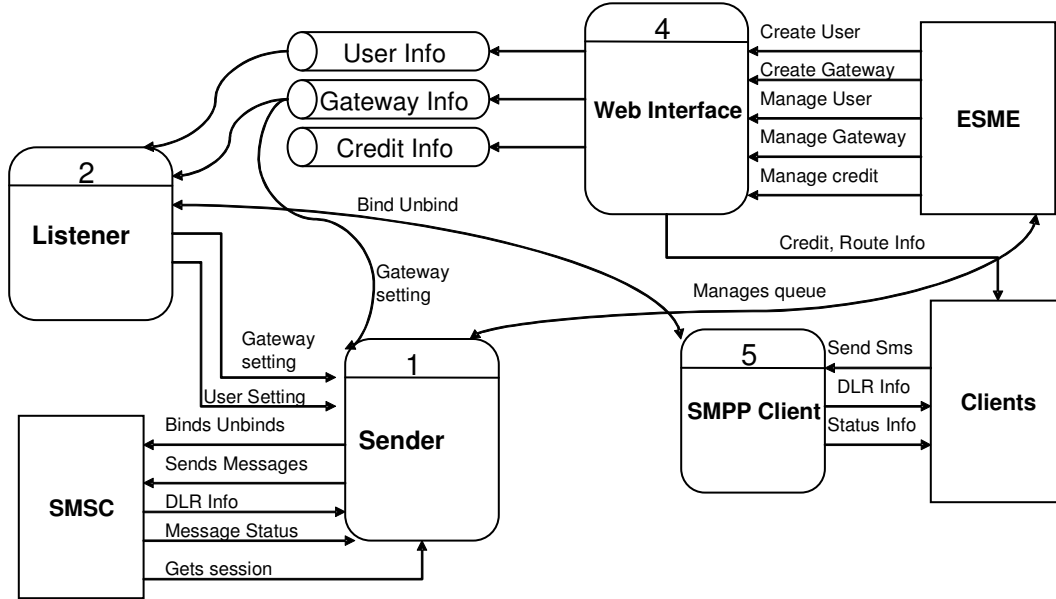
Flow-I

This provides the overall system interaction with the external agents and data that is passed between different functions that are interacting within the system. It also shows which data are stored in system that are required to manage and administer the system.

Listener , Sender are the utilities that interacts with the upstream smsc and Users who are configured with our service. Web interface is the GUI given to client for creating and managing users , gateways etc.



Routesms Messaging Platform



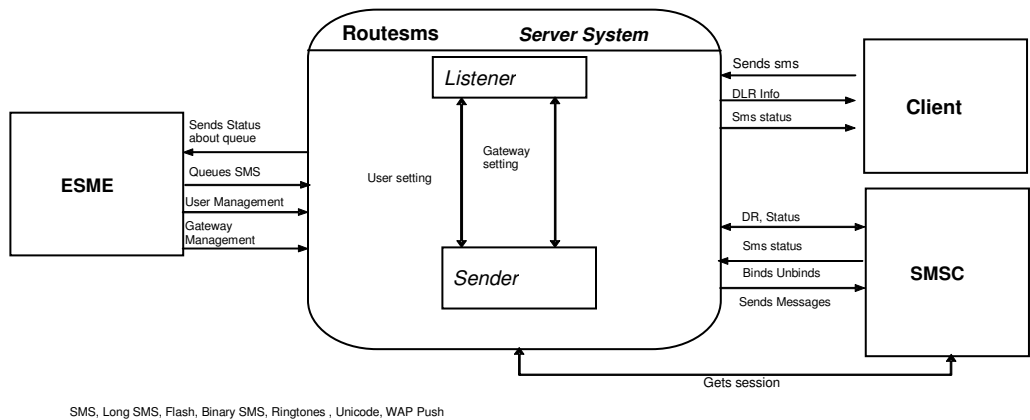
Flow-II

The system shows the external entities that interacts with the system and the functional units and their interaction within the system. This shows the overall Functional and Technical data that is passed between the system functions and the external agents that are outside the system. Here ESME Manages user and smsc details

This shows how the systems functional modules interacts with the external entities it also shows what type of data are passed in between them from one module to another module and the interaction in between them.

The data that is passed through system from the external entities are shown below.

System Functional & Technical Overview

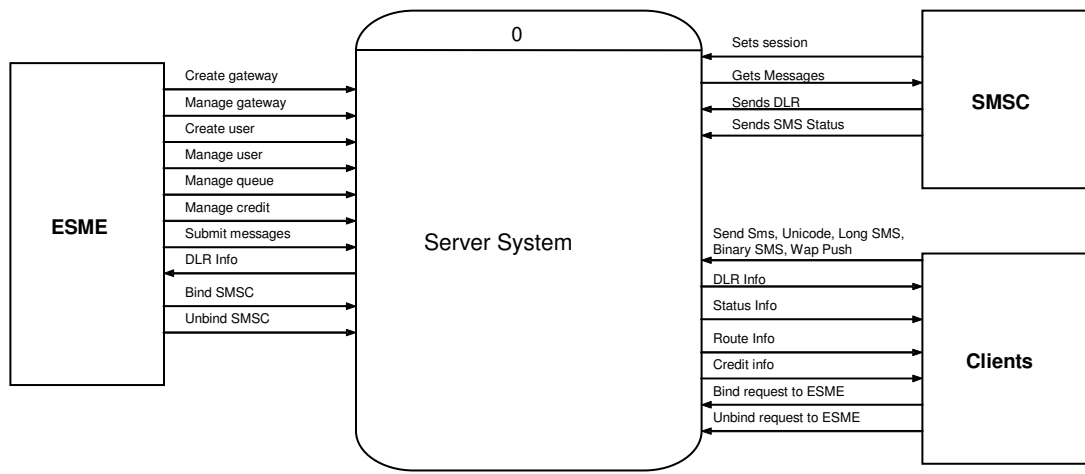




Flow-III

This is an overall system that shows how the system interacts with external entities over the server. The system interacts as ESME and SMSC with SMSC and Clients; it allows sending data through ESME through registered gateway for every registered client. The System gives DR to clients, it also manages gateway and user for the ESME, it acts as a gateway allowing only valid messages to be sent via Gateway to SMSC.

Context Diagram





Web Interface for Administration

The Routesms Messaging Platform WebAdmin module can read, parse and write the configuration file.

The Web Interface is an efficient and user-friendly way to manage users and gateways on SMPP Server and to generate MIS Reports.

The Routesms smpp server runs on a Linux platform and provides any easy methods to manage user and gateway creation, modification or deletion. One needs to be technically sound and particularly comfortable on the Linux platform for performing such functions. And even though one might possess the technical know-how to do so it still remains a tedious task and one which could easily lead to errors if one is not careful while doing it.

The Web Interface overcomes all these shortcomings and presents the user with a very friendly easy-to-use interface through which he could perform tasks of managing the gateway and users with relative ease.

One of the most compelling features of the Interface are that you need not know what's going on behind the scenes, i.e. a lay-man or a complete non-technical person with just about average knowledge of computers could run the show through the interface as a system administrator would do without it.

The Web Interface developed solely by Routesms. divides the user functions into two main categories as follows:

Administration:

The Administration part consists of management of users which itself encompasses user creation, modification and deletion, and gateway management which also comprises of the same activities.

Given below are the screen-shots of the Web Interface which would be self-explanatory.

User Management for Routesms SMPP platform:

User Management is the facility through which one can easily create the User configuration after which user can connect to the allotted service. From this user Management service the user's credit will be managed.

Username and password for the user is created from this service. Gateway routing is assigned to user from this service.

User Management	
User Name	<input type="text"/>
Password	<input type="password"/>
Confirm Password	<input type="password"/>
Company	<input type="text"/>
Credit To Add	<input type="text"/>
Credit Alloted	<input type="text"/>
Contact Person	<input type="text"/>
Credit Balance	<input type="text"/>
Route	<input type="text" value="g01"/>
<input type="button" value="Submit"/> <input type="button" value="Reset"/>	

Users								
User Name	Company	Credit Allotted	Contact Person	Balance	Credit Used	Route	Modify	Delete
testweb1	Routesms	60	Routesms	41	19	g02	Modify	Delete
testweb2	Routesms	10	Routesms	10	0	g02	Modify	Delete



Gateway Management on Routesms SMPP Platform

Gateway management module is given for managing multiple gateway's which will connect to upstream smsc. Here IP Address, port, username, password, ton, npi and other settings related to Upstream smsc can be handled in this module. addition, modification and deletion of gateways are provided.

Gateway Management	
Route Id	<input type="text"/>
Gateway Name	<input type="text"/>
User Name	<input type="text"/>
Password	<input type="text"/>
IP Address	<input type="text"/>
Port	<input type="text"/>
Source Ton	<input type="text"/>
Source Npi	<input type="text"/>
Destination Ton	<input type="text"/>
Destination Npi	<input type="text"/>
Enquire Interval	<input type="text"/>
<input type="button" value="Submit"/> <input type="button" value="Reset"/>	

Gateways										
Route Id	Gateway Name	IP Address	Port Number	Source Ton	Source Npi	Destination Ton	Destination Npi	Enquire Interval	Modify	Delete
g01	g01	202.63.160.92	2345	1	0	1	1	60	Modify	Delete
g02	g02	202.63.160.92	2345	0	1	1	1	60	Modify	Delete



MIS Reports:

The reports part consists of various reports of client usage of the Routesms smpp server, such as daily stats, log of messages sent on a specific day, date or month, logs of delivery messages, sender specific logs, user specific logs and other such data that could be of utmost importance for the management.

Daily Statistics Report

Daily statistics report provides the current day count of sms sent. This report will show the userwise sms sent for the current day.

Stats Report for August 23, 2006			
Users	Balance	Route	Total Messages Sent
testweb2	10	smpp_g35 : 3	3
Total Messages Sent			3

Delivery Report for selected user and sender for selected date

Log For : 2006-8-24

User	testweb1
Sender	4884
Route	g02
Total Messages	4

[Export to Excel](#)

Delievery Log Report							
No.	Mobile	Message ID	Gateway	Sender	Submit Date	Done Date	Status
1	306948789588	RTS238194046	g02	4884	2006-08-24 19:05:00	2006-08-24 19:50:00	DELIVRD
2	306948789588	RTS238194046	g02	4884	2006-08-24 19:05:00	2006-08-24 19:50:00	DELIVRD
3	306948789588	RTS238194046	g02	4884	2006-08-24 19:05:00	2006-08-24 19:50:00	DELIVRD
4	306948789588	RTS238194046	g02	4884	2006-08-24 19:05:00	2006-08-24 19:50:00	DELIVRD
4 record(s) Found - Page 1 of 1							

The above report provides information about the delivery report of the selected user ,this Report is basically gives the Delivery status , submit date , done date , which gateway its submitted

This report is very helpful for taking decisions in the allocating routing.



Log Report For Selected user, sender and specific date

Log for : 2006-8-24

User	testweb1
Sender	test
Route	g02
Total Messages	2

[Export to Excel](#)

Sms Log Report					
No.	Mobile	Message	SMSC	Sender	Date
1	919869233956	Testing chars	smpp_g02	test	2006-08-24 20:08:45
2	919869233956	Testing chars	smpp_g02	test	2006-08-24 20:09:39
2 record(s) Found - Page 1 of 1					

The above report provides information about the delivery report of the selected user ,this Report is basically gives the Delivery status , submit date , done date , which gateway its submitted

This report is very helpful for taking decisions in the allocating routing.

SMSC wise Month Summary Report

Report For August 2006

[View Report](#)

Log for : August 2006

Date and SMSC Wise Month Report		
Date	SMSC Wise Count	Total Messages Sent
2006-08-31	smpp_g01 : 5	5
2006-08-30	smpp_g31 : 10 smpp_g35 : 9 smpp_g01 : 5	24
2006-08-29	smpp_g31 : 16 smpp_g35 : 12	28
2006-08-28	smpp_g35 : 1	1
2006-08-26	smpp_g35 : 10 smpp_g31 : 2	12
2006-08-25	smpp_g35 : 31 smpp_g31 : 21	52
2006-08-24	smpp_g31 : 17 smpp_g35 : 8	25
2006-08-23	smpp_g31 : 16 smpp_g35 : 19	35
2006-08-22	smpp_g35 : 2	2
2006-08-21	smpp_g35 : 4	4
2006-08-17	smpp_g35 : 3	3
Total Messages Sent		191

The above Report is very helpful in management point of view . This report gives us the summary count of all the messages sent on various gateways configured in the system. This report is very useful for cross checking with the submitted count at gateway.

User and Date-wise Month Summary Report		
Date	User Wise Count	Total Messages Sent
2006-08-31	testweb8:5	5
2006-08-30	testweb8:5 testweb19 : 10 testweb12 : 3 testweb5 : 6	24
2006-08-29	testweb5:2 testweb16 : 2 testweb12 : 10 testweb19 : 14	28
2006-08-28	testweb6:1	1
2006-08-26	testweb14:10 testweb18 : 1 testweb16 : 1	12
2006-08-25	testweb12:25 testweb14 : 19 testweb16 : 8	52
2006-08-24	testweb9:2 testweb16 : 17 testweb12 : 2 testweb5 : 1 testweb10 : 3	25
2006-08-23	testweb2:3 testweb10 : 16 testweb16 : 16	35
2006-08-22	testweb2:2	2
2006-08-21	testweb2:4	4
2006-08-17	testweb10:3	3
Total Messages		191

The above Report is very helpful in management point of view . This report gives us the summary count of all the messages sent by various Users configured in the system. This report is very useful for cross checking with the submitted count at gateway.



User Wise Summary Report for USER testweb2 for the month of August '06

User-wise Month Summary Report			
Client Name	testweb2		
Report For	August	2006	
View Report			

Report for testweb2 for August 2006

User-wise Month Summary Report			
Serial No	Date	SMSC	Messages
1	2006-08-23	smpp_g35	3
2	2006-08-22	smpp_g35	2
3	2006-08-21	smpp_g35	4
Total Messages			9

The above report gets date wise count for the selected user for the selected month. This report is also very useful to cross check the actual submission to the smsc.



Web Client Interface

The Routesms Messaging Platform WebClient can be used to send single , bulk and group sms ,view credit details and log reports.

Client Login : Enter Username and password for logging to the web client ,only the authorized user is allowed to access the system.

The image shows a login form titled "Login". It contains two input fields: "Username" and "Password". Below the fields is a "Login" button. Two blue callout boxes point to the input fields. The first callout points to the Username field and contains the text "Enter username (max 8 character)". The second callout points to the Password field and contains the text "Enter password (max 8 character)".



Single SMS : sends single or more than one messages with Mobile nos. separated by commas in the Number Fields

Welcome : tester100

- Single SMS
- Bulk SMS
- Group SMS
- Credit Details
- Month Summary
- Address Book
- Logout

Send Single Sms

Number	<input type="text"/>
Sender	<input type="text"/>
Message Type	Text <input type="button" value="v"/>
Message	<input type="text"/>
Characters :	

Submit Reset

Mobile number with Country code.

Source Address/ Sender ID.

Select appropriate type for the message.

Enter message content here.



Bulk SMS : To send a single message to multiple mobile nos. just upload the file (.txt or csv) containing mobile numbers. The file must contain only mobile numbers with each mobile nos. on the new line .

The message can also be scheduled by checking the schedule option and selecting the Date and Time at which the message should schedule.

The screenshot shows the 'Send Bulk Sms' interface. On the left is a navigation menu with buttons for 'Single SMS', 'Bulk SMS', 'Group SMS', 'Credit Details', 'Month Summary', 'Address Book', and 'Logout'. The main form includes:

- 'Attach Cell No File': A text input field with a 'Browse...' button. Callout: 'Select a text or CSV file.'
- 'Sender': A text input field. Callout: 'Source Address/ Sender ID.'
- 'Message Type': A dropdown menu currently set to 'Text'. Callout: 'Select appropriate type for the message.'
- 'Message': A large text area for entering the message content. Callout: 'Enter message content here.'
- 'Characters': A dropdown menu showing '(GMT+05:30) Calcutta, Chennai, Mumbai, New Delhi'. Callout: 'Select your local time zone.'
- 'Schedule': A checkbox and a date/time picker. Callout: 'Select schedule date and time for the message.'
- 'Submit' and 'Reset' buttons at the bottom.



Group SMS : To send the message to the person added in the address book , just click on the address book button and select the person name or the Distribution list name to send the message and click on Import. Enter the sender ,select the message type , enter the Message and schedule the message to be sent.

Welcome : tester100

Send Group Sms

Name: Address Book

Sender: [Text Field]

Message Type: Text

Message: [Text Area]

Characters: [Text Field]

Schedule: (GMT+05:30) Calcutta, Chennai, Mumbai, New Delhi

Submit Reset

Callout boxes:

- Select Mobile number from address Book
- Source Address/ Sender ID.
- Select appropriate type for the message.
- Enter message content here.
- Select your local time zone.
- Select schedule date and time for the message.

Address Book

Business

Name	Mobile No	
test1	98787656	<input checked="" type="checkbox"/>

Distribution List

DList

Import

Callout boxes:

- Select Group from address Book
- Select Name from address Book
- Select distribution list from address Book



Credit Details : The credit details page shows the credit details for the user such as credit allotted, credit used and the Balance.

Welcome : tester100

- Single SMS
- Bulk SMS
- Group SMS
- Credit Details
- Month Summary
- Address Book
- Logout

Credit Details for tester100 as of November 7, 2007	
User	tester100
Credit Alloted	200
Credit Used	104
Balance	96

Credits details of the user



Month Summary Report : shows the Monthly Log Reports to the user for the selected month and the year.

The reports is displayed datewise and the total number of message sent on the respective date can be viewed in this report.

Welcome : tester100

- Single SMS
- Bulk SMS
- Group SMS
- Credit Details
- Month Summary
- Address Book
- Logout

Monthly Summary Report

Report For: November 2007

[View Report](#)

Select Month and year to view Summary Report.

Welcome : tester100

- Single SMS
- Bulk SMS
- Group SMS
- Credit Details
- Month Summary
- Address Book
- Logout

Log for : November - 2007

Monthly Summary Report	
Date	Total Messages Sent
2007-11-07	1
Total Messages	1

Datewise messages sent.



Address Book : The address book feature allows you to store and manage your contacts. You can create Groups and Distribution Lists here. In a group you can store contacts whereas in distribution lists you can store numbers.

The screenshot shows the 'Distribution List' management page. On the left is a navigation menu with options: Single SMS, Bulk SMS, Group SMS, Credit Details, Month Summary, Address Book, and Logout. The main content area includes:

- Add Group:** A form with a 'Group' input field and an 'Add Group' button. A callout box points to this section with the text: "Create group by entering the group name."
- Add User:** A form with 'Name' and 'Mobile No.' input fields and an 'Add User' button. A callout box points to this section with the text: "Enter name and mobile no. to add to the selected group"
- List of Groups:** A dropdown menu currently showing 'Business'. Below it are 'Delete Group' and 'Import' buttons. A callout box points to this section with the text: "List of groups added"
- Table:** A table with columns 'Name', 'Mobile No', and 'Delete'. It contains one row: 'test1', '98787656', and a 'Delete' link. A callout box points to the 'Delete' link with the text: "Displays the name and mobile no. in the selected group."

Additional callout boxes at the bottom of the page include:

- "delete group." pointing to the 'Delete Group' button.
- "Create group by entering the group name." pointing to the 'Add Group' button.



Distribution List : To create a distribution list enter the name for the distribution list and click create button. Then fill in the list with the numbers, for the respective distribution list created previously again the numbers are supposed to be in the line separated format.

The screenshot shows the 'DISTRIBUTION LIST' management interface. On the left is a navigation menu with buttons for 'Single SMS', 'Bulk SMS', 'Group SMS', 'Credit Details', 'Month Summary', 'Address Book', and 'Logout'. The main area is titled 'DISTRIBUTION LIST' and contains a table with columns for 'DList', 'Mobile Number', and 'Action'. The 'DList' column has a dropdown menu. The 'Mobile Number' column contains two entries: '956568545' and '954747474'. The 'Action' column has 'Delete' and 'Import' buttons. A 'Create' button is located below the table. A red instruction reads 'Enter Mobile Number one below the other'. A blue callout bubble points to the 'DList' dropdown with the text 'Shows distribution lists created previously'. Another blue callout bubble points to the 'Create' button with the text 'Create new Distribution List here'. A third blue callout bubble points to the 'Delete' button in the 'Action' column with the text 'Delete mobile no. in the particular distribution list'. A fourth blue callout bubble points to the 'Mobile Number' column with the text 'Enter mobile nos. to add to distribution list'.



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