SendQuick Server 3.0
Licensing Agreement and
Administration User Manual

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sendQuick Server 3.0

Administration User Manual

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SENDQUICK SERVER 3.0 ADMINISTRATION USER MANUAL

1.0 INTRODUCTION

Welcome to sendQuick Server 3.0 Administration User Manual. This document is prepared for the administrator, as a guide for configuring the sendQuick SMS Server for sending and receiving SMS.

The Administrator will configure the sendQuick Server for it to work in your company's network to send and receive SMS. The Administrator will need to work on the network configuration first, which is the Server Set-up. Once you had configured the IP address and the relevant network set-up, you can access sendQuick from any workstations using a web browser.

This manual is a consolidated document for all sendQuick servers. Therefore, some of the items are found in some sendQuick models. There will be an indication on the features of they are not applicable for some of the models.

2.0 SET-UP PROCEDURE

The sendQuick Server is designed to be set-up and configured easily. It will save you time and resources and enable your corporation to have a SMS server within 10 - 20 minutes.

The following are the steps to set-up the system fully.

1. Connect the power supply and monitor to the system
2. Power-up the system and wait for the system to be fully started (the IP routing table shown on the monitor. Refer to section 5.0)
3. Connect a cross cable to E1, launch a web browser and access via the default IP 192.168.1.8. Login using the **username: admin** and **password: admin123**
4. Configure the Server Set-up (IP address and others)
5. Configure the SMS System Set-up.
6. Plug in the ethernet (LAN) cable
7. Connect the GSM modem and insert the SIM card in the modem

You will be ready to send and receive SMS messages when you have performed the steps above.

> **Note:** Get assistance from your system administrator if you do not have the IP addresses for the server and gateway.

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3.0 SET-UP AND CONFIGURATION

3.1 Physical Connections

The first step in configuring the sendQuick Server is to establish all the physical connections. This includes power cable, modem connection (USB or serial), SIM card, keyboard (optional), mouse (optional) and monitor. The ethernet (LAN) connection will be connected at a later stage (we will advise you in this document) after the Server Set-up is completed.

> **Note:** We suggest that you connect the ethernet (LAN) later as the default IP setting (192.168.1.8) may conflict with your existing network.

3.2 Log-in Procedures

After completing the physical connections, you can power-up the system and let the system activate the program. After the activation process, you will see the IP routing information on the monitor. This means that the system is fully started.

Connect a cross-cable to E1, use a web browser to access IP: 192.168.1.8 and you will see the web login page as shown in Figure 1 below.

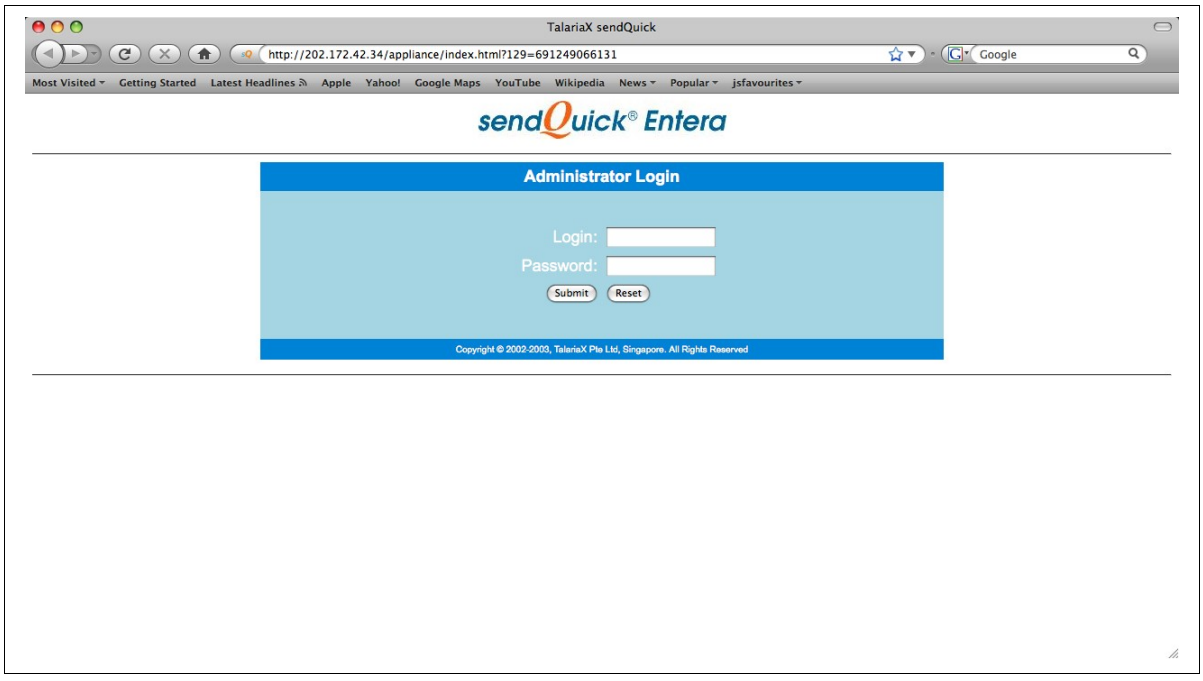

Figure 1: Web Administrator Log-in Page

Enter the default Administrator's Log-in Name and Password to access the system. The default Log-in Name and Password is as below:

Log-in Name: admin **Password:** admin123

You can change the password by using the change password button after logging-in. The procedure to change password is explained in Section 3.16.

3.3 Server Set-up

After log-in (as in Section 3.2), you will see the interface as shown in Figure 2 below:

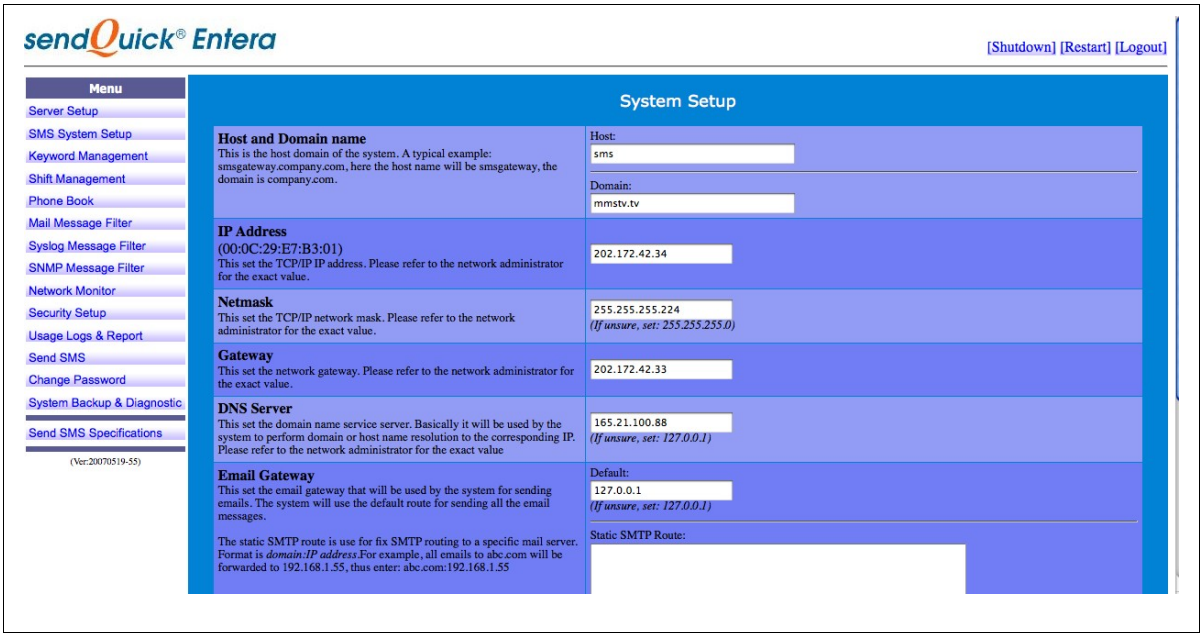

Figure 2: Server Set-up

On the left is the navigation (Menu) bar for the sendQuick server. At the bottom of the Menu Bar, you will see the version number of the sendQuick software. You can choose to configure the items and the description are as follow:

(a) Server Set-up
- to prepare and configure the server to connect to the network in a proper manner

(b) SMS System Set-up
- to configure the system on how to send and receive messages, as well as how to interface with external application for receiving SMS messages

(c) Keyword Management
- to perform the incoming SMS message routing based on the keyword table

(d) Shift Management and Phone Book
- to create shifts and phone book for filter rules usage

(e) Mail Message Filter
- to perform the Email Filter configuration for selective SMS messaging based on configured rules

(f) SNMP Message Filter
- to perform the SNMP Trap Filter configuration for selective SMS messaging based on configured rules

(g) Syslog Message Filter
- to perform the Syslog Message Filter configuration for selective SMS messaging based on configured rules

(h) Network Monitor
- to perform the ICMP Ping, Port Check and URL Check for monitoring IP address and send SMS when IP is unavailable and restored

(i) Security Setup

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- to configure the permission for certain IP addresses that are allowed to send SMS messages for sendQuick server

(j) Log & Usage Report

- to view the logs of the system and messages (sent, received, failed and in progress)

(k) System Backup and Diagnostic

- to backup and restore the configuration settings as well as generating diagnostic file

(l) Send SMS

- perform sending SMS for testing or for mass SMS sending

(m) Change Password

- change the default log-in password in the system

(n) Send SMS Specifications

- these are the specifications and format to send messages to sendQuick server.

We will start explaining on the Server Set-up first. The **Server Set-up** is the default view of the system when log-in successfully. You can configure the following items in the Server Setup.

(a) Server Host and Domain

- The server hostname is the name assigned for the server. This can be of any name, like 'sendquick', or use a name that is related to your company. Domain is the registered domain in your network, eg: company.com.sg. Use a valid name if you have a DNS to do name resolution.

(b) Server IP Address

- This is the IP address assigned to the sendQuick server. You can use an internal or public IP, depending on your network configuration. This IP is used to identify the server and will be used in all communications between sendQuick and external applications as mentioned in Section 3.11. The default IP is 192.168.1.8.

(c) Netmask

This is the subnet mask value of the network. This defines the network that you are connected to. Most networks use 255.255.255.0. This has been set as the default value in the system.

(d) Gateway IP Address

Gateway IP refers to the IP address of your machine that does routing to other machines in another network. For most networks, it refers to your router's IP address.

(e) DNS Server IP Address

DNS Server refers to machines that will resolve a valid hostname and domain name. This is usually a server that is connected to the Internet with the capability to update the hostname via the public Internet or via an internal network (for internal DNS). If you do not have a DNS server, set the IP to 127.0.0.1. This allows the sendQuick to obtain updates from Internet periodically. ***Note: If you are using a firewall, please configure your firewall to allow UDP connection (port 53) as DNS server (127.0.0.1) uses UDP for data update.***

(f) Email Gateway IP Address

Email Gateway refers to the SMTP server that will send email out to the Internet. If you have an email server in your office or you are allowed to use an email SMTP gateway on the Internet, use that IP in the sendQuick server. Else, insert 127.0.0.1 to use the internal SMTP in sendQuick server. (See Section 3.10 on security on using this SMTP gateway). You can also fix the SMTP static routing in the table space provided. If you are using Exchange/LotusNotes as your SMTP, please configure the DNS to assign a valid domain as well as the MX record (in Exchange/Lotus) for proper SMTP routing.

(g) Check to use Hostname for all emails

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By checking on this field, all emails that sent out from the sendQuick server (like failure notice, incoming SMS, etc) will bear the Hostname that you had configured in the Hostname section in the Server Set-Up.

(h) Setup DNS Server

The sendQuick Entera can be configured to function as a DNS server. This is very useful if companies do not have an internal DNS server in their infrastructure. This DNS configuration allows the company to set-up and assign a domain internally. This DNS can only be set-up with one (1) domain and can support multiple subdomain. Referring to Figure 4, you can set the email routing information (MX record) as well as the subdomain mapping to the respective IP address.

(i) Optional Network Server

The sendQuick can support up to four (4) network ports. This section allows for configuring the other network ports, assign the data transfer speed and the web server port configuration (Figure 5 and 6)

(i) Server Time Configuration

The server time is configured manually or automatically updated with a web server that is synchronised with a NTP (Figure 7)

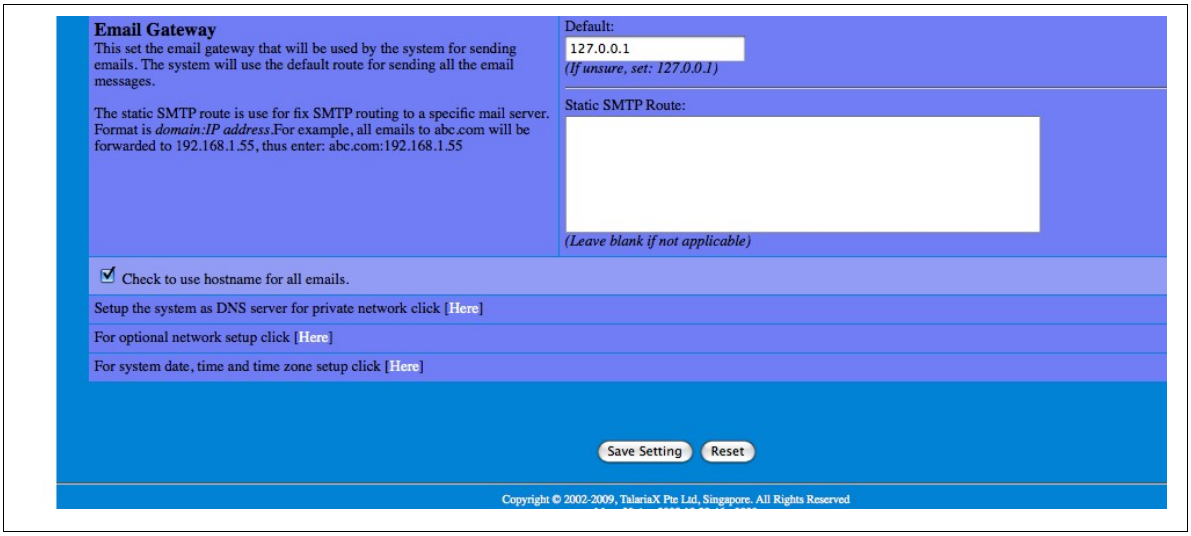

Figure 3: Server Setup 2

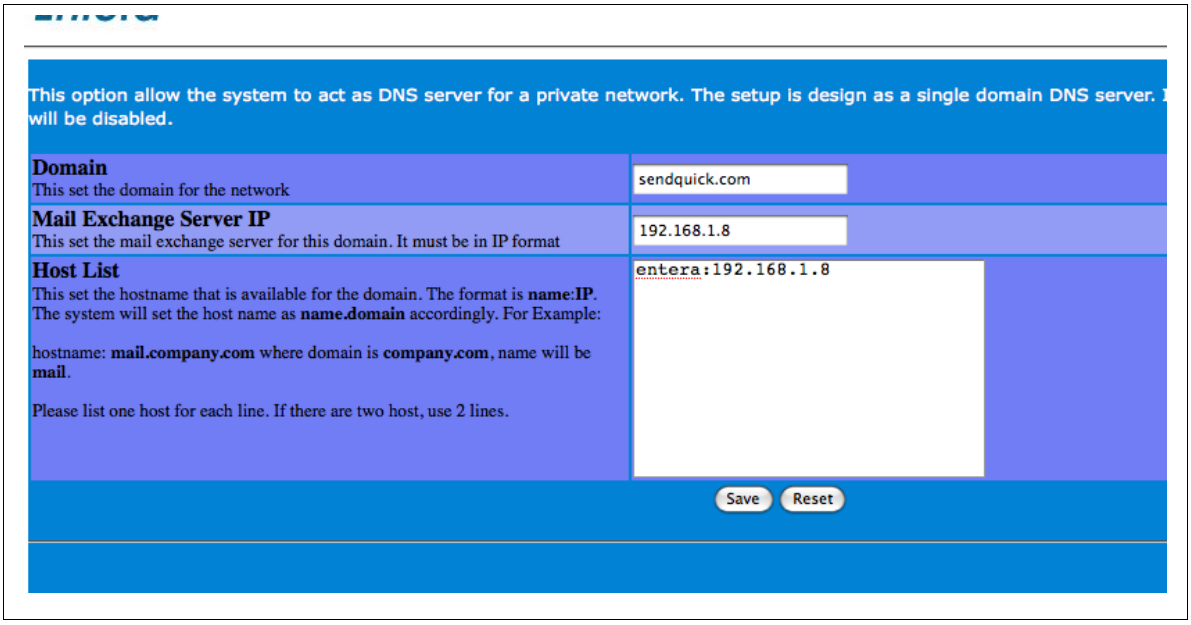

Figure 4: DNS Domain Name Setup

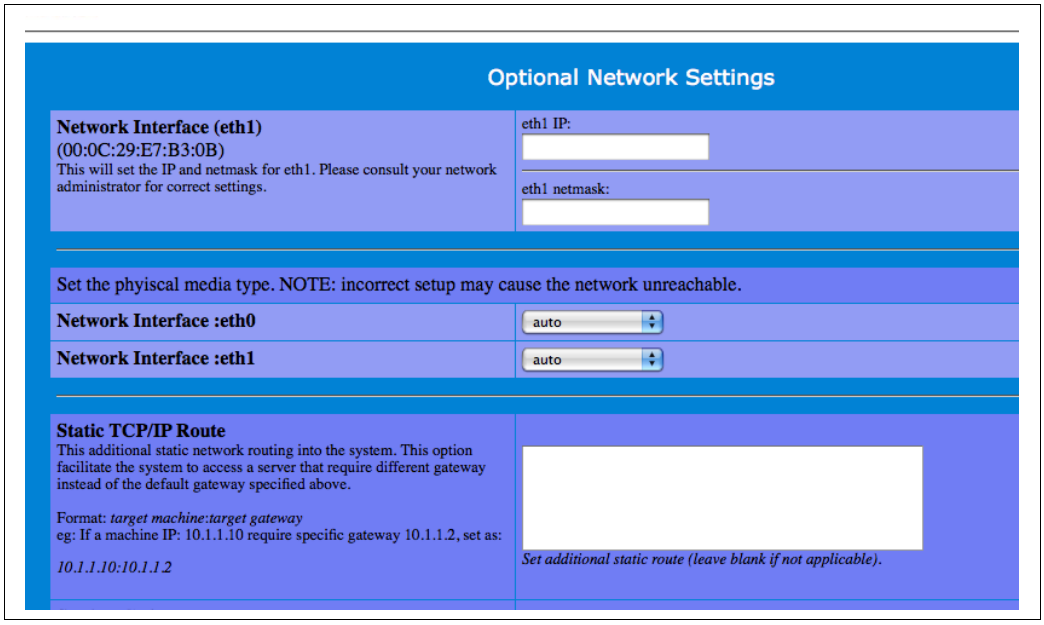

Figure 5: Optional Network Setup

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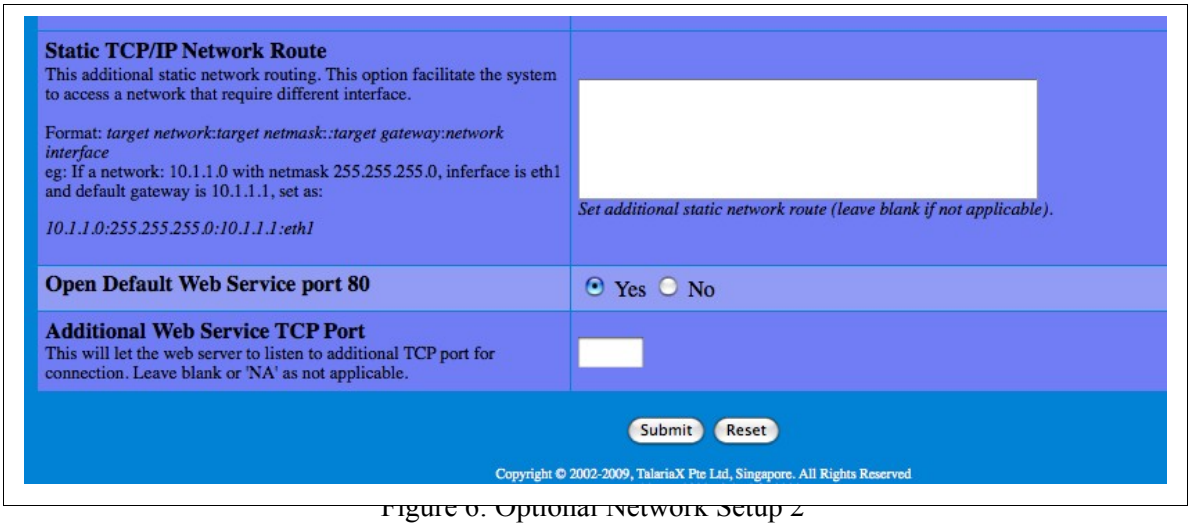

Figure 6: Optional Network Setup 2

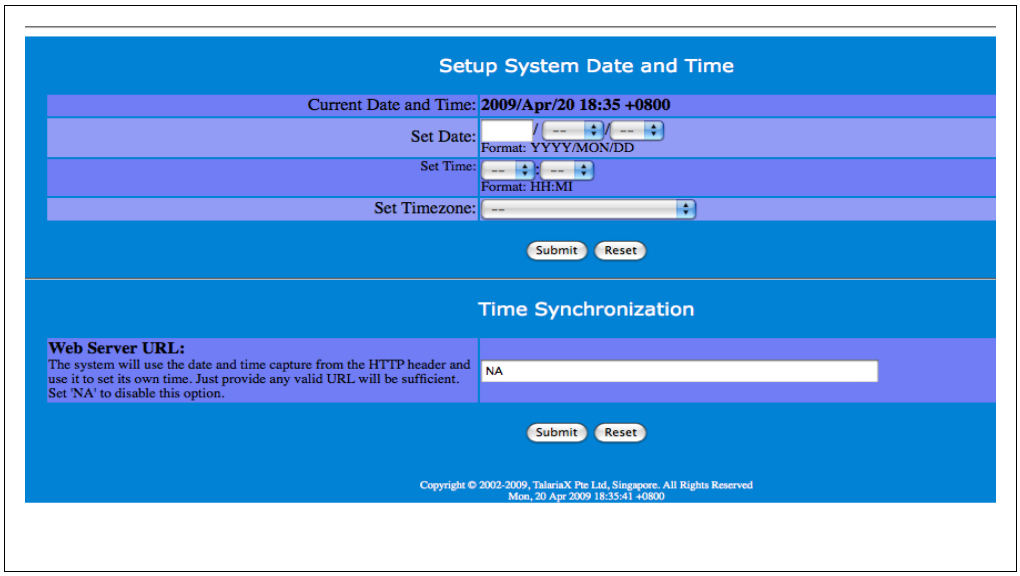

Figure 7: Server Time Setup

When you have completed the server set-up, select the **'Save Setting'** button. The server setting will be saved into the system with the new IP address provided. However, this does not activate the server with the new IP address. To activate, you will need to select the **'Activate Setting'** button. After activation, you will be prompted to login to the system again. Selecting the Activate Setting button ensures the changes had been fully activated in the server.

After this configuration, you can choose to access the server from other computers on your network and not directly from the server. If you wish to do so, just perform the following steps:

Action:

1. Activate your Internet browser (either Microsoft Internet Explorer or Netscape)
2. Type in http://the new IP address. If your new IP is 192.168.1.8, you should access http://192.168.1.8
3. You should see a screen as depicted in Figure 1.

> **Note:** Please remember to plug-in the ethernet (LAN) cable before you access the server via the network. You can connect the ethernet cable to the server now.

3.4 SMS System Set-up

SMS System Set-up refers to how the modem is connected and how the sendQuick server interacts with your applications, for sending and receiving SMS. There are 9 main items that need to be configured. These items are shown in Figure 8, 9 and 10 below. They items to be configured are:

(i) Modem connection and message format (for e-mail)
The default modem connection is USB connection and you need to select the number of modems to be activated (license fee applicable). Then, select how the e-mail to SMS message is sent (with sender's address, subject matter or message body) as well as the number of SMS per e-mail message, if the message is longer than 160 characters. If it is longer than 160 characters, it will be truncated and sent as multiple SMS if you select to send more than 1 SMS per e-mail. Messages can be combined as long SMS (concantenated SMS) if it is selected. Do note that the ability to display long message format is phone dependant.

(ii) SMS to Email Function
The administrator can Enable the SMS to Email service by checking on the box provided. This will allow all users to send email via the SMS message. The format to send is: ***EM<space>Recipient Email Address<space>Message Content****. Send this SMS (in the format stated) to your SIM card number attached to the server. This SMS message will be converted to an email message and sent to the intended recipient.*

(iii) Service Activation/Deactivation
The administrator can Enable and Disable the services (E-mail to SMS, HTTP-to-SMS and FTP to SMS) if required. This can be used as a form of security and control measure. The messaging format is explained in Section 3.11.

(iv) Error SMS Messages Handling
When there is an error SMS message or if the message is not sent, the sendQuick server will inform the sender via HTTP Post or E-mail. Please specify the HTTP URL address or e-mail address for this purpose. You can enter multiple email address by entering one (1) email per line.

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(v) Modem Language

*This is to set the GSM modem to **receive** the messages in the desired language. Currently, sendQuick only support 2 language types (ASCII and UTF-8 language). Please select the language that you wish.*

(vi) Messaging Threshold Setting

This features allow the administrator to be alerted if there are more than X number of messages in the SMS queue. The alerts can be via email or SMS. The messages to be sent (when threshold exceeded and back to normal) is configurable. To disable, set it to 0.

(vii) Received SMS Messages Handling

When there is a SMS message received by the server (incoming SMS message), the sendQuick server will inform the recipient via HTTP Post or E-mail. Please specify the HTTP URL address or e-mail address for this purpose.

(viii) SMS Reply for Unmatched Keyword

This function is to send an automated SMS reply (with the text in the text box) if the incoming SMS does not match any keyword. Keyword is defined as the first word in the incoming SMS messages and described in Section 3.5.

(ix) View Modem Status, Virtual Routing and Message Respool Checker.

This section will indicate whether the GSM modem is connected and detected by sendQuick server. It also allows for the configuration of virtual routing to send SMS with a different modem and message retry functions. This is shown in Figure 11, 12 and 13 below.

Note:	When you switch between USB and Serial connection and vice versa, please remember to shutdown the server, connect the relevant modem and restart the server. You need to restart the server as sendQuick may not be able to detect the modem properly. This is more evident in the USB modem.

For receiving messages (either Error or SMS Response Messages) you can use both HTTP Post/Get and E-mail methods. The error HTTP string will be as follow:

http://<failure_url>?mno=91234567&txt=Hello+World&status=F
Where:
mno -- the mobile phone number
txt -- the text message
status – F (failure)

The Received Messages (SMS Response) string is explained in Section 3.14.

To complete the System Set-up, fill in the information in the spaces provided as shown in Figure 8, 9 and 10 below.

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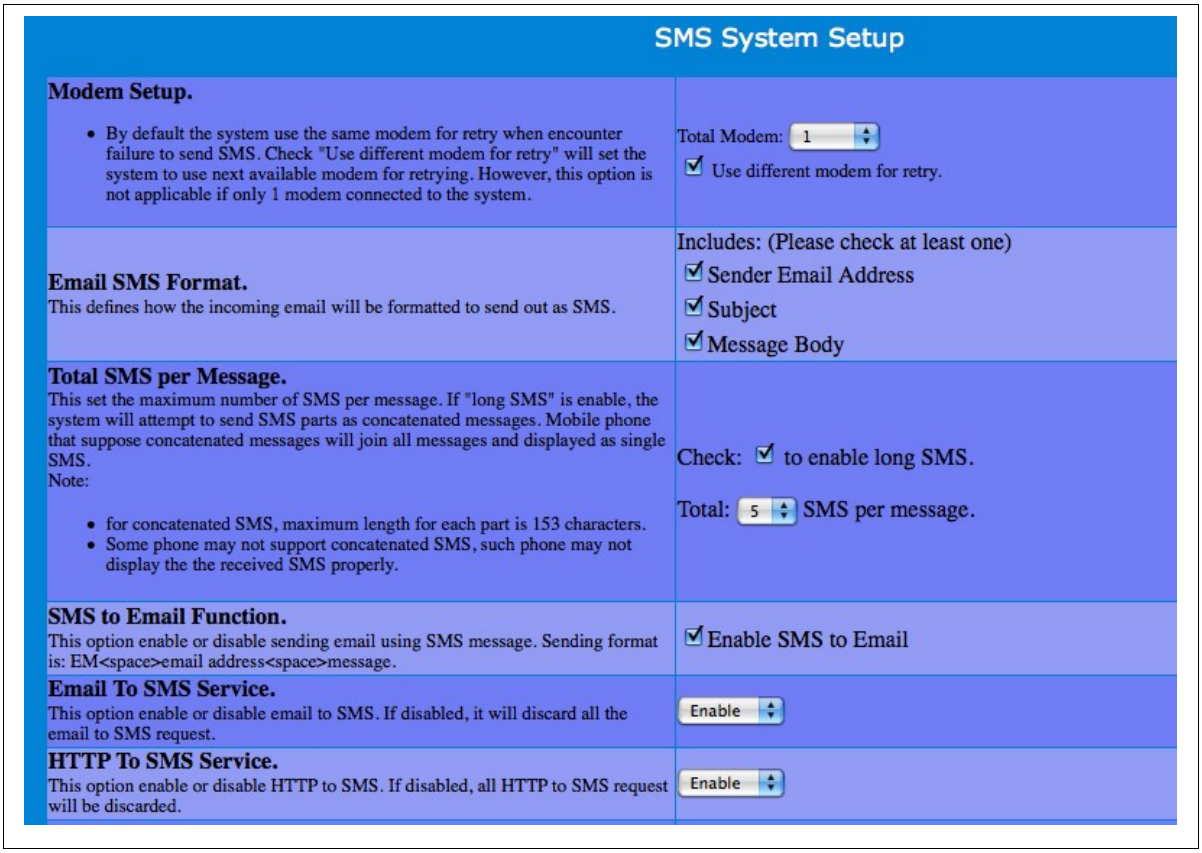

Figure 8: Modem and Service Activation Setting

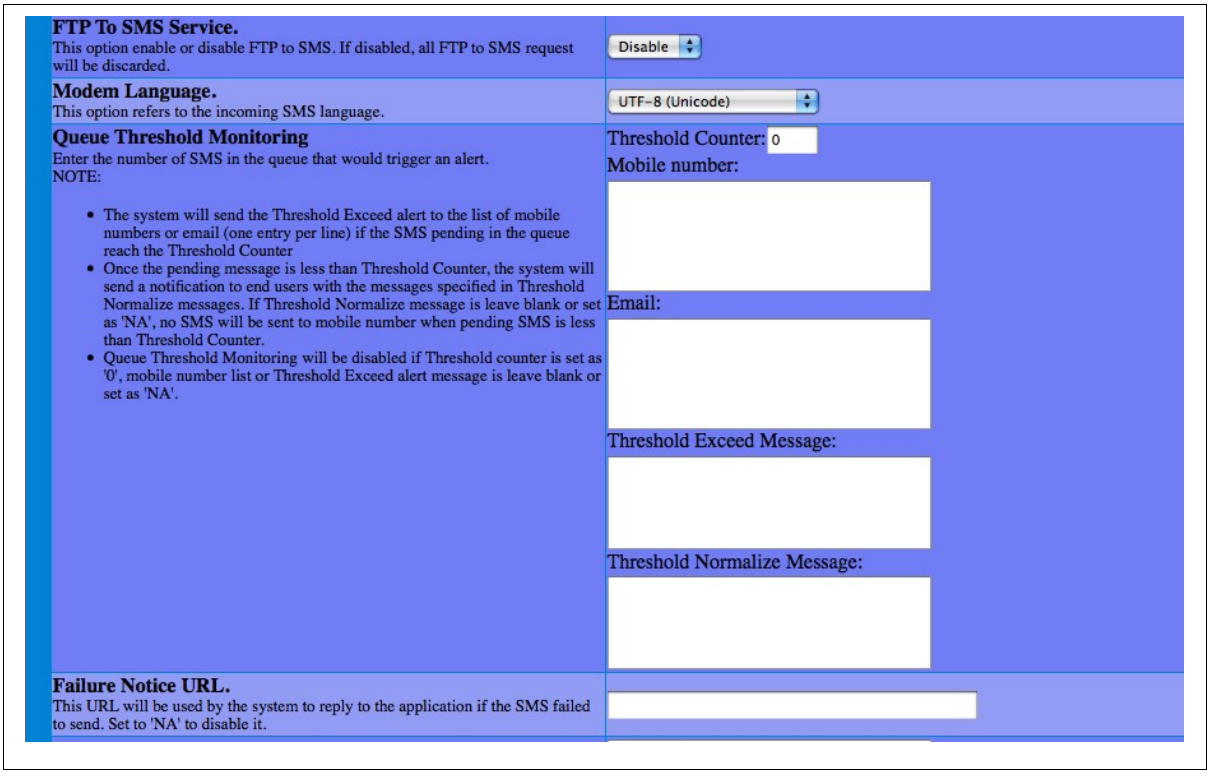

Figure 9: Threshold Setting

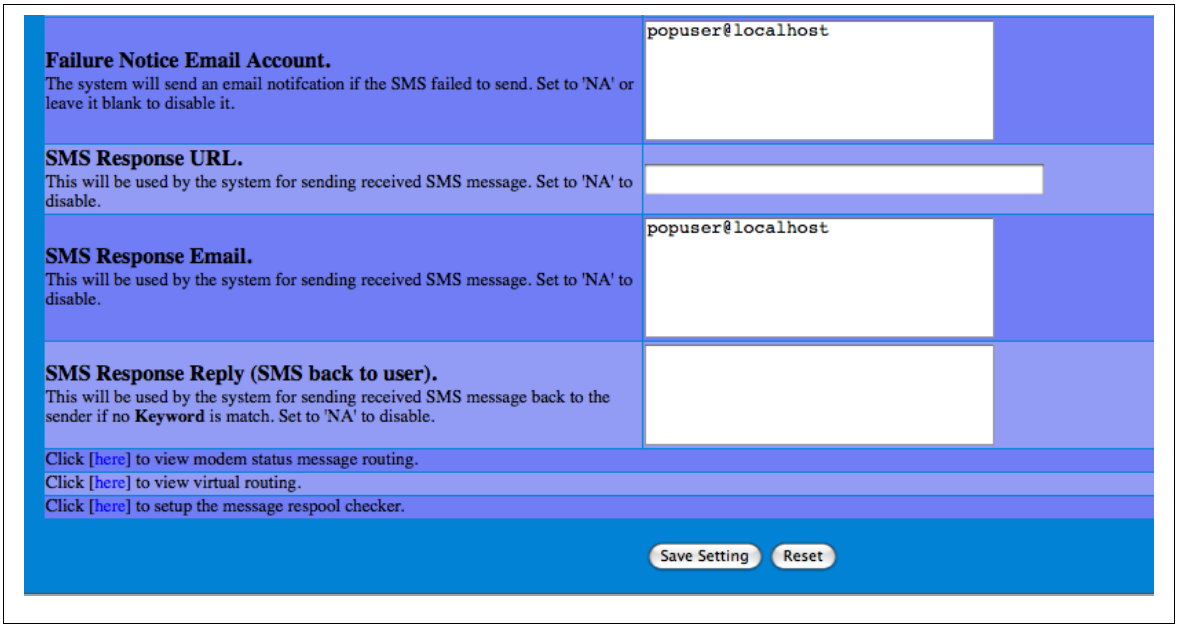

Figure 10: Failure and Receives SMS Setting

Figure 11 below shows the modem task detection as well as the modem routing information. On the left, you will see the task name (sms-dev1) and the items like SMSC number, IMEI number, Telco network and signal strength is displayed. If you see a modem status as in Figure 11, the modem is detected. Otherwise, modem is not detected.

On the right hand side is the modem routing information. You can send SMS by choosing a specific modem by domain name, mobile prefix or modem label. Incoming SMS can be processed specifically to an email (Response Email) or URL (Response URL). You can also designate which modem is the default modem or select any modem that is available to send SMS.

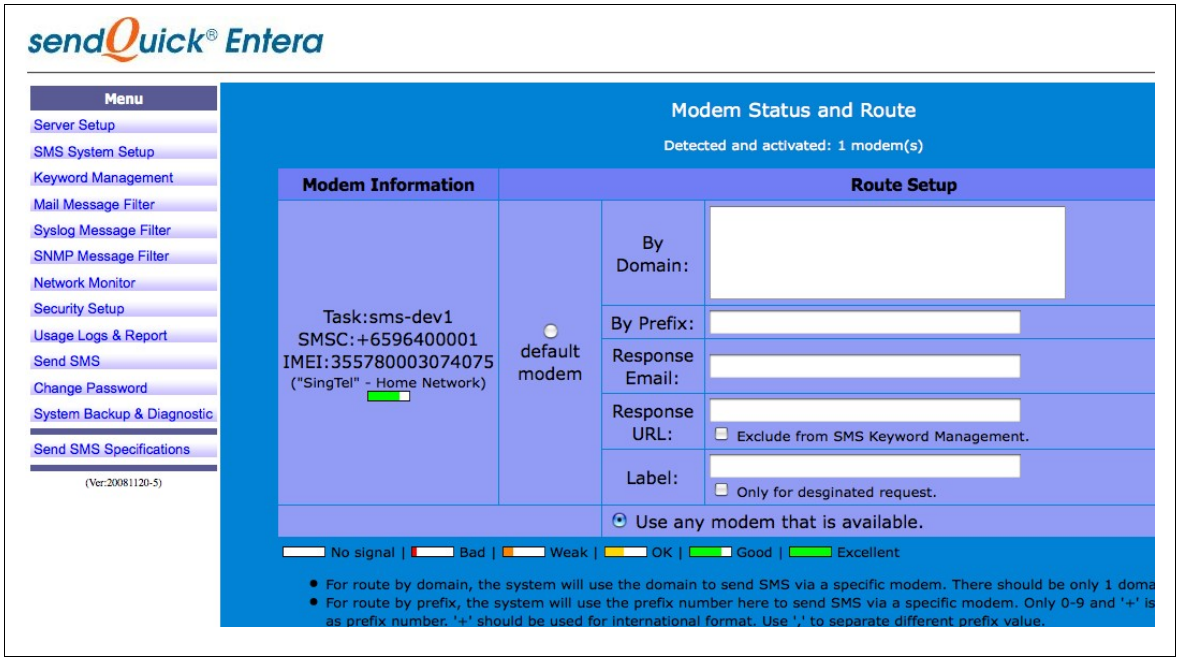

Figure 11: Modem Status

The Virtual Modem routing allows two (2) sendQuick servers to share the modem to send and receive SMS. This is particularly useful if the sendQuick servers are located in different geographical region (different countries) and they can be used to send SMS locally in their own country.

Basically, virtual modem allows a message to be routed and sent via different sendQuick server by filtering based on the mobile number (pre-fix). Figure 12 below shows a summary of virtual modem routing for different prefix number via different server. The configuration page is shown in Figure 13 below.

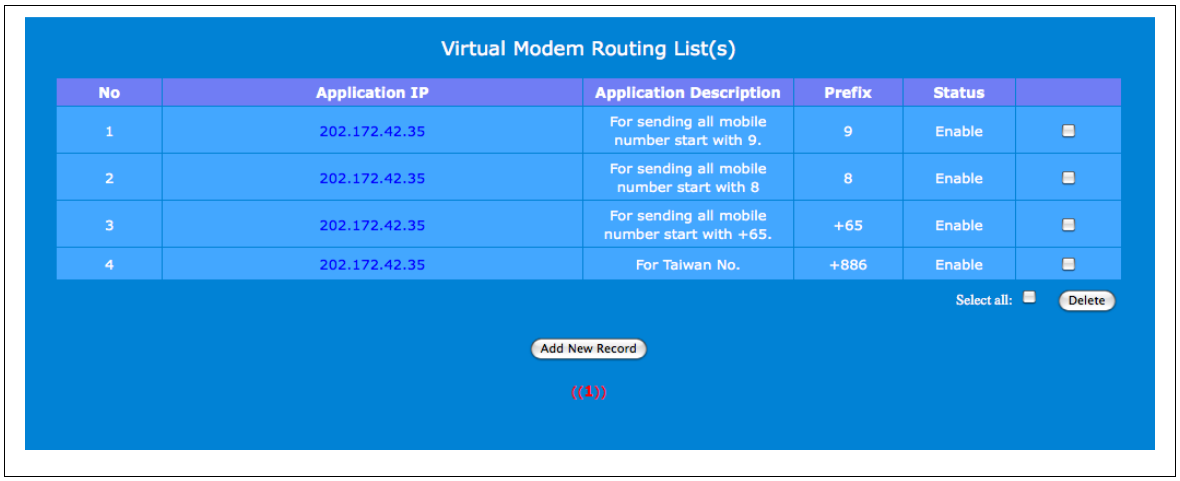

Figure 12: Virtual Modem Summary

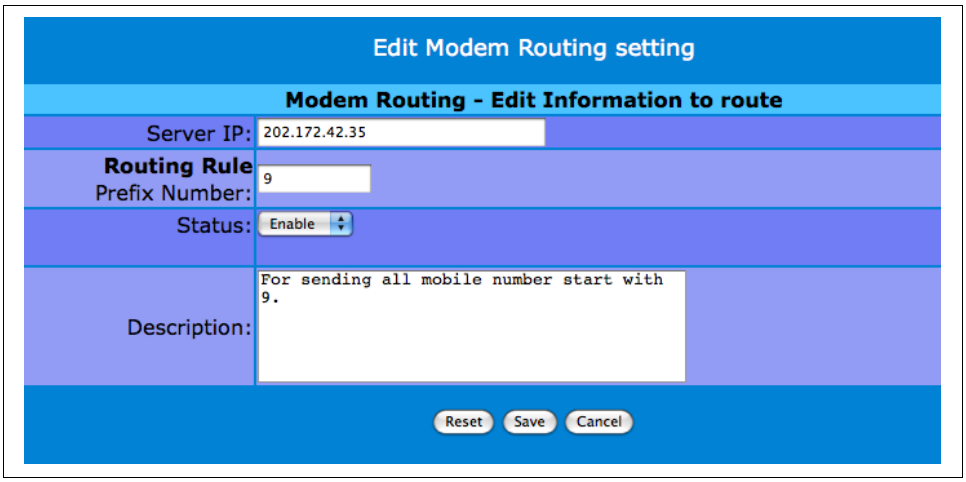

Figure 13: Virtual Modem Configuration

For configuration, specify the IP address of the destination sendQuick server, the routing rule (mobile numbers starting with specific character/characters, enable/disable the service and the description. An example is shown in Figure 13 above.

> **Note:** You have to fill in all items in the SMS System Set-up. If you do not wish to use any particular function, use NA in the space provided.

When everything is completed, select **Save Setting** button and the data will be updated with the new configuration. However, this does not activate the server with the new configuration yet. To activate, you will need to select the **'Activate Setting'** button.

After activation, you will see the confirmation message to confirm the setting activation.

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3.5 Keyword Management

The purpose of Keyword Management is to provide message routing capability for sendQuick server. This allows all the incoming SMS to be routed to a specific path (email, HTTP Post or mobile number) if the incoming message start with the keyword.

Keyword is defined as the **first word** of the SMS message. Hence, if the SMS message start with **'Hello How are you?'**, the word '**Hello**' is the **keyword**. The purpose of using keyword is to allow organisations to automatically route the incoming SMS messages to specific users or applications for message processing, segregation and message management. This can be used for specific purpose like the following:

- Marketing campaign involving categorised responses. Each response can be easily segregated using keywords in the SMS messages
- Polling for different questions where the question numbers will serve as the keywords
- Business enquiries for sales, marketing, support and others are differentiated using keywords
- Incoming SMS to be sent to different individuals, using keyword and many others

First, select the Keyword Management button at the Menu Bar. You will see the interface as shown in Figure 14.

Figure 14: SMS Keyword List

You can view the existing keyword by selecting on the highlighted (blue) keywords. These are the active links to the keywords. You can also **Edit** and **Delete** the keywords. To create a new keyword, select the **Add Keyword** button in Figure 14 above. You will see a list of entries to configure the keyword as shown in Figure 15, 16 and 17 below.

Items	**Description**
Keyword	This is the keyword to be assigned. Enter the desired keyword in this field. Keywords cannot be duplicated and are not case sensitive.
Description	The description for the keyword for easy reference
URL	This is the URL HTTP Path that will receive the redirected incoming SMS (via HTTP Post) containing the keyword specified.
Email Address	This is the email address that will receive the redirected incoming SMS containing the keyword specified
Redirect Mobile Number	This is the mobile number that will receive the redirected incoming SMS containing the keyword specified

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Items	Description
Autoreply	To turn on or off the auto SMS reply to all incoming SMS containing the keyword
Autoreply Message	If the autoreply is turn-on, the message in this field will be sent to the sender as SMS message
Email Brochure	To turn on or off the auto email brochure reply to all incoming SMS containing the keyword and email address in the SMS message
Reply Email Address	If turned on, this email address will appear as the From address in the outgoing email message
Email Subject	This is the subject field in the outgoing email message
Email Content	This is the content of the outgoing email message
File Upload	This is the file (brochure) that will be attached to the email. User need to upload the file to the server for each keyword before it can be activated. Each keyword can contain only 1 file.

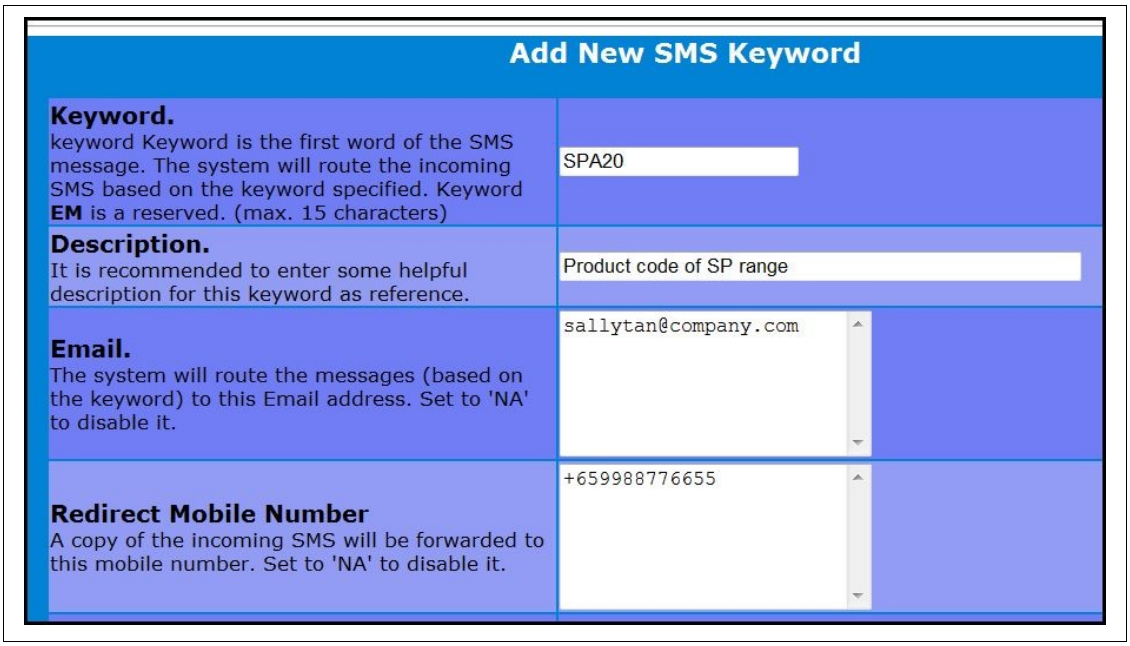

Figure 15: Create Keyword, HTTP Post URL, Email and Mobile Number Path

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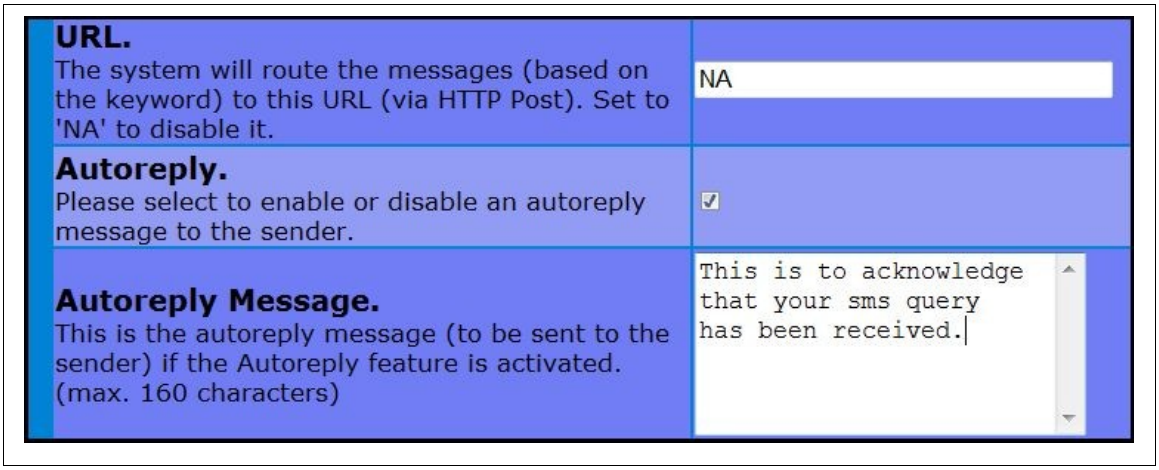

Figure 16: Keyword Autoreply Configuration

Once completed, select the **Save** button and the keyword will be activated and added to the Keyword List as indicated in Figure 17 below.

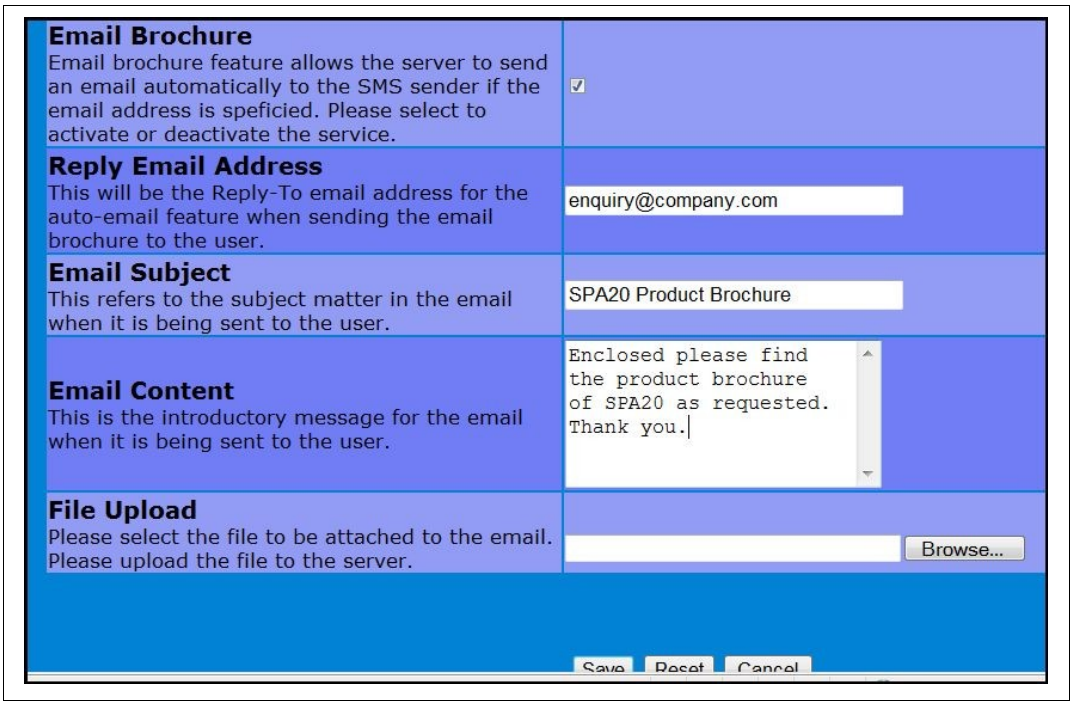

Figure 17: Email Brochure confirmation

3.6 Shift Management (Optional Item to Alert Plus and Entera)

The Shift Management is an optional module that can be added to sendQuick Alert Plus and Entera. This module comes together with the Phone Book function as a package. The purpose for this optional module is to allow the administrator to pre-configure the name, mobile number and email of the individuals who will be selected for receiving SMS under the filter rules. The Shift Management define the time period and the days that a particular individual (groups) will receive the SMS if the event is triggered. This is also commonly known as duty roster module.

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Select the **Shift Management** (in the Navigation Menu) and the **Time Shift Summary** will be shown (in Figure 18). The Shift Management section need to be configured first before allocating the shifts to the users in the Phone Book module (Section 3.7). In the summary below, the Shift Name as well as the selected day and time of day is indicated as shown.

Figure 18: Shift Time Summary

Select the **Add Shift** button and Figure 18 for creation of a new shift is shown. Specify the **Shift Name**, select the relevant **Day** and insert the **Shift Time** in 24 hour (HHMM) format. The time range will be From HHMM-HHMM as shown in Figure 19 below. If there are multiple time slots per day, use a comma to separate the different time slots in the day. Once completed, select **Save** and the shift time will be saved.

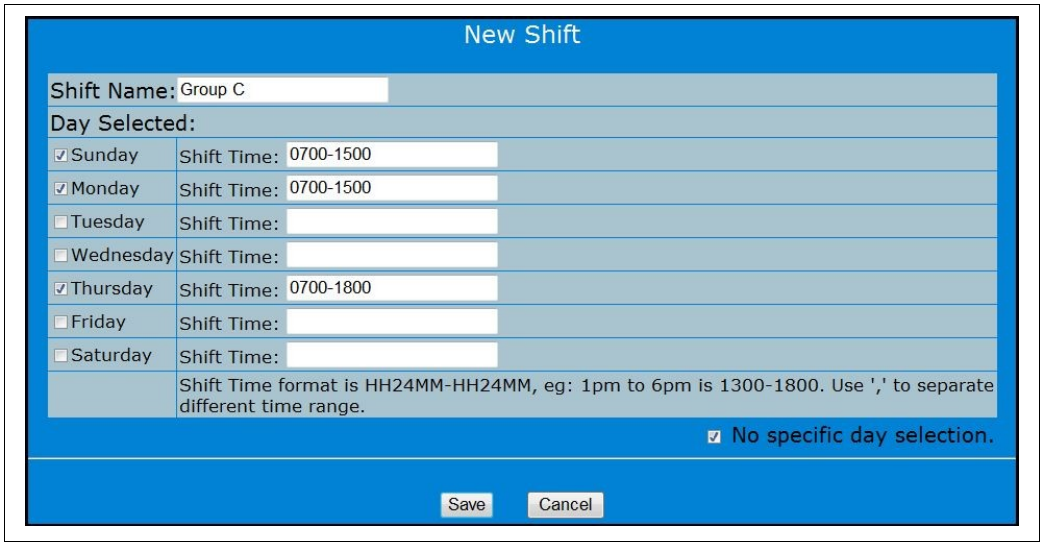

Figure 19: Create New Shift

There are instances where a shift is for a particular period and not repeated, eg, from 10 January to 3 March. In this instance, select **No Specific Day Selection** in the shift creation page as shown in Figure 18 above. Once selected, a calendar as shown in Figure 20 below appears. Browse to the relevant month and select the dates that are applicable. All required dates need to be selected. To unselect, click on the selected dates again and the highlight will disappear (as seen in Figure 20 below).

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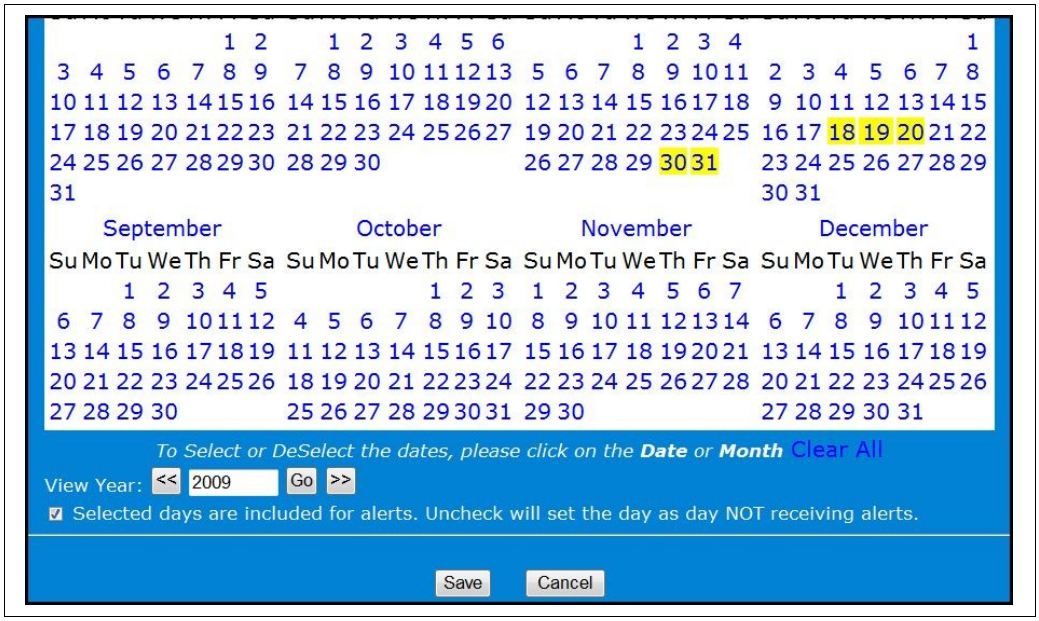

Figure 20: Date Selection for New Shift

You can also select the dates across different years. Once the selection is completed, select **Save** and the dates are saved for the Shift.

3.7 Phone Book (Optional Item to Alert Plus and Entera)

The Phone Book is an optional module that can be added to sendQuick Alert Plus and Entera. This module comes as a package with the Shift Management module described in Section 3.6 above. The purpose of the Phone Book is to provide an easy management of the alertee list (recipients) in the filter rules. With the creation of the address list in the phone book, the alertee list can be added and amended from the phone book and the changes will be effected to all the relevant rules.

Start the Phone Book record creation by selecting the **Phone Book** in the **Main Menu** and a summary list of the records are shown in Figure 21 below. The summary list show the respective users, mobile number, email address, group that they belong to and the shift that they had been allocated. This shift timing is configured as described in Section 3.6 previously.

Figure 21: Phone Book Summary

Select **Create** and a new record can be created as shown in Figure 22 below. Enter the username, mobile number (preferably in international format with a '+' sign), email address (where required). Then, select

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the groups whom this user will belong to. You can select multiple or no group assignment. The display list are the existing groups. To create a new group, enter the group name in the **New** text box. The name in the text box will form the new group name for the phone book. Finally, select the shift to be allocated for the user from the drop-down menu.

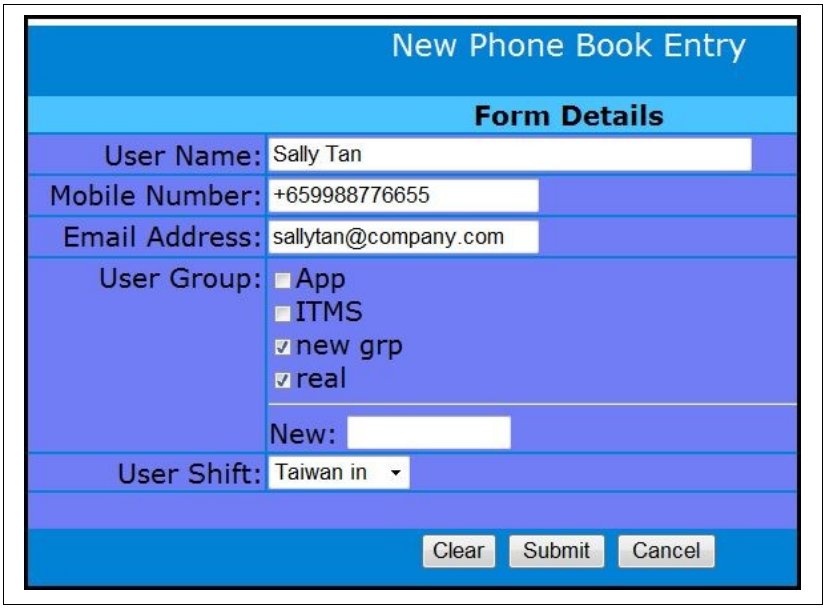

Figure 22: Create New Phone Book Entry

Select **Submit** once the information is correct and the record is created. The same interface will appear for editing the phone book. The system can support unlimited number of records for the Phone Book.

3.8 Mail Message Filter

Select the **Mail Message Filter** (in the Navigation Menu) and the **Message Filter Summary** will be shown (in Figure 23). The Message Filter section need to be configured carefully to provide the right rules for SMS alert. It is fine if you configure the Message Filter on a later stage as it has no impact on the operation of sendQuick system. The Message Filter will be useful for the selective sending of alert messages using SMS.

3.8.1 Message Filter Summary and Email Configuration

The email summary list all the message filters that had been created in the system. You can create as many message filters as required. In Figure 22 below, there is a button for creating multiple email address in the sendQuick system, to receive alert messages for filtering. Select on the **Email Address** button (in Figure 23) and Figure 24 with configuration option will be shown. You can also configure the time buffer that will ignore any repeated messages during the buffer period (Figure 25 below).

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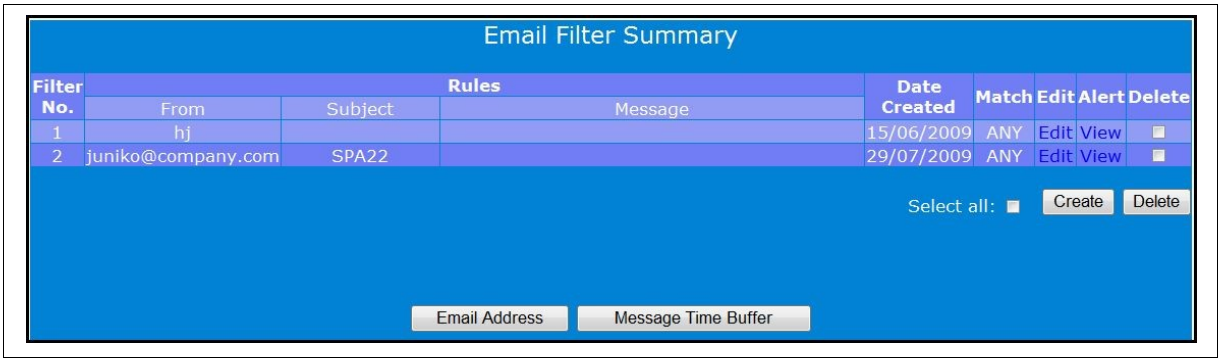

Figure 23: Message Filter Summary

The configurable email addresses are used for sending alert messages from your firewall, anti-virus, IPS, UPS and others, to these email addresses. All messages that were sent to these addresses will be filtered in accordance to the message filter rules. Hence, all the rules created will be applied to all these email addresses.

The purpose of these email addresses is to offer the flexibility for users to forward alert messages to common email addresses, that can be created by the users. All types of usernames can be created, except for *default* and *monitor*, that had been reserved by the system. Just enter the desired email address user names in the space provided. For more addresses, just enter them on the next line.

All addresses will end with the IP address or the domain name of the sendQuick server. If the sendQuick server has an IP of *192.168.1.8* or a server name of *sms.com.sg*, then the email addresses created will be as follow (if the email username is ***alarm***):

alarm@192.168.1.8 or *alarm@sms.com.sg*

All the messages that were sent to the filter accounts can be forwarded to other email addresses, as a backup function. Insert the required email addresses in the spaced provided in Figure 24 labelled as Email Forward Addresses. *(Note: the SMTP configuration in Server Setup need to be configured for proper mail delivery).* To insert more address, use the next line (one line for each email address).

Once complete configuration, select the **Save** button and you will see the Mail Filter Summary.

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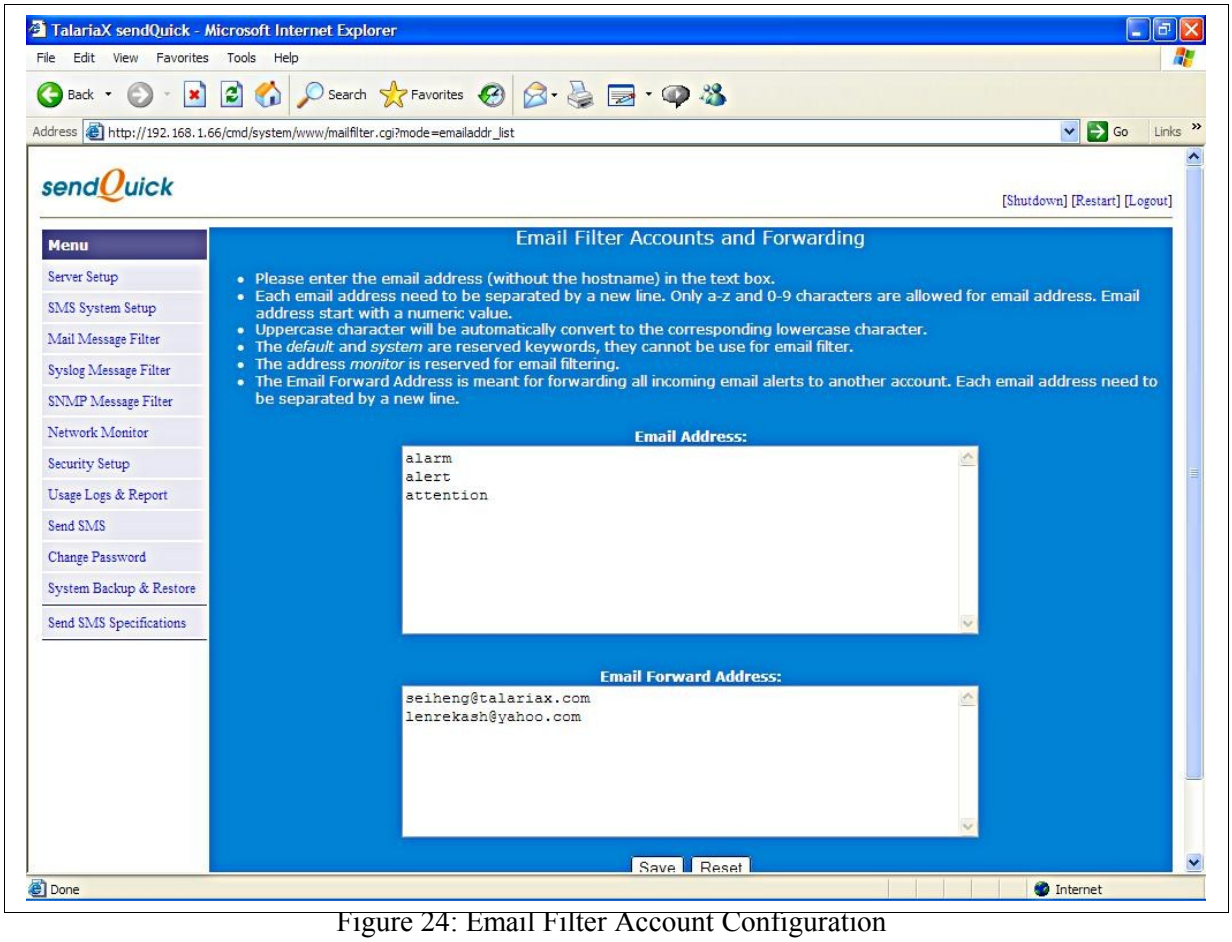

Figure 24: Email Filter Account Configuration

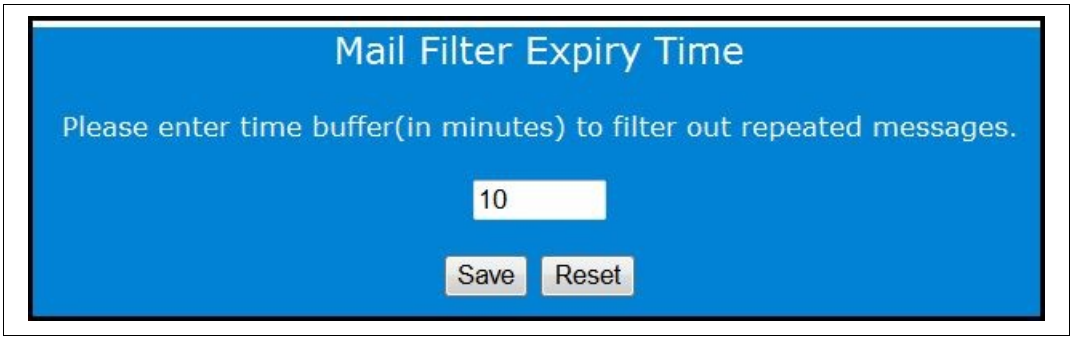

Figure 25: Message Buffer Timer Configuration

There is a message buffer configuration as seen in Figure 25. Message Buffer Timer is a configuration to avoid repeated SMS when devices generated repeated messages or send repeated messages to sendQuick. The value inserted in the buffer timer (Figure 25) means any repeated messages sent to sendQuick within the buffer time will be discarded. This allows sendQuick to ignore the repeated messages and only send one (1) SMS for each event.

Hence, to avoid more repeated messages, set the time buffer to a higher value.

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3.8.2 Create New Message Filter

The administrator can create new message filters by selecting the **Create** button on the Message Filter Summary Listing (in Figure 23). The interface to add a new filter is shown in Figure 26 below.

The filter works by checking on the three attributes of an email message. They are the **Sender** email address (FROM field), **Subject** field and **Message** body content. There is a checkbox on the side of the field name. If the desired field name is required for filtering, just check the box. Then, fill in the required content that will be used to filter the messages. You can select more than one checkbox and determine the relationship as AND (All) and OR (Any) relationship. Hence, the SMS alert will be sent only if the criteria are fulfilled.

The filtering engine is based on matching the exact words or character and the phrase filled in the space provided, for each relevant field. Since the matching is based on words or characters and phrase, it will record a confirmed match as long as the word (or character) and phrase appear in the selected field.

Example, if the **Subject** field is entered with '**error message**' the various scenarios is illustrated below:

Sentence	***Match Status***	***Reasons***
There is an error in the system message	No	Though the words 'error' and 'message' appears in the sentence, they are individual words and not a phrase.
This is a system error	No	Only the word 'error' occur and not the whole phrase
There is an error message from system 1	Yes	The whole phrase 'error message' appear in the sentence.

Figure 26: Create a New Filter Rule

Once the system had matched the relevant words (or characters) and phrase, it will send the SMS messages to the mobile numbers and email as indicated in the **Mobile Number to Receive SMS** and **Email Address for Alert** field (Figure 28). Select Create from the Mail Filter Rules Alert list as shown in Figure 27. You can insert more than one mobile number/email, by inserting the mobile numbers/emails in the next line. To send to overseas numbers, please include the '+' and country code, followed by the mobile number. (Example, +60126234567 for Malaysian number).

If the Phone Book module is added, the phone numbers and email address list will appear for selection. Just move your mouse and click on the required numbers/email address or groups. Selected

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numbers/email will receive the notifications when triggered. The example list if phone book records are shown in Figure 28.

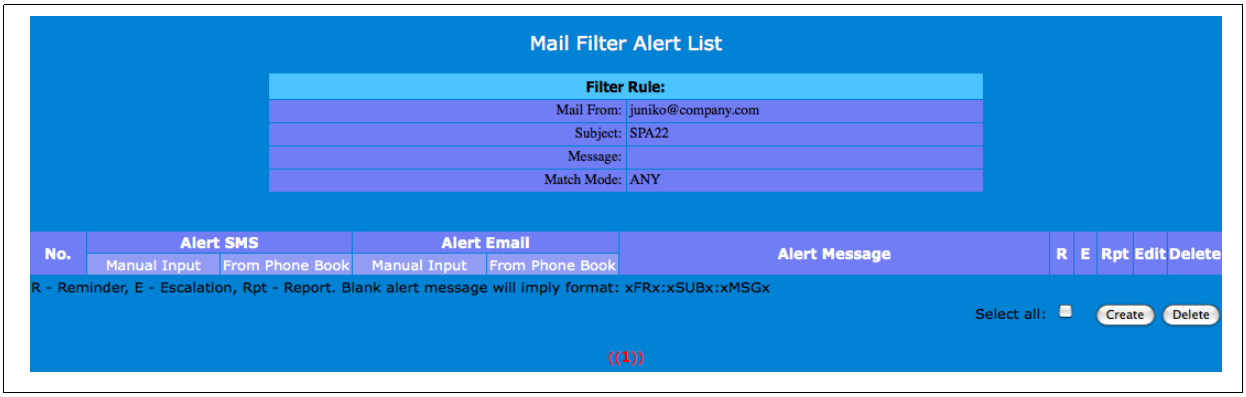

Figure 27: Mail Filter Alertee View

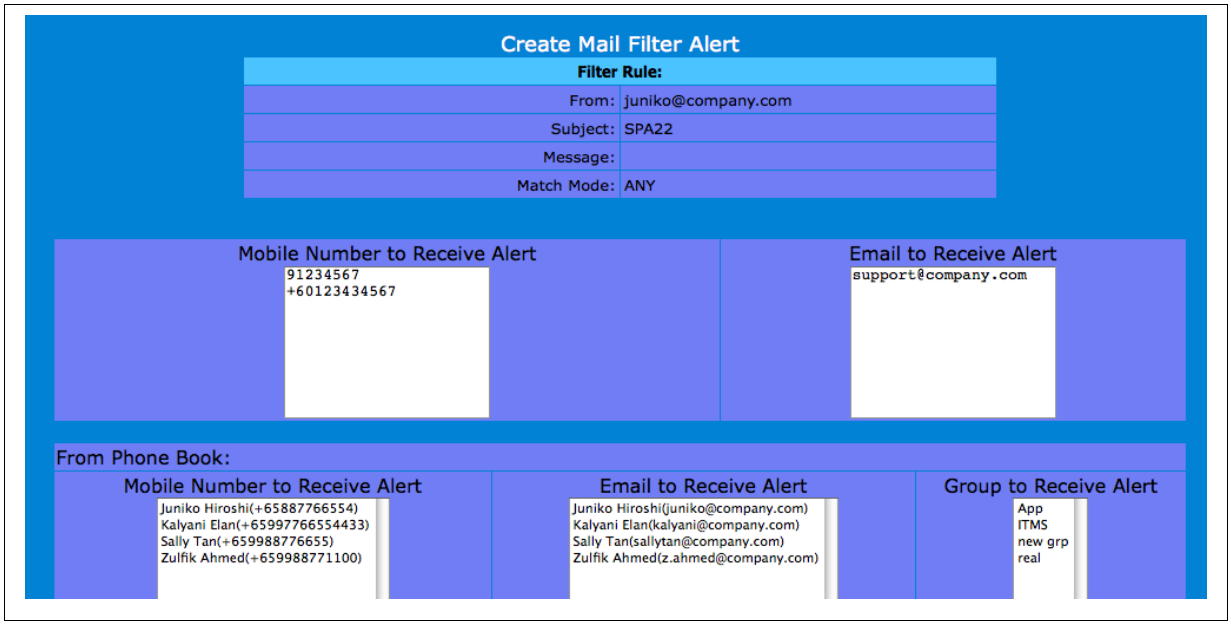

Figure 28: Configure Alertee List

The actual content of the SMS alert will be the original content of the email message and the fields to be sent (FROM, SUBJECT and MESSAGE) will depends on the selection in the SMS System Setup in Section 3.4. The message can be customised if there are characters inserted in the **Text Box** shown in Figure 29. The customised message can include additional words and the original FROM, SUBJECT and MESSAGE from the email notifications by placing the variable **xFRx** (FROM Field), **xSubx** (SUBJECT Field) and **xMsgx** (MESSAGE Field).

The message length and other content of the email alert message (that will be sent via SMS if the message alert checkbox is not selected) will be determined in the **SMS System Setup** under the multiple SMS per email and other functions in the set-up section. Please refer to the SMS System Setup in the manual for more information.

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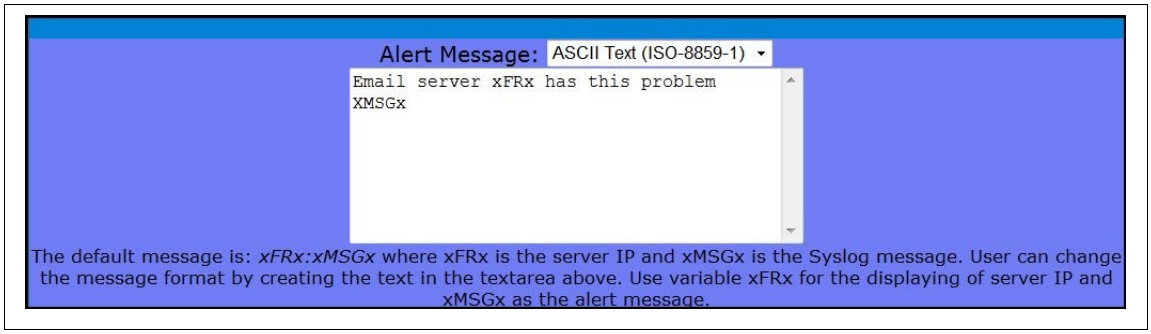

Figure 29: Configure SMS Alert Message

3.8.3 Configure Reminder, Escalation and Report

The next configuration is the reminder and escalation, following by reporting function. The reminder and escalation configuration is shown in Figure 30 below.

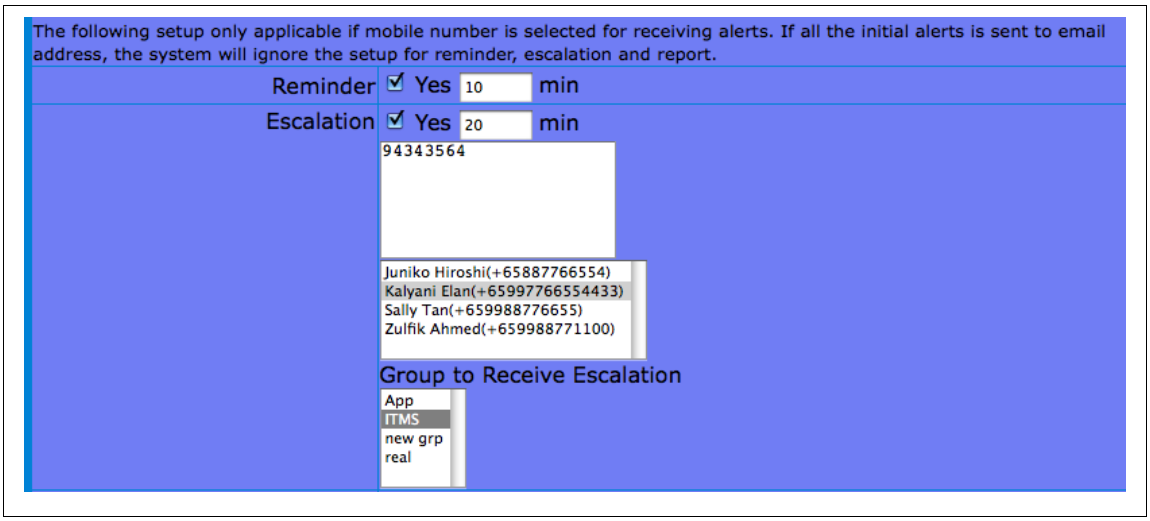

Figure 30: Configure Reminder and Escalation

Select the **Check Box** (Figure 30) to activate either **Reminder** or **Escalation** or both. Selecting the check box is to activate the service and complete the time setting in the field, in minutes. The value means how long does the time lapse before a reminder SMS is sent. The reminder will only be sent if there is no acknowledgement within the time set.

When either reminder or escalation is selected (activated), the SMS message will include an ID value (eg, ID:25) which is a numeric value. To respond to the case, reply the SMS with the number (eg, 25) and send back to sendQuick. This SMS acknowledgement will stop the reminder and escalation process. However, if no acknowledgement is received (from any alertee), the reminder (once) and then escalation will be triggered.

For acknowledgement reply, user will need to reply the message with the message ID that appears on the SMS message. The reply message must have the message ID as the first word. The email reminder and escalation has no acknowledgement function. It serves as information purposes only.

The phone numbers to receive the reminder will be the original alertee list that was configured to receive the SMS. For escalation, you can select from the Phone Book or group or insert the numbers in the text box provided. Similarly, if the SMS is acknowledged before the escalation is triggered, the escalation message will not be sent.

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However, if there is no SMS acknowledgement from any recipients despite the reminders and escalation, a SMS summary report will be sent at the end of the time session that was configured for the **Report** (Figure 31). The report will consists of the summary of the numbers that acknowledged and those that did not.

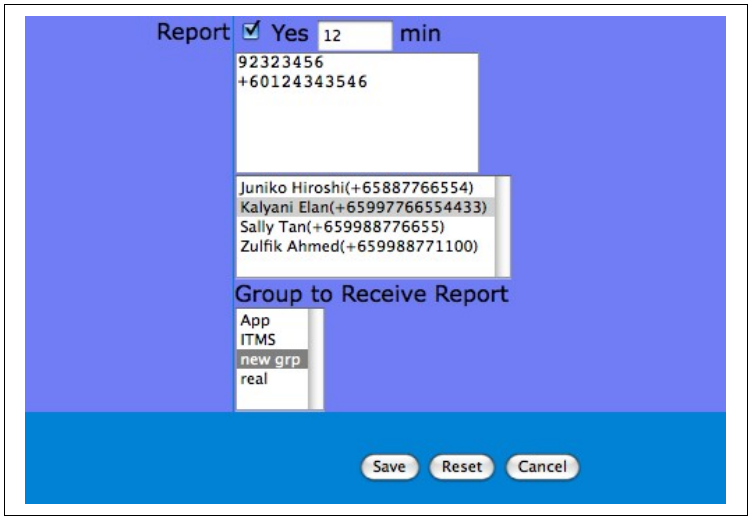

Figure 31: Report Configuration

3.9 SNMP Message Filter (sendQuick Alert Plus and Entera Only)

Apart from email to SMS alert, sendQuick also support SNMP (Simple Network Management Protocol) to SMS/Email function. The SNMP trap feature is supported by a wide range of network equipment and devices in the world. With SNMP Trap support, sendQuick users will be able to send SMS alert messages either via email or SNMP.

To capture the SNMP trap, just point the SNMP trap messages (from the devices and equipments) to the sendQuick server. The default community setting and port (in sendQuick) is **Public** and **162**. These are commonly available community and port for SNMP in all devices and is supported by sendQuick Alert Plus and Entera. Hence, if your devices need to configure the community and port, just configure based on the information provided.

Once you had configure the SNMP trap to sendQuick server, you can configure the relevant trap messages that will trigger a SMS message. This is called the **SNMP Message Filter**. Select the SNMP Message Filter option on the left navigation bar and you will see the SNMP Filter Summary page as shown (Figure 32). In this page, you will see the summary of the SNMP message filters (if any).

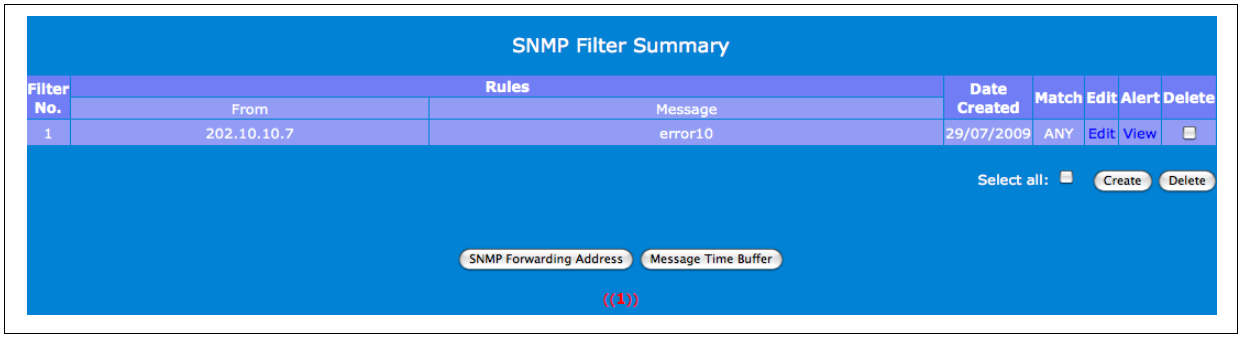

Figure 32: SNMP Filter Summary

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Before configuring any trap messages, you may wish to configure the SNMP Forwarding which allow all incoming SNMP Trap messages to be forwarded to another server as Syslog messages. The interface to configure is as shown in Figure 33 below.

You can also set the message time buffer, which will allow repeated messages to be ignored if it occurs within the time buffer. The time buffer setting is in minutes and similar to Figure 25 above.

When configuring a new SNMP Trap filter, enter the relevant data and select ALL or ANY for the filter relationship. The key difference is the FROM field is an IP address of the incoming SNMP Trap device (Figure 34). The actual process is similar to Mail Message Filter as illustrated in Section 3.8 above. A rule summary is shown in Figure 35 below

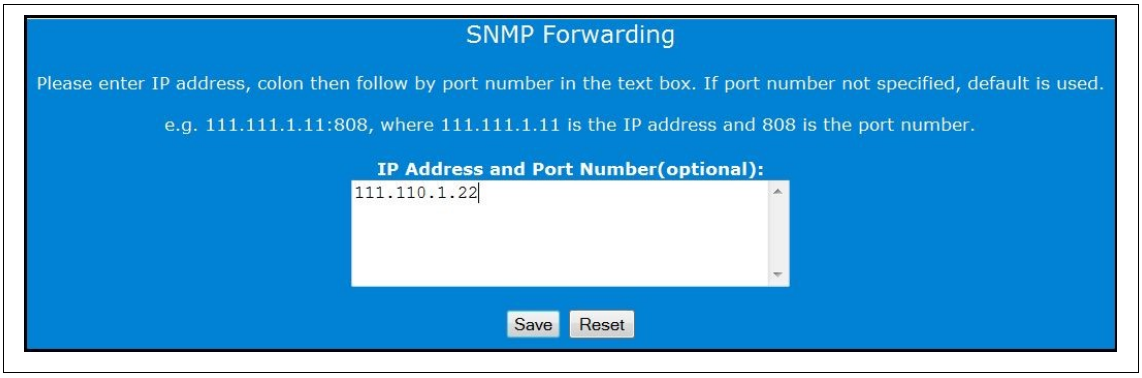

Figure 33: SNMP Filter Forwarding Address

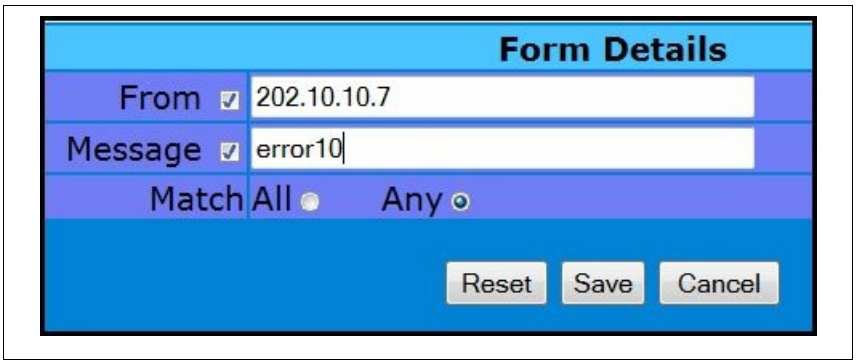

Figure 34: Add New SNMP Filter

Figure 35: SNMP Rule Summary

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Similar to Mail Message Filter, you can configure the SMS and Email alerts as well as a custom message for alerting. The escalation options are similar to Mail Message Filter and you can refer to **Section 3.8.3** for more details.

You can create as many filter rule as required and is limited by the disk space of the system. To edit a SNMP Rule, select **Edit** on the message summary (Figure 32) and you can proceed with the editing of the rules.

3.8 Syslog Message Filter (sendQuick Alert Plus and Entera Only)

In addition to SNMP, sendQuick also support Syslog to SMS/Email function. The Syslog feature is supported by a wide range of network equipment and devices in the world. With Syslog and SNMP Trap, sendQuick Alert Plus and Entera users will be able to send SMS alert messages either via email, SNMP or Syslog.

To capture the Syslog, just point the Syslog messages (from the devices and equipments) to the sendQuick server. The default port (in sendQuick) for Syslog is **514**. Once you had configured the Syslog to sendQuick server, you can configure the relevant messages that will trigger a SMS message. This is called the **Syslog Message Filter**.

Select the Syslog Message Filter option on the left navigation bar and you will see the Syslog Filter Summary page as shown (Figure 36). In this page, you will see the summary of the Syslog message filters (if any).

Figure 36: Syslog Filter Summary

Before configuring any Syslog messages, you may wish to configure the Syslog Forwarding which allow all incoming Syslog messages to be forwarded to another server as Syslog messages. The interface to configure is similar to SNMP as shown in Figure 33.

You can also set the message time buffer, which will allow repeated messages to be ignored if it occurs within the time buffer. The time buffer setting is in minutes and similar to Figure 25 above.

When configuring a new Syslog filter, enter the relevant data and select ALL or ANY for the filter relationship. The actual process is similar to Mail Message Filter as illustrated in **Section 3.8** above. A rule creation summary is shown in Figure 37 and 38 below.

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Similar to Mail Message Filter, you can configure the SMS and Email alerts as well as a custom message for alerting. The escalation options are similar to Mail Message Filter and you can refer to **Section 3.8.3** for more details.

You can create as many filter rule as required and is limited by the disk space of the system. To edit a Syslog Rule, select **Edit** on the message summary (Figure 36) and the interface is similar to Figure 37 will be shown.

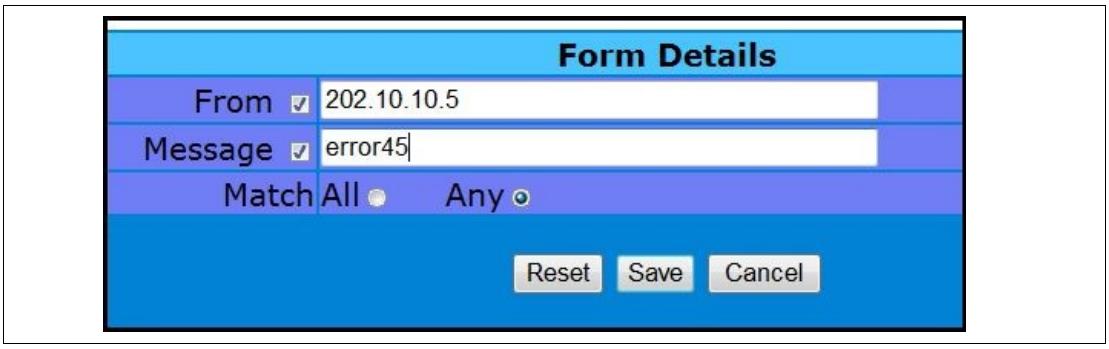

Figure 37: Syslog Rule Creation

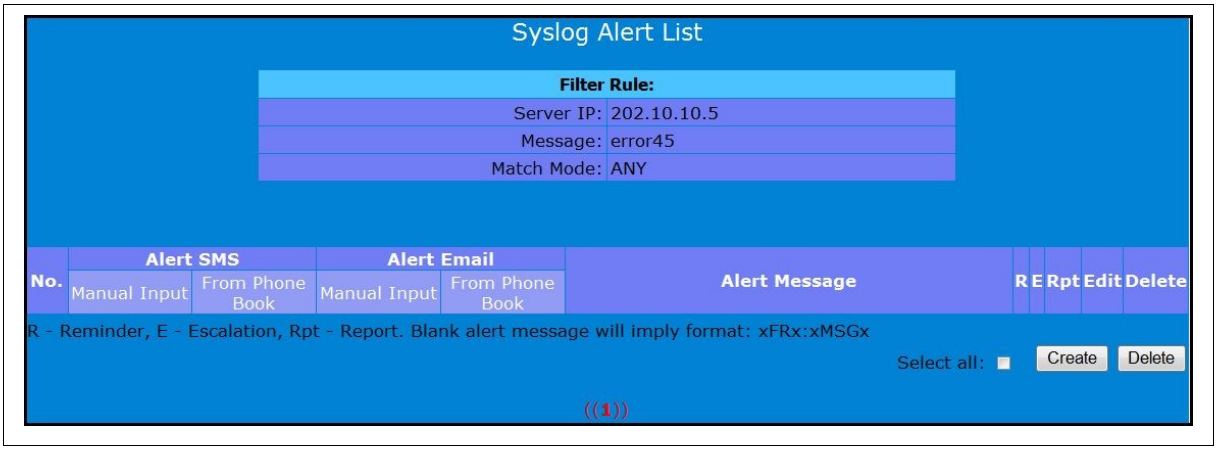

Figure 38: Syslog Filter Configuration

3.9 Network Monitor (sendQuick Alert Plus and Entera Only)

The sendQuick (Alert Plus and Entera) has a simple server monitoring function using ICMP Ping, Port and URL Check (Entera only) feature. This allows sendQuick to ping and check another machine and send a SMS alert if there is no server response within the specified time. Select the Network Monitor button and the **Network Monitor Summary** is shown in Figure 39 below.

Select the **Create** button and you can create a new Ping monitor as shown in Figure 40 to 43 below. Enter the information required as described in the table below.

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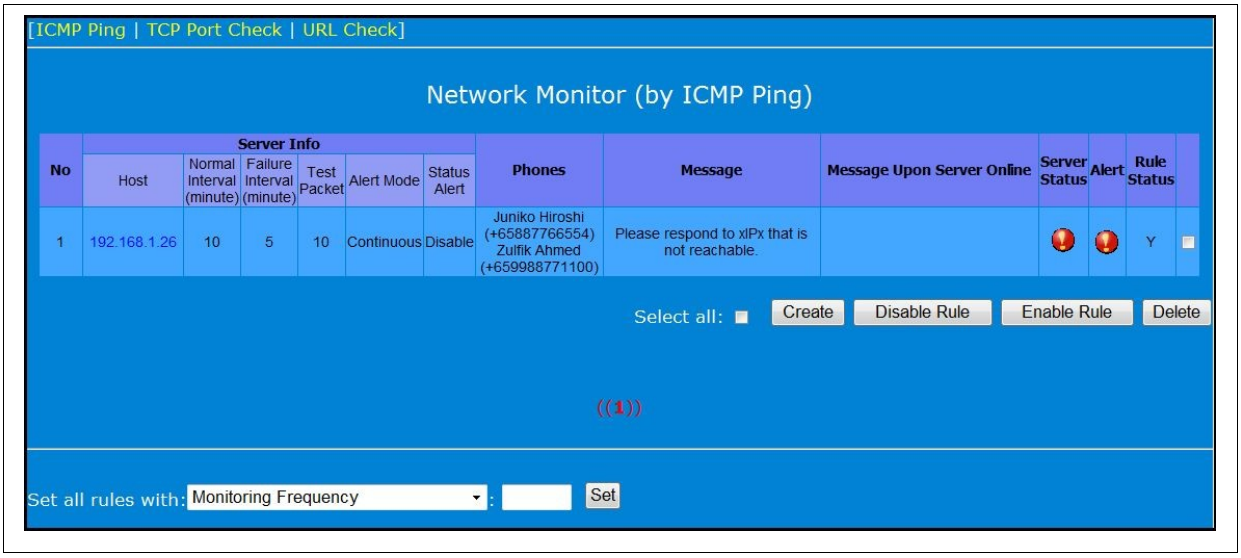

Figure 39: Network Monitor Setting Summary

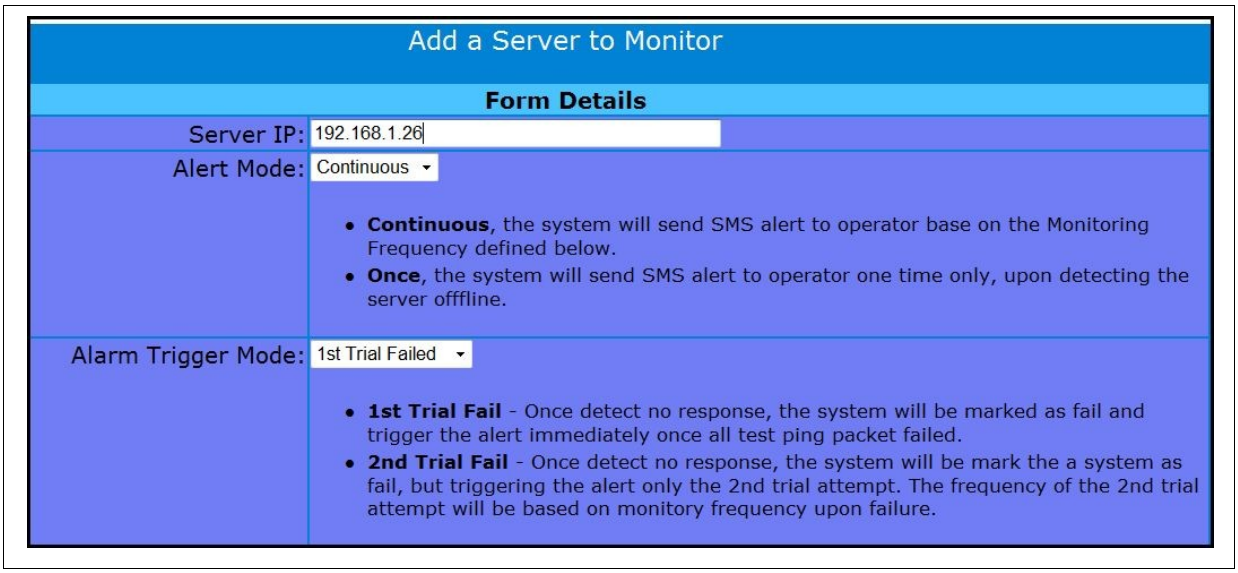

Figure 40: Configure Network Monitoring Setting

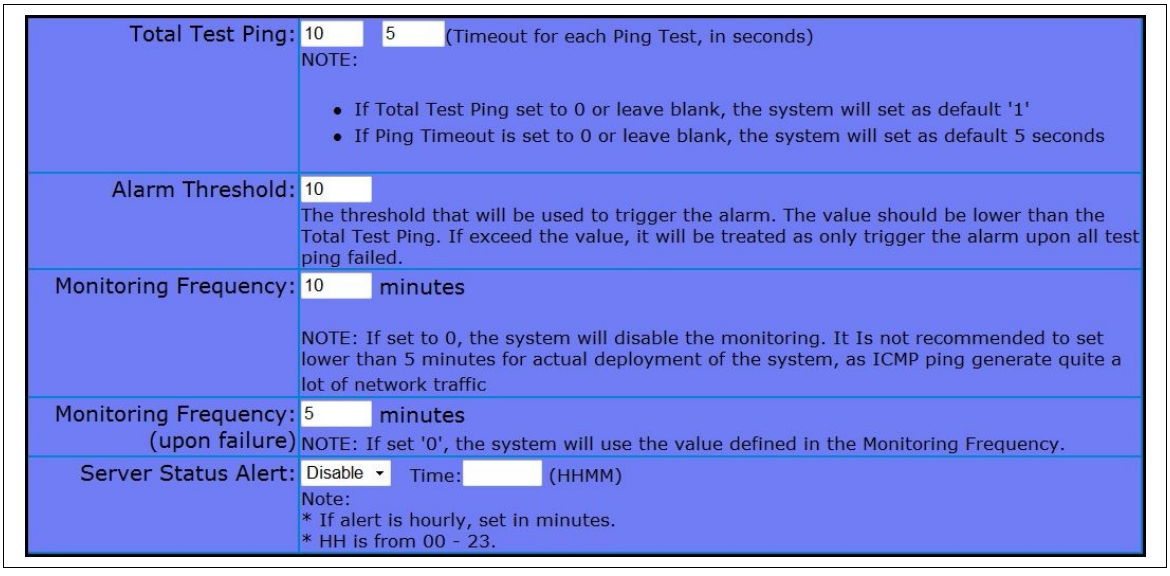

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Figure 41: Configure Network Monitoring Setting 2

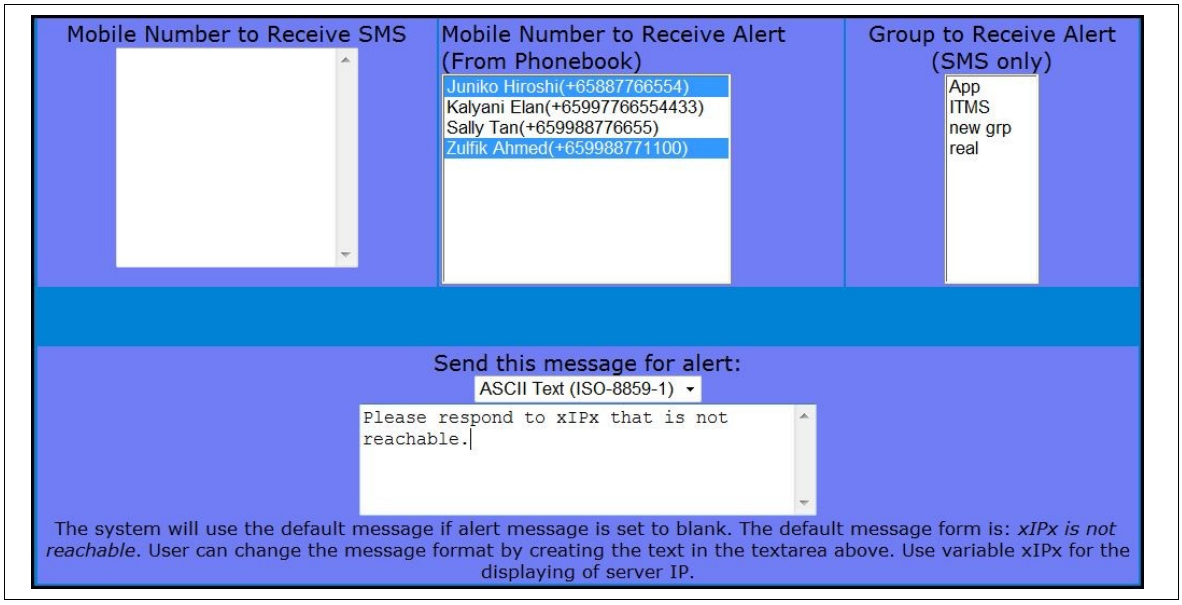

Figure 42: Configure Network Monitoring Setting 3

Figure 43: Configure Server Online SMS Message

Configuration	Description
Server IP/URL	The IP address of the server for PING, Checking or the URL address
Port No	The port number for the port check service
Alert Mode	The mode is either Once Only or Continuous. **Once Only** refers to sending SMS only one time when a check is failed. **Continuous** will send SMS for every check attempt that failed. *Note: The checkign process will continue even if the response is failed.*
Alarm Trigger Mode	Te triggering can be configured to trigger when the failure happen the first time or the second time. The second time failed means SMS will only be triggered when two consecutive failure occurs.

Configuration	Description
Total Test Ping	This is the total number of test ping packet (or Port check or URL check) packet will be sent. **Time Out** refers to how long the packet response must not be longer. If it is longer than the time configured (in seconds), the checking will fail.
Alarm Threshold	This refers to how many of the test packets must fail before the SMS is sent. Hence, the higher the number, the less SMS will be triggered as it is less sensitive to failure
Monitoring Frequency	This is the time (in minutes) interval to perform each check. The time interval is advised to be wide (> 10 minutes) to avoid any system and network overload due to too much traffic generated by the PING, Port and URL check packets.
Monitoring Frequency Upon Failure	This is the interval (usually shorter) that will be used if there is a failure in server response. This will allow a more frequent checking when a failure occurs.
Server Alert Status	This service function on a different way here it will send SMS when the server check is successful. Hence, it can be configured to send SMS hourly or daily.
Mobile Number to Receive SMS	The list of phone numbers to receive the alerts when there is a failure or when server is back online. If Phone Book is present, just select the required numbers or groups or it can be a mixture of all entries.
Send SMS for Alert	The SMS message sent when there is a failure
Server Online Message	The SMS message sent when the server is back online (failure is restored)

You can also **Enable/Disable** the rule by selecting the rules and activating the right button. This will assist when the rule need to be suspended during a maintenance process.

The Port Check and URL Check service is only available in sendQuick Entera. The interface for Port and URL check is shown in Figure 44 and 45 respectively.

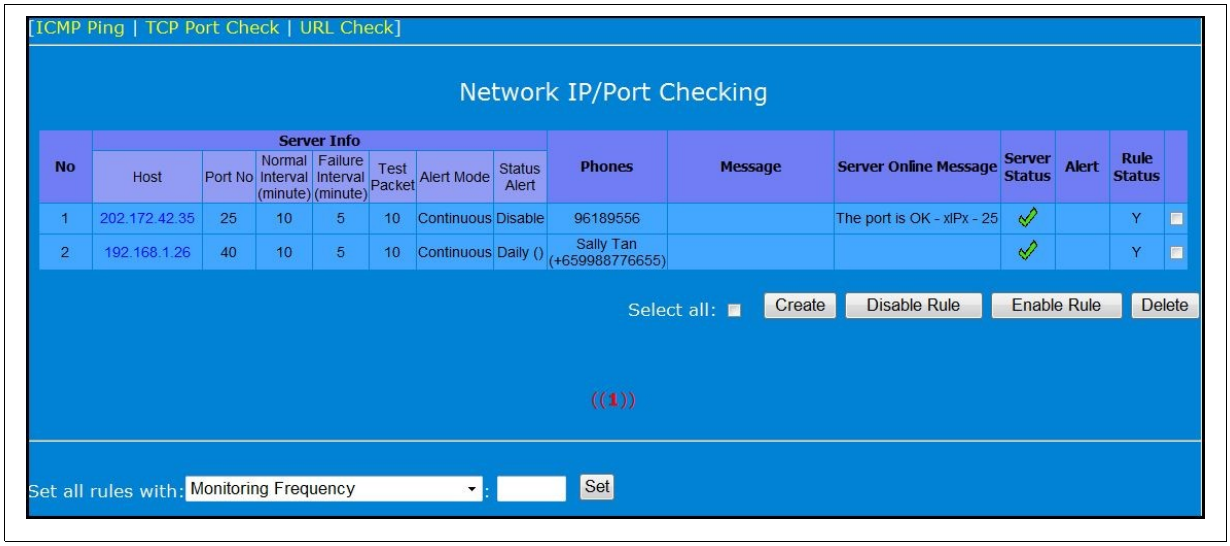

Figure 44: IP Port Check Summary

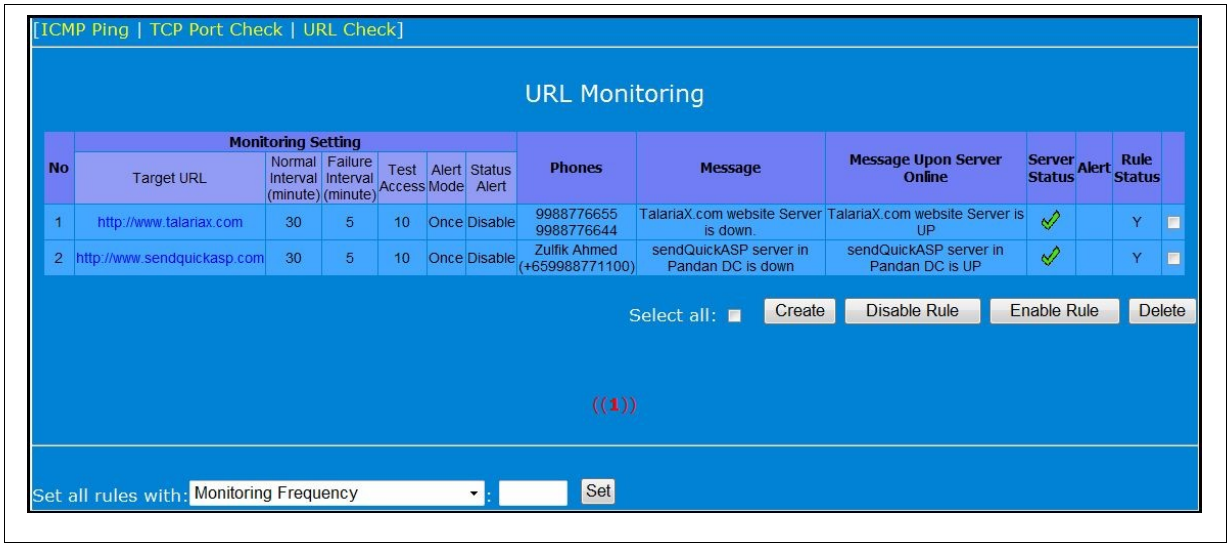

Figure 45: URL Check Summary

3.10 Messaging Security

The sendQuick server messaging security is done by allowing/disallow message sending by restricting the IP address of the originating message. This is done by blocking the IP addresses of the unapproved HTTP URLs, SMTP host gateway IP (for e-mail to SMS), FTP and Database access.

If you intend to block some IP address, please insert the IP addresses allowed into the text area provided under the relevant classification. Only one IP can be listed on one line. If more than one IP address, please use the next line. This approach is applicable to HTTP Host Allow and SMTP Host Allow. If you wish to allow all IPs to access and send SMS, just leave the text box empty.

The system also allows users or server to use sendQuick as a SMTP relay. This is controlled in the SMTP Relay Host Allow feature. This message relay had been enabled by using the allowed list. **In the default status, there will be no SMTP relay allowed (i.e., no IP address specified)**. If you wish to allow SMTP relay for some servers or users, please include their IP addresses in the box provided. Please save and these IP addresses will be allowed to use sendQuick server for email relay to the Internet.

Please refer to Figure 46, 47, 48 and 49 below for examples and table below for description.

Security Items	Description
HTTP Host Allow	The IP address that is allowed to send HTTP Post to sendQuick. If empty, all IPs allowed (no control)
SMTP Host Allow	The SMTP IP address that is allowed to send SMTP email to sendQuick. (email to SMS). If empty, all IPs allowed (no control)
Email User Allow	The email address (From) that are allowed to send Email-to-SMS. If empty, all email address are allowed.

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Security Items	Description
SMTP Relay Allow	The SMTP IP that are allowed to perform email relay using sendQuick. If not IP stated, no SMTP relay is allowed.
DB Host Allow	The Database server IP that are allowed to perform ODBC connection to sendQuick. If not IP stated, no ODBC connection is allowed.
Mobile Number Allow	The lost of mobile numbers that will receive SMS from sendQuick. If no numbers in the list, sendQuick can send to any number.

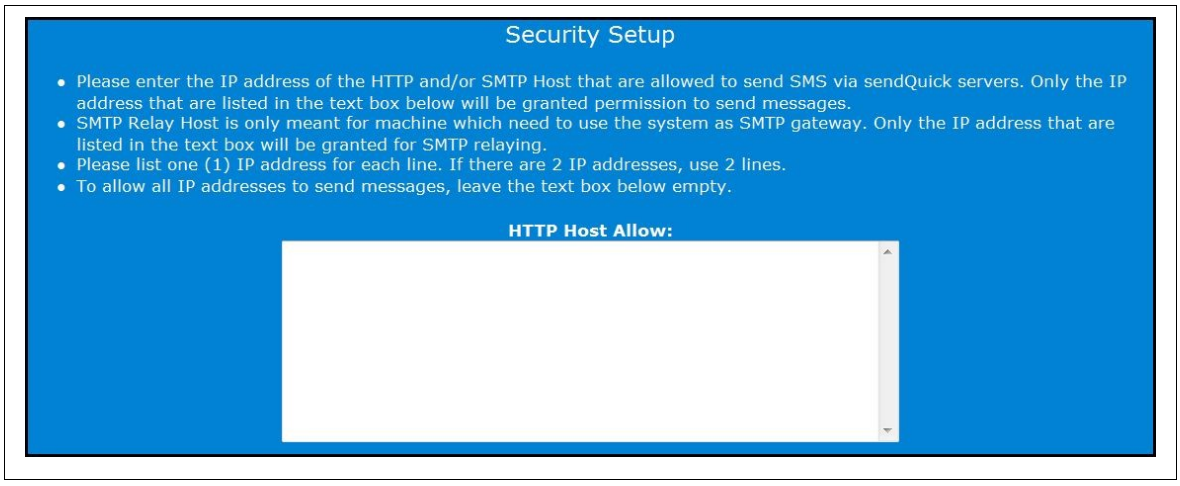

Figure 46: Security Setting for HTTP Post

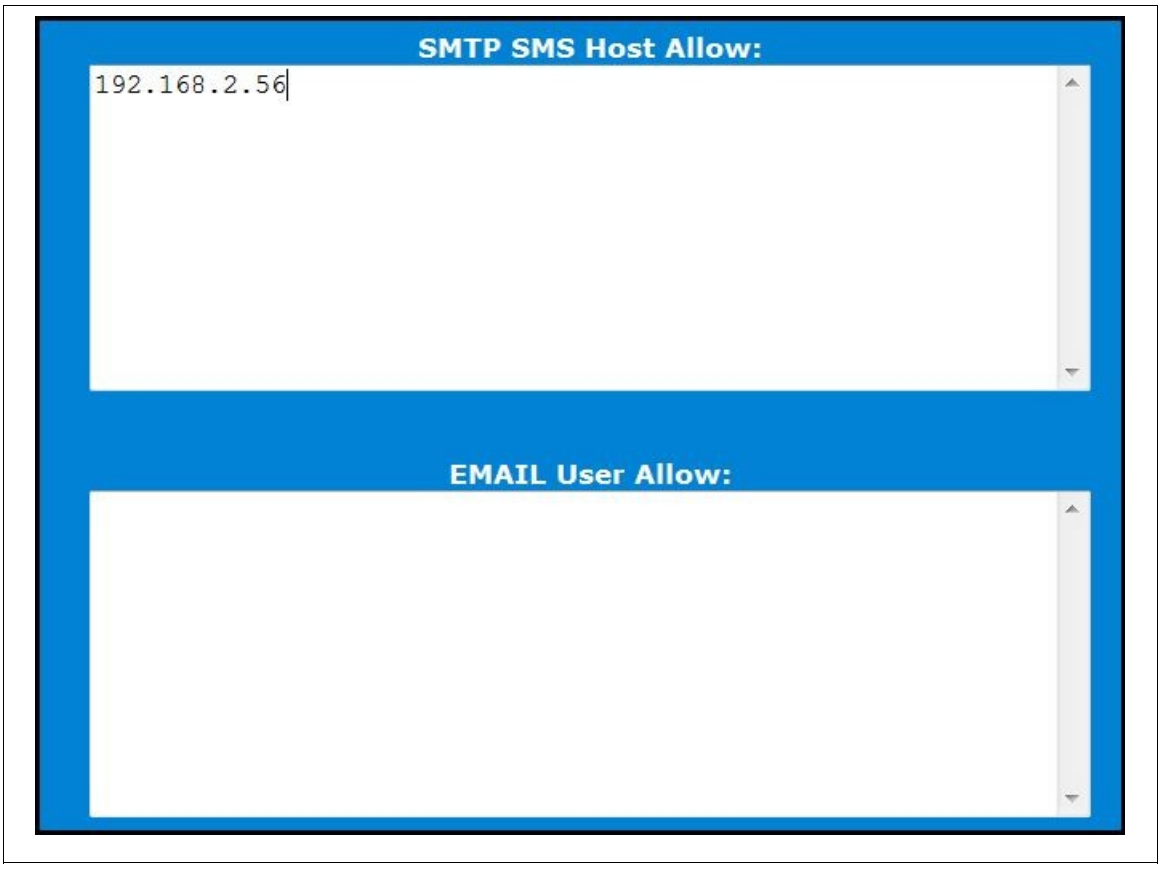

Figure 47: Security for Email (SMTP) and Email User address

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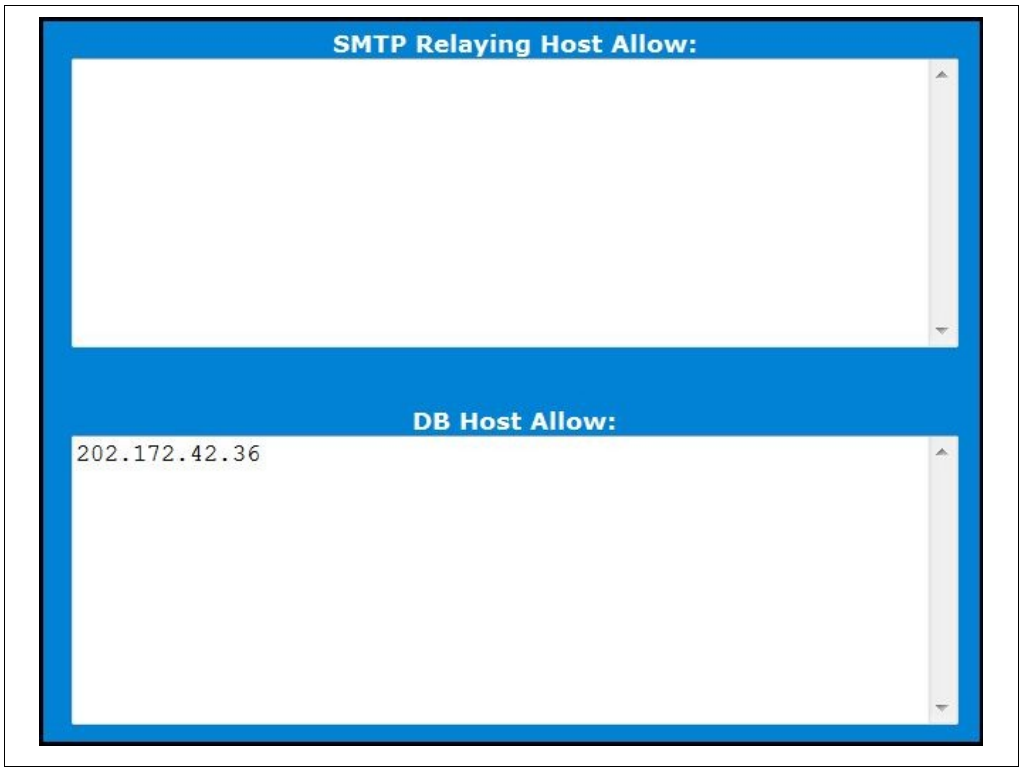

Figure 48: Security for SMTP Relay and DB Access

Figure 49: Security for Mobile Number Allow List

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sendQuick also allows for control of the system services to enhance the security access to the system. Administrator can choose to turn-on/turn-off the services that are not required to enhance the security of the system. Select on **System Services** in Figure 49 and the list of services that are activated/deactivated is shown in Figure 50 below.

Apart from the default/compulsory services, you can uncheck the non-essential service and select **Submit**. This will disable the service in the sendQuick.

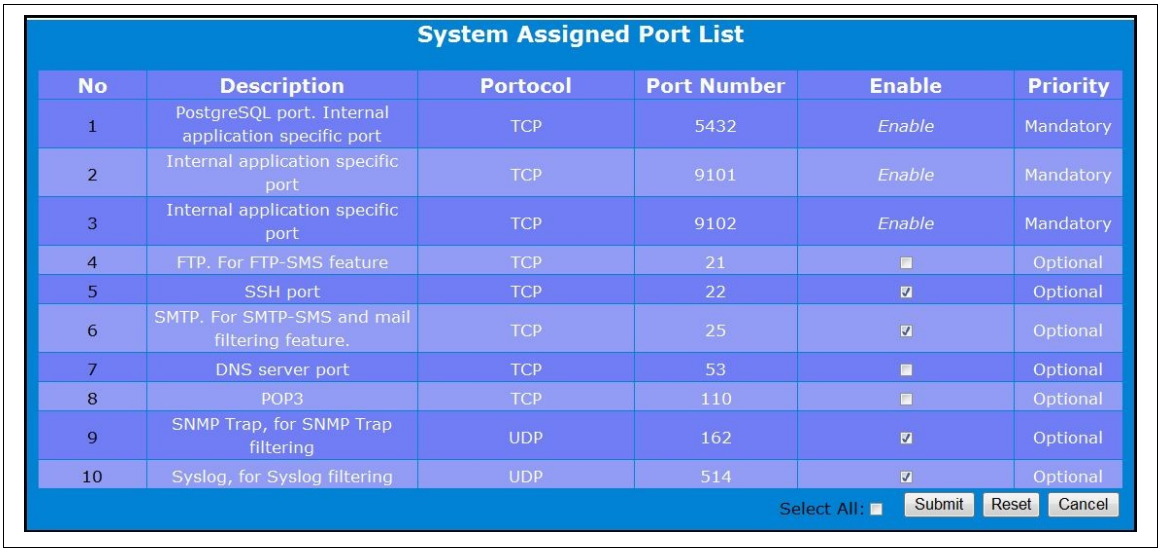

Figure 50: System Services Control

Another enhanced security function in sendQuick is the SSH Public Key requirement to perform SSH access to the system. This is more secure implementation as it requires more than just username and password. Before using this function, you need to create a public key with a key generator (like PuTTyGen) and select **SSH Public Key** in Figure 49 above. Figure 51 show a list to public key used in the system.

Figure 51: Public Key List

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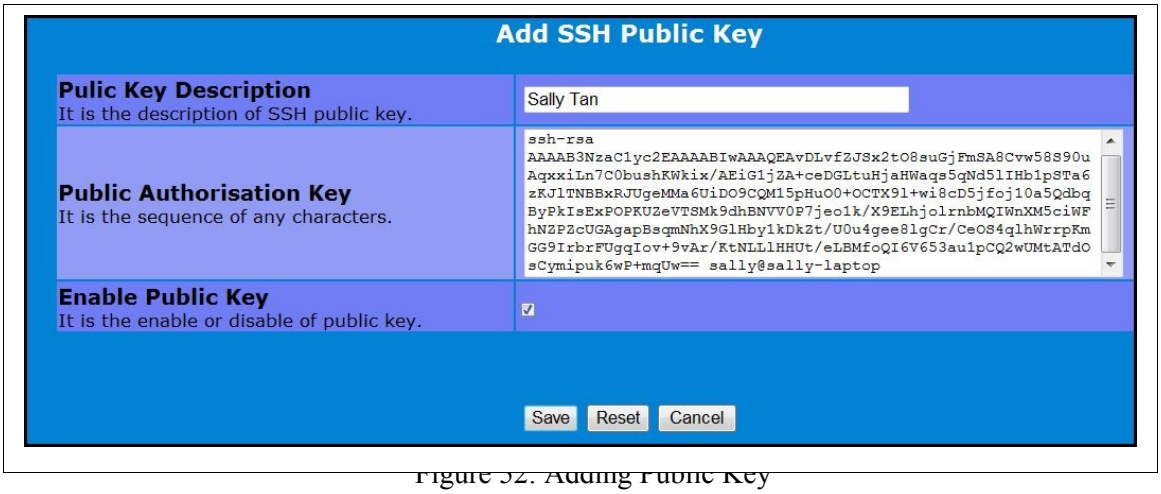

Figure 52: Adding Public Key

Select **Add Public Key** (Figure 51), provide a **Key Description**, **paste the Key** and **Enable** the key and Save (Figure 52). The public key will be uploaded to sendQuick and you can access using SSH '**sqguest**' account from a laptop/PC with the relevant private key installed.

3.11 Send SMS via sendQuick Server

You can send SMS via sendQuick in 3 ways. They are the HTTP Post, E-mail-to-SMS and File Upload (CSV and Tab Delimited). The sendQuick server had preset the HTTP and E-mail sending methods tied to the IP address of the server. Hence, whenever you change the server IP, the URL and e-mail address will change.

> **Note:** You should configure the Server with the correct fixed IP and should not change them unless absolutely necessary.

The setting for the message sending HTTP URL and e-mail are as follow:

HTTP Post/Get http://<serverIP>/cmd/system/api/sendsms.cgi

E-mail <tar_num>@<serverIP/domainname>

Example:
If you set the IP address to 192.168.1.8, then the URL and e-mail for sending messages are as follow:

HTTP Post/Get http://192.168.1.8/cmd/system/api/sendsms.cgi

E-mail <label>-<tar_num>@192.168.1.8

The format for sending messages via HTTP is determined by the variables that define the mobile phone number and message body. The defined format for HTTP Post/Get is as below (if server IP is 192.168.1.8).

CGI/HTTP variables:
tar_num: target (handphone) number
tar_msg: message to send via modem
tar_mode: mode=text (ASCII) or mode=utf8 (Unicode)
label: modem label to allow specific routing of the HTTP Post to specific modem

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trackid: tracking ID provided by remote applications for status checking (optional)
status_url: URL for sendQuick to HTTP Post back the status (optional)
priority: The priority to send the SMS in sendQuick (optional)

Example:
http://192.168.1.8/cmd/system/api/sendsms.cgi?tar_num=91234567&tar_msg=how are you&tar_mode=text&label=modem1

Hence, to send in languages other than ASCII, you will need to send HTTP Post as Unicode format (mode=utf8)

Refer to sendQuick_API_Guide in the sendQuick CD-ROM for more detailed description and examples.

As for e-mail, you will need to e-mail to the server in the following format.

To : label-91234567@192.168.1.8
Subject : Test message
Message: Test message for you.

There is no difference for sending SMS messages via email for different languages. The system will be able to recognize the language format from the email header (please set the email client character format to the right character set). If you are sending UTF-8, please ensure the mail client has the UTF-* encoding set. The **label** (in the email) is to designate which modem will be sent for the message. The label parameter is optional. When no label is specified, the messages will be sent with any available modem.

You can use both formats for sending messages to the server. If you need to send many messages, you will need to send more (HTTP or email) messages to the server. Hence, if you are using sendQuick with your application server, it is more advisable to use with HTTP Post connection.

You can find the Send SMS Specifications in the server (under **Send SMS Specifications button**). As for sending via File Upload, please refer to Section 3.12

> **Note:** All SMS can only receive 160 characters per message. Please do not use more than 160 characters in the message body for both e-mail and HTTP Post connection.

3.12 Sending Mass SMS (Broadcast) using Designated File Format

SendQuick has a feature that allows users to send mass SMS (broadcast) using some designated format, which include Comma Separated Value (CSV) or Tab Delimited value. These two formats are supported by most database or spreadsheet software, like Microsoft Excel, Access, MS SQL, GoldMine, ACT! and others.

The files need to be formatted (or exported in the relevant format) and saved as either CSV (**.csv**) or TXT (**.txt**) extensions. For Comma Separated Value, the file can be either CSV or TXT. For Tab Delimited, it will need to be in TXT format.

Data Format: The data format should be segmented in 2 columns: handphone number and message content. The table below shows the example of the data format in the CSV and TXT file.

Data Format in the Files	Example

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Comma Delimited Value (CSV)	91234567,hello how are you?
Tab Delimited Value (TXT)	91234567 hello how are you?

For exporting data from database or Microsoft Excel, your data in the software should be organized as shown below. The extreme left column is the mobile phone number followed by the Message in the next column. This format had to be followed strictly or will result in processing error.

96367680	Hi! This is a message for you
96189556	Hello, greetings from Singapore

To send messages using either of these two file formats, select the **Send SMS** item on the left navigation bar You will notice a File Upload item as shown in Figure 53. Select **File Upload** and select the **File Type**, **Language** (your message is written in) and **Browse** to select the file. Select **Upload** once you are ready (Figure 54).

The messages are displayed for your preview to check the messages before sending. If all the messages are **OK** (under Message Format), then you can send the messages without errors. If there are messages that are **Error**, you can choose to amend the original file and upload again. If all messages are **Error** (indicating wrong format), you will not be able to send the messages.

Once you are satisfied with the messages in the preview, select **Send** and the messages will be sent for processing and sent as SMS. You can select **Cancel** to perform Upload again.

This feature allows you to export data from database and others to send SMS to all users on one single process.

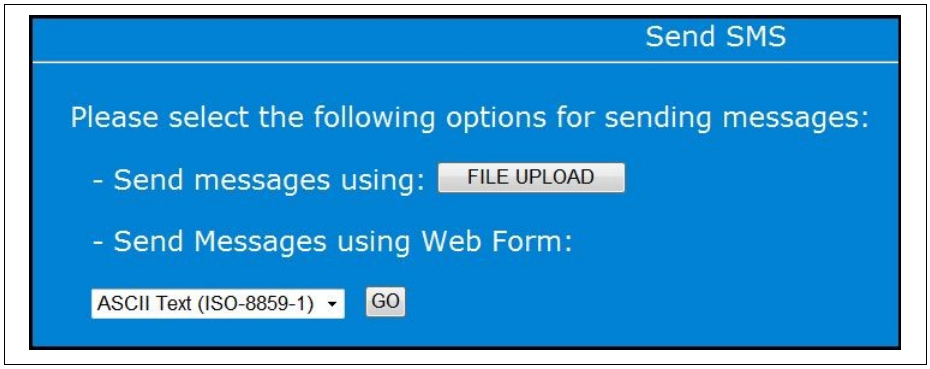

Figure 53: Send SMS Option for File Upload and Direct Sending

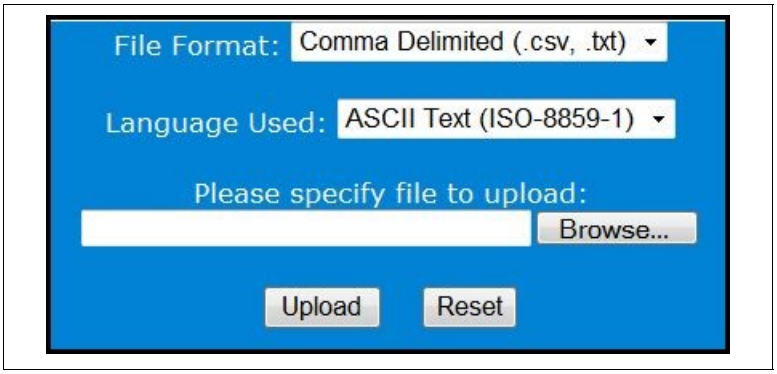

Figure 54: Selecting the File format for Upload

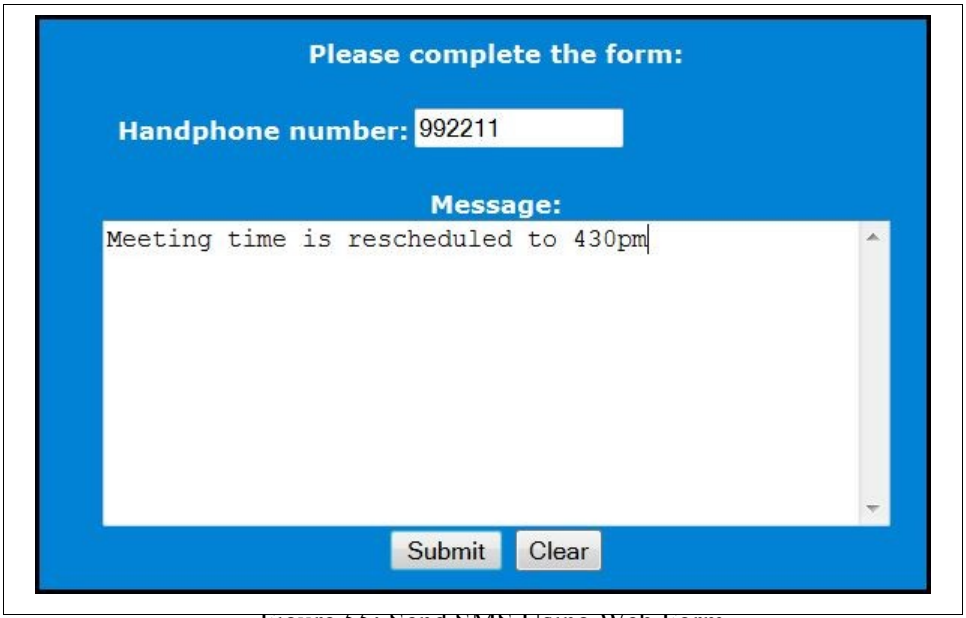

Figure 55: Send SMS Using Web Form

Figure 55 shows how you can send a SMS using the web form. This is for testing of SMS purposes.

3.13 Sending Messages to Overseas Mobile Numbers

SendQuick Server supports sending SMS to overseas users. This is network (or SIM) dependent. This means that your SIM card and mobile network must be able to send to an overseas number directly using the SIM card.

For sending via email to SMS, start the email address with (+)(country code). Hence, if you are a using the server in Singapore and intend to send to Malaysia, your email will look like:

+60121234567@192.168.1.8

where +60 is the added country code for overseas (international) SMS.

If you are using HTTP Post method, the (+) and country code need to be added to the mobile phone (tar_num) field. The hex-value for (+) is %2B for HTTP Post method.

3.14 Receive SMS via sendQuick Server

After you have defined the receive SMS path and method (for your application server to receive the replied SMS) in Section 3.4 above, you will need to configure your applications to accept the messages in the following format and predefined variables. These format and variables are predefined by sendQuick and cannot be changed. It defines the way that your applications are able to recognise the information sent from sendQuick.

Please refer to the format below for the HTTP Post and E-mail communication methods.

Example of http response from the server:

http://<response_url>?mno=91234567&txt=Testing&dtm=02/06/10,14:19:18&charset=utf-8

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Where:
mno -- the mobile phone number
txt -- the text message
dtm -- the date and time of the SMS received.
charset – language character set

As for e-mail, the received SMS message will be sent to the e-mail specified in Section 3.4. An example of the received e-mail is as below.

From : 91234567@192.168.1.8
Date : Monday, June 10, 2002 2:31 PM
To : sh_ang@yahoo.com <sh_ang@yahoo.com>
Subject : SMS From 91234567

Sender: 91234567
Timestamp: 10/06/02,14:32:54
Message: Test

You will need to configure your back-end system and applications to receive the messages in the format mentioned above.

3.15 Message Log

The sendQuick server has a comprehensive log system that records the server and transaction log in the server. Select the **Usage Logs and Report** on the navigation bar and you will see the interface in Figure 56 and 57 below.

The Logs are divided into four sections. They are explained below:

(i) System Logs
- The System Logs are the Server and Email Logs. These logs shows the activities in the sendQuick server as well as the SMTP (email) activities in sendQuick. These are shown in Figure 58 and 59.

(ii) Usage Logs
- Usage Logs are for the SMS messages that were sent and received by sendQuick. All the messages will be recorded with their respective time, date, from (sender), to (mobile number), modem IMEI and SMSC number and the message content. You can see the different logs in Figures 60, 61 and 62 below. The Logs are Inbox (receive), Outbox (sent), Queue (waiting to sent), Unsent (failed to send) and Discarded Alert (unmatched message).

(iii) Usage Log Maintenance
- This refers to how long the messages are kept in the sendQuick server by specifying based on number of days (old) from current date. If the days are set to 180 days, messages older than 180 days will be deleted automatically. This allow the system to perform automatic data deletion and house keeping.

(iv) Usage Log Report via Email, FTP and Syslog
- This allow the administrator to receive the messages log via email (specify the email address) at a selected period (daily, weekly, monthly) and at a certain specified time. The FTP setting is for backup the files to a FTP directory/server (eg,NAS) at the same specified time and interval. The Syslog is for sendQuick to send the SMS messages log to a syslog server.

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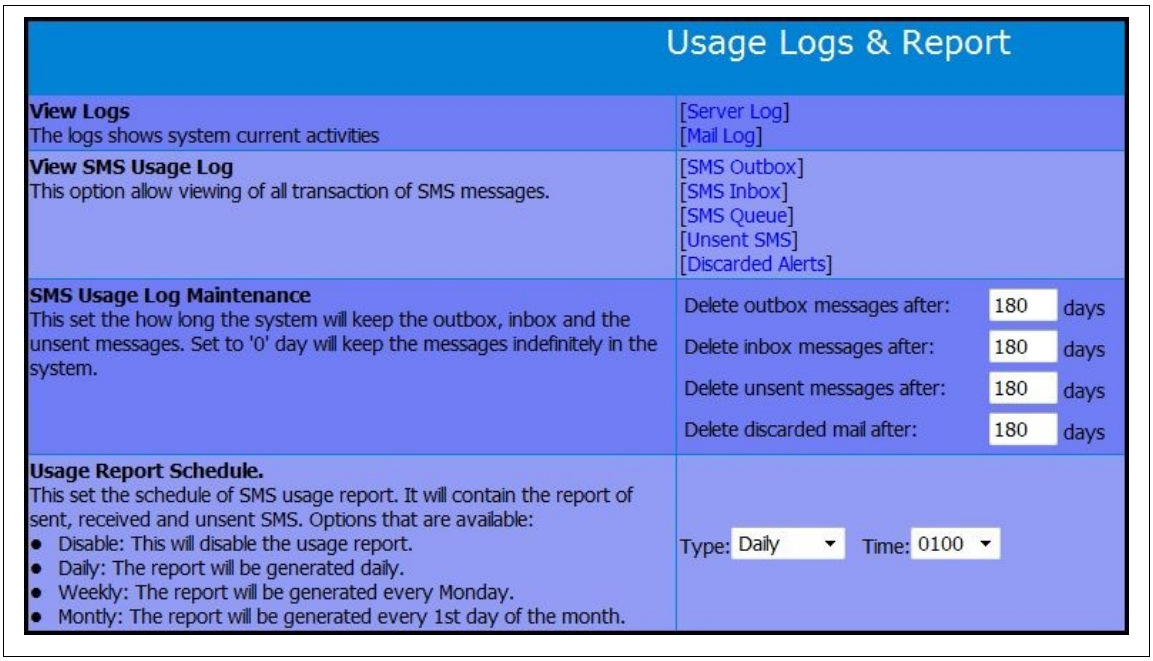

Figure 56 : Logs and Usage Report

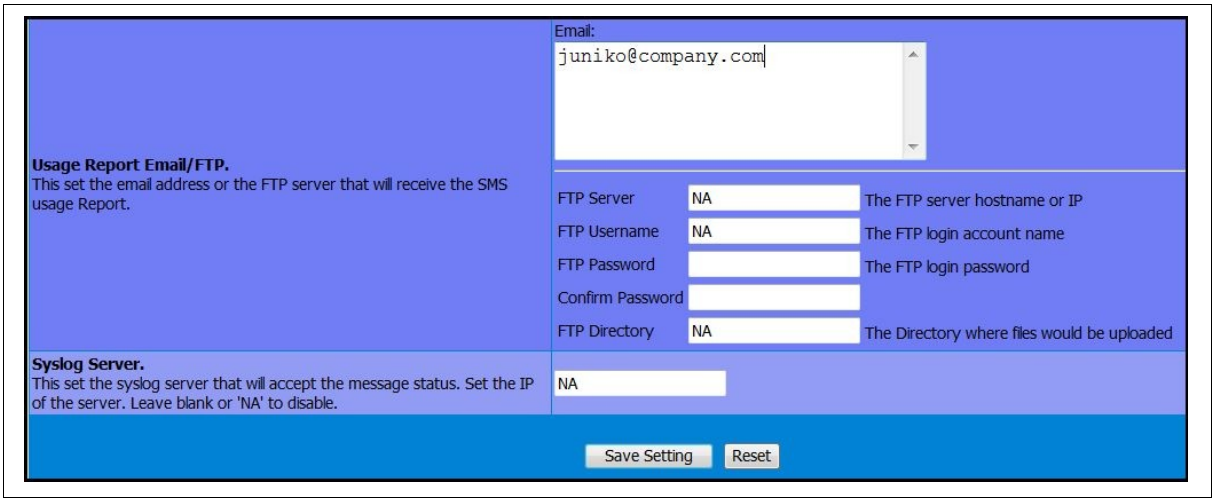

Figure 57 : Log Backup via Email and FTP

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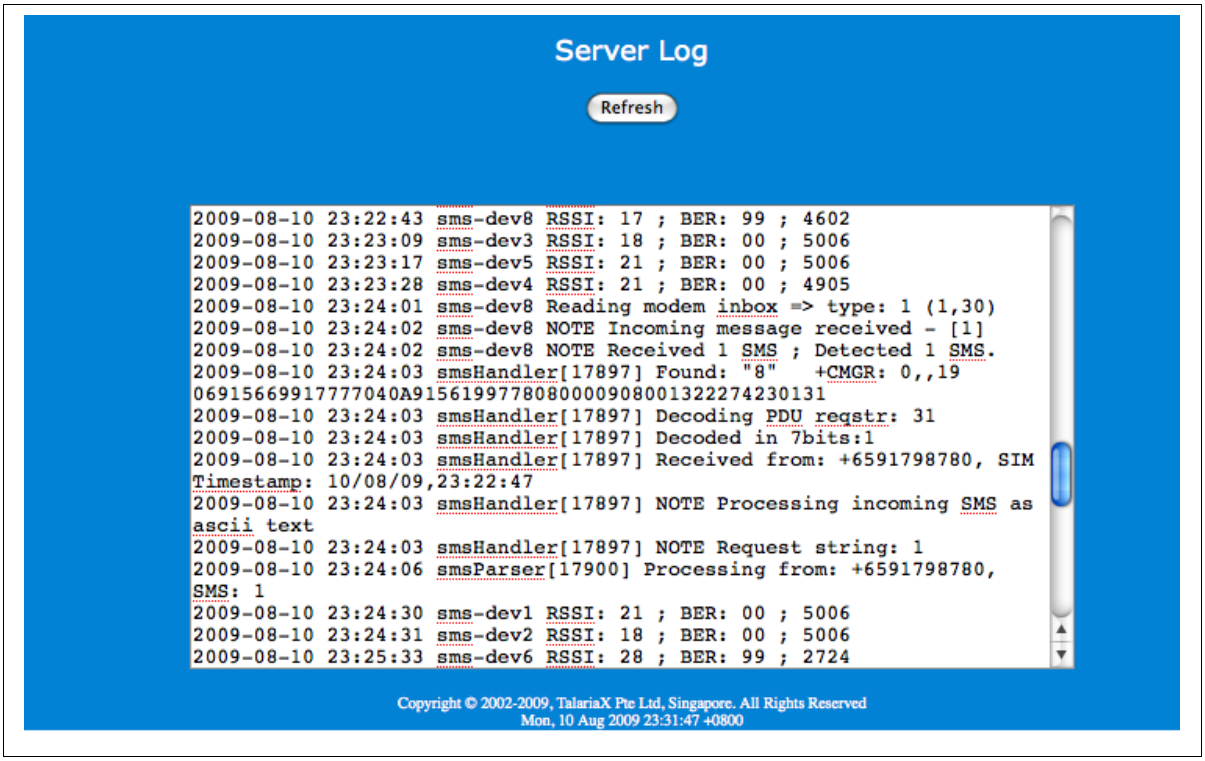


Figure 58 : Server Activity Log

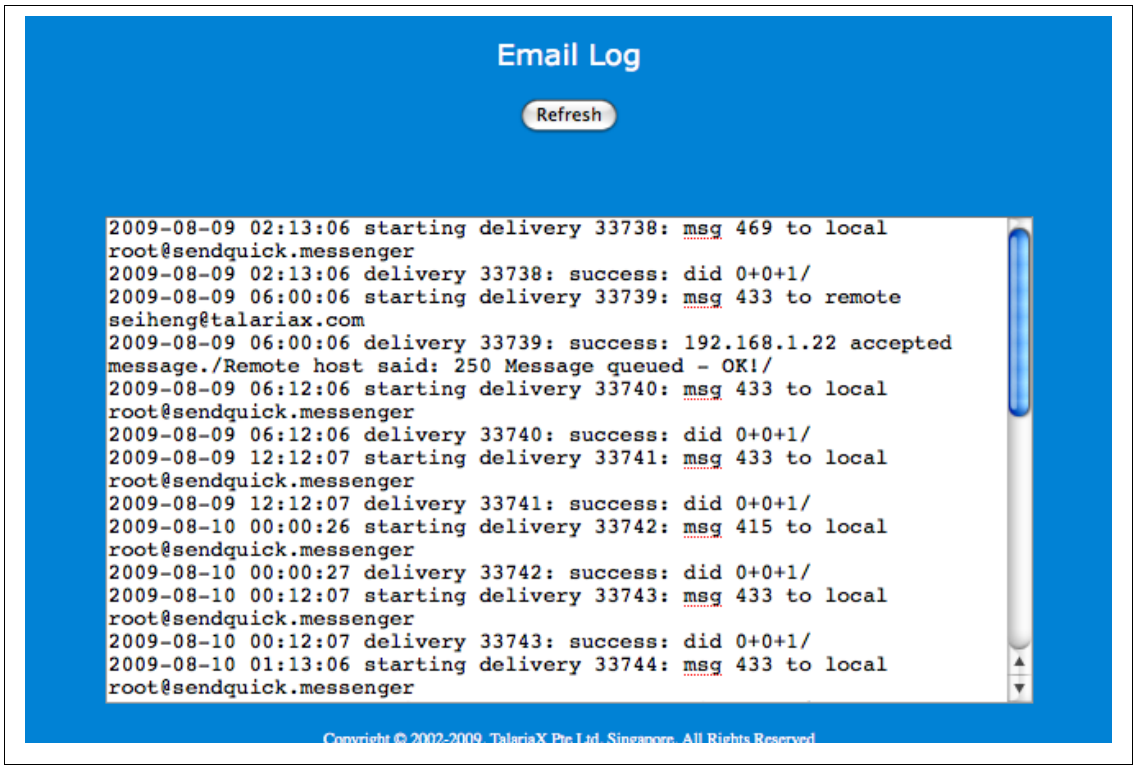
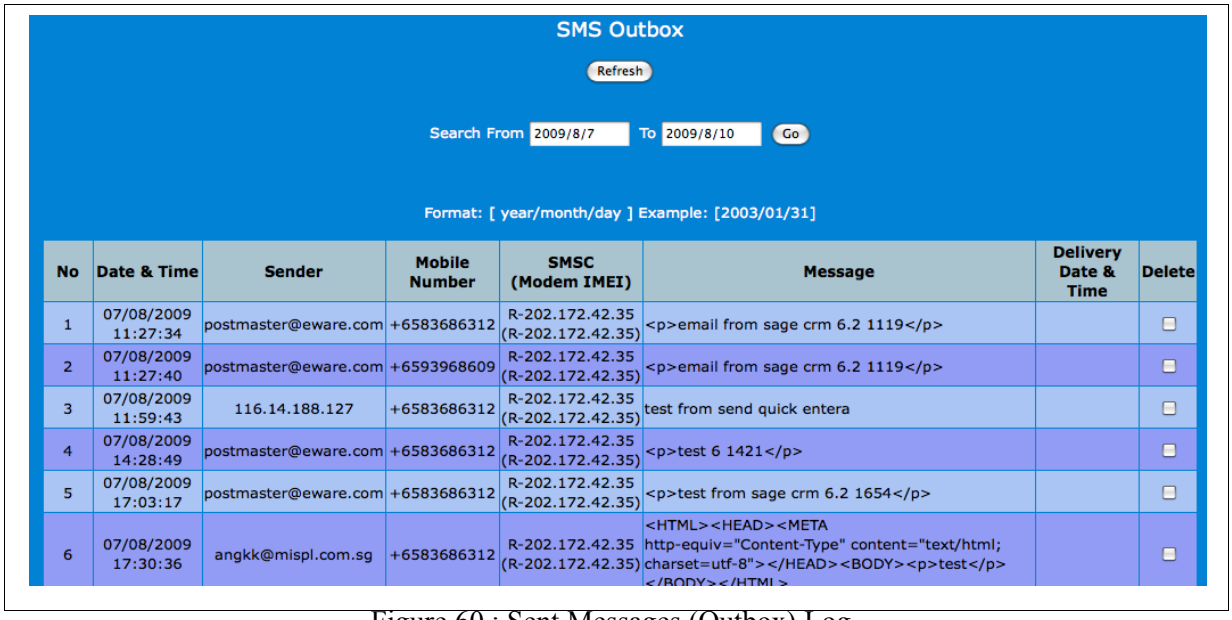


Figure 59 : Email Activity Log



SMS Outbox

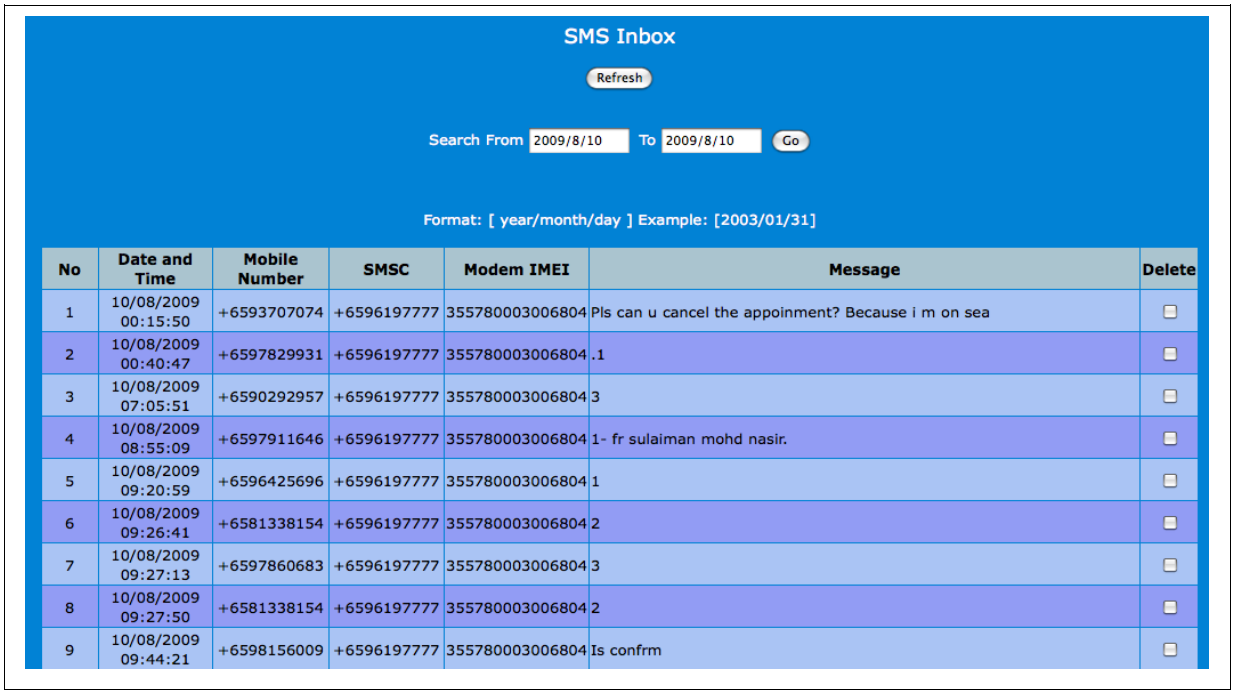
Refresh

Search From 2009/8/7 To 2009/8/10 Go

Format: [year/month/day] Example: [2003/01/31]

No	Date & Time	Sender	Mobile Number	SMSC (Modem IMEI)	Message	Delivery Date & Time	Delete
1	07/08/2009 11:27:34	postmaster@eware.com	+6583686312	R-202.172.42.35 (R-202.172.42.35)	email from sage crm 6.2 1119		
2	07/08/2009 11:27:40	postmaster@eware.com	+6593968609	R-202.172.42.35 (R-202.172.42.35)	email from sage crm 6.2 1119		
3	07/08/2009 11:59:43	116.14.188.127	+6583686312	R-202.172.42.35 (R-202.172.42.35)	test from send quick entera		
4	07/08/2009 14:28:49	postmaster@eware.com	+6583686312	R-202.172.42.35 (R-202.172.42.35)	test 6 1421		
5	07/08/2009 17:03:17	postmaster@eware.com	+6583686312	R-202.172.42.35 (R-202.172.42.35)	test from sage crm 6.2 1654		
6	07/08/2009 17:30:36	angkk@mispl.com.sg	+6583686312	R-202.172.42.35 (R-202.172.42.35)	<HTML><HEAD><META http-equiv="Content-Type" content="text/html; charset=utf-8"></HEAD><BODY> test </BODY></HTML>		

Figure 60 : Sent Messages (Outbox) Log



SMS Inbox

Refresh

Search From 2009/8/10 To 2009/8/10 Go

Format: [year/month/day] Example: [2003/01/31]

No	Date and Time	Mobile Number	SMSC	Modem IMEI	Message	Delete
1	10/08/2009 00:15:50	+6593707074	+6596197777	355780003006804	Pls can u cancel the appoinment? Because i m on sea	
2	10/08/2009 00:40:47	+6597829931	+6596197777	355780003006804	.1	
3	10/08/2009 07:05:51	+6590292957	+6596197777	355780003006804	3	
4	10/08/2009 08:55:09	+6597911646	+6596197777	355780003006804	1- fr sulaiman mohd nasir.	
5	10/08/2009 09:20:59	+6596425696	+6596197777	355780003006804	1	
6	10/08/2009 09:26:41	+6581338154	+6596197777	355780003006804	2	
7	10/08/2009 09:27:13	+6597860683	+6596197777	355780003006804	3	
8	10/08/2009 09:27:50	+6581338154	+6596197777	355780003006804	2	
9	10/08/2009 09:44:21	+6598156009	+6596197777	355780003006804	Is confrm	

Figure 61 : SMS (Message) Inbox Log

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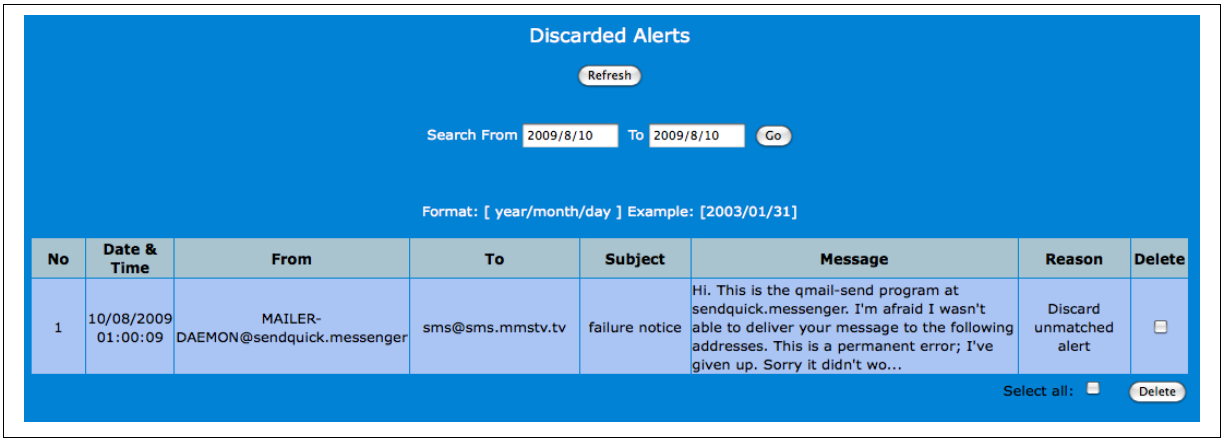

Figure 62 : Discarded Alert Log

Discarded Alerts are messages that were sent to sendQuick filter accounts for processing but did not match the Email, SNMP Traps or Syslog filter rules. These (unmatched) messages will be logged in the discarded alert log. Hence, if you did not receive any SMS after configuring the filter rules, it is advisable to check on the discarded alert log.

All the logs messages can be searched (the date range) for easy reference. You can also save and archive the message logs manually. At the bottom of the message log, there is a **Save** button which will save the messages selected for the specified period. Select the Save button, the **Download** button and use a **right mouse click**. This allow the files saved as a text file in a local storage.

To delete the records, **select/check** the delete button and select **Delete**.

3.16 Change Password

The administrator can change the password for prudent system management. Select Change Password and the interface is shown in Figure 63 and 64 below.

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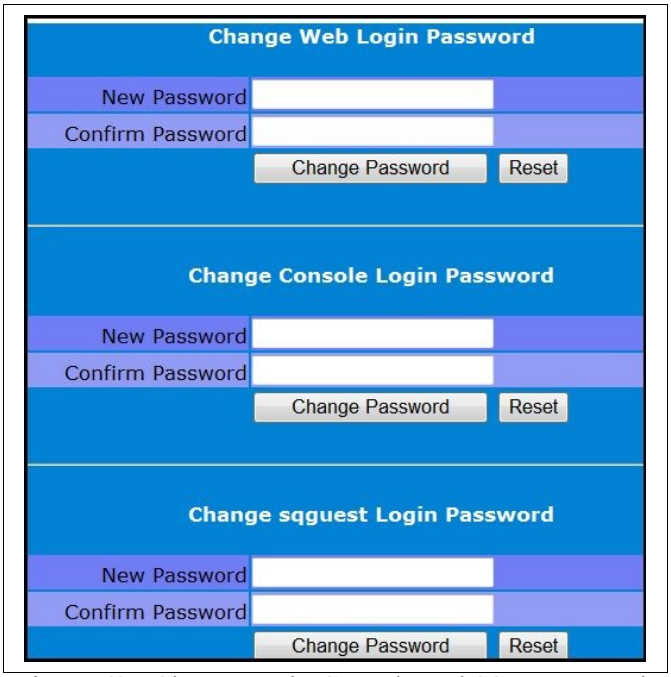

Figure 63 : Change Web, Console and SSH Password

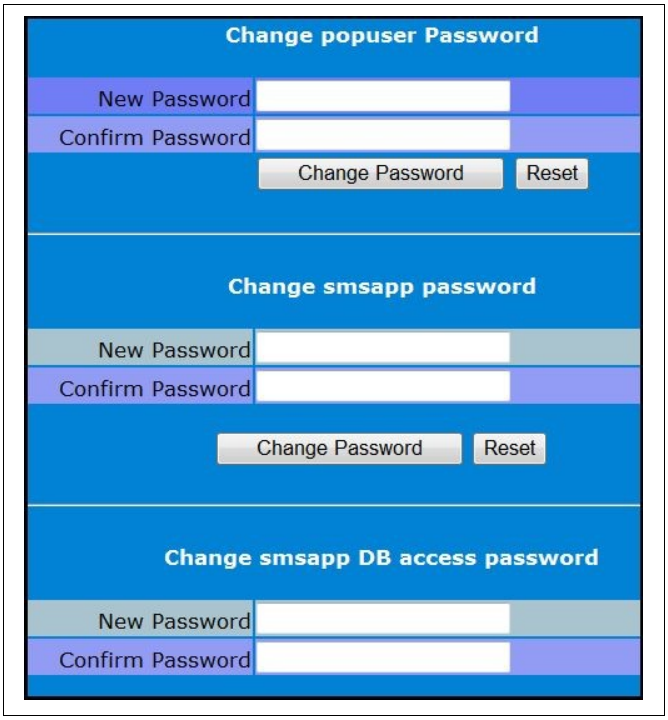

Figure 64 : Change Popuser, FTP and DB Password

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There are six (6) passwords that can be changed. They are:

Web Login	:	Password for web administrator login (default: admin123)
Console Login	:	Password for console login (default: sqroot)
Sqguest Login	:	Password for access via SSH for limited SSH access
Popuser	:	Email POP account in sendQuick (default: popuser)
SMSApp FTP	:	Account to upload file to sendQuick to send SMS
SMSapp DB	:	Account for ODBC access

At the bottom of the page (of change password), there is a field selection to reset the Useradmin password (default: admin123) for the User Interface to send SMS (Figure 65). This Useradmin interface is only available in sendQuick Entera and sendQuick Enterprise server.

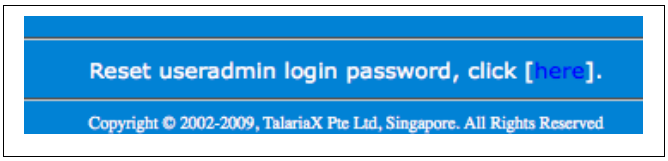

Figure 65 : Reset Useradmin Password

3.17 System Backup and Diagnostic

You can backup the system configuration, keyword and the alert rules in the sendQuick server. To activate, select the **System Backup and Diagnostic** button in the navigation menu and you will see an interface as shown in Figure 66 below.

Select the Backup System Configuration, if you wish to backup the system configuration and rules respectively. Once selected (the **Start** button) and you will need to save the backup files in an external media (hard disk) in another machine (which can be your local access machine).

Note: When the backup process is in progress, do not close the browser as it may affect the process and have an impact on sendQuick subsequently. Just wait patiently until the process completed and you will b prompted to Save the file.

You will notice that sendQuick backup files are named in accordance to the 'bakfiletype_date' with an extension '**.enc**'. This is a proprietary format for sendQuick and can be used for sendQuick server only. Please use the same file when you restore the configuration or alert rules respective.

The administrator can also create a diagnostic file when required. **A diagnostic file is an sendQuick system image file that will capture all the essential system information, logs and other relevant information in sendQuick**. This file is very useful for sendQuick technical team to review when it is required to troubleshoot any problem in sendQuick.

Select the **Start** button at **Create System Diagnostic File** in Figure 65 below. The creation process may take a few minutes (depending on the file size), so do be patient. Similarly, **DO NOT CLOSE THE BROWSER** when the creation process is in progress (for a few minutes and may be as long as 10 minutes). Once completed, the browser will refresh and a **Download** link will appear. Perform a right click and save the file and send the file to sendQuick technical for review. The file is an encrypted file with '**.enc**' extension.

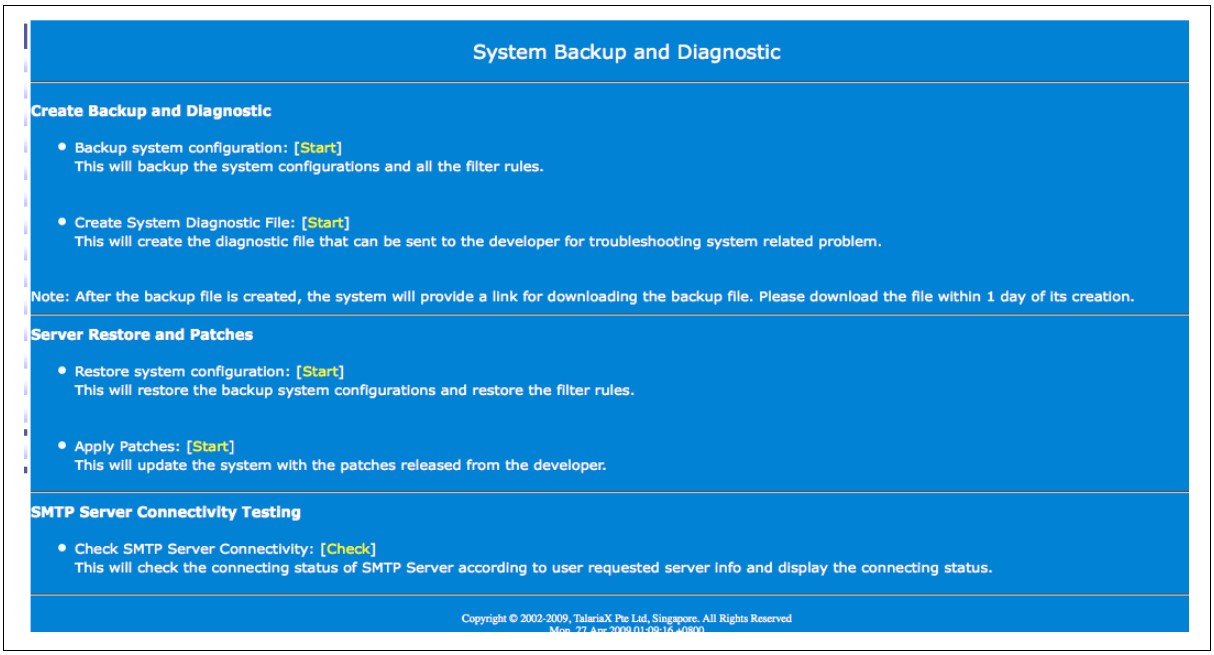

Figure 66: Backup and Diagnostic

Occasionally, TalariaX will release new patch version of sendQuick server which can be applied to the sendQuick servers. Similarly, if the technical team discovered some problems, the issues can be resolved by applying patch to the system. The process to apply patch is illustrated in Figure 67, 68 and 69 respectively.

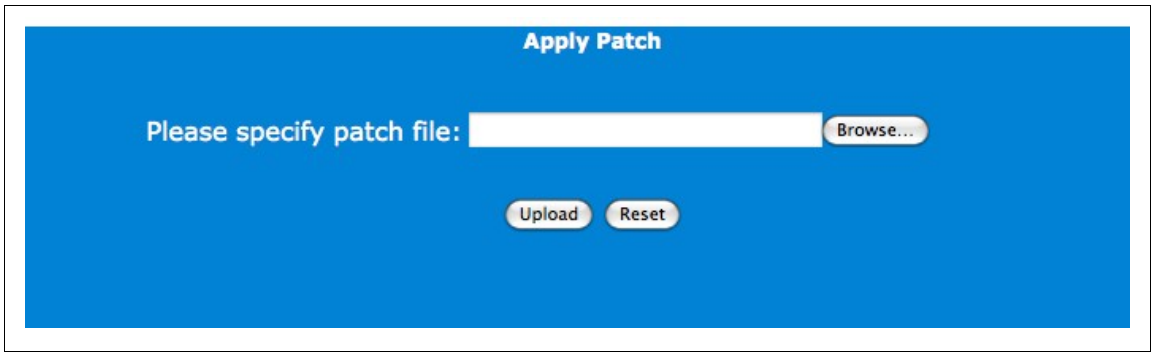

Figure 67: Apply Patch

Select **Server Restore and Patches > Apply Patches** in Figure 66 and the Browse page in Figure 67 appears. Select **Browse** and select the file as shown in Figure 68 below. Please note that the patch file is a file with extension **'.enc'** and is provided by TalariaX. For generic patch, please note the version number of sendQuick at the bottom of the left menu bar (Figure 2). The generic patch must bear the same version creation number as illustrated below.

20070525 – 5	(a)	Version Creation Number
(a) (b)	(b)	Patch Version Number

Different version creation number are not compatible with each other, despite being the same product model. Each version creation number will have their own patched versions.

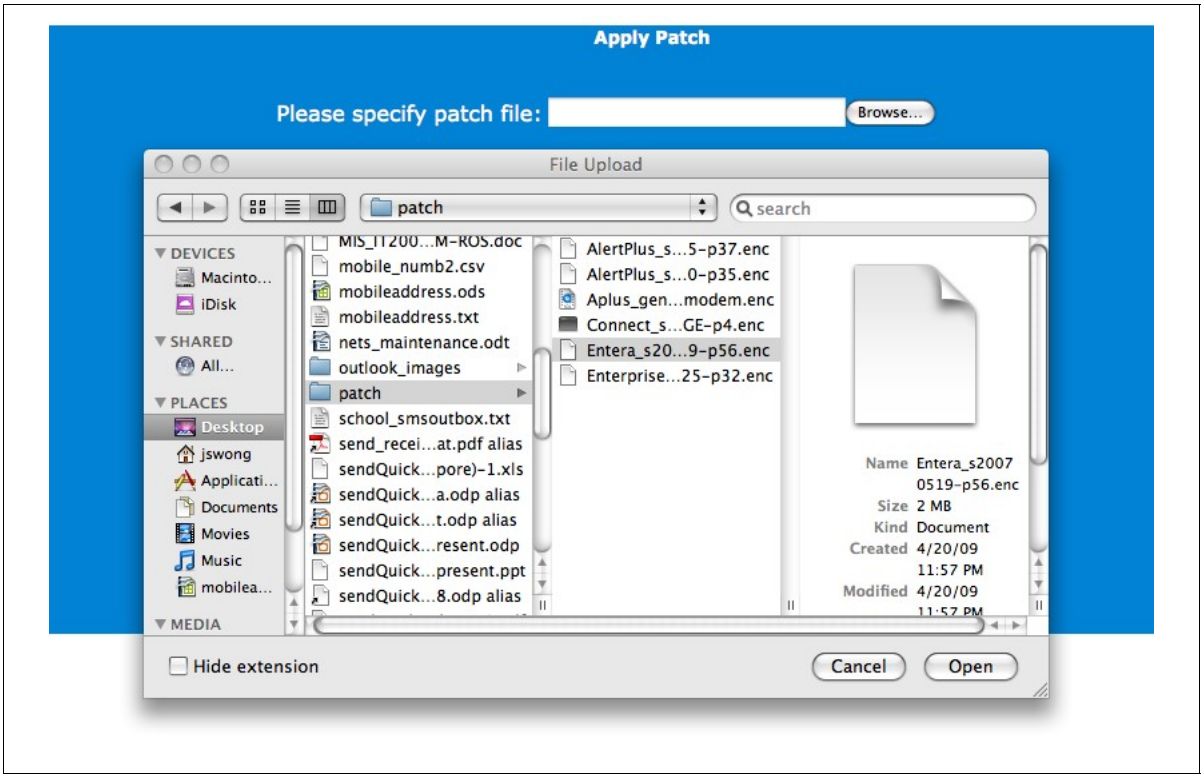

Figure 68: Select Patch File to Apply

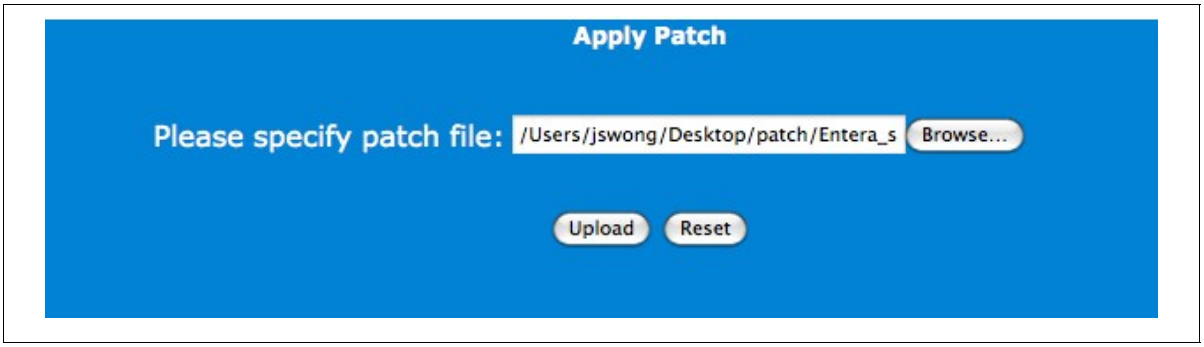

Figure 69: Upload File and Patch

The process to restore the backup and configuration is the same. Similarly, the backup file can only be applied to the same version creation number.

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3.18 Send SMS Specifications

This section document the specifications to send SMS via sendQuick. The send SMS specifications allow developers to develop applications to send messages to sendQuick server via email or HTTP Post methods. The detailed specifications were explained in Section 3.11 earlier and a copy of the specifications (HTTP Post) is included in the sendQuick CD-ROM for detailed reference. Figure 70 shows the specifications for summary reference.

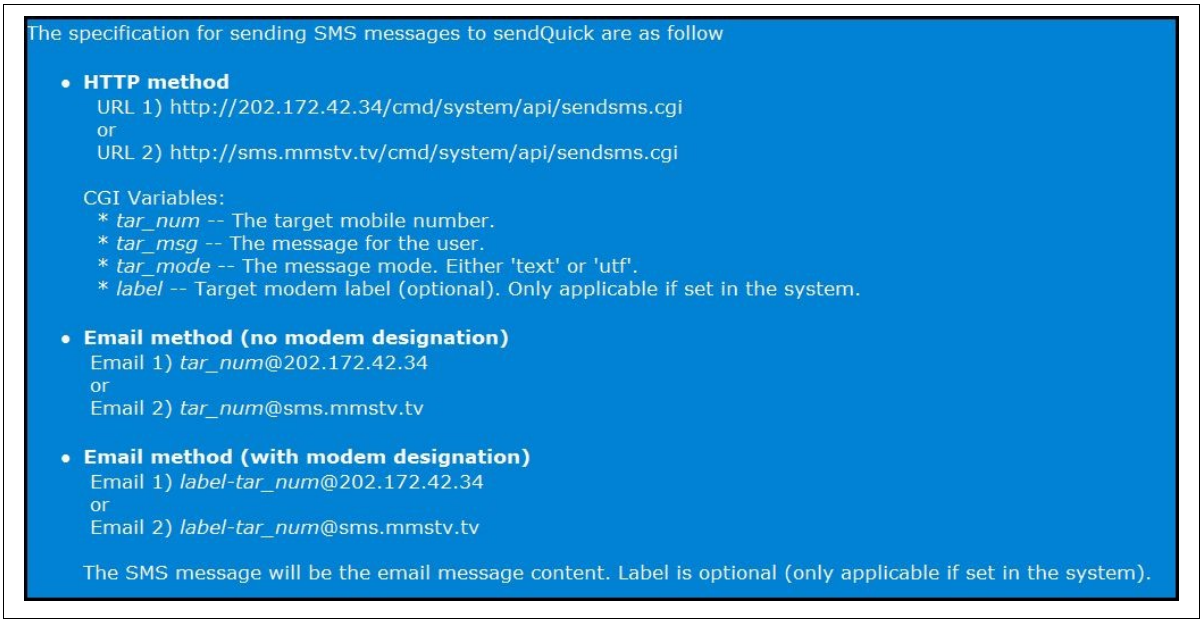

Figure 70 : Send SMS Specifications

3.19 POP User Account in sendQuick

sendQuick server has a built-in and pre-configured POP account for easy access, single user environment or when an alternative e-mail server is not present in the network. This POP account will allow the administrator or any user to use this POP account to receive SMS by using the SMS-to-email reply option.

The default and standard configuration for this POP user is as follow:

POP username	:	popuser
Password	:	popuser (default password)
POP e-mail account	:	popuser@localhost
Incoming (POP) mail server	:	IP address of the sendQuick server
Outgoing (SMTP) server	:	IP address of the sendQuick server (or others)

To change the password for the POP user account, refer to section 3.16.

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3.20 Send Test Message from sendQuick Server

To ensure that the server is functioning properly, sendQuick has a built-in message sending interface for you to send a test message.

Please select the Send SMS button on the left bar and you will see the screen shown in Figure 53 in Section 3.12 above. Select **Send Messages Via Web Form** and you will see an interface to send messages as in Figure 55. You can select the languages that you wish to send the message as shown in the language selection box as shown in Figure 53.

Once the message is sent successfully, you will see a success page.

3.21 Shutdown, Restart and Log-out from the System

To Shutdown, Restart or Log-out, just select the relevant button from the navigation menu located at the **Top Right Hand** corner of the interface (Figure 71). You will see a successful message when the task is confirmed.

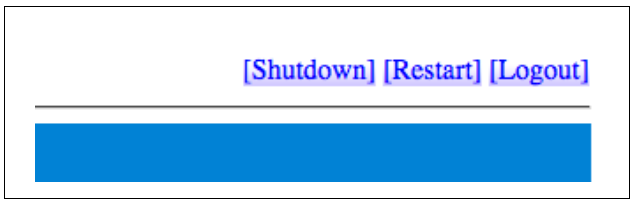

Figure 71 : Shutdown, Restart and Logout

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4.0 HIGH AVAILABILITY CONFIGURATION

SendQuick SMS Gateway can support High Availability (HA) to ensure a continuous SMS delivery for your applications in your environment. This is an optional item (contact your distributor or TalariaX for pricing) and is only available for selected models; **sendQuick Alert Plus, sendQuick Entera, sendQuick Conexa and sendQuick Communications.**

You need to access the server administration interface to configure the HA module (after purchase is made). Login as admin user and you will be able to see the option to configure HA at the bottom of the **Server Setup** section (Figure 72).

As the configuration requires certain understanding, we do advise all administrator to read this section before actual configuration to avoid any confusion and misconfiguration. When in doubt, please contact TalariaX for clarifications. The step-by-step approach is documented below.

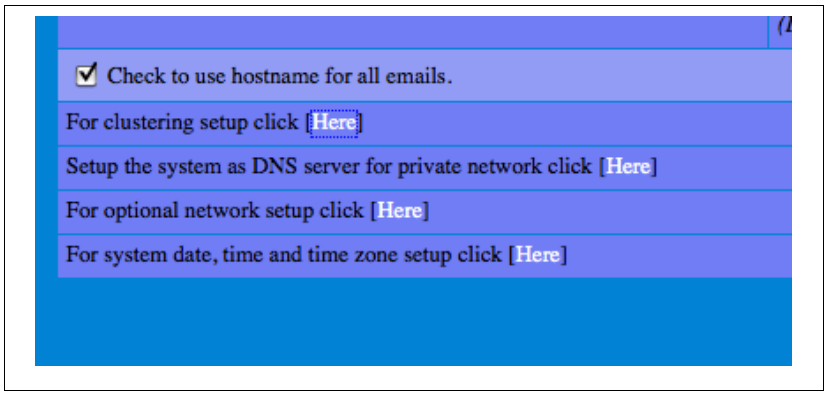

Figure 72 : Clustering (HA) Setup Option

Before you proceed with the configuration, please make sure you have the following prepared:

- 1 x Cross cable for hearbeat checking
- 2 x IP address set for heartbeat checking (this can be internal IP set)
- 2 x IP address set of the primary and secondary server (configure the servers as normal configuration first)

Select the Here button and the interface for configure the HA (cluster) is shown in Figure 73.

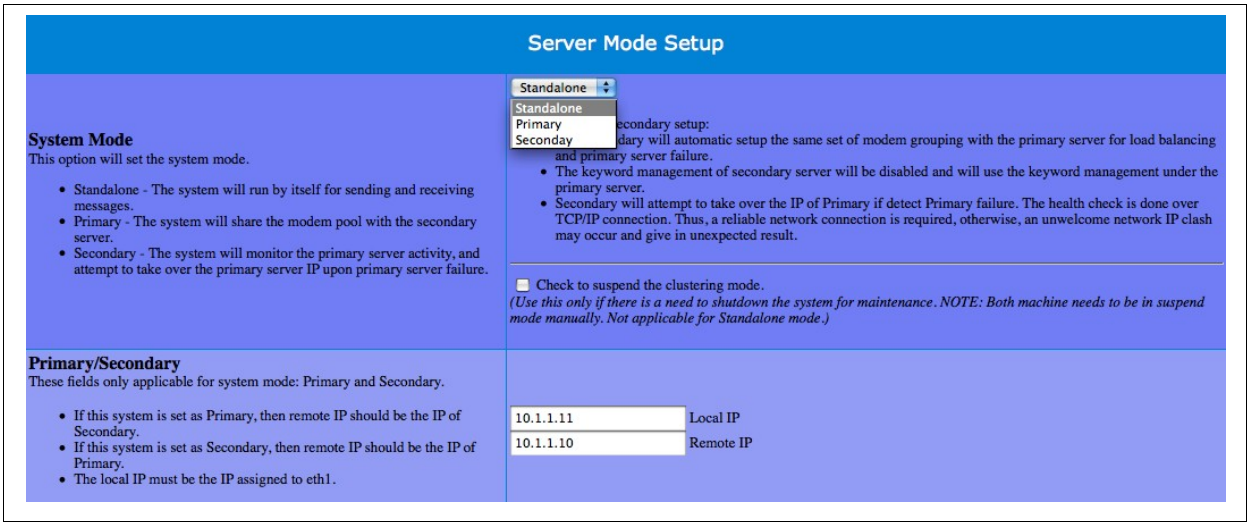

Figure 73 : Configuring Clustering Setup

First, select whether the system is a **StandAlone (no HA), Primary or Secondary Server**. Then, you can choose to suspend the HA service (select only when you need to perform the maintenance of the system. Else, do not select).

The description for the three options as as below:

Options	Description
Stand Alone	The system perform as a single machine and no HA is required. By default, this is selected. Hence, the system can function as a normal single unit, if required.
Primary	Primary server refers to the system that is being used by the applications, and perform the load distribution and replication with the secondary server. This also serves as the controller in the HA configuration.
Secondary	Secondary server serves as a backup for the Primary. It has synchronised all the configuration of the Primary and will assume Primary server IP when primary is not working.

The next section is to configure the cross IP checking performed by the two (Primary and Secondary server) servers with each other. This is also known as the **heartbeat** between the two systems.

The **heartbeat checking is configure on eth1 or E2** (as labelled on the LAN port).

The **Local IP** refers to the IP if the machine (that you are configuring) for the heartbeat LAN port. If the server is a Secondary Server, this is the hearbeat IP of the secondary server. **Remote IP** is the IP address that will be checked by the Local IP. Eg, if secondary server, Remote IP is Primary Server heartbeat IP port.

Note: The IP (Local and Remote) in Figure 73 above is NOT the IP that is configured for the servers (Primary & Secondary) respectively, that was configured in the Server Setup section (Section 3.3). In fact, the (local and remote) has to be a totally different network range from the IP address in the Server Setup.

In the setup above, always perform the configuration in the secondary server first. The reason is once you complete the Primary server configuration, it will need to search and replicate to the secondary server. (refer to the step by step guide for the right order).

Then, configure the alertee list for email and SMS for notification when the HA system perform a switch-over and restoration.

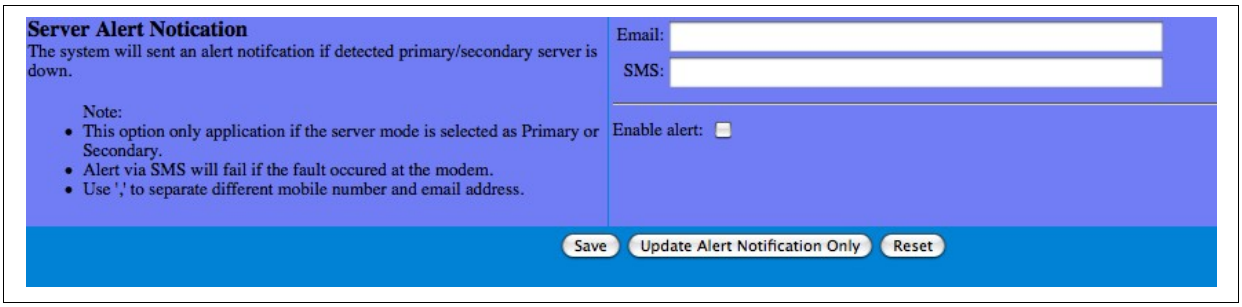

Figure 74 : Alertee List Configuration

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Once you have completed the configuration, select **Save** and the configuration will be saved and activated. You can update the alertee list separately on a later date and select **Update Alert Notification Only** in order not to have any impact on the HA configuration.

When saving as Primary server, once you Save, the system will show a configuration process and Secondary server will be updated automatically. If the update is successful or unsuccessful, it will be displayed on the web interface.

Note: Please have the cross cable connected between the Primary and Secondary servers' E2 before the Primary server can activate the Secondary server.

Once the configuration is completed, the two (2) servers are already in HA mode.

The HA function is sendQuick works with an actual IP on actual LAN. **SendQuick does not use a virtual LAN for the HA**. Hence, when there is a failure, the **Secondary server will restart and will reconfigure itself as the Primary server IP**, ensuring there is continuous performance and no changes done at the application layer. Applications can continue to send SMS as the IP is assumed by the Secondary server, ensuring continuous SMS availability. The switch over downtime is about 30 seconds.

When the Primary server is restored and turned on, the two servers will synchronised and their roles will be reverted to their original configuration automatically. This process will take about 30 seconds as well.

In summary, the step-by-step guide to configure HA systems are as below:

Step	Materials Required	Configuration
1	IP address set	Configure the IP, Netmask and Gateway of Primary and Secondary server IP as explained in section 3.3.
2	LAN cable	Connect the LAN cable to port E1 of both Primary and Secondary servers and ensure the IP is accessible via the network
3	Cross cable	Connect the cross cable between ports E2 of both Primary and Secondary servers
4	Laptop/PC in the LAN Local and Remote IP for E2 for Secondary server	Access Secondary server IP and configure the HA (cluster) configuration with the Remote and Local IP for secondary on port E2. Save the setting
5	Laptop/PC in the LAN Local and Remote IP for E2 for Primary server	Access Primary server IP and configure the HA (cluster) configuration with the Remote and Local IP for primary on port E2. Save the setting and you will notice a process where Secondary server is being configured and synchronised. Please ensure the web interface shows a successful configuration. The process is completed once it is successfully configured.

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5.0 CONSOLE CONFIGURATION AND SETTINGS

While the main access approach to sendQuick is via web browser, you can also perform some simple configuration and settings via the console. Console access will require the monitor and keyboard connected to the system.

Connect the monitor to the VGA Port
Connect the USB/PS2, whichever is applicable

Once the sendQuick is fully started, you will see the IP routing table on the monitor screen. The display is shown in Figure 75 below.

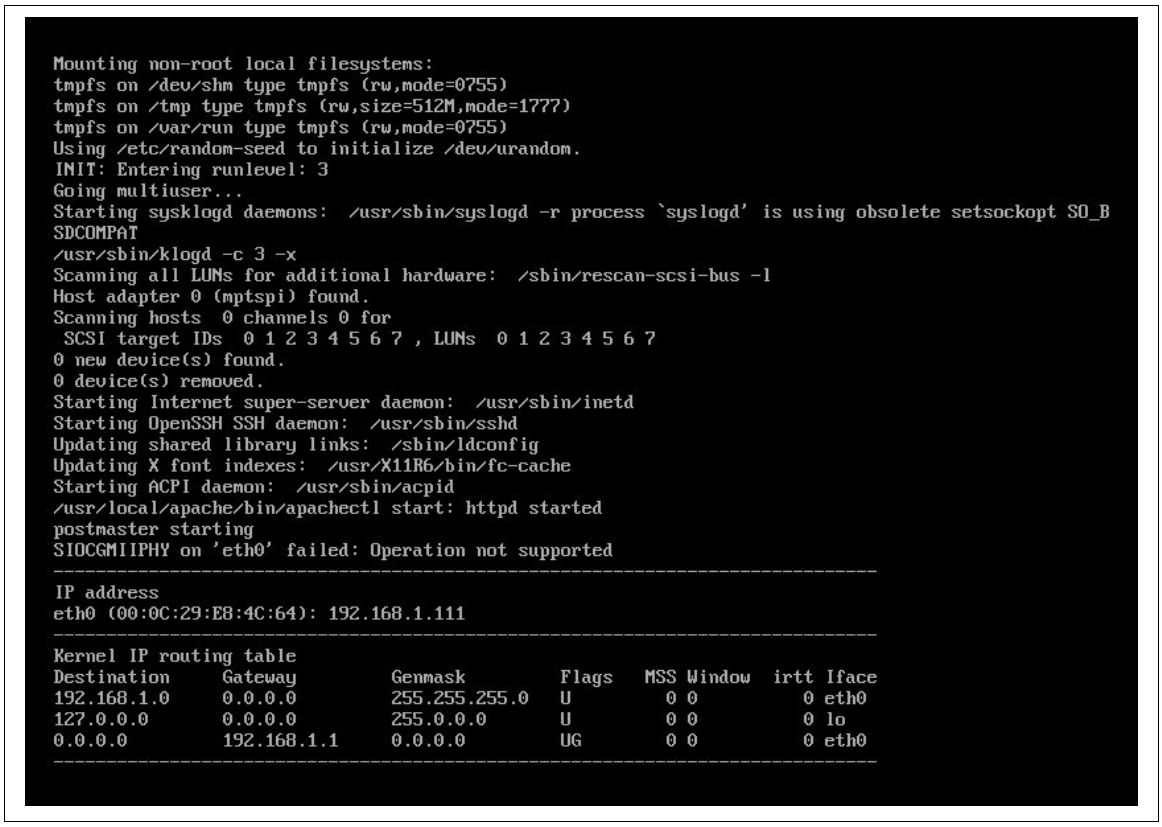

Figure 75 : IP Routing Table

In the monitor console, the administrator can perform the following functions:

- Configure IP address of sendQuick system
- Change sendQuick Web Admin Password

5.1 Configure sendQuick IP via Console

First, you need establish the physical connection as described above. Then, enter **ALT and F4** simultaneously. You will see the login page as shown in Figure 76 and enter the default username and password below.

Console Username: admin **Console Password: sqroot**

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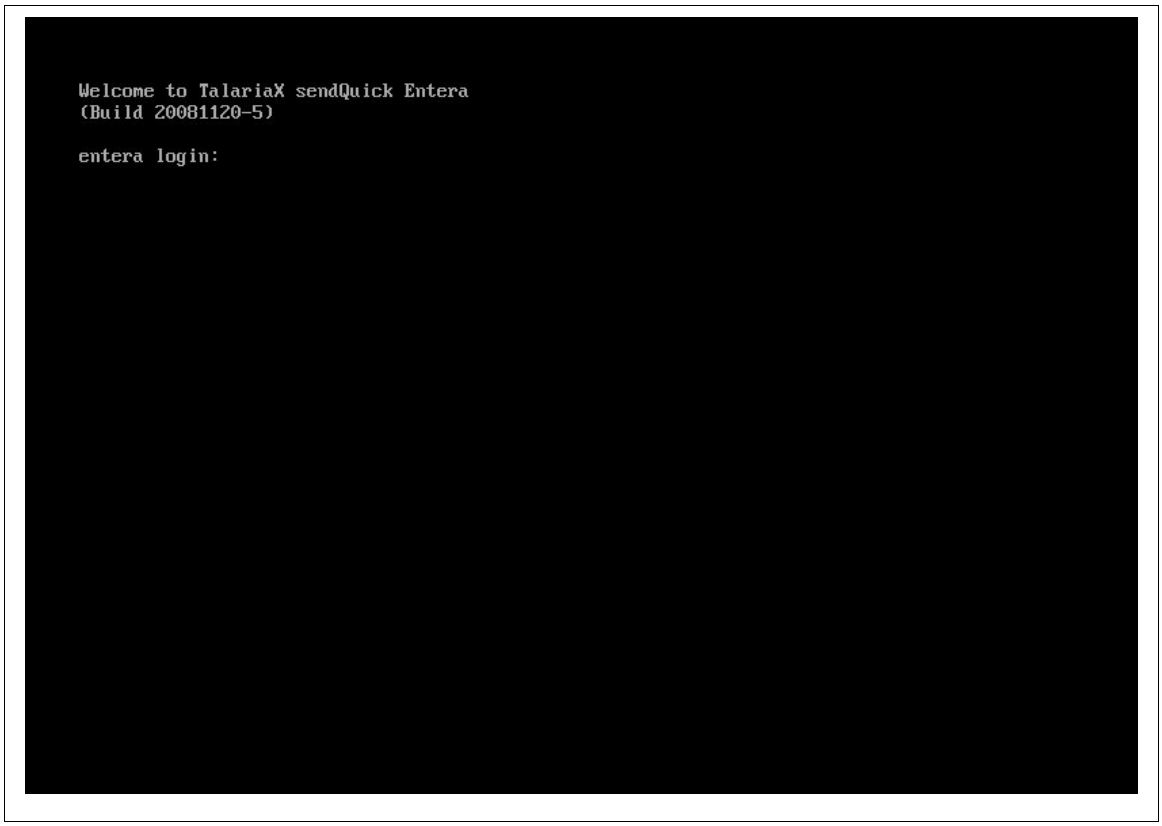

Figure 76 : Console Login Prompt

Figure 77 : Change IP Address

After entering the login details, the Change IP interface will appear and use the keyboard to move the curser and change the IP, Netmask and Gateway IP as required (Figure 77). Once completed, follow the instructions as displayed at the bottom of the screen to **Save** and **Exit**.

5.2 Reset Web Login Password

Another function that can be performed from the console is to reset the web login password back to the default **admin123**. To perform this, enter **ALT and F3** on the keyboard and the **Reset Password Prompt** is shown on the screen as seen in Figure 78.

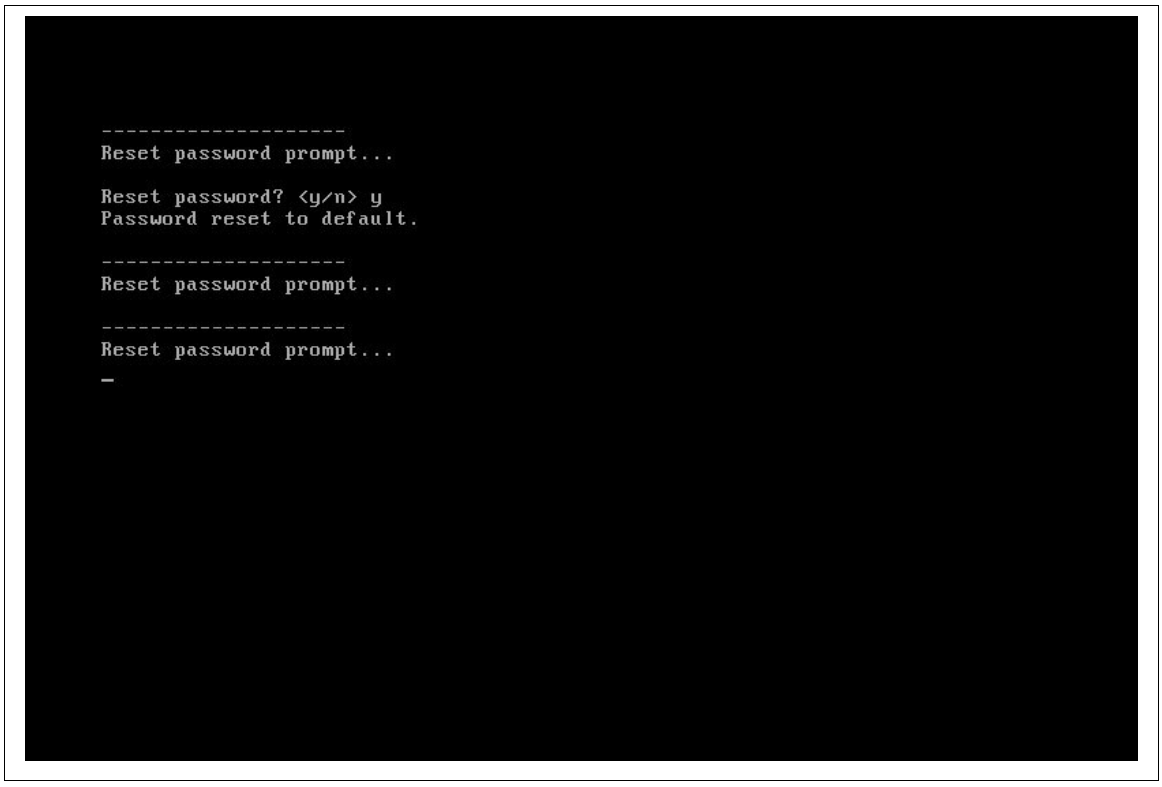

Figure 78 : Reset Password Prompt

Follow the instructions that are shown on the screen the reset password will be executed. Once the reset has been done, you can perform the web login with the following:

Username: admin Password: admin123

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6.0 TROUBLE SHOOTING

You may encounter some common problems when using sendQuick Server. This section serves to address these common problems and how to overcome them.

6.1 I have forgotten the IP address of my sendQuick server. How do I check?

If the system is powered up, connect a monitor to the VGA port and notice the IP address in the IP routing table (Figure 75). The IP is address is the IP on eth0.

6.2 I have done all the set-up. I tried to SMS via the web interface as explained in section 3.12 but no SMS was received. Why?

You could be facing the following problems:

(i) Modem connection is not properly attached. Please check the USB connection

(ii) The SIM card is not placed properly or not working. Try with another SIM card.

(iii) The SIM card is not activated (see Question 6.8)

6.3 I set all the configuration in the server set-up accordingly but I still cannot send e-mail to SMS from my e-mail software. Why?

There may be a few reasons for this. We will review the possible reasons accordingly.

(i) The physical network connection may be faulty. Try to ensure that the network cable is plugged-in properly and do not use an old cable. Once the cable is fine, then,

(ii) Try to 'ping' the sendQuick Server from a remote machine. If there is no reply, there are some problems with the network or connection or the switch (some switch requires hard reboot to activate a new connection). Please check. If you get a ping reply, then,

(iii) Check your e-mail server setting. Your mail server may not be supporting the e-mail address for SMS as it does not contain a valid DNS or name server (when you use an IP). You need to configure a static mail routing in your e-mail server. You can also try by changing the SMTP server in your e-mail client configuration to the IP address of sendQuick Server. If it works after you change the SMTP server, then it is a problem with your e-mail server concerning the mail routing information. Contact your administrator for assistance *(If sending email via Exchange or Domino, please ensure you register the SMS domain in the DNS, perform mail routing in Exchange/Domino – MX or A records for proper email routing)*.

(iv) Your modem connection could be loose. Try to fasten the modem (especially the USB version) and restart the server if necessary. Restart using hard reboot.

6.4 I cannot access the sendQuick Server from my local PC even though it is already in the network and some of my other colleagues can use it. Why?

This could happen if there exist some sub-networks in your company's network. You may need to check with your system administrator and ensure that the router allows the different networks to send data to each other.

6.5 I realised that the server only provides for one e-mail and one HTTP response. How do I allow SMS enquiries to more than one applications at one instant?

The sendQuick server is designed as a 'black-box' solution for sending and receiving SMS. We understand that most of our customers would want to interact with more than one server. In order to make things easy for all, we designed a single response URL and e-mail to make sendQuick very easy to configure and hassle free. To connect to multiple applications, you just need to develop a simple script to process the replies from sendQuick (either HTTP or e-mail) and make your own distribution to the respective applications. This can be done by setting unique codes (keyword) for each SMS when they were sent to sendQuick and processed by your script. In this way, you will not have any constraints on any number of application servers that can use sendQuick. You can also purchase sendQuick Entera or sendQuick Enterprise that has built-in Keyword Management module.

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6.6 I am getting email alerts on my administrator email account stating that the modem is not found or having problem. What should I do?

The sendQuick server is designed as a 24x7 system with a built-in self checking mechanism to the modem and SIM card availability. Hence, if there is any failure to detect the modem or SIM, it will generate an error message and email to the administrators email account.

If the error messages is not frequent (that is, the alert message is occasional and not continuous for every second), there is no cause for alarm. Instances that may cause this problem is when there is an intermittent weakness in the GSM network or the system cannot find modem at that point of time. However, if the error message in continuous (for every second) and still happening at the point when you read the messages, then there is an indication that there is some modem or SIM problem with the system (see question 6.7).

6.7 I am getting continuous alert messages stating that there is no modem and the alert message is occurring every second or I cannot send SMS despite able to access the system via web interface. What is the solution?

If either of the above happened, there could be a problem with the GSM network, SIM card or GSM modem. Troubleshoot by checking the following areas:

- check that the SIM card is still in service or there is sufficient credit (for prepaid card) by calling (dialing) the SIM card number and you should hear a dialing tone (indicates it is normal).
- Check that the GSM modem is properly connected and the LED indicator is blinking (normal). If the LED is not blinking (continuous light), either the SIM is not working, fail to connect to GSM network or modem not properly connected.
    - You can try by remove and then plug in the modem again
    - Remove and insert the SIM card again. Please make sure the GSM modem cover is properly covered.

6.8 The system is not sending SMS. What are the troubleshooting steps?

If you cannot send SMS from your applications, there are a few possibilities. Do the following actions to determine the possible point of failure.

i) Ping the sendQuick server and see if there is a response. If yes, try step (ii). If no response, check your network connection to sendQuick server or to your application server. You may wish to access the sendQuick using the direct console access. If you cannot access or you see an error message on the console, contact TalariaX for technical support.

ii) Access sendQuick using the web browser. If yes, try step (iii). If you cannot browse the server, try to access via the console. If you cannot access or you see an error message on the console, contact TalariaX for technical support.

iii) Use the browser access, go to Send SMS section and send a test SMS message to your self. Check the modem status and log file to ensure messages are processed and sent. If you receive the SMS sent, then the problem lies with the application server. If you did not receive a SMS message, there could be a problem with the SIM card or GSM modem.

iv) Check that the SIM card has sufficient credit (for prepaid) or that the GSM modem is blinking. You can try to remove and reinsert the SIM or to unplug and replug the modem into the USB/serial slot. If you are using a new SIM card, please ensure that the SIM (PIN number) lock has been disabled or unlock. Please perform a SMS or phone call with the new SIM card (in a phone) to ensure the SIM is activated. If all fails, contact TalariaX for technical support.

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6.9 I had configured the reminder and escalation function and I am receiving the SMS. However, the Reminders and Escalations are sent even after I sent the correct reply (Acknowledgment).

There are two possible causes:

(i) The SMS acknowledgement was received (about the same time) as the reminder or escalation message was sent. Therefore, the messages were generated while the acknowledgement was received. In this case, please set the reminder/escalation timing interval with a larger value

(ii) The acknowledgement SMS format and the Number list need to be an exact match. Most incoming SMS has an international format with a plus '+' sign. In order to have a match in the acknowledgement, change the number format (in the alertee list) to an international format with a '+' sign.

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