



# AlertDispatcher v3.1

## Quick Start User Guide

Last update: October 11, 2012

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## 1. System Preparation

Thank you for selecting AlertDispatcher. Here's a checklist of what you need to prepare before installing the software.

### 1). Working SIM card

An activated GSM/GPRS/3G SIM card (**with no PIN password set**).

**Note:**

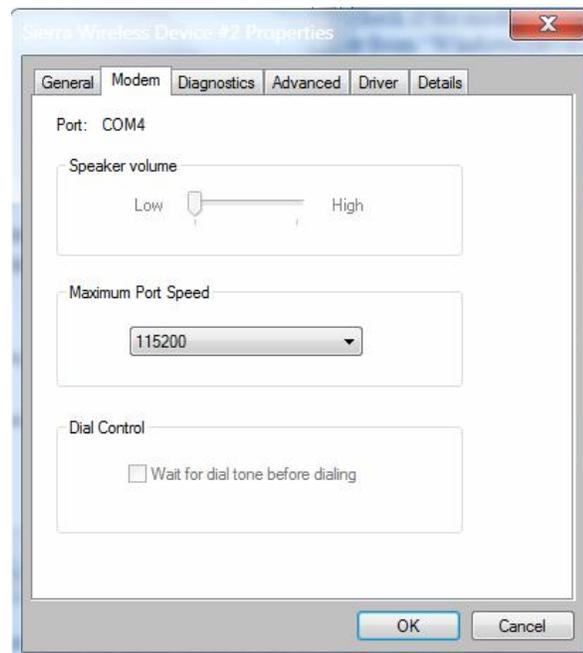
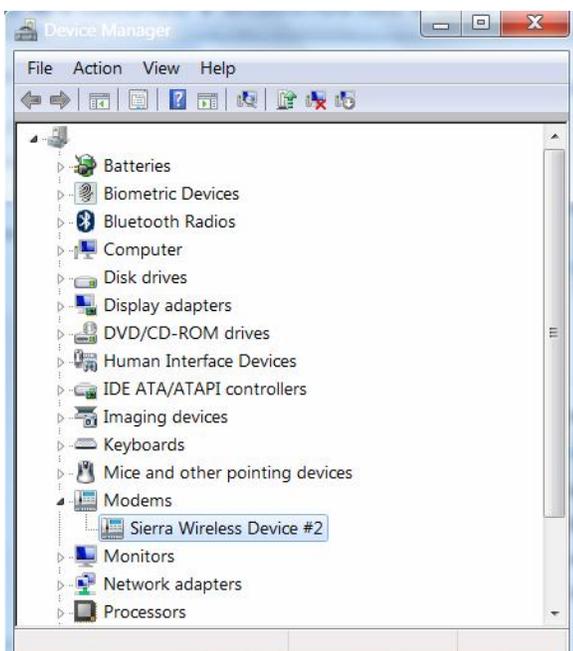
1. Some prepaid SIM cards need to be activated by voice call before SMS is enabled. Please test the SIM card using a mobile phone if required.
2. If you need to change your SIM card, before removing the SIM card, please **always turn off** the power supply or remove the power supply cable from the modem. You may reconnect the power supply after you have installed the new SIM card.

### 2). Working GSM or GPRS modem

A Compatible GSM, GPRS or 3G modems (Please contact your dealer if you do not have one).

If you are using a serial modem, please ensure that your PC has a DB9 serial port. If there is no available DB9 serial port, you may install third party PCI DB9 RS232 serial card. STLab Serial cards are reliable and known to work with most serial GSM/GPRS modems.

USB modems generally require modem drivers to work. After installing the modem driver, go to *Start* → *Control Panel* → *System* → *Hardware Tab* → *Device Manager* → *Modems* and ascertain the COM port onto which the modem driver has been installed.



**Note:** Refer to [Appendix A](#) for more details on preparing the GSM modem.

### 3). Windows PC/Server (Recommended System Requirements)

If possible, please prepare a clean installed Windows PC/Server with the following specifications. The following hardware specifications are recommended for a deployment with up to 4 modems attached and processing up to 10,000 messages per day.

*Minimum Processor:* Pentium 4 for Windows XP / Pentium Core 2 Duo for higher versions of Windows.

*Operating System:* Windows XP (Service pack 3) / Windows 7 / Windows 2003 Server / Windows 2008 Server.

*RAM:* Minimum 1 GB, Recommended 2 GB RAM (for Windows XP). Minimum 2 GB, Recommended 4 GB RAM (for higher versions of Windows).

*SIM card:* Activated and working SIM card from your mobile operator.

*GSM Signal:* Location of server/PC must have good GSM reception. You may compare the signal strength for various SIM card providers using the software – signal strength will be displayed on the Client console.

*USB port:* Required for USB modems – as USB modems draw power from the USB port, you may need to use an externally powered USB hub if you have attached other USB devices to your PC/Server.

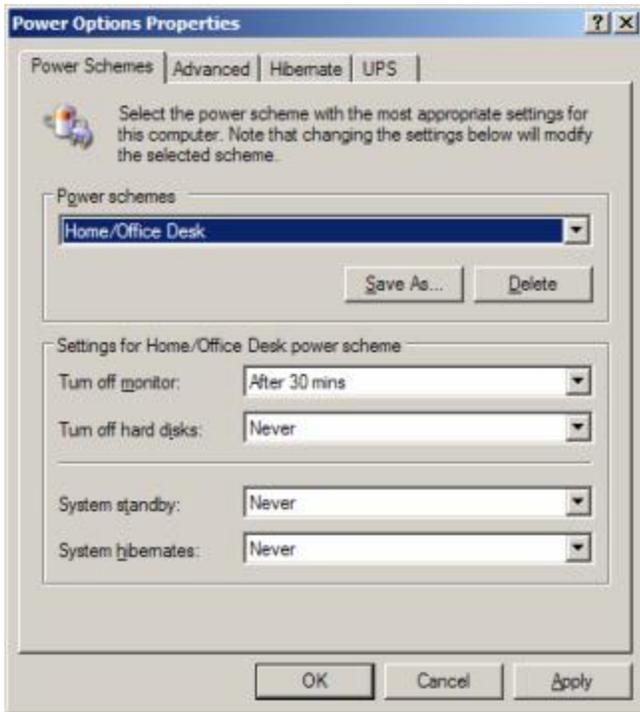
*Serial port:* Required for Serial modems – ST Lab 2 & 4 port serial cards are supported.

**Note:** We would recommend that you install antivirus software if you need to login to the system regularly.

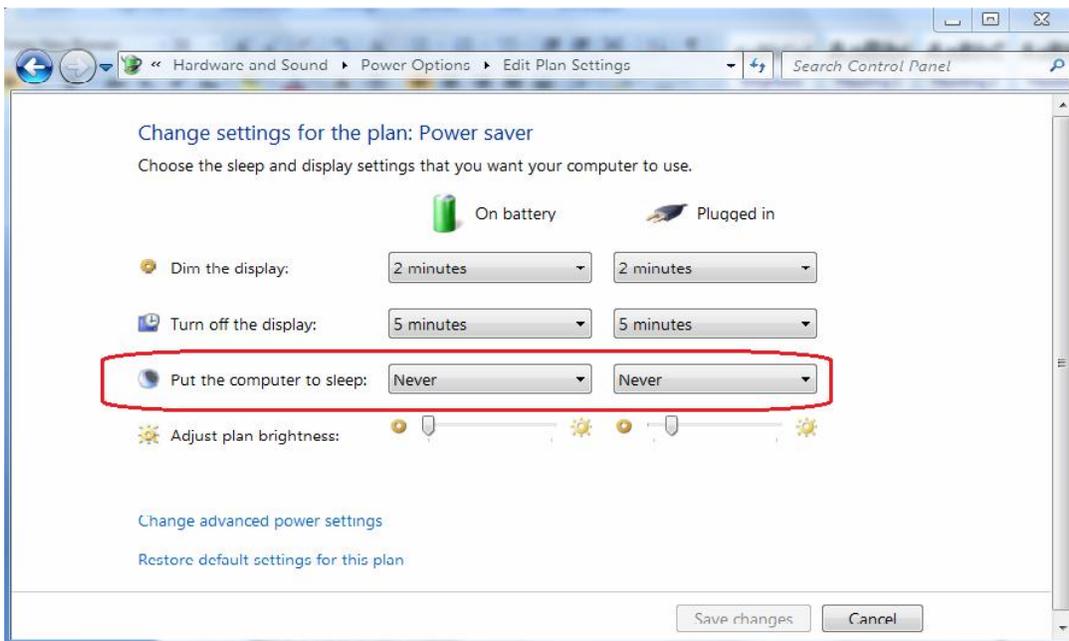
### 4). Disable System Standby (For XP, 7 and workstation OS)

If you are installing AlertDispatcher on a workstation OS, e.g. Windows XP, Vista or 7, please ensure that system standby/sleep and turn off hard disk settings are changed to 'Never'.

Setting for XP:



Setting for Windows 7:



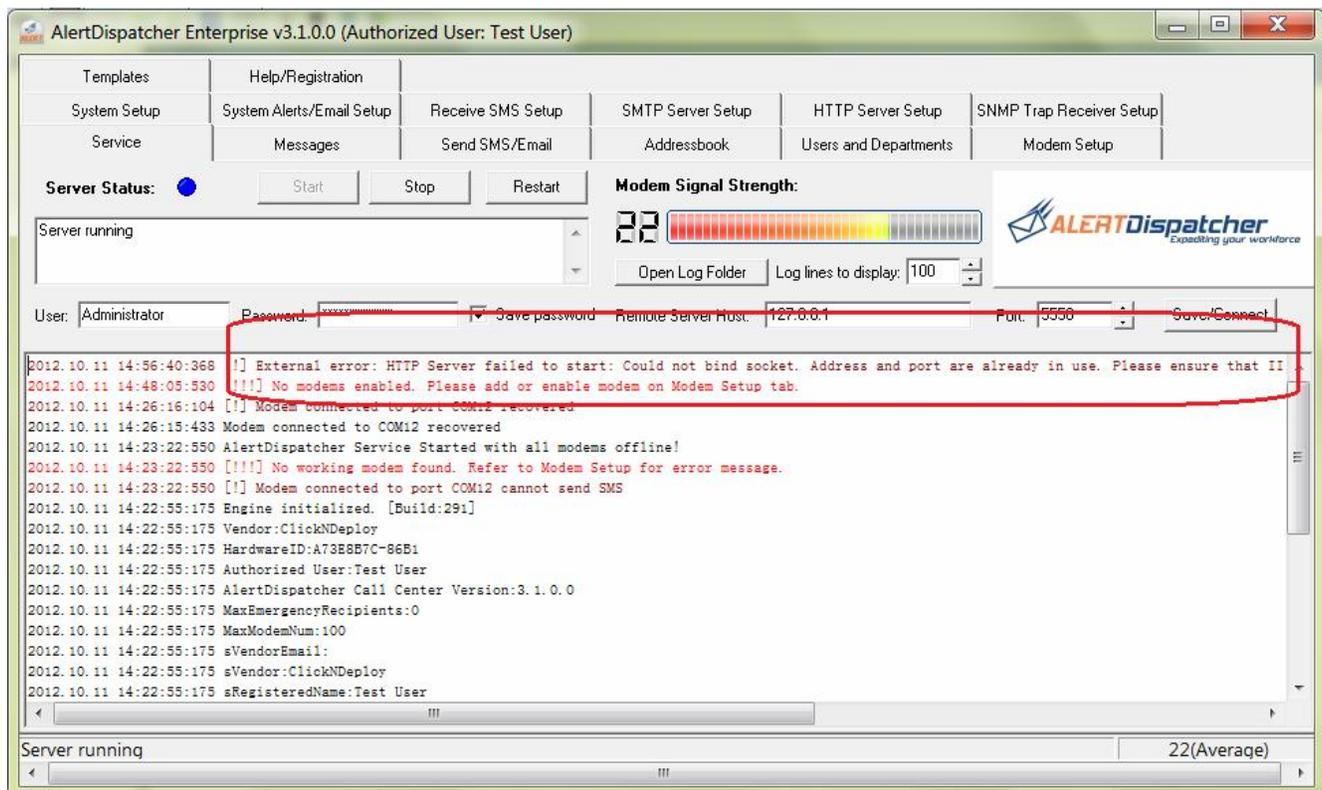
## 5). Setup considerations for API / Email-to-Alert (Email2SMS) / HTTP-to-Alert / SNMP trap receiver interface

### a). Resolving possible port conflicts

AlertDispatcher comes with a built-in HTTP Server (Web Server), SMTP Server and SNMP Trap Receiver. You can send Alerts (Email/SMS) using the HTTP and SMTP (Email) interfaces provided. You can also convert SNMP traps into Alerts. The built-in servers use the following default ports for their respective protocol.

<i>Server Protocol</i>	<i>Default Port</i>	<i>Remarks</i>
HTTP Server	80	
SMTP Server	25	
SNMP Trap Receiver	162	
AlertDispatcher Server	5556	<i>Used by AlertDispatcher Client and DLL API</i>

In order for these interfaces to work, there must not be conflicting services running on your system occupying the same ports. If there is a conflicting service using the same port, the following error will appear: “Could not bind to socket”.



For example, for SMTP Server interface, you may check whether Windows ‘Simple Mail Transfer Protocol (SMTP)’ service exists and is set to run automatically. If yes, stop and disable the service, and then restart ‘AlertDispatcher-SNMP’ service.

For HTTP Server, ensure that Windows World Wide Web Publishing Service, or IIS isn't running on the same port (default port for HTTP server is 80).

For SNMP Trap Receiver, if you have installed Windows SNMP Trap service, please ensure that the service is stopped or change to a different port (default port for Trap Receiver is 162).

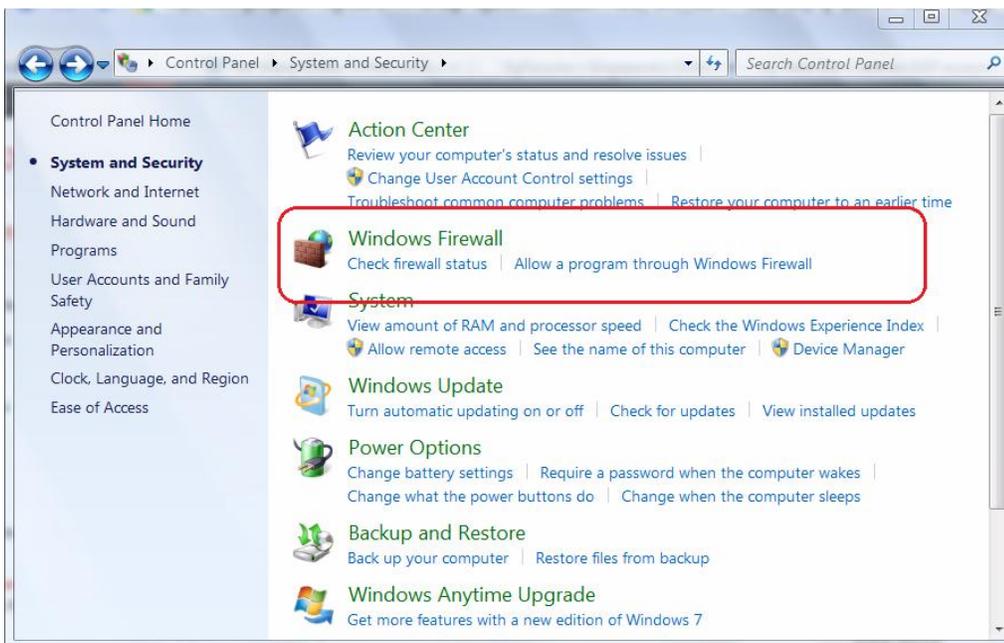
## b). Add server ports to Firewall

If you need to be able to access AlertDispatcher Server from the network, and there is a firewall running on your system, you must add the ports used by the services you require to your firewall list of "allowed ports".

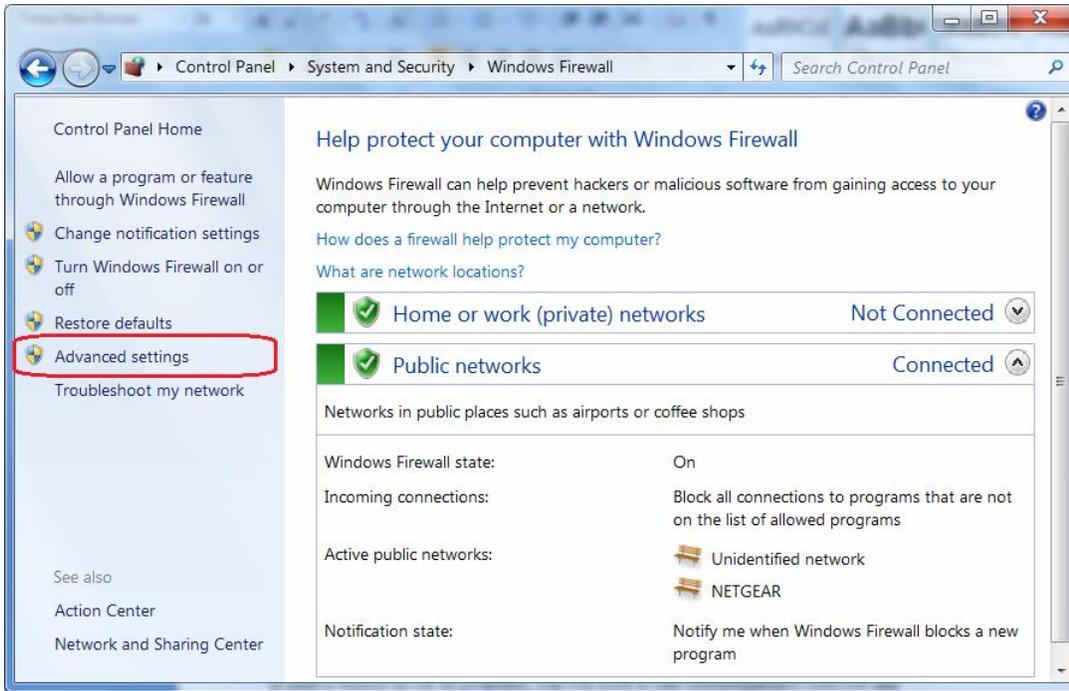
Next, we shall describe how this can be done for Windows Firewall. If you are using a 3<sup>rd</sup> party firewall, check with your IT administrator or the firewall vendor.

To add ports to Windows Firewall exception list:

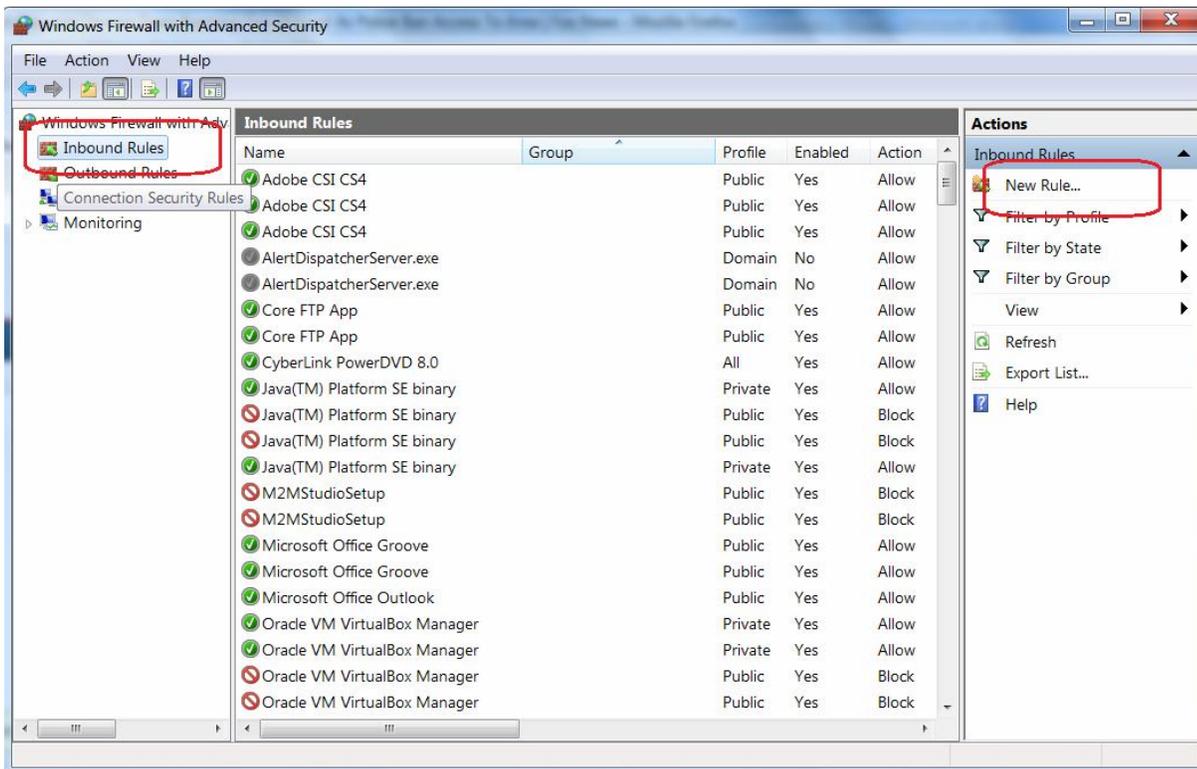
Go to *Start* → *Control Panel* → *Windows Firewall*.



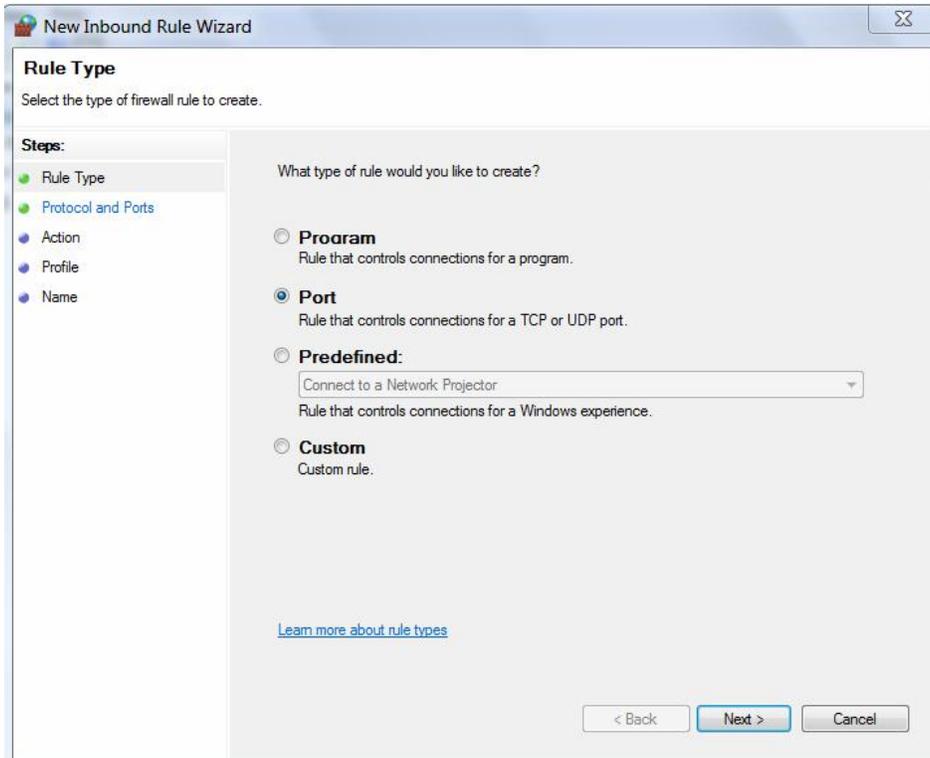
Click "Advanced settings".



Click Inbound Rules, followed by “New Rule”.



Toggle “Port”, click Next.



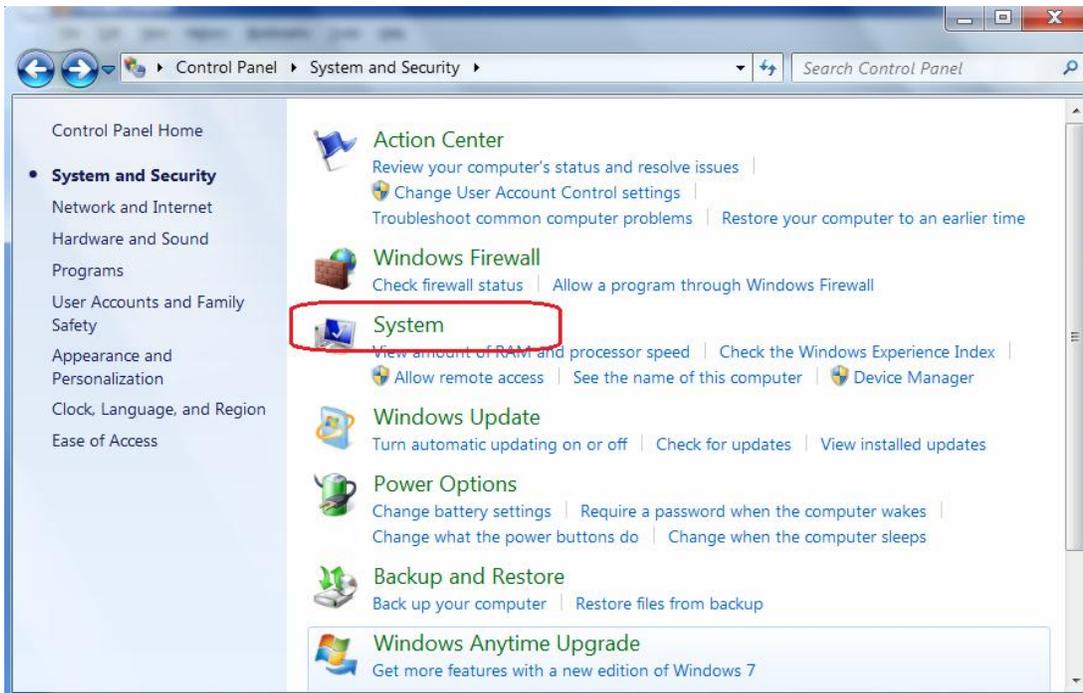
Under “Specific local”, enter “25, 80, 162, 5556” or any other ports you wish to use.

### c). DEP exception list.

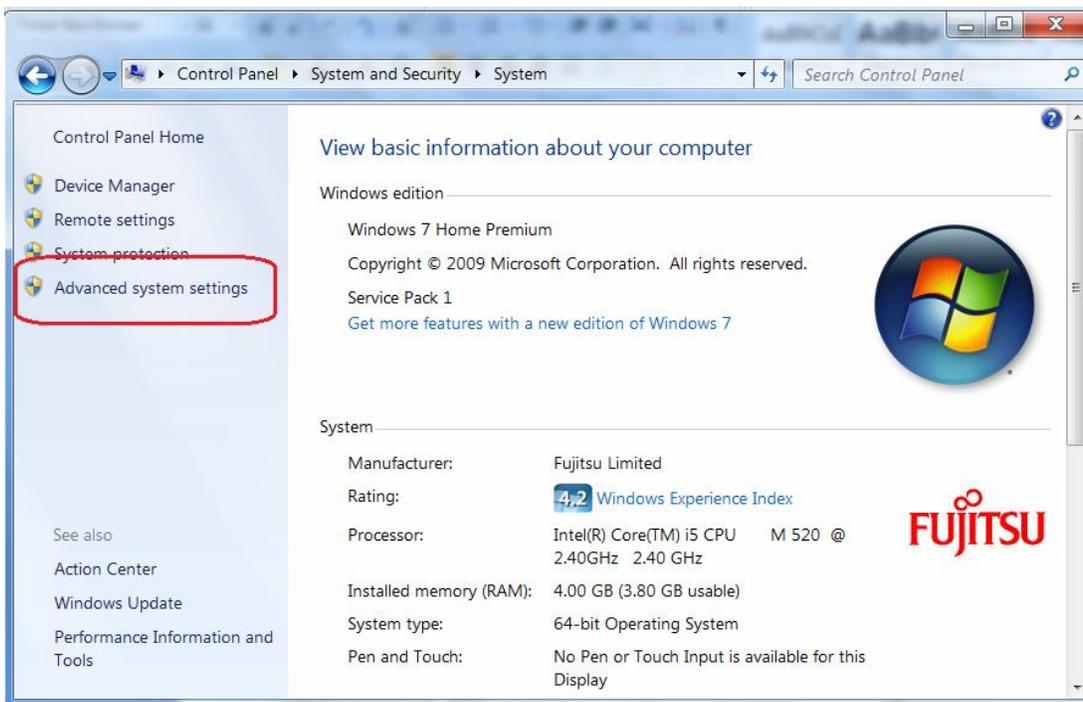
If DEP is turned on for all programs, you will need to add AlertDispatcherClient.exe and AlertDispatcherServer.exe to the exception list. This is usually done automatically by the installer when you install AlertDispatcher for the first time.

**Note:** For Windows 2008, DEP is turned on for all programs by default so this step is essential for Windows 2008.

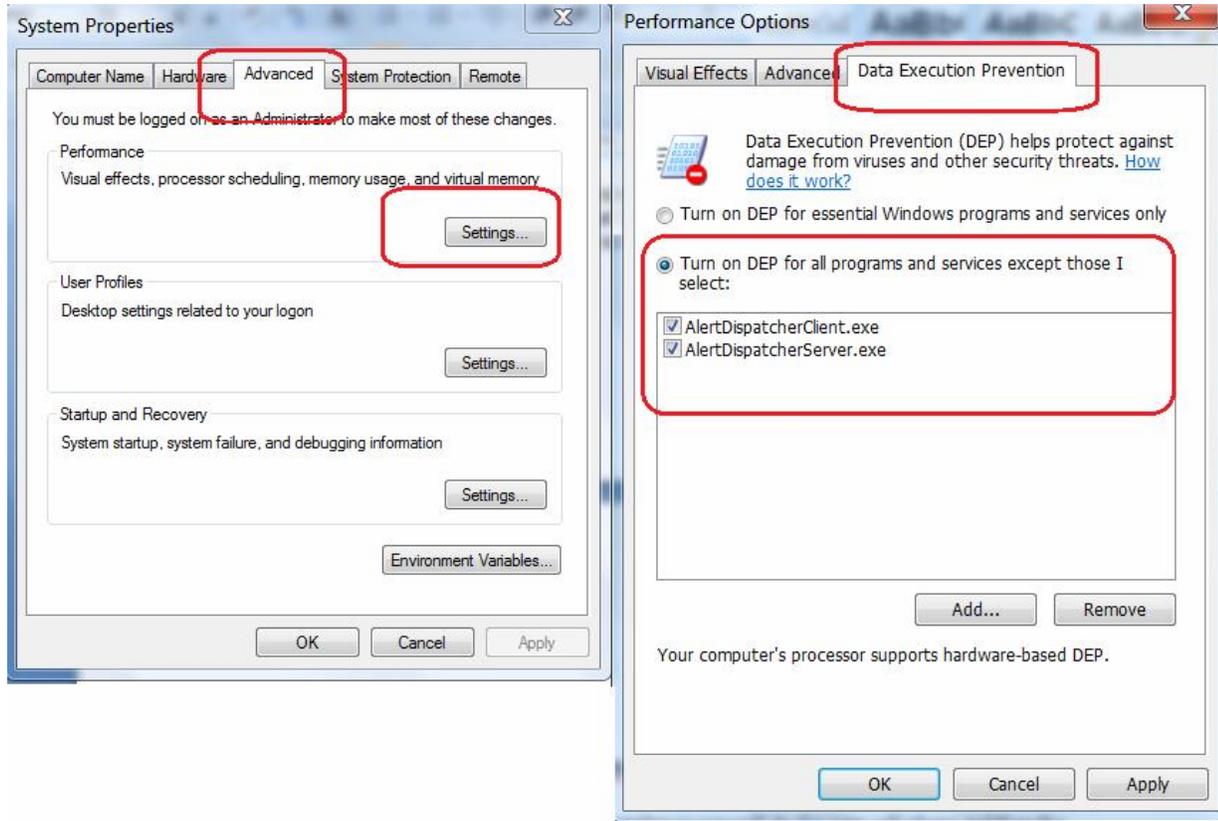
Go to Start → Control Panel → System



Click “Advanced system settings”, “Advanced” tab, followed by “Data Execution Prevention” tab.



If the radio button for “Turn on DEP for all programs and services except those I select:” is checked, please add C:\Program Files\AlertDispatcher\AlertDispatcherClient.exe and C:\Program Files\AlertDispatcher\AlertDispatcherServer.exe to the exemption list.



## 6). Obtaining an SMTP or Email account

In order for AlertDispatcher to send out Emails, you must configure an SMTP user account under [Alerts/Email Setup](#). Please obtain the SMTP Server address and SMTP username and password from your company email administrator, e.g. Exchange administrator. As far as possible, do not use your email account or an existing email account in case you change your password and forget to update the password set on AlertDispatcher. Create a new email account, e.g. alertdispatcher@yourcompanydomain.

If you do not have an SMTP Server, you can register a free GMAIL account. Note that GMAIL SMTP Server (smtp.gmail.com) uses port 587 instead of the standard port 25.

**Note:** In the event that all modems are offline, AlertDispatcher can only send out system alerts via email, so you will need to configure an SMTP account in order to receive such alerts. This is highly recommended if you are using AlertDispatcher for critical purpose.

## 2. Installation, Upgrade and Configuration

### 1). Installation / Upgrade / Migration

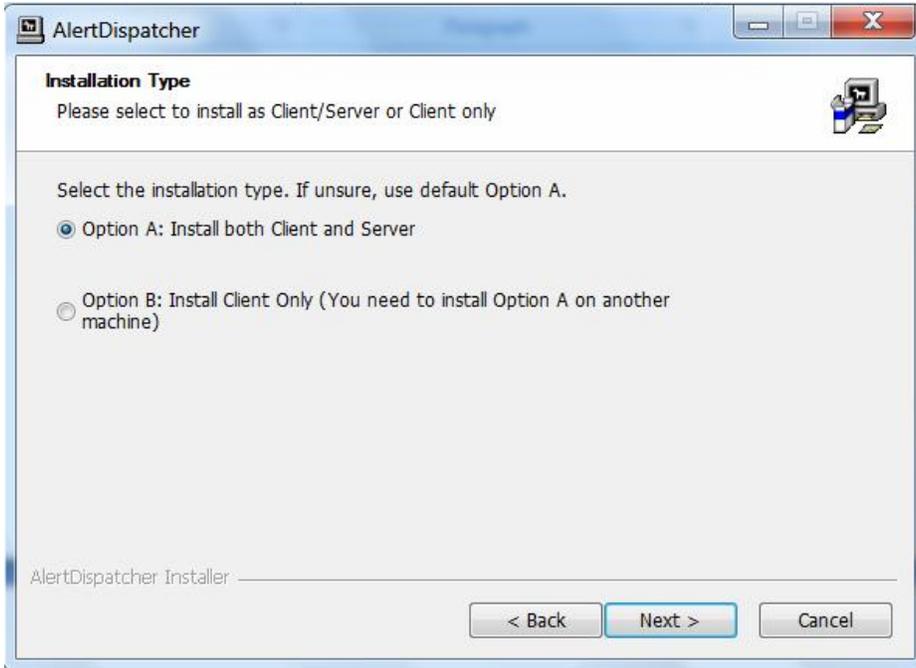
Insert the AlertDispatcher CDROM into your PC that you wish to install or upgrade AlertDispatcher, run AlertDispatcher\_Setup.exe. Follow through the steps in the Setup Wizard.



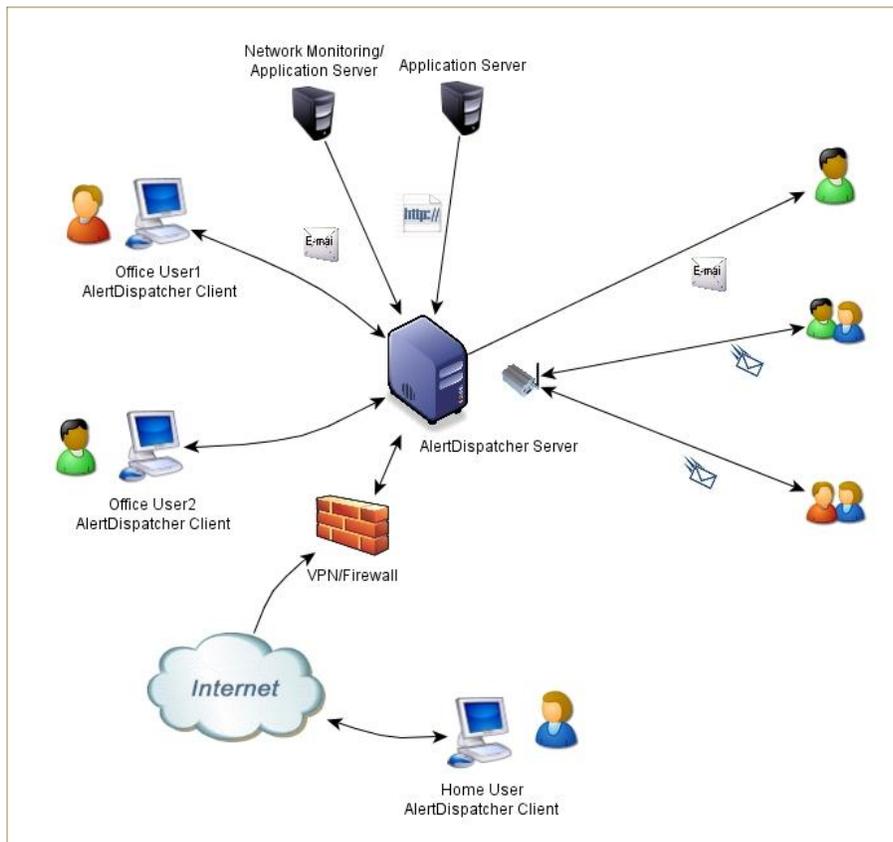
**Note:** If you are upgrading, you may run the new installer onto your existing AlertDispatcher installation (without uninstalling the latter). The new installer will not override your existing configuration. AlertDispatcher will automatically upgrade your old installation.

The installer will prompt you whether to install as Client and Server or as a Client only (usually on a workstation). The Client is the management application you use to view messages and to configure and manage AlertDispatcher Server (which may be located on a separate machine).

**Note:** Please install AlertDispatcher Client only if you have purchased the Corporate (or higher) license.



As illustrated in the diagram below, an operator may install AlertDispatcher Client to connect to AlertDispatcher Server remotely.



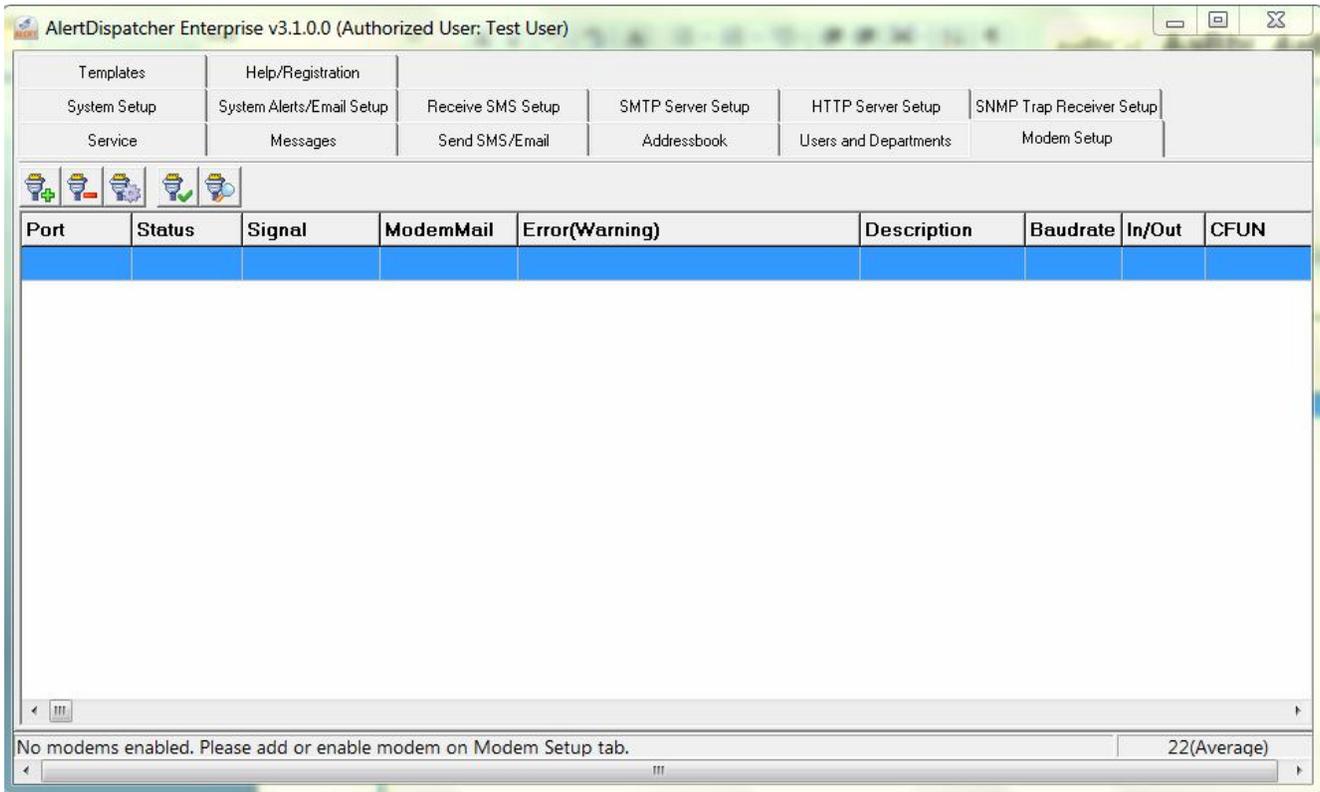
**Note:** If you wish to migrate an existing installation to the new machine, after installing AlertDispatcher on the new machine, simply copy all the files with .ini extension and AlertDispatcher.db file located at the path c:\Program files\AlertDispatcher\ (assuming you did not change the default path during installation) on the old machine onto the new machine, replacing the original files. The new version of AlertDispatcher will automatically upgrade the old files.

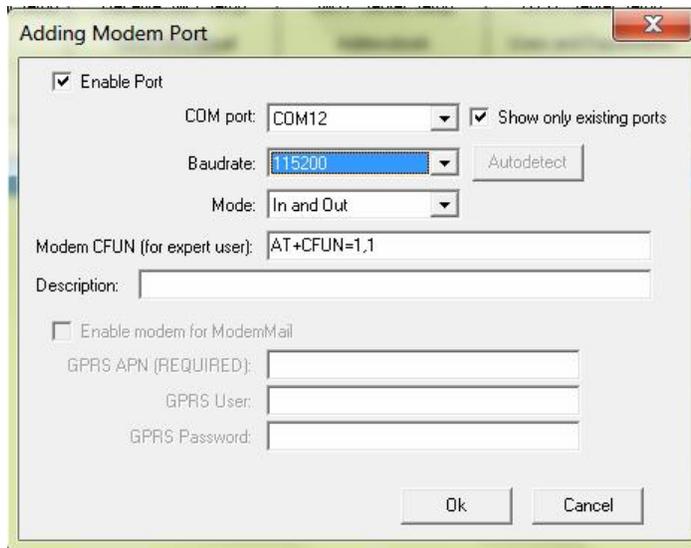
## 2). Configure Modem

### a). Add modem

**Note:** If you are using a USB modem, please configure your modem driver as shown in Appendix A.

After installing, run AlertDispatcher Client using the shortcut from Windows Desktop. Plug your modem to your machine and then go to 'Modem Setup', click on the 'Add Modem Port' button .





Check *'Show only exist ports'* – this will display only valid COM ports on the system. Select the COM port which your modem is connected to, followed by the baud rate. The most common baud rate is 115200. If unsure, click *'Ok'* button to create the Modem Port, and then select the Modem Port you have just created from

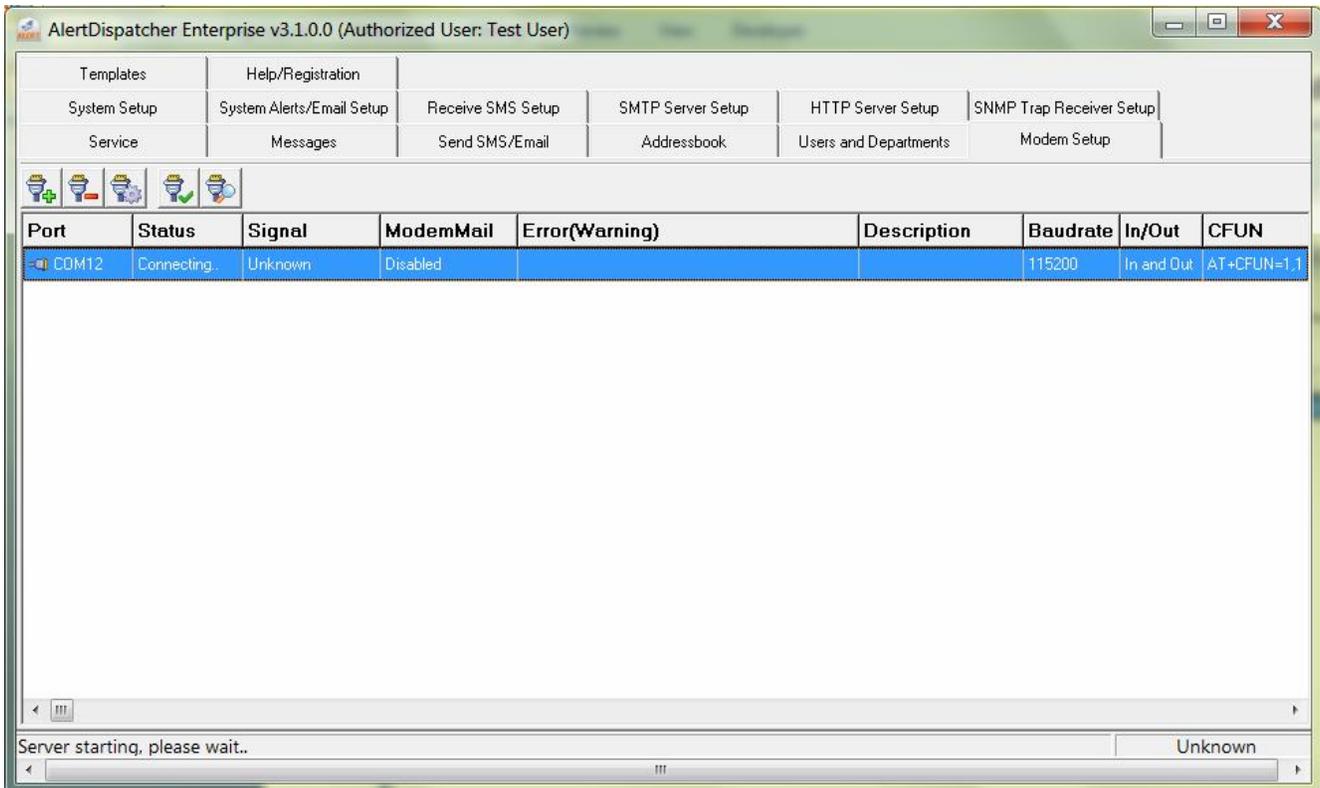
the list. Click on *'Setup Modem Port'* button  and then click *'Autodetect Baudrate'*. AlertDispatcher will then attempt to connect to the modem using all available baud rates - this may take a few minutes. Alternatively, if you are using a USB modem, you may to *Start → Control Panel → System → Hardware Tab → Device Manager → Modems* to ascertain the COM port and baud rate onto which the modem driver has been installed.

Next click *'Ok'* button - you will see the *'Server starting, please wait'* message at the status bar at the bottom left of the Window.

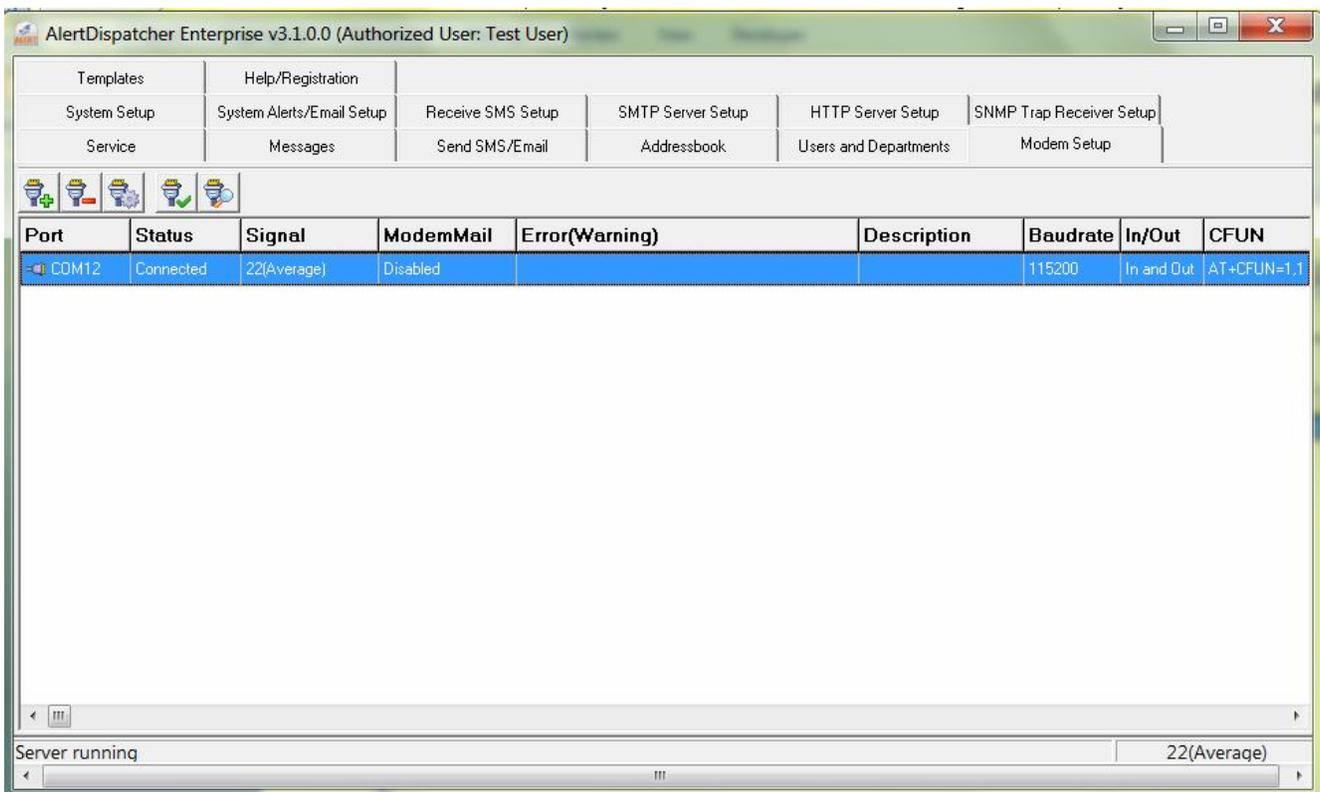
**Note:**

a). The setting *'Modem CFUN (for expert user):'* is used for modems that use a different CFUN setting, e.g. Huawei modems. Please do not change this setting unless you know what you're doing.

b). The *'Enable modem for ModemMail'* setting is required only if you need to send Email using the GPRS modem – only works for selected modems. Note that you will need to enable ModemMail under Alerts/Email Setup before you can toggle this setting.



If the setup is correct, you will see the 'Server running' along with the signal strength on the right corner, otherwise an error message such as the following may appear (see below).



## b). Troubleshooting modem connection issues

If you're getting an error, check the following:

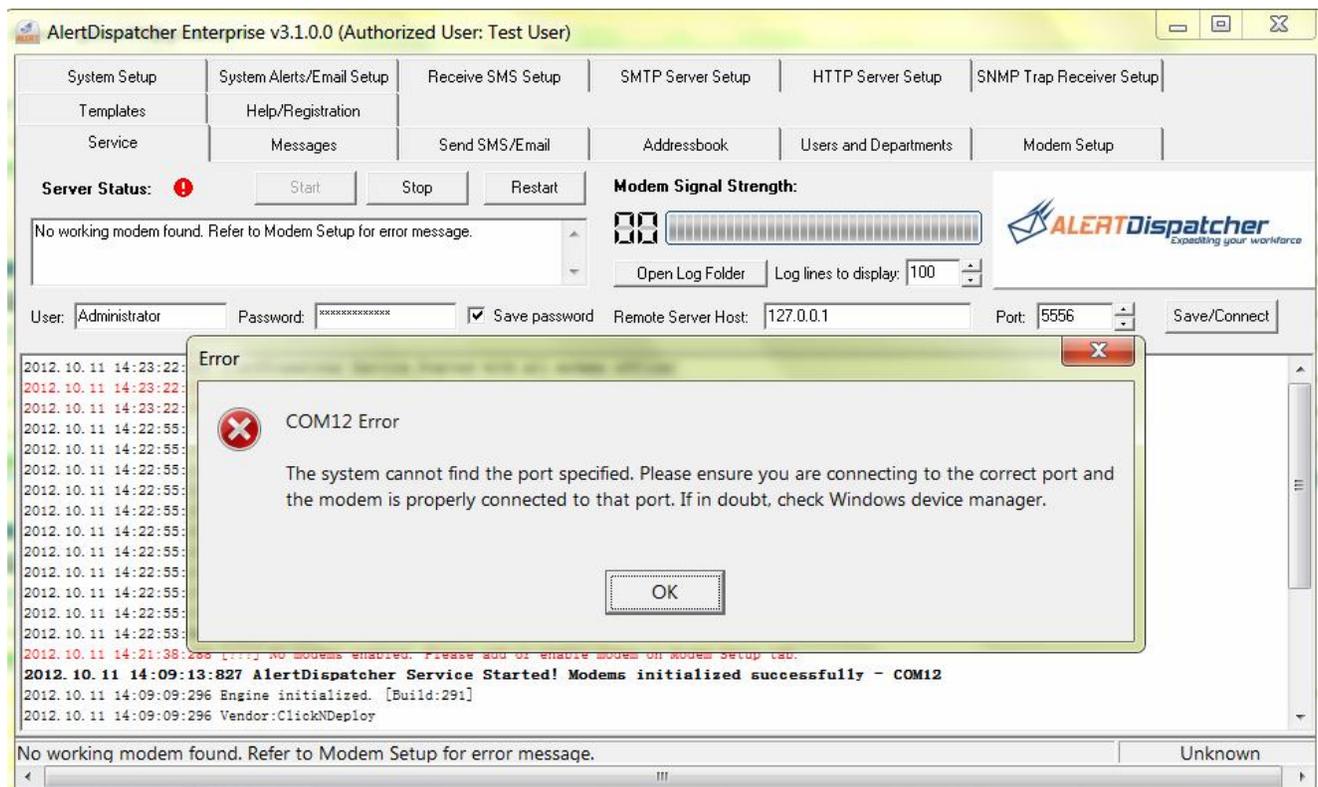
1. Ensure that the modem is connected to the COM port which you have previously configured. If you are using the PC original COM ports, it should be either COM 1 or COM2. Ensure that the COM port is not occupied by another application.

If you are using USB or external serial card, the driver must be installed. You can usually locate the COM port from *Start* → *Control Panel* → *System* → *Hardware Tab* → *Device Manager* → *Modems*.

2. That a working SIM card with no PIN protection is inserted into the modem. Most modems come with a network indicator light that will flash or blink if the modem is connected to the GSM network. You should also be able to send SMS Alerts if you insert the SIM card into your cell phone.

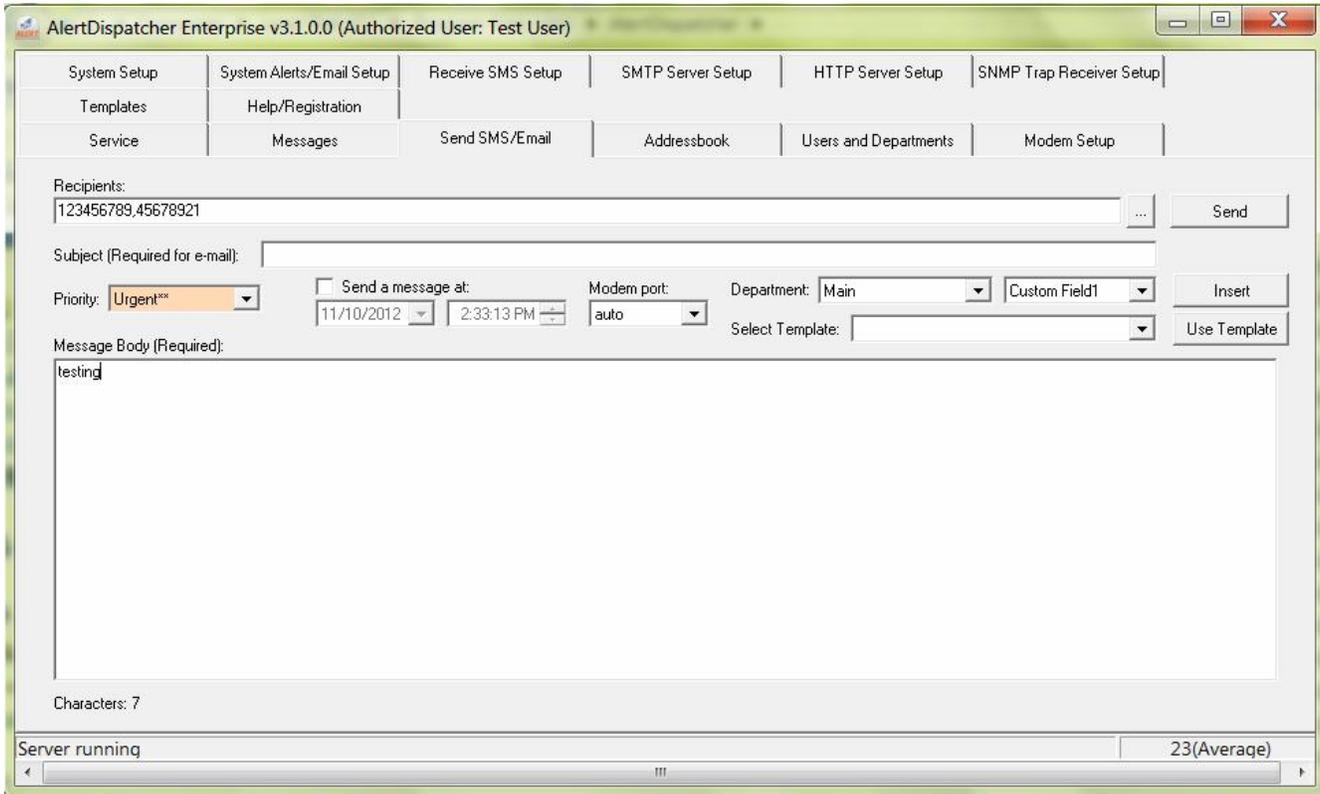
If the modem network indicator light is not blinking, check that the SIM card is properly inserted and then reset or switch off and on the modem. Also refer to [Appendix A](#) for details on preparing the GSM modem.

3. Check if you are using the correct baud rate. The most common baud rate is 115200. If unsure, click 'Autodetect Baudrate' – this may take a few minutes.

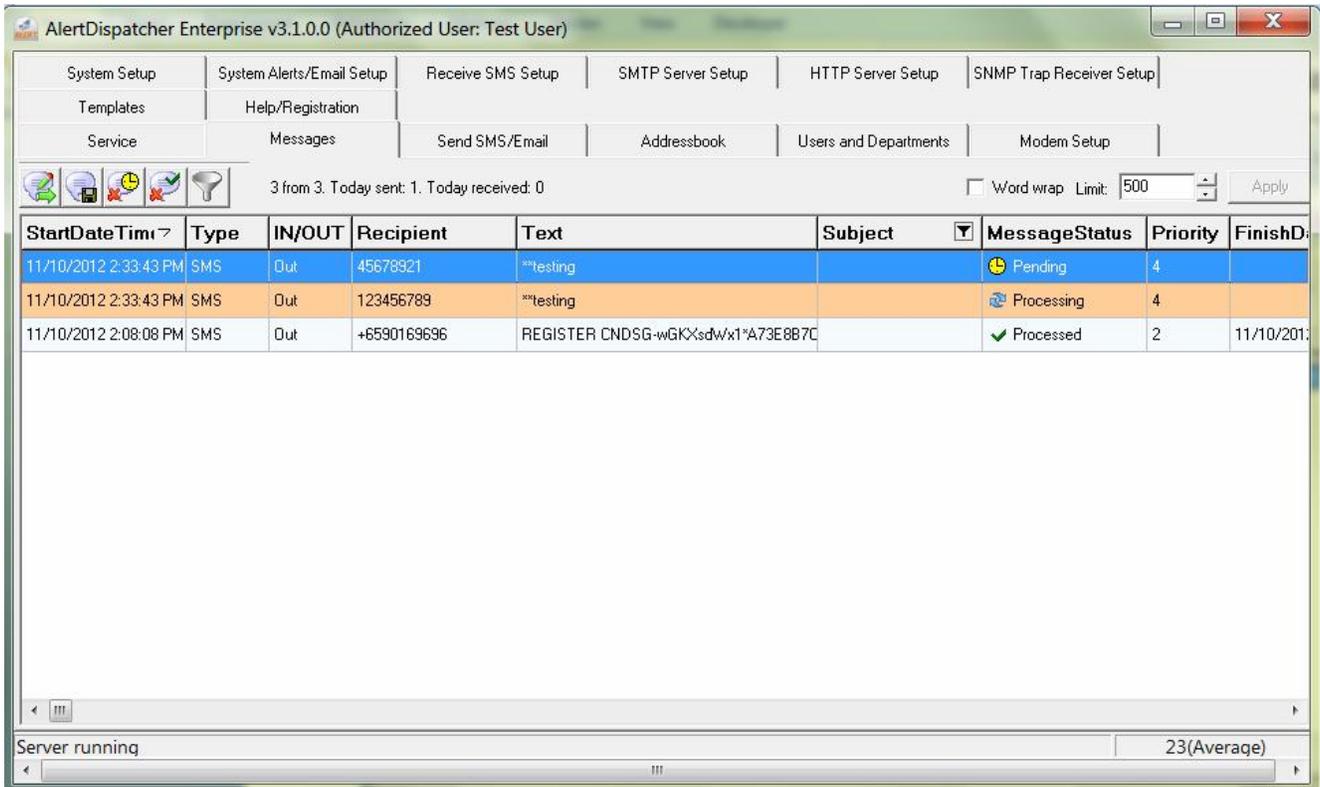


### c). Send test SMS

Once the modem has been successfully detected, you can test by sending a test Alert SMS to yourself. Go to 'Send SMS/Email' Tab, type in your phone number as you will do for your cell phone and then the message. Click 'Send' button.



If the phone number is correct and the modem is working, you should get the following screen. If not, verify that the SIM card is working using your cell phone.

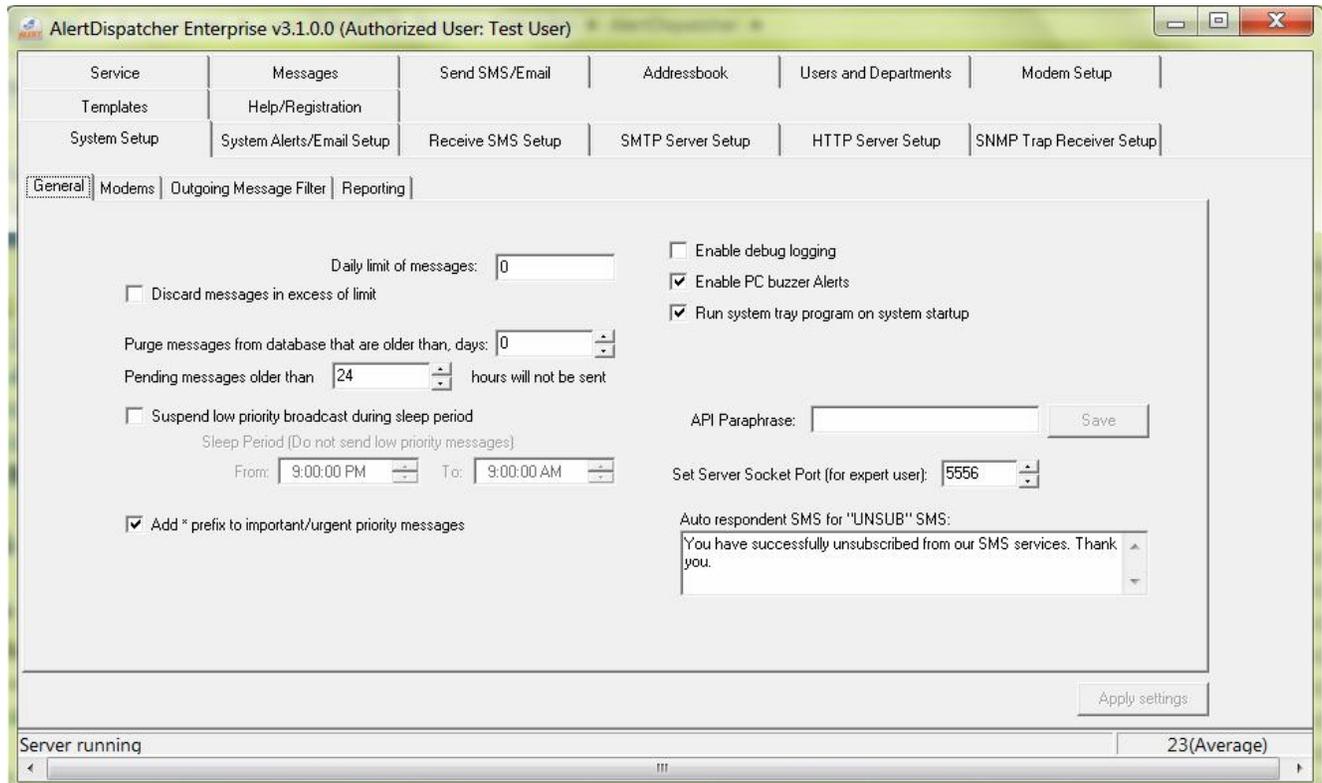


**Note:** You still can't send email until you have configured the SMTP Server and credentials AlertDispatcher will use to dispatch Emails. See "Configure System and Alerts Setup" for details.

### 3). Configure System and Alerts Setup

#### a). System Setup - General

AlertDispatcher comes with some configurable settings which you can modify. The default settings are recommended values and should work for the average user.



If you wish to send more than 2000 Alerts a day, please reset *'Daily limit of messages'*. To impose no limit, set *'Daily limit of messages'* to 0. If you want excess messages (above the daily limit) to be discarded, please check *'Discard messages in excess of limit'*.

*'Purge messages from database that are older than x days'* setting runs a task that purges old messages from the database that are older than the configured number of days. This task runs once a day.

**Note:** For performance reason, AlertDispatcher will only keep up to 100,000 messages in the database. When this limit is exceeded, the oldest 10,000 messages will be automatically purged.

*'Suspend priority 1 broadcast during sleep period'* setting allows you to setup a *'sleep period'* in which all priority 1 broadcasts are suspended during that period of time. Broadcast will resume after the time period has ended. **Note:** Messages with priority higher than 1 will still be sent during this *'sleep period'*.

*'Enable debug logging'* is used to debug modem communication and modem hardware issues.

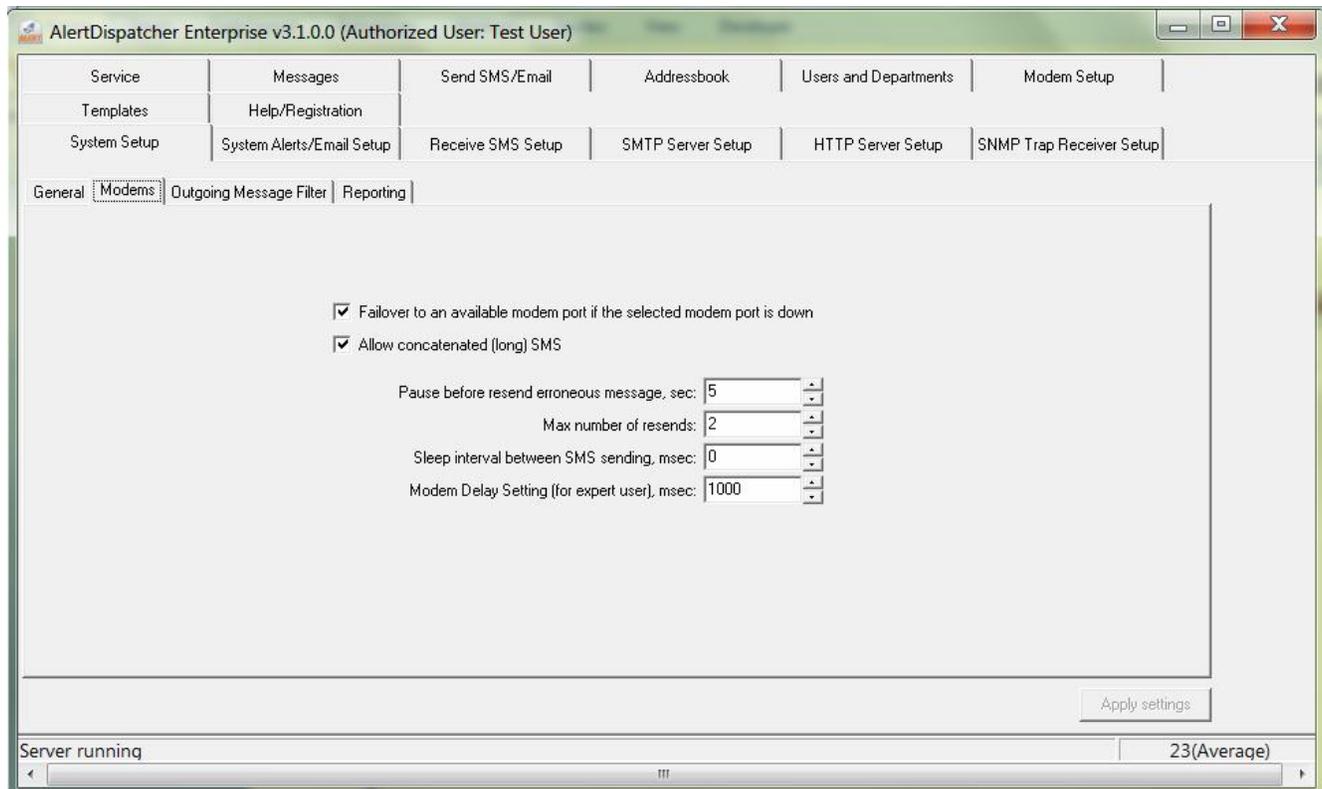
*'Enable PC buzzer Alerts'* is used to sound the PC buzzer on AlertDispatcher Server and AlertDispatcher Clients whenever there is an error. For example, a continuous melody will be played if a modem cannot be detected. You can stop this melody either by rectifying the modem issue or acknowledging the Alert using

AlertDispatcher Client.

'API Paraphrase' is used to protect access to AlertDispatcher Server via API. If high security is required, you should configure a password for API Paraphrase.

'Set Server Socket Port (for expert user)' allows you to change the default port 5556 which the server uses to communicate with AlertDispatcher Client and APIs. Please refrain from changing this setting unless necessary.

## b). System Setup - Modems

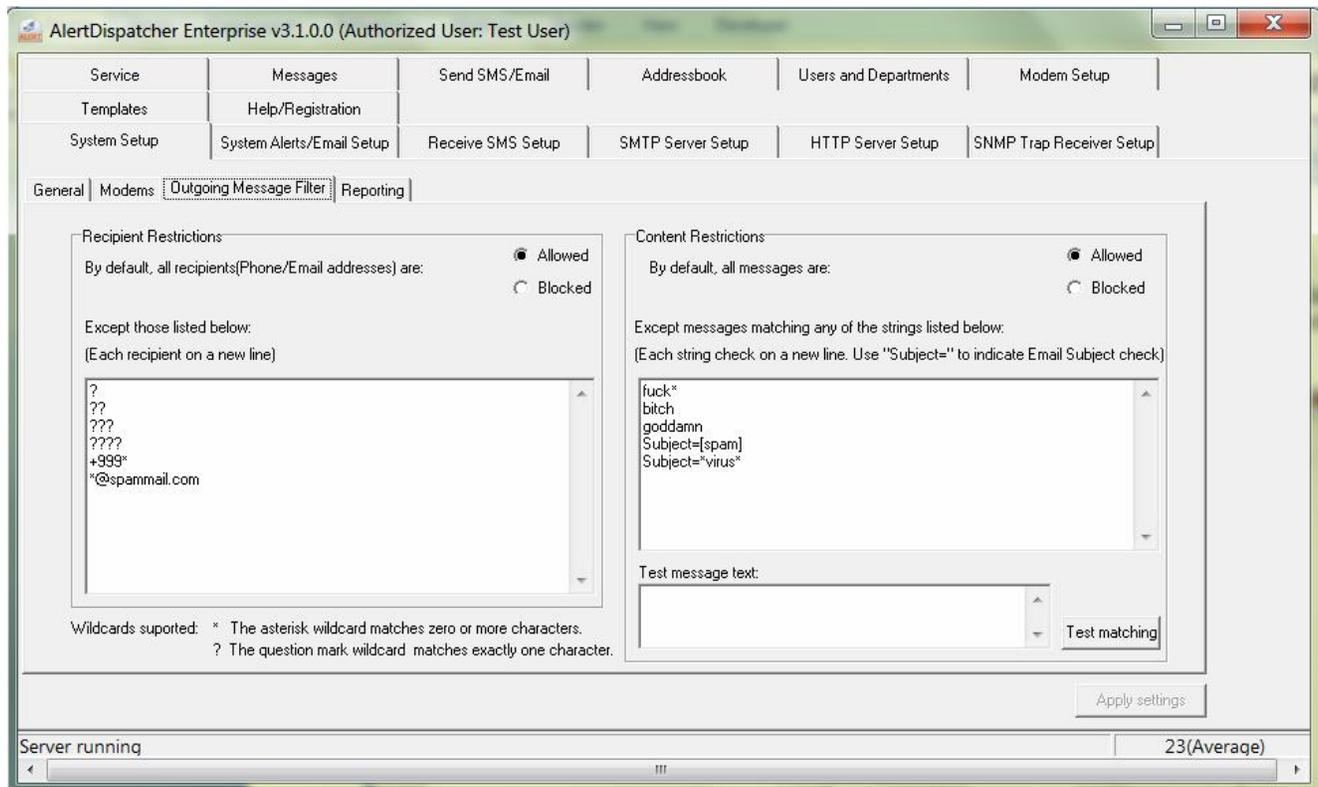


By default, AlertDispatcher will automatically failover to an available modem port if the selected modem is not working. The default setting is recommended for critical operations.

If 'Allow concatenated (long) SMS' is not enabled, messages will be truncated to 160 characters for ASCII text and 70 characters for Unicode text. More phones made within the last 5 years can support concatenated SMS of up to 6 SMS in length.

## c). System Setup – Outgoing Message Filter

You can setup 'Outgoing Message Filters' to block Email and SMS messages to particular recipients (wildcard characters supported) and also messages that contain certain strings. The asterisk wildcard character matches zero or more characters. The question mark wildcard character matches exactly one character.



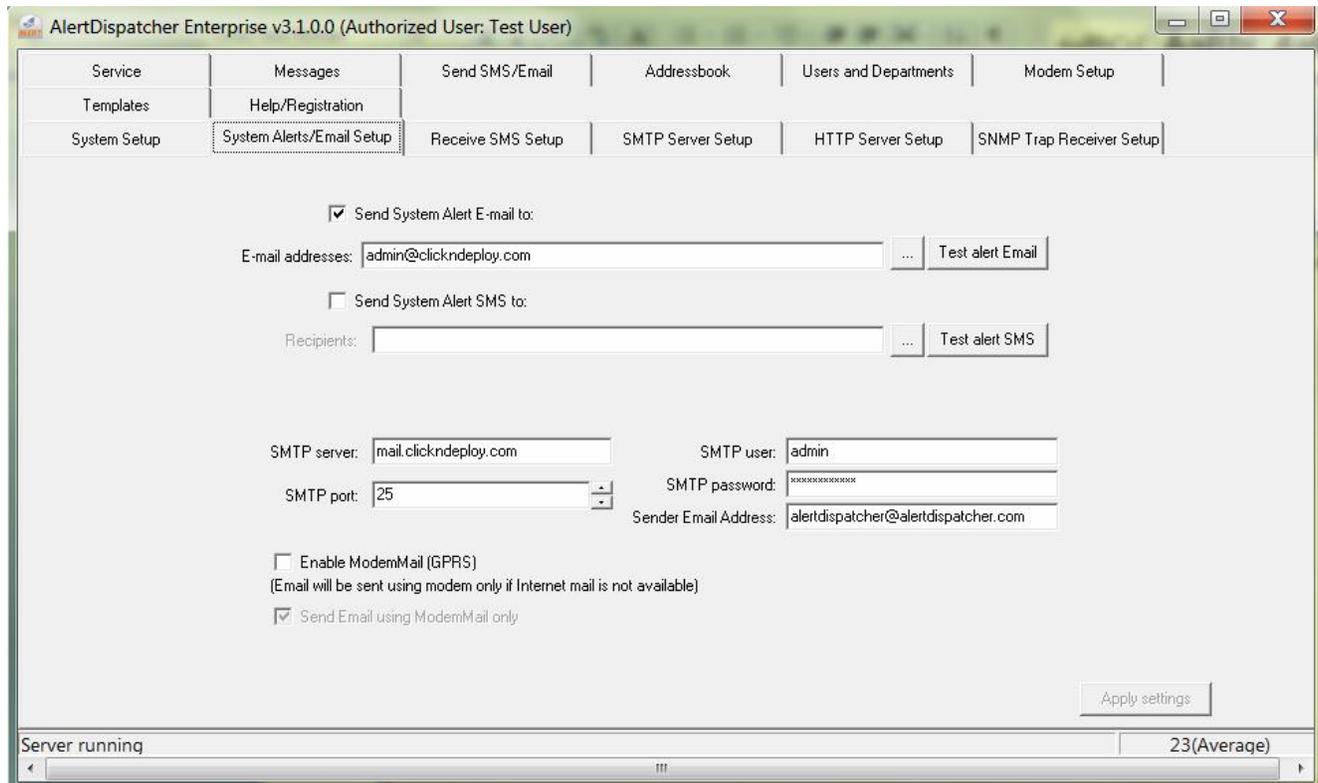
In the above example, recipients containing 1 to 4 characters only (? , ?? , ??? , ????) , and recipients beginning with +999 (+999\*) , e.g. +9991234567 are restricted. To block all international SMS, simply block the prefix, e.g. +\* or 00\* (different networks use different prefixes).

The check string *'bitch\*'* will block all messages with the keyword *'bitch'* followed by any other characters, e.g. *'bitch!'* and *'bitchyou!'* will be restricted. However, *'hibitch'* will be allowed.

Note that for the case of phrases (more than one word separated by spacing), the asterisk wildcard will be automatically added to the beginning and end of the phrase. For example, the check string *'god damn'* will block the message *'God Damnit!'*.

#### d). System Alerts/Email Setup

In order for AlertDispatcher to send out Emails, you must configure an SMTP user account under [Alerts/Email Setup](#). Please obtain the SMTP Server address and SMTP username and password from your company email administrator, e.g. Exchange administrator.



As far as possible, do not use your email account or an existing email account in case you change your password and forget to update the password set on AlertDispatcher. Create a new email account, e.g. alertdispatcher@yourcompanydomain.

If you do not have an SMTP Server, you can register a free GMAIL account. Note that GMAIL SMTP Server (smtp.gmail.com) uses port 587 instead of the standard port 25.

You can configure to receive System Alert Email and/or SMS whenever AlertDispatcher encounters a modem, database, or any other errors by setting up the following. This is highly recommended if you are using AlertDispatcher for critical purpose.

**Note:**

- a). SMS Alerts will not be sent if there are no available modems – all modems are offline. Therefore, in case of such a scenario, you must configure System Email Alerts if you wish to receive system notifications.
- b). You must enable '*Enable ModemMail (GPRS)*' if you want to allow AlertDispatcher to be able to send Email using the GPRS modem. Please do not enable this feature unless you need it as it may incur additional GPRS costs on your SIM card bill.

If 'Send Email using ModemMail only' is not enabled (the default setting), AlertDispatcher will attempt to send out Emails via TCP/IP network first, and only if that method fails, failover to ModemMail.

## 4). Configure Users and Departments

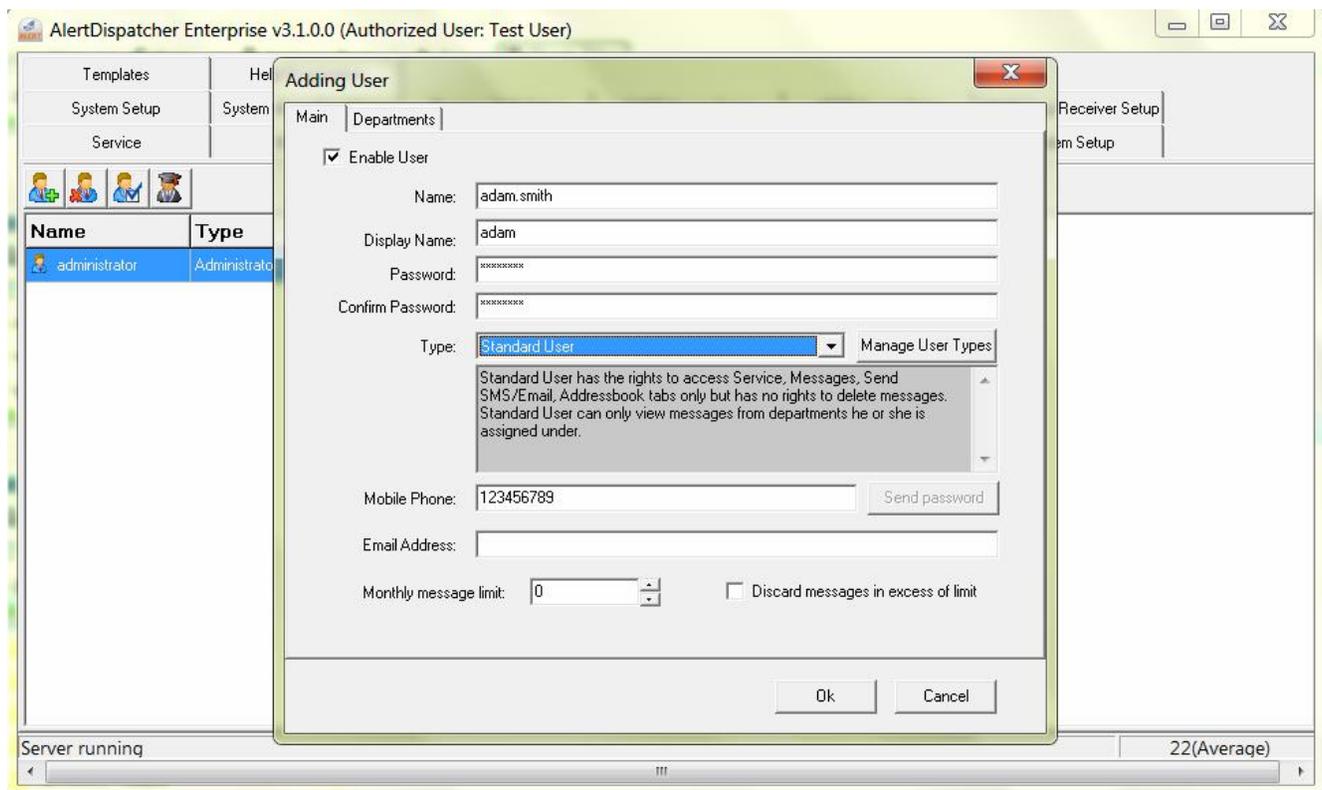
### a). Create user

If you are using the Corporate license (or higher licenses), you can install AlertDispatcher Client on workstations and configure the client to connect to AlertDispatcher Server remotely.

You can create multiple login Users of different “User Types” (each user type has a different combination of access rights). Every login user is assigned to a user type. The user will in turn inherit all the rights configured for that user type. Login users are used for both AlertDispatcher Client and Web Portal login.

For your convenience, the following user types are created upon installation – Administrator, Basic User, Department Leader, Manager and Standard User.

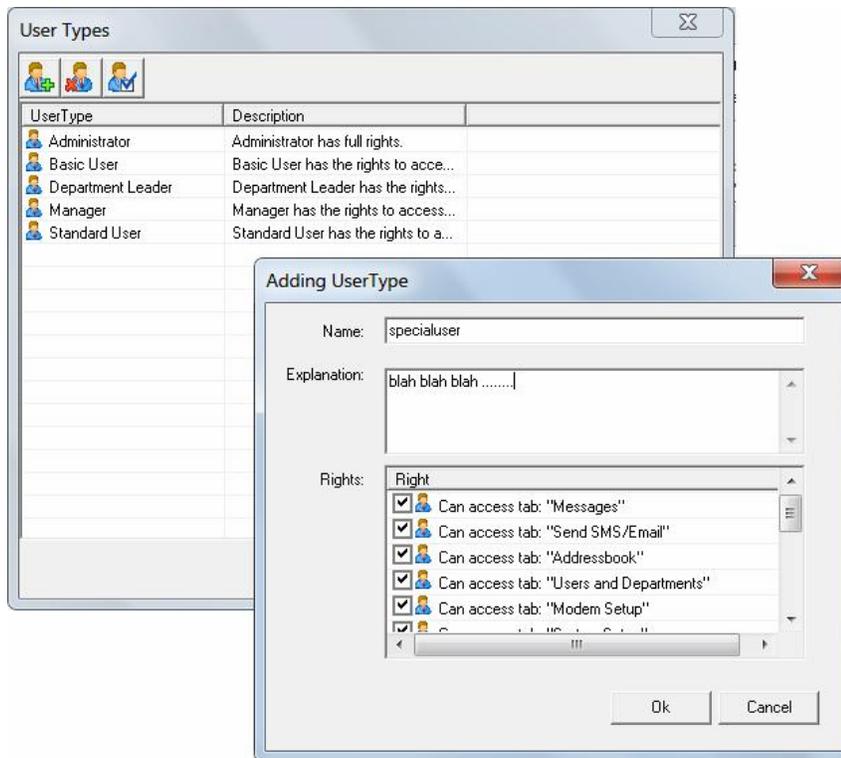
In the example shown below, the newly created user “adam.smith” is assigned the user type “Standard User”. Standard User has the rights to access Service, Messages, Send SMS/Email, Addressbook tabs only but has no rights to delete messages. Standard User can only view messages from departments he or she is assigned under.



**Note:** The User “Administrator” is created automatically. The password is “administrator” (caps sensitive). You are advised to change this password as soon as possible.

### b). Create new user types

If you need a user type with a combination of access rights not found in any of the default user types, you can create your own user type.



### c). Create departments

To allow groups of users to work together distinctly from the rest of the organization, you can create new “Departments” (Users are assigned to the “main” department by when they are created and cannot be removed from “main” department).

You can create new departments and assign users to the newly created departments. Once the users are in different newly created departments, you can restrict a user to view/delete only messages generated by fellow members of the department. Users with the right to access messages from different departments can choose to filter messages displayed in the Messages display grid by department.

Addressbook Recipients/Groups and Message Templates are also restricted to users from a specific department (“main” department by default). If you create a new department, e.g. ‘IT’, and assign recipients/groups or a message template to this new department, users assigned to only ‘main’ department will not be able to send to these recipients and groups or access this message template.

**Tip:** If you want a recipient or group or message template to be accessible by all users, simply restrict the recipient/group or template to ‘main’ department. As all users are assigned to the default ‘main’ department, so recipients/groups and message templates assigned to ‘main’ are accessible by all users.

#### d). Connecting client to remote server.

The ability to create multiple users is especially useful if you are using the Corporate (of higher) license which supports multiple remote clients. You may connect to a remote server using by editing 'Remote Server Host' as shown below.

## 5). Configure SMTP Server Setup

### a). SMTP Server Setup – General Setup

AlertDispatcher has a built-in SMTP Server that listens to port 25 (default). The built-in SMTP Server allows AlertDispatcher to be used as an Email-to-Alert (Email/SMS) gateway. You can configure MS Exchange or Lotus Notes to forward Emails to AlertDispatcher which will deliver them as SMS and/or Email using configurable rules.

**Note:** This setting is different from the 'SMTP Server' setting found under 'Alerts/Email Setup' tab – which allows AlertDispatcher to relay Email (as an Email client) to network based SMTP Servers.

The SMTP interface is required for some of the APIs such as the SQL Server stored procedure. As SMTP is a common protocol, the SMTP interface allows you to send Alerts from any programming language or software that can send out Email.

By default, AlertDispatcher will set the Email Body of Emails received by the SMTP Server as the Alert message. You can change this to Email Subject or to both Email Subject and Body. The recommendation is to use Subject if you do not need to type long messages.

The screenshot shows the 'SMTP Server Setup' configuration window for AlertDispatcher Enterprise v3.1.0.0. The 'General Setup' tab is active, showing the following settings:

- Enable SMTP Server
- General Setup**
  - SMTP Server Port: 25
  - Maximum number of SMS per email: 5
  - Default message Priority: 2
  - Set as SMS Recipient: Email Recipient User
  - Enable SMS Message Footer
  - Set as SMS Message Content: Email Body Content
  - SMS Message Footer: From:%EMAILSENDERADDRESS(%EMAILSENDERNAME)
  - Automatically disable SMTP on server failure or when no modems are working (For client side failover to alternative server)
- Basic SMTP Authentication**
  - Enable SMTP Authentication
  - Username: [ ] Password: [ ]
- Email Filtering Rule**
  - Forward ALL emails to Numeric email recipients as SMS
  - Query Phonebook for all other email recipients. If no match is found, deliver email as regular email.
  - Deliver all emails received as regular email with the exception of emails with the following recipient domains: alertdispatcher.com (Emails to other domains will be delivered as regular emails)
- TCP/IP address access restrictions**
  - By default, all computers will be:  Granted access
  - Except those listed below:  Denied access
  - Table with columns: Access, IP address (Subnet mask), Add, Delete, Properties
- Use Modem Port: auto IP throttle: 600 Messages/Minute
- Apply settings button

At the bottom of the window, a status bar displays: "No working modem found. Refer to Modem Setup for error message." and "Unknown".

By default, the Alert recipient will be taken from the recipient Email Address before the @ symbol. e.g. +65912345678@clickndeploy.com or groupname@clickndeploy.com (Note: groupname must be configured within the Addressbook). You may change to SMS recipient to take from Email Subject instead.

You may append a message footer to all Alerts sent out from the SMTP Server.

The "Automatically disable SMTP Server on server failure when no modems are working" setting is disabled by

default and you should only enable it if you are using an SMTP Client with a failure over to alternate server capability.

Using the *'Email Filtering Rule'*, you can selectively forward Emails to either SMS or relay as regular Email. If you check *'Forward ALL Emails to Numeric Email recipients as SMS'*, all Emails sent to recipient Email addresses in the following format: [+12345678@anydomain.com](mailto:+12345678@anydomain.com) or [12345678@anydomain.com](mailto:12345678@anydomain.com) will be forwarded as SMS.

You can toggle between *'Query Addressbook for all other Email recipients. If no match is found, deliver Email as regular Email.'* or *'Deliver all Emails received as regular Email with the exception of Emails with the following recipient domains:'*.

If set to *'Query Addressbook for all other Email recipients. If no match is found, deliver Email as regular Email.'*, AlertDispatcher will search the Addressbook for the group or recipient that exactly matches the username of the recipient Email address.

For example, if the recipient Email address is [john@mydomain.com](mailto:john@mydomain.com), and if the group or recipient 'john' exists in the Addressbook, that Email will be forwarded to the recipients defined in the Addressbook entry for 'john'. Otherwise, the Email will be relayed to [john@mydomain.com](mailto:john@mydomain.com) as a regular Email.

Conversely, if set to *'Deliver all Emails received as regular Email with the exception of Emails with the following recipient domains:'*, AlertDispatcher will only forward Emails with recipient Email address that matches a specified domain name(s). All other Emails destined for other domains will be sent as regular Email.

For example, if you indicate *'Alertdispatcher.com'* (default), only Emails with recipient Email address in the following format [+65912345678@Alertdispatcher.com](mailto:+65912345678@Alertdispatcher.com) will be converted into SMS. All other Emails will be delivered as regular Email\*. You can specify more than one domain name.

The Email filtering rule is a powerful feature enables 3<sup>rd</sup> party software to send both SMS and Email via a single SMTP Server.

The configuration *'TCP/IP Address access restrictions'* allows you to whitelist or blacklist specific computers or specific groups of computers by IP address. In the above example, all computers with the IP Address 192.\* are permitted to send Email to AlertDispatcher SMTP Server.

*'Use Modem Port'* feature allows you to specify which modem to use SMS messages relayed through the SMTP Server. The default setting is 'Auto'. This feature allows you to setup an active (primary) – passive (secondary) modem array in which the failover “passive” modem will be used only if the primary “active” modem fails.

*'IP Trottle'* controls the maximum number of emails per minute that the SMTP Server will process. Excess emails will be rejected.

### **Note:**

1). You can send Alerts (both SMS and/or Email) to a group of people by configuring their Email and SMS contact in the Addressbook.

2). If Windows Firewall is enabled, you must open access to port 25 in order for SMTP Server interface to work. For details, please refer to the section *'Setup considerations for API / Email-to-Alert (Email2SMS) / HTTP-to-Alert / SNMP trap receiver interface'* on this guide.

*For advanced Users Only:*

You can also indicate the Priority (Parameter **P**) and Scheduled date time (Parameter **D**) to send the Alert by appending the following the parameters to the end of the Email message sent to AlertDispatcher (you may be required to append to Email Subject instead of Body, depending on your SMTP Server Setup). **P** and **D** are optional parameters.

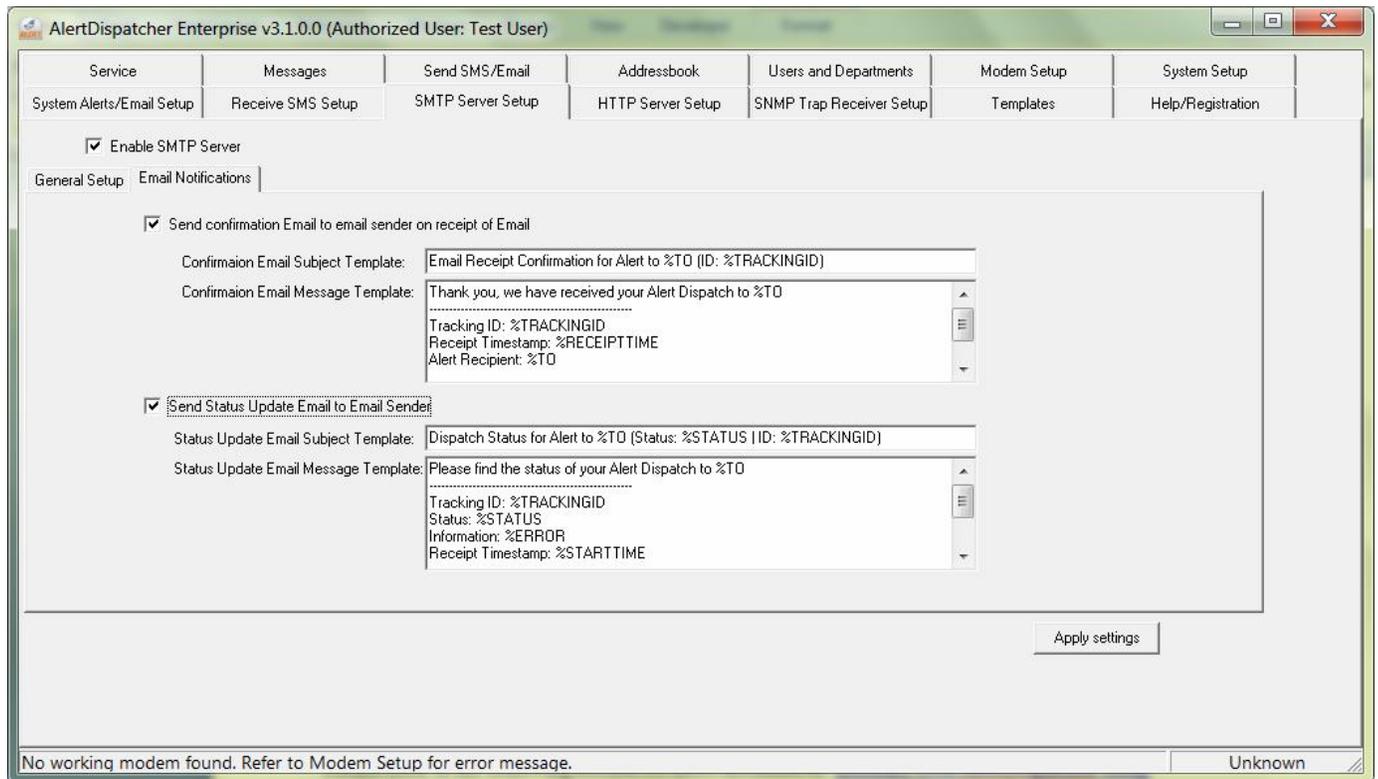
`D==YYYY-MM-DD HH:MM:SS P==HH:MM:SS`

e.g. If you have defined the Alert message to be taken from the Email subject, you can indicate the Email subject as follows:

`Hi, how are you? D==2010-12-01 20:00:00 P==4`

## b). SMTP Server Setup – Email Notifications

You can also setup AlertDispatcher to send an auto response Email to the sender of the Email. This is useful if you are routing Emails via Exchange or Lotus to AlertDispatcher SMTP Server. The sender of the Email will be informed on the delivery status of the SMS by the auto response Email. The auto response Email template can be amended as shown above.



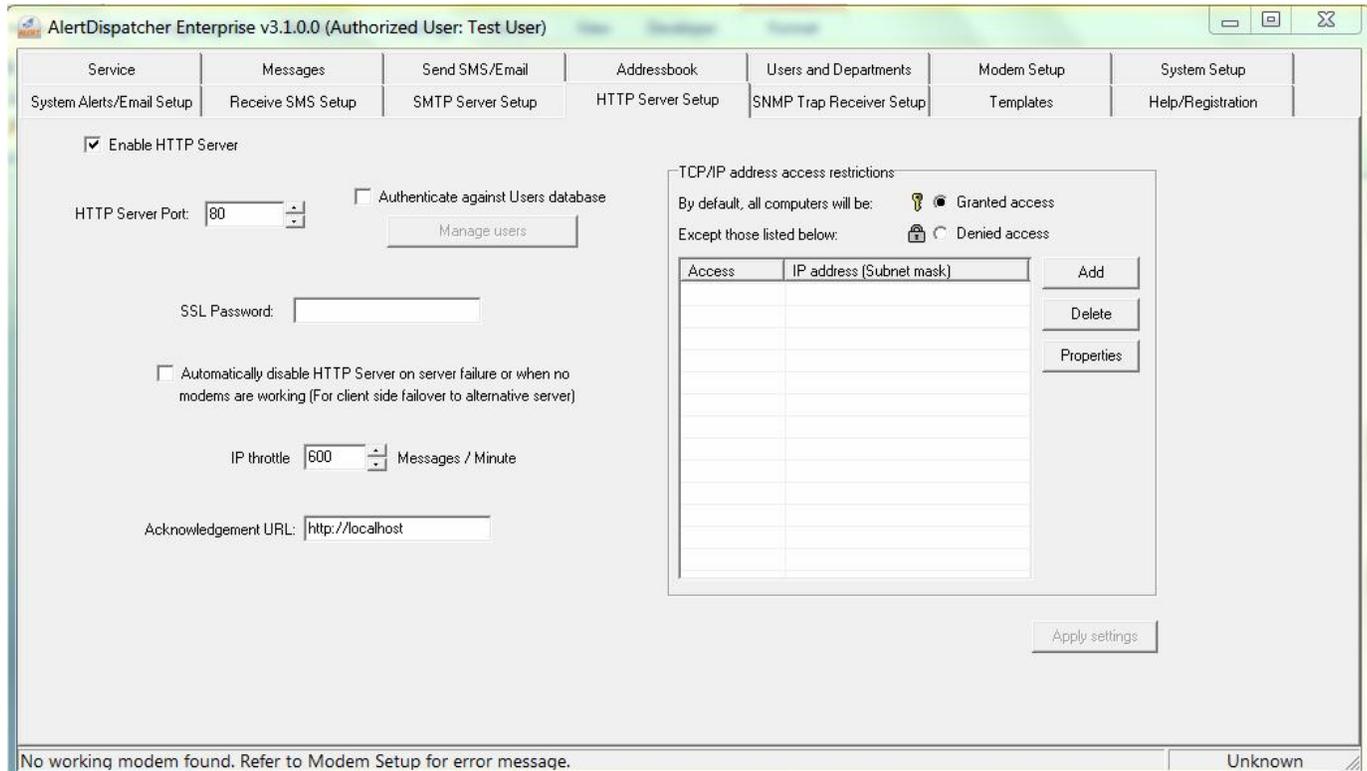
Please refer to the following section for more information: [Interface with AlertDispatcher using SMTP/HTTP/DOS](#)

Go to `C:\Program Files\AlertDispatcher\APIs` files to access the files for Command Line API and SQL Server stored procedure.

## 6). Configure HTTP Server Setup

AlertDispatcher HTTP interface is enabled and listens to port 80 by default. This allows your server to be used as a HTTP-to-SMS gateway by calling the URL

<http://smsservername/sendsms?N=phonenumber&M=messagebody>. You can protect the URL by enabling the “Authenticate against the Users database” setting as shown below.



The "Automatically disable HTTP Server on server failure when no modems are working" setting is disabled by default and you should only enable it if you are using an HTTP Client with a failure over to alternate server capability.

**Note:** If Windows Firewall is enabled, you must open port 80 in order for HTTP interface to work. If Windows IIS World Wide Web service is running, you need to change HTTP interface port to a different one from what IIS is using. For details, please refer to the section ‘[Setup considerations for API / Mail-to-SMS interface](#)’ on this guide.

And similarly to the SMTP interface, the configuration ‘*TCP/IP Address access restrictions*’ allows you to whitelist or blacklist specific computers or specific groups of computers by IP address. In the above example, only computers with the IP address 192.168.0.6 and 192.168.0.100 are permitted to interface with AlertDispatcher via HTTP.

‘*IP Trottle*’ controls the maximum number of HTTP requests per minute that the HTTP Server will process. Excess requests will be rejected.

‘Acknowledgement URL’ refers to the URL used in Acknowledgement links sent in Basic Escalation and Emergency Mobilization messages.

**Note:**

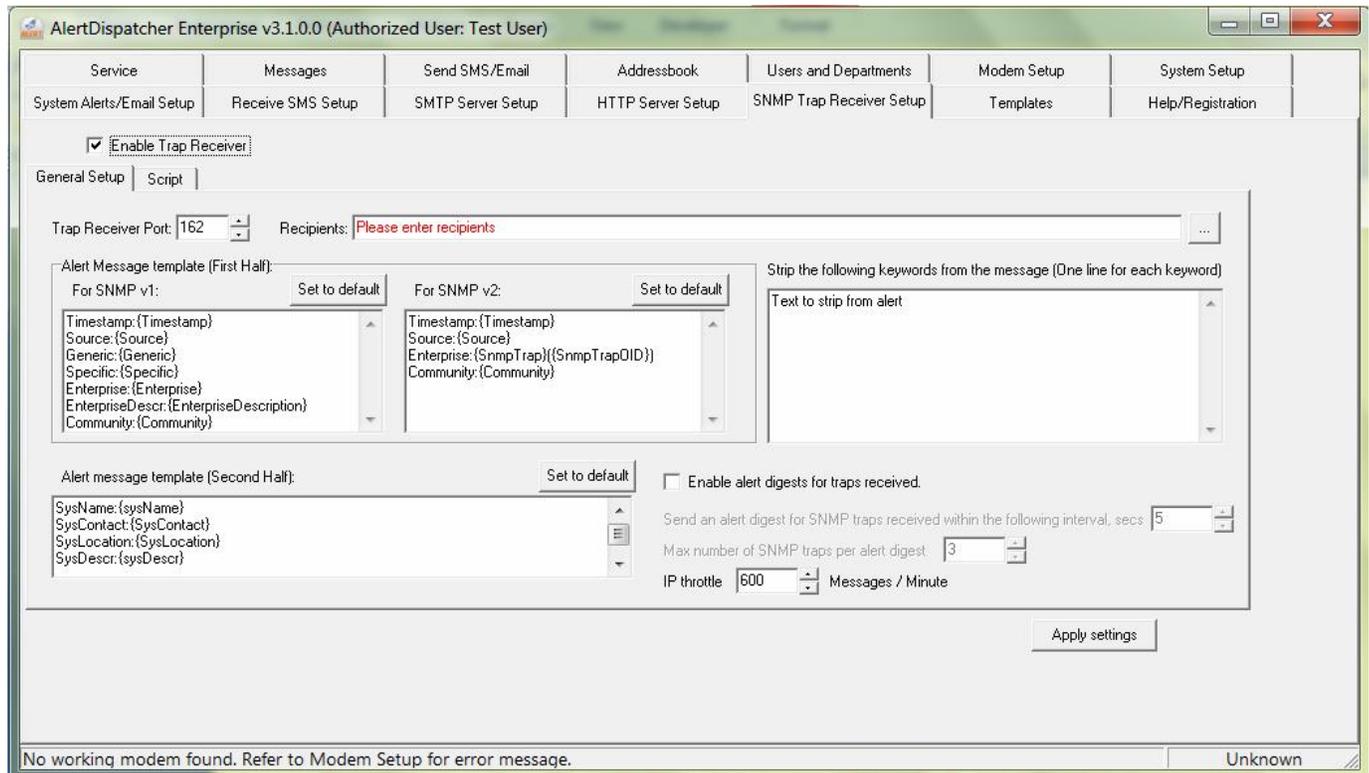
- 1). Internal addresses such as <http://192.168.0.111> or <http://localhost/> are not accessible from the Internet, i.e. you can't use them from smart phones.
- 2). Do not include the port number, e.g. <http://localhost:88>

Please refer to the following section for more information: [Interface with AlertDispatcher using SMTP/HTTP/DOS](#)

## 7). Configure SNMP Trap Receiver Setup

AlertDispatcher will capture SNMP Traps (v1 and v2) sent to the built-in SNMP trap receiver (which listens at the default port 162) and then formulate the alert message using the alert message template and the information derived from the SNMP trap. The alert is then sent to the list of Email and SMS recipients defined in the setup (default is no recipients).

You can customize the template for the alert and configure AlertDispatcher to strip unnecessary text from the message before it is sent. You can also set AlertDispatcher to send a single “digest alert” for SNMP traps received within a short interval so as to reduce the number of alerts.



**Note:** If Windows Firewall is enabled, you must open port 162 in order for SNMP Trap interface to work. If Windows SNMP Trap service is installed and running, you need to either stop the service or change to another port. For details, please refer to the section ‘[Setup considerations for API / Mail-to-SMS / SNMP trap receiver interface](#)’ on this guide.

## 8). Loading your Contact List into Addressbook Groups, setup Duty Schedule, Basic Escalation and Emergency Mobilization

AlertDispatcher allows you to create multiple groups of recipients which you can import from CSV (if you are using Excel, you can save to CSV format). You can broadcast Alerts (SMS/Email) to groups with as many as 5000 recipients at a time.

You can find a sample group at C:\Program Files\AlertDispatcher\SampleGroup.csv. Modify to your own values using spreadsheet software such as MS Excel. Click on the Save icon. Click 'Yes' on the next prompt to ensure the file is saved in CSV format. Please do not attempt to use "Save As".

**Note:** Import/Export from CSV only works after registration (please refer to '[License Key Registration](#)'). Each group can only have up to 10,000 recipients. If you have more than 10,000 records, please split into multiple CSV files. The Addressbook can store up to 200 groups and 50,000 recipients (across all groups).

	A	B	C	D	E	F	G	H	I	J	K	L
1	Name	Type	Phone	Email	Descriptor	BirthDate	Unsubscrib	CustomFie	CustomFie	CustomFie	CustomFie	CustomFie
2	JohnKhoo	0	34543500001		IT Manager	0100-01-0	0					
3	MarySim	0	65465464444	mary@clicl	Accountan	0100-01-0	0					
4	TimSong	0	45654654654	tim@clickndeploy.com		0100-01-0	0					
5												
6												
7												
8												

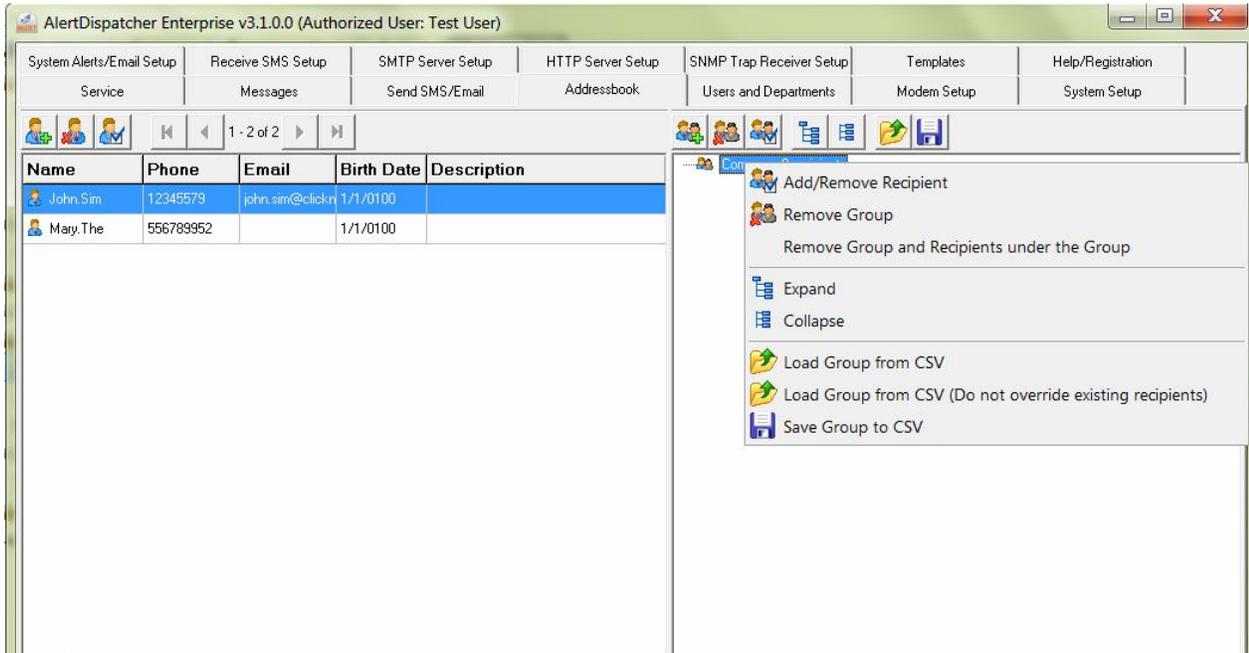
	A	B	C	D	E	F	G	H	I
1	Name	Type	Phone	Email	Descriptor	BirthDate	Unsubscrib	CustomFie	CustomFie
2	JohnKhoo	0	34543500001		IT Manager	0100-01-0	0		
3	MarySim								
4	TimSong								
5									
6									
7									
8									
9									
10									
11									

Company.csv may contain features that are not compatible with Unicode Text. Do you want to keep the workbook in this format?

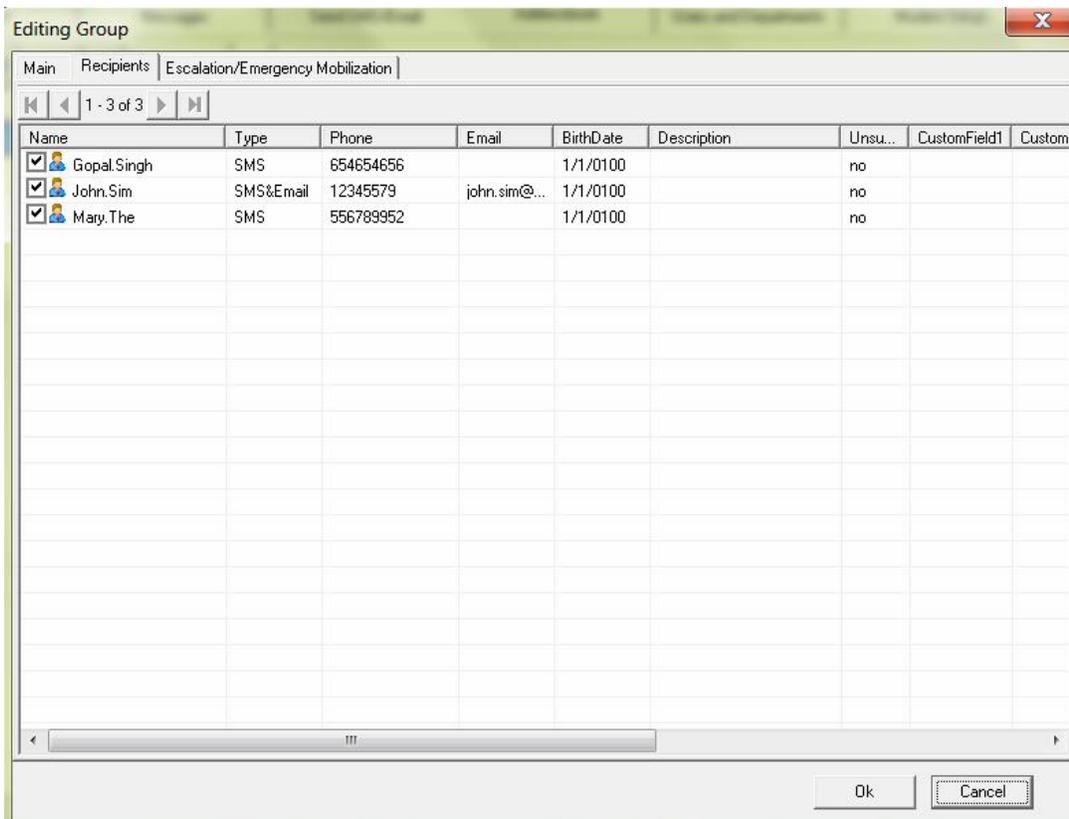
- To keep this format, which leaves out any incompatible features, click Yes.
- To preserve the features, click No. Then save a copy in the latest Excel format.
- To see what might be lost, click Help.

Yes No Help

Click on the *'Add Group'* button  to create a new group, e.g. IT. Click right on the newly created group and select *'Load Group from CSV'*.



To test your newly created group, go to *'Send SMS/Email'* Tab, click on  to open the Addressbook selection dialog. You may also add or remove recipients assigned to the group.





Alternative, you can also enter the recipients manually using , and then assign them to groups. You can define the 'Group Level Priority' for individual recipients. This setting takes effect when sending to a group of recipients with different priority. The recipient with higher Group Level Priority will receive the alerts first.

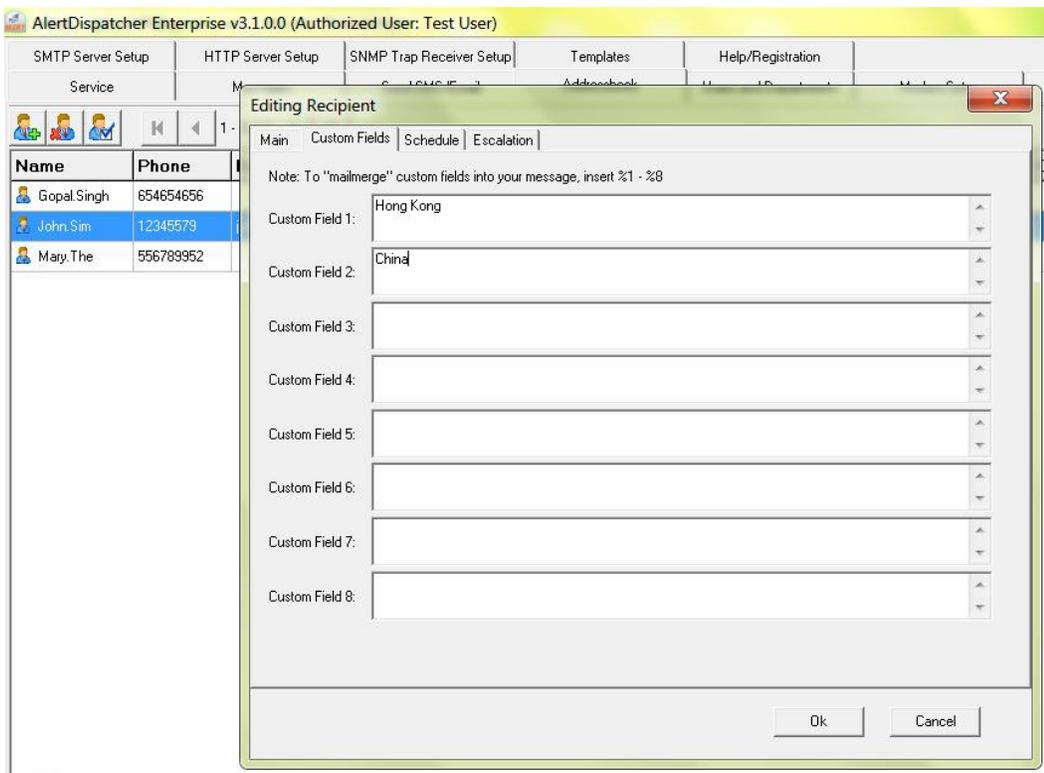
You can also restrict a recipient or group to users from a specific department. By default, only users under the default 'Main' department are allowed to send to a newly created recipient or group. Newly created users are assigned to the 'Main' department.

**Note:** A user can be assigned to multiple departments and thus will have the right to send to recipients and groups that are restricted to all departments which the user has been assigned with.

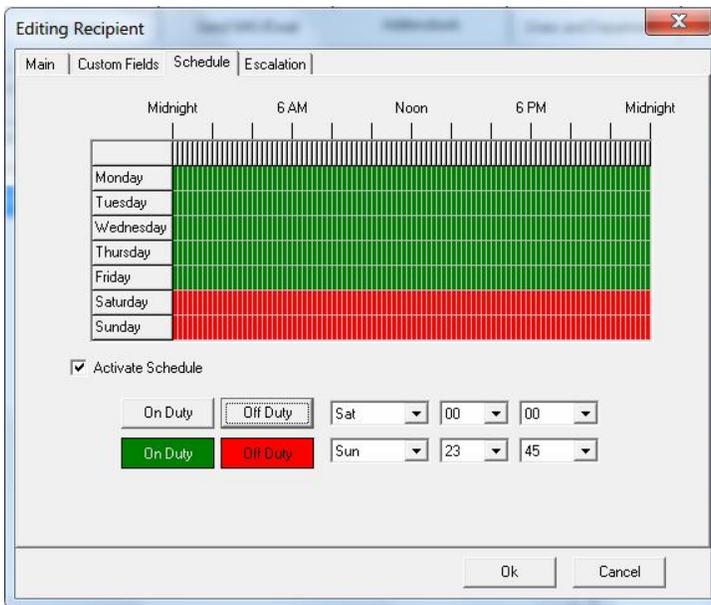
The screenshot shows the 'Editing Recipient' dialog box with the following fields and values:

- Name: Mary.The
- Type: Send SMS only
- Phone: 556789952
- Email: (empty)
- Alternative Phone/Email(s): (For Emergency Mobilization(RSVP)) (empty)
- Group Level Priority: Average
- Restrict to Users from Department: Main
- Birth Date: / /
- Description: (empty)
- Unsubscribed:  Unsubscribed (Recipient will not receive SMS)
- Note: (Note: Recipient can unsubscribe by sending UNSUB to SMSDispatcher)

You can setup up to 8 Custom Merge Fields for every recipient. To merge the Custom Merge Field into your messages, simply type {CustomFieldNo.}, e.g. {CustomField5} for Custom Field 5.



You can define the duty schedule for the recipient on a weekly basis. Alerts will not be sent to recipients that are off duty.



You can enable 'Basic Escalation' at the recipient or group level and for individual recipients and groups. If escalation is enabled for a recipient or group, recipients will need to send an acknowledge SMS or click on an acknowledgement link to halt the escalation process.

Only one recipient from the group needs to acknowledge. If no one acknowledges, you can configure AlertDispatcher to forward the message to another recipient or group. Up to 10 escalation levels can be configured.

Recipients can also add personal comments to the acknowledgment SMS or from the acknowledgment link, which would be automatically forwarded by AlertDispatcher to other recipients.

The acknowledgment footnote is configurable. You can also disable automatic forwarding any acknowledgment to other recipients.

**Editing Recipient**

Main | Custom Fields | Schedule | Escalation

Enable escalation

If none of the recipients have acknowledged within:

	15	mins.	ring phone (for 6 econds)	Company
Next	15	mins.	escalate to:	
Next	15	mins.	escalate to:	
Next	15	mins.	escalate to:	... Groups ... Company ... Recipients ... Gopal.Singh John.Sim Mary.The
Next	15	mins.	escalate to:	
Next	15	mins.	escalate to:	
Next	15	mins.	escalate to:	
Next	15	mins.	escalate to:	

Append acknowledgement link to SMS sent to recipients  
 Append acknowledgement link to Email sent to recipients

Acknowledgement footnote:

Notify everyone that has been contacted whenever anyone makes an acknowledgement or makes a subsequent comment  
 Continue sending unsend Dispatch messages after receipt of acknowledgment

For groups, besides 'Basic Escalation', you have the option to enable 'Emergency Mobilization' (only available for Enterprise License). Unlike Basic, Emergency Mobilization requires every recipient from the group to acknowledge. They can do so by sending an acknowledge SMS or click on an acknowledgement link. Recipients that fail to acknowledge can be reminded through a configurable escalation process as shown below.

**Editing Group** [Close]

Main | Recipients | Escalation/Emergency Mobilization

Enable Escalation/Emergency Mobilization

Basic Escalation: If none of the recipients have acknowledged within:

Emergency Mobilization: If there is ANY recipient that has not acknowledged within:

	15	mins, escalate to	resend to recipients that have yet to acknowledge
Next	5	mins, escalate to	send report to sender
Next	5	mins, escalate to	ring phone of recipients, that have yet to acknowledge, for 6 seconds
Next	5	mins, escalate to	resend to recipients that have yet to acknowledge
Next	5	mins, escalate to	send report to sender
Next	5	mins, escalate to	call phone of recipients that have yet to acknowledged
Next	5	mins, escalate to	resend to recipients that have yet to acknowledge
Next	10	mins, escalate to	resend to alternative contact of recipients that have yet to acknowledge
Next	5	mins, escalate to	send report to sender
Next	5	mins, escalate to	resend to recipients that have yet to acknowledge

Append acknowledgement link to SMS sent to recipients

Append acknowledgement link to Email sent to recipients

Acknowledgement footnote:

Alternative contact header:

Require send confirmation for Emergency Mobilization messages received from user via SMS or Email

Forward all comments made by recipients to the sender

OK Cancel

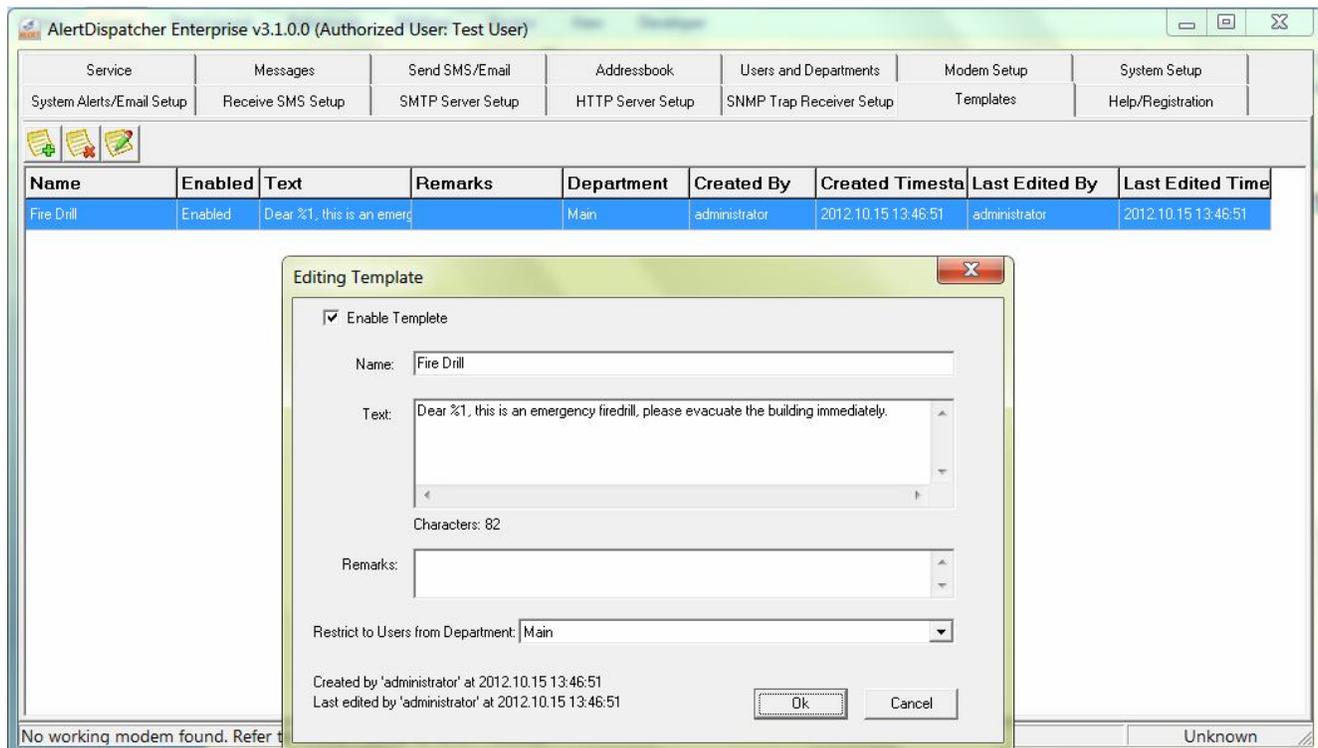
## 9). Configure Message Templates

You can create and configure message templates using the *'Templates'* tab on AlertDispatcher Client.

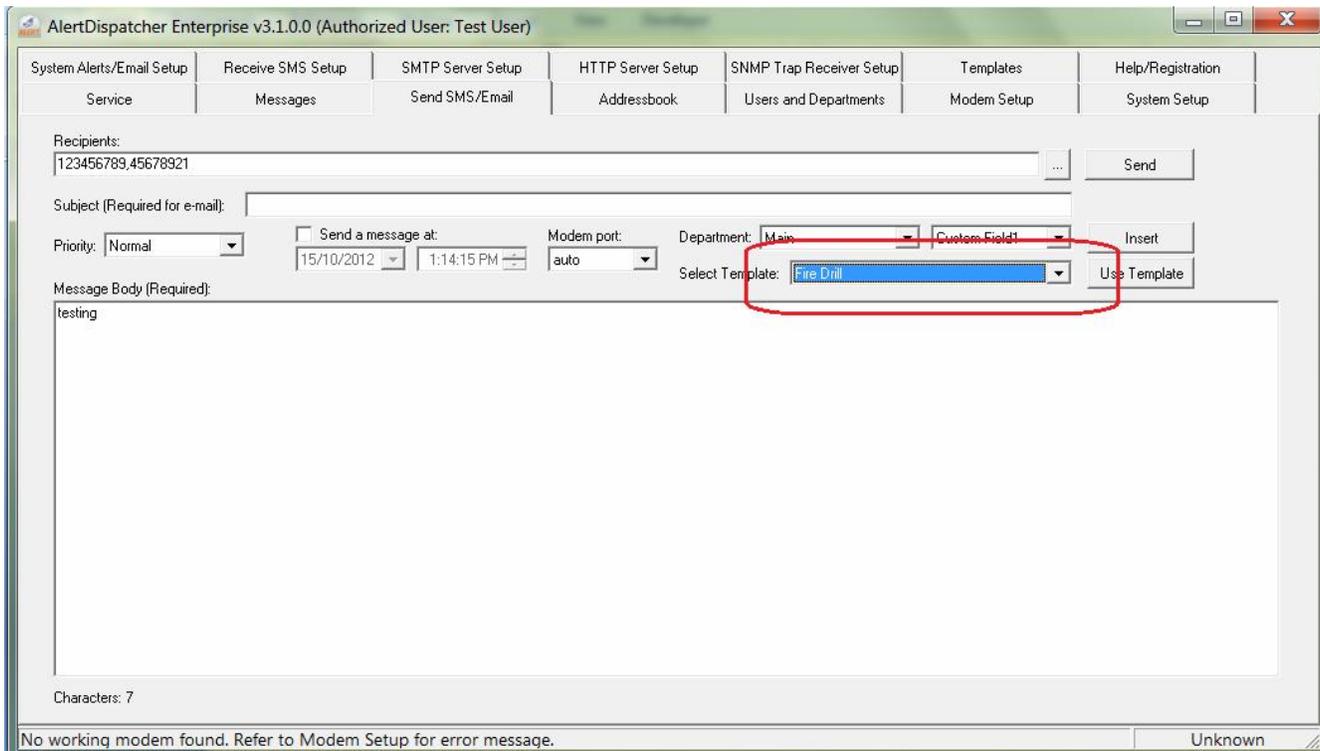
Message templates are restricted to Users from a specific department ( *'main'* department by default).

If you create a new department, e.g. *'IT'*, and create a template that is restricted to this new department, users assigned to only *'main'* department will not be able to access this template.

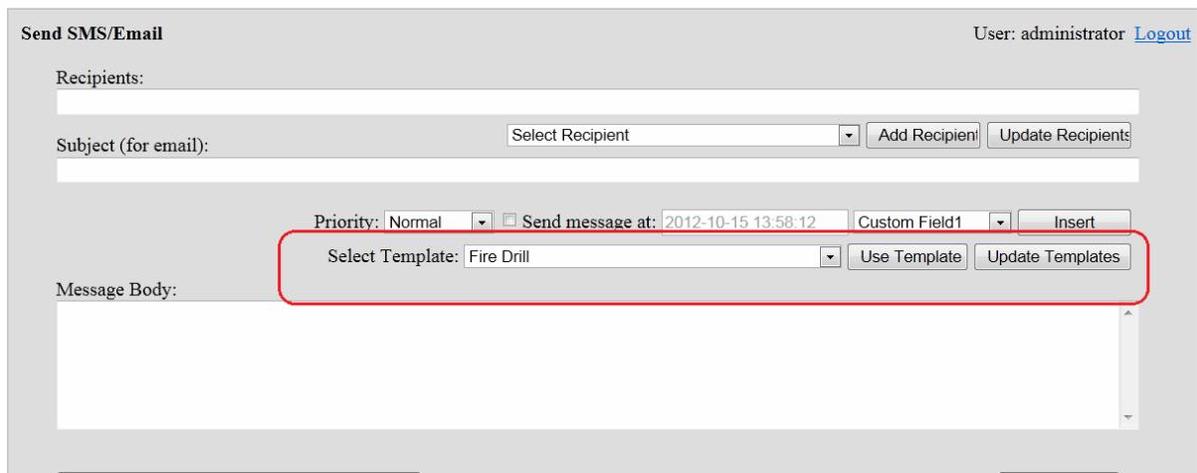
**Tip:** If you want a template to be accessible by all users, simply restrict the template to *'main'* department. As all users are assigned to the default *'main'* department, so Message templates assigned to *'main'* are accessible by all users.



Templates are accessible from both the *'Send SMS/Email'* tab and the web portal.



 **AlertDispatcher - Test User Alert System**

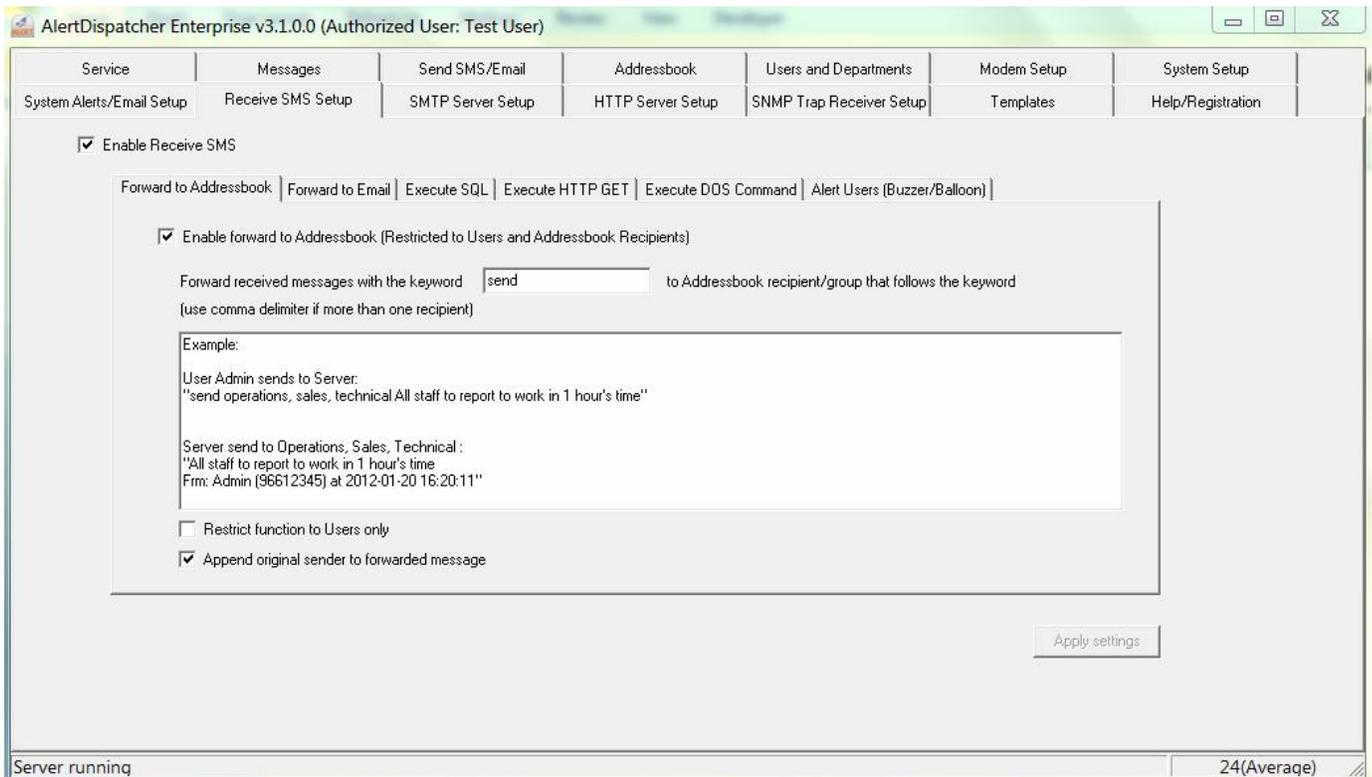


## 10). Configure Receive SMS Setup (Forward to Addressbook / Forward to Email / Execute SQL / Send HTTP GET request / Execute DOS Command)

AlertDispatcher allows you to forward to addressbook, forward SMS received to Email, execute an SQL command, send an HTTP GET request and execute a DOS Command on receiving an SMS. You can enable/disable each feature individually.

### a). Forward to Addressbook

Enabling '*Forward to Addressbook*' feature allows users and addressbook recipients to forward/broadcast their SMS to addressbook recipients and groups. You have the option to restrict this feature to users only.



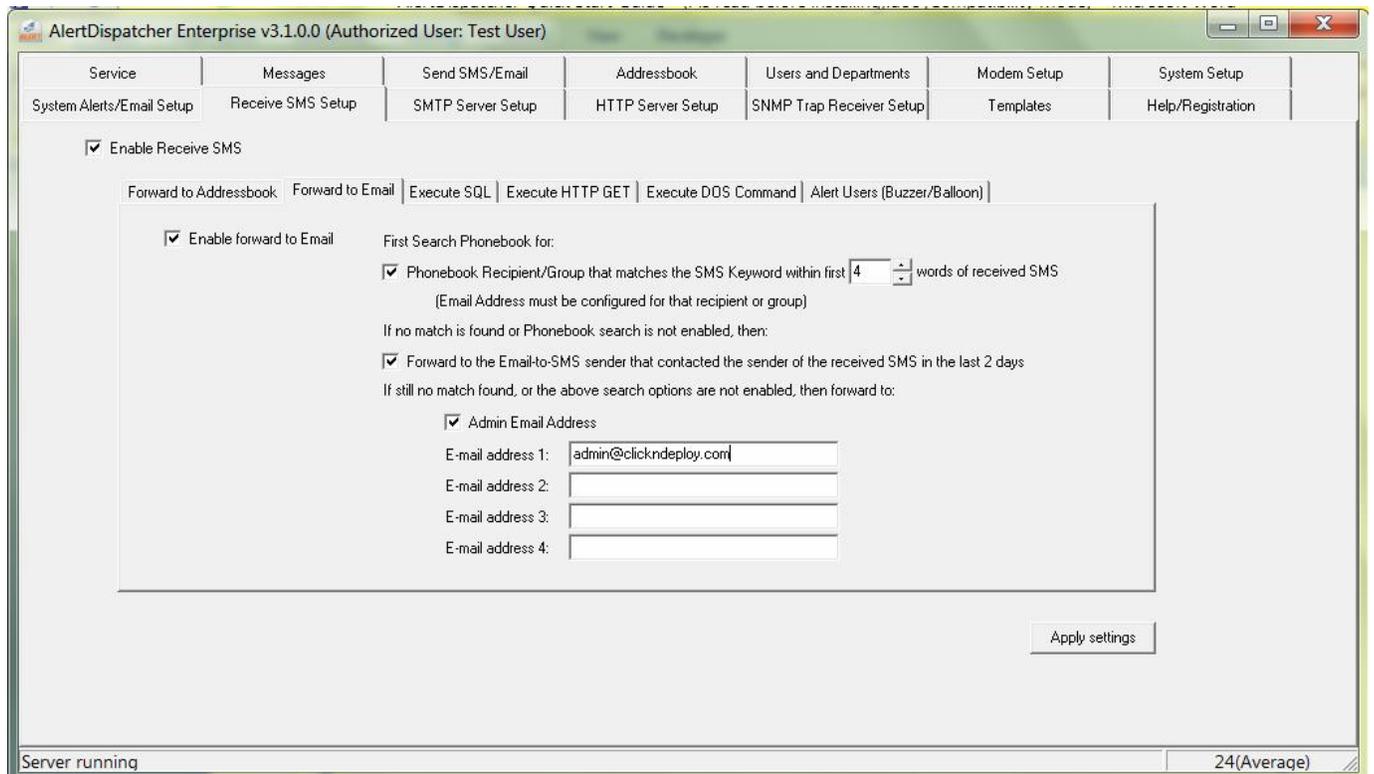
**Note:** Using the '*Restrict to Users from Department*' setting under Edit Recipient/Group, you can further restrict users from only a specific department to have the right to send to a particular group or recipient.

The screenshot shows a window titled "Editing Recipient" with a close button in the top right corner. The window has four tabs: "Main", "Custom Fields", "Schedule", and "Escalation". The "Main" tab is active. The form contains the following fields and controls:

- Name: Text box containing "Mary.The"
- Type: Dropdown menu set to "Send SMS only"
- Phone: Text box containing "556789952"
- Email: Empty text box
- Alternative Phone/Email(s): Text box with a search icon (three dots)
- Group Level Priority (within the group itself): Dropdown menu set to "Average"
- Restrict to Users from Department: Dropdown menu set to "Main", highlighted with a red rectangle
- Birth Date: Text box with slashes ( / / ) and a dropdown arrow
- Description: Empty text box
- Unsubscribed (Recipient will not receive SMS): Checkbox, currently unchecked
- Note: (Note: Recipient can unsubscribe by sending UNSUB to SMSDispatcher)
- Buttons: "Ok" and "Cancel" at the bottom right

**b). Forward to Email**

You need to configure Alerts/Email Setup before you can enable 'Forward to Email' feature (see the section 'Configure System and Alerts Setup'). Ensure that the SMTP configuration you use is working using the Test Alert Email button; otherwise this feature will not work. The status of the test Alert Email will be displayed in the Messages tab.



AlertDispatcher will first search the Addressbook for names that match a keyword in the first X (default four) words of the received SMS.

For example, if the SMS message is *“Tom, please come here”*, a copy of the SMS will be forwarded to his Email address as defined in the Addressbook (see below screen capture). AlertDispatcher is intelligent enough to detect *‘tom’* within the first few words of the SMS.

Note that if you include the surname in the recipient name, e.g. *‘tom sawyer’*, the keyword will be *‘tom sawyer’*, e.g. *“Tom sawyer, please come here”*.

The screenshot shows a window titled "Adding Recipient" with a close button (X) in the top right corner. The window has four tabs: "Main", "Custom Fields", "Schedule", and "Escalation". The "Main" tab is selected. The form contains the following fields and controls:

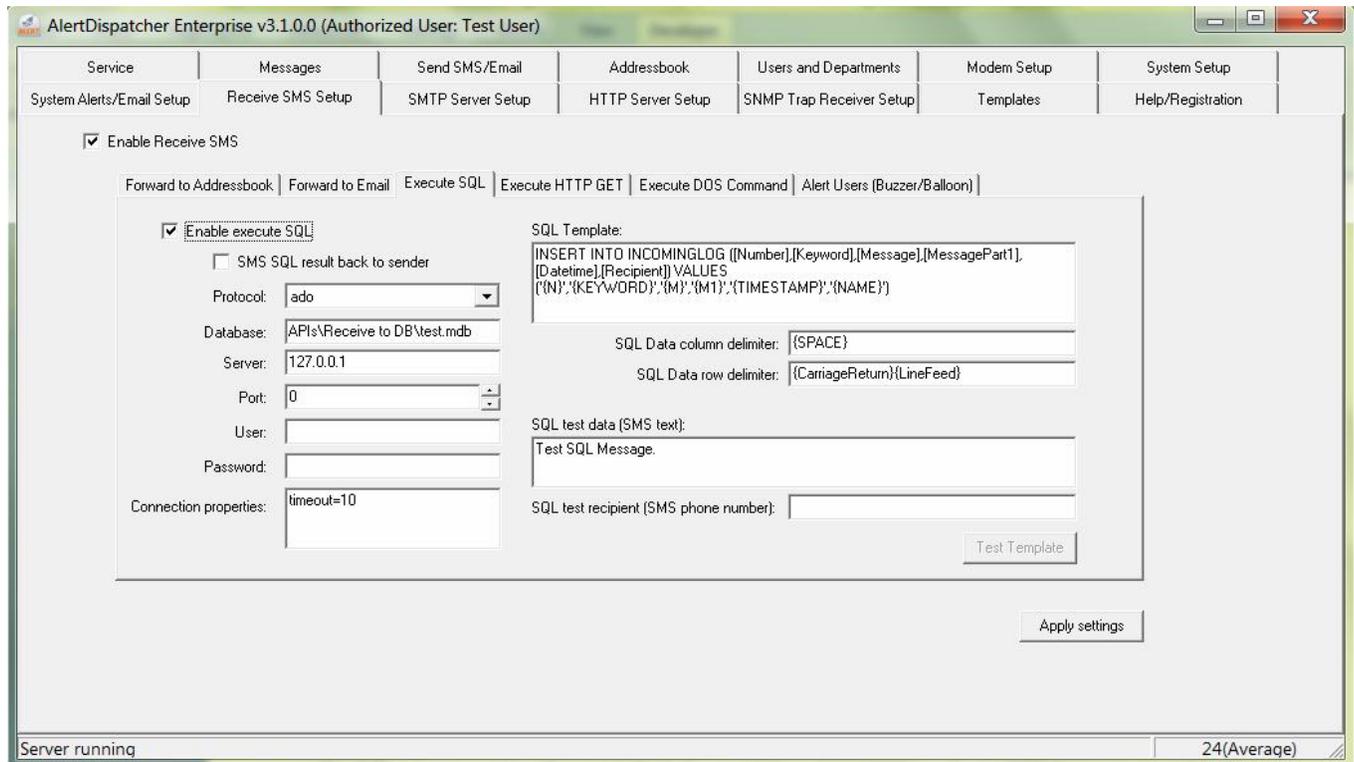
- Name: tom
- Type: Send both SMS / Email (dropdown menu)
- Phone: 123456789
- Email: tom@clickndeploy.com
- Birth Date: / / (dropdown menu)
- Description: (empty text box)
- Priority: 2 (dropdown menu)
- Unsubscribed (Recipient will not receive SMS)
- (Note: Recipient can unsubscribe by sending UNSUB to SMSDispatcher)
- Ok button
- Cancel button

If no match is found within the Addressbook, AlertDispatcher will then search the Message log for Email-to-SMS users that have contacted the sender of the received SMS within the last 2 days. By comparing the contents of SMS sent and received, particularly names addressed in the messages, AlertDispatcher will forward the SMS received to the Email-to-SMS user who is the most likely intended recipient for the SMS reply. If a good match cannot be determined, AlertDispatcher will forward the SMS to all Email-to-SMS users that had contacted the sender within the last 2 days.

Last, if no matches are found, AlertDispatcher will (only then) forward the SMS to the Admin Email Address – as configured under Alerts/Email Setup and up to 4 unique Email addresses.

### c). Execute SQL

AlertDispatcher also allows you to execute an SQL query based on the SMS received by the modem.



The following example will execute the following SQL statement against the MSSQL Server mypc/sqlexpress.

```
INSERT INTO INCOMINGLOG ([Number],[Keyword],[Message],[MessagePart1],[Datetime],[Recipient])
VALUES ('{N}','{KEYWORD}','{M}','{M1}','{TIMESTAMP}','{NAME}')
```

*{N}* represents the mobile number of the sender.

*{KEYWORD}* represents the first section of the SMS message delimited by the first instance of the SQL data delimiter which is *{SPACE}* by default. You can also use asterisk (please use the original \* symbol in the setting), hex or any other symbol.

*{M}* represents the entire SMS message including the keyword.

*{M1}* represents the second section of the SMS message after the first delimiter and before the second delimiter.

*{NAME}* represents the Addressbook entry of the sender.

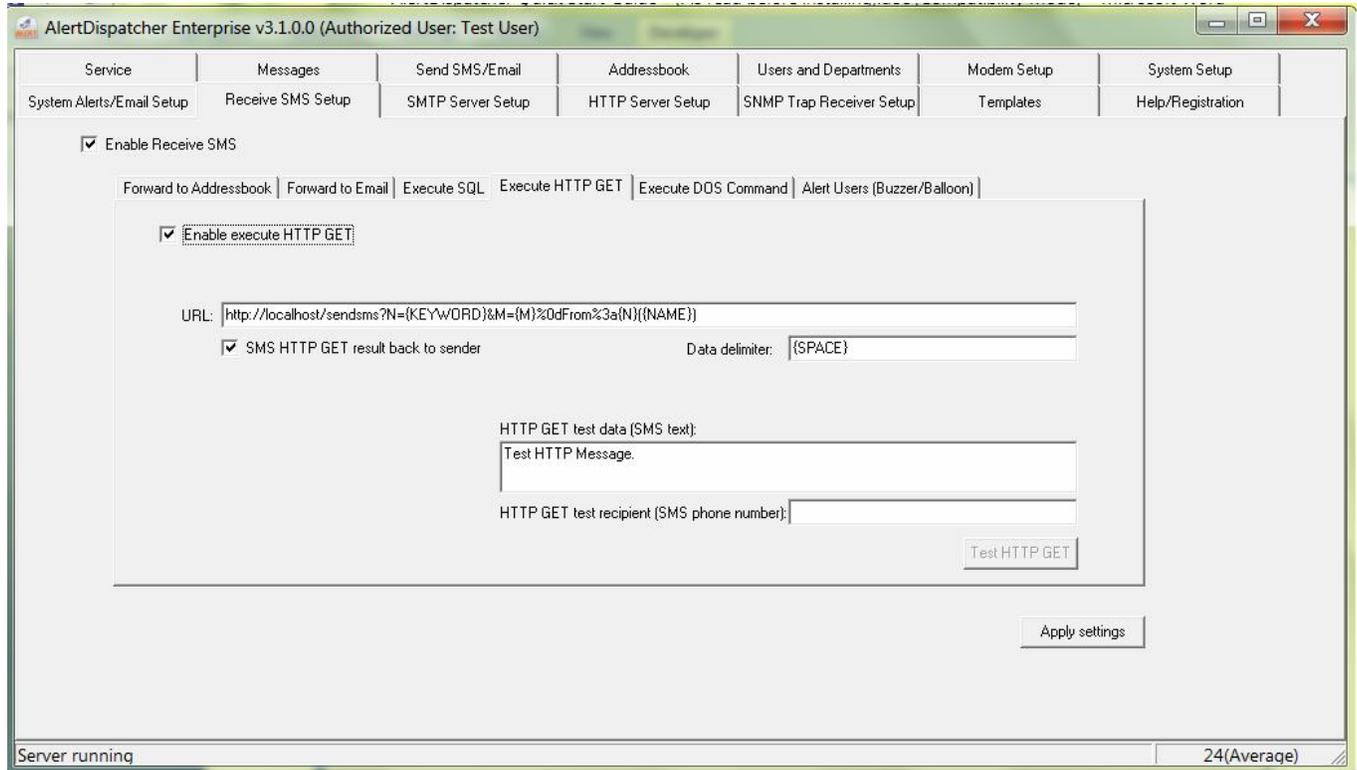
For example, if the SMS message is “How are you?” by “Tom” from his mobile phone number “+44123456789”, the following SQL query will be executed by AlertDispatcher:

```
INSERT INTO INCOMINGLOG ([Number],[Keyword],[Message],[MessagePart1],[Datetime],[Recipient])
VALUES( '+44123456789' , 'How' , 'How are you ' , 'are' , '2010-01-01 00:00:01' , 'Tom' )
```

If the SQL execution returns a result as is the case of a SELECT statement, you can send the result back to sender by enabling “SMS SQL result back to sender”.

## d). Send HTTP GET request

AlertDispatcher also allows you to send an HTTP GET requests based on the SMS received by the modem.



The following example will issue the following HTTP GET request, which will forward SMS received by AlertDispatcher back to the built-in HTTP Server (SMS loop back). The KEYWORD of the SMS received would be the assigned recipient.

*SMS Message: 9123456789 test sms*  
*From Phone Number: 812345678*

*URL setting: [http://localhost/sendsms?N={KEYWORD}&M={M}%0dFrom%3a{N}\({NAME}\)](http://localhost/sendsms?N={KEYWORD}&M={M}%0dFrom%3a{N}({NAME}))*

*Where,*

*{N} represents the mobile number of the sender.*

*{KEYWORD} represents the first section of the SMS message delimited by the first instance of the SQL data delimiter which is {SPACE} by default. You can also use asterisk (please use the original \* symbol in the setting), hex or any other symbol.*

*{M} represents the entire SMS message including the keyword.*

*{M1} represents the second section of the SMS message after the first delimiter and before the second delimiter.*

*Hence,*

{KEYWORD} = 912345678

{M} = 912345678 test sms

{M1} = test

{N} = 812345678

{NAME} = tom

Actual HTTP GET Request:

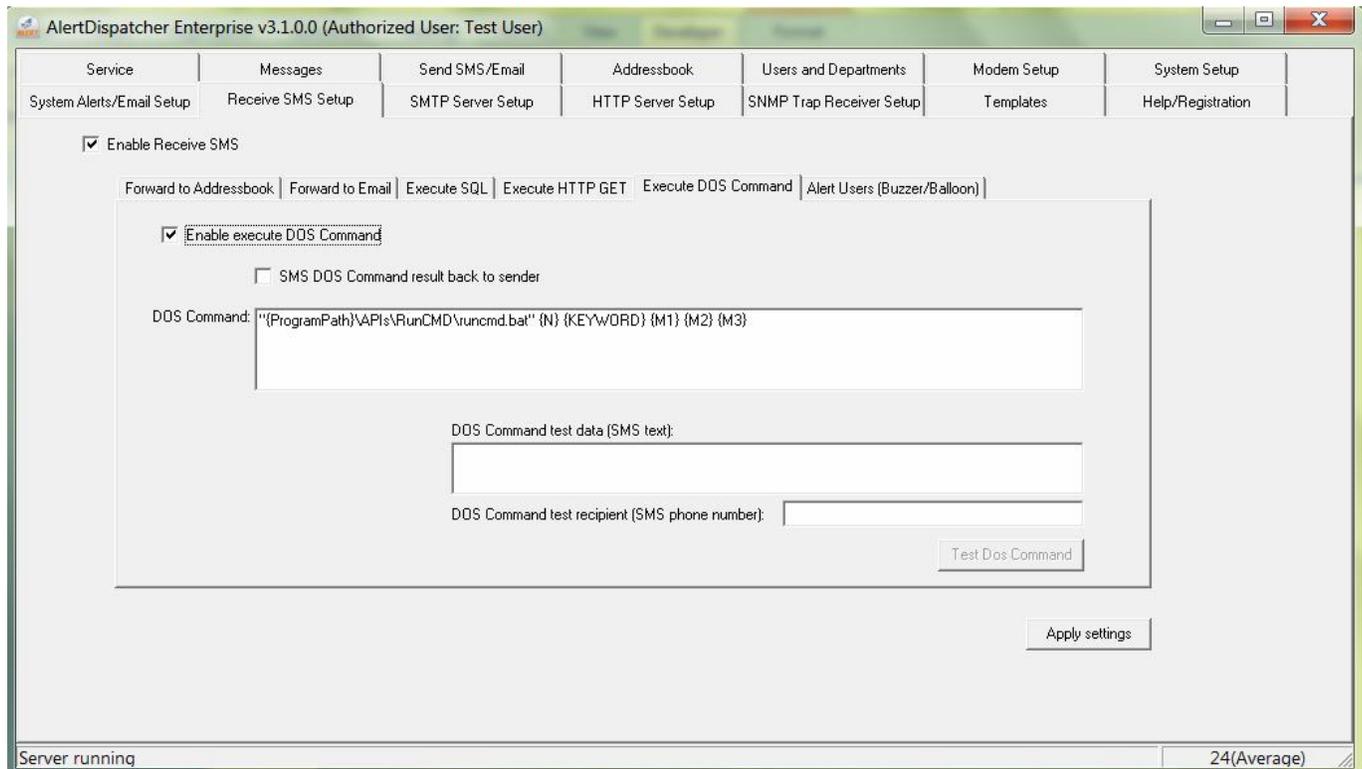
[http://localhost/sendsms?N=912345678&M=912345678%20test%20sms%0dFrom%3a812345678\(tom\)](http://localhost/sendsms?N=912345678&M=912345678%20test%20sms%0dFrom%3a812345678(tom))

If successful, it will send the message “912345678 test sms From:812345678(tom)” to “912345678”.

If ‘SMS HTTP GET result back to sender’ is enabled, the HTTP response would be sent back to the sender.

### e). Execute DOS Command

AlertDispatcher also allows you to execute a DOS Command and return the result back to the sender. The given example executes runcmd.bat provided in the installation.



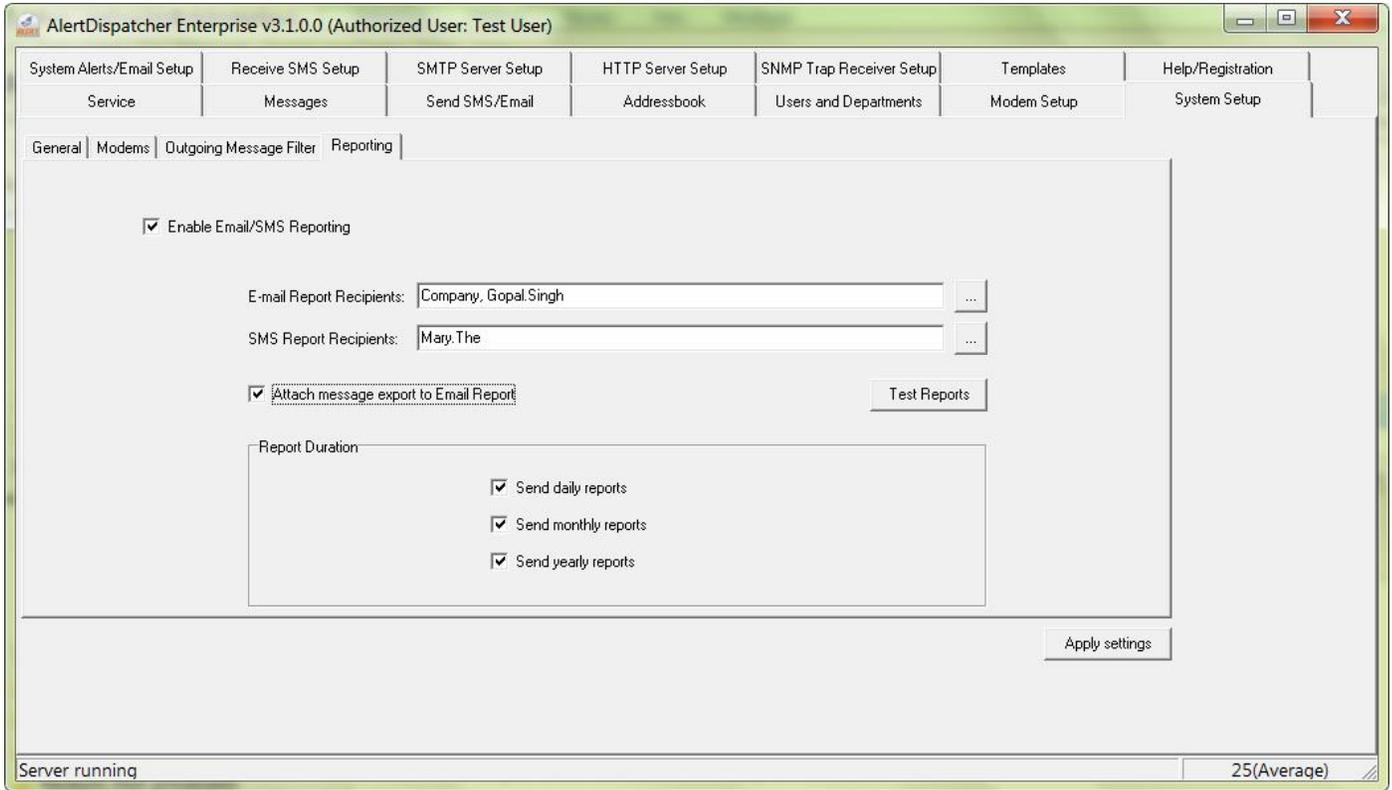
Please refer to [Appendix C – FAQ and Tips](#).

If you are still facing problems, send a detailed description of the issue you are facing along with the log files located in C:\Program Files\AlertDispatcher\Log to your vendor.

You may also refer to [Appendix B - Troubleshooting Checklist](#).

## 11). Configure Reports

You can configure AlertDispatcher to send daily/monthly/yearly reports containing usage statistics via SMS or Email. A message export can be optionally attached to Email reports.



Here's an example of an Email report.



[COMPAQSERVER] Daily Report generated for July 4, 2011, Period: 2011-07-04 00:00:00 to 2011-07-04 23:59:59

#### SMS Statistics

- 1). Number of SMS successfully sent: 5
- 2). ACTUAL number of SMS successfully sent: 5
- 3). Number of SMS that failed to send: 37
- 4). Number of SMS received: 4

#### Email Statistics

- 1). Number of Emails successfully sent: 1
- 2). Number of Emails that failed to send: 0

Please refer to CSV attachment for the SMS log.

Note: For item 1 of SMS Statistics, a long or concatenated SMS is treated as one SMS.

Sent from AlertDispatcher v1.5.0.0 - Licensed User:UNLICENSED - TESTING USE ONLY



report\_2011\_07...4\_23\_59\_59.zip

### 3. License Key Registration

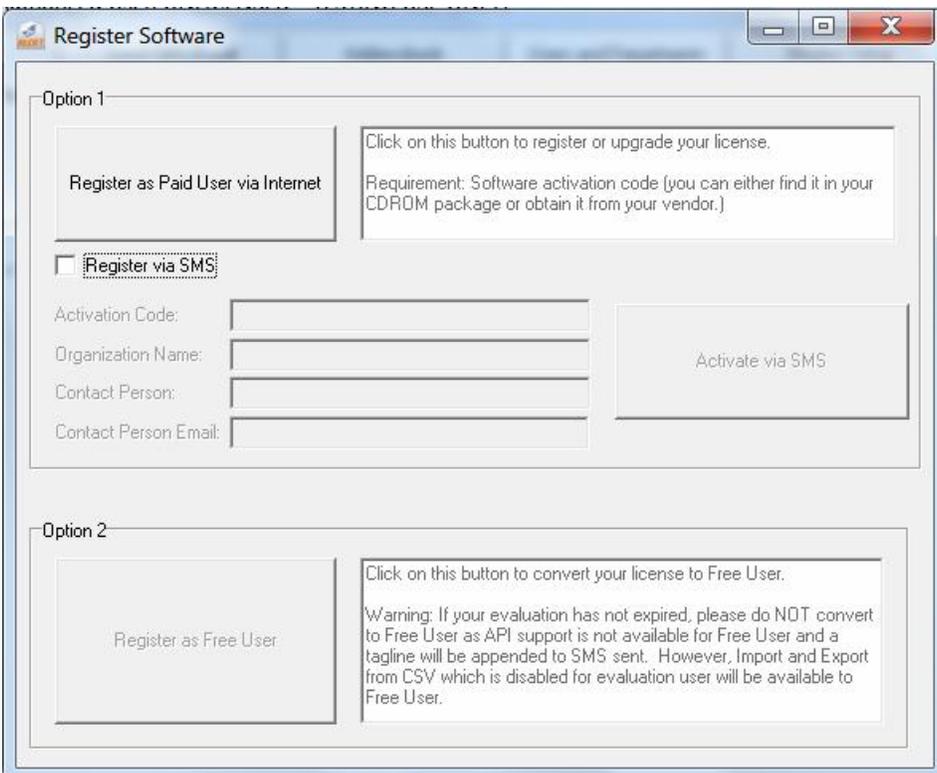
Once you have successfully setup and configured your AlertDispatcher installation, the software will work fully for 30 days until you registered the software or converted it into a free version.

To register, run AlertDispatcher Client, and click on the 'Register Software' button on the splash screen.



You will see the following screen with Option 1 and Option 2. If you have purchased a paid license, please click 'Register as Paid User'.

If you do not have access to Internet connection, you may register via SMS by ticking the checkbox "Register via SMS". Please register via Internet if SMS registration does not work.



If you select Internet registration, the following website will load. Enter your license Activation key. This can be found within your CDROM box or maybe sent to you by Email after you have made your purchase. If you do not have this key, please contact your software vendor. The software key will be sent to you by Email. Please check your spam folder if you cannot find your activation Email.

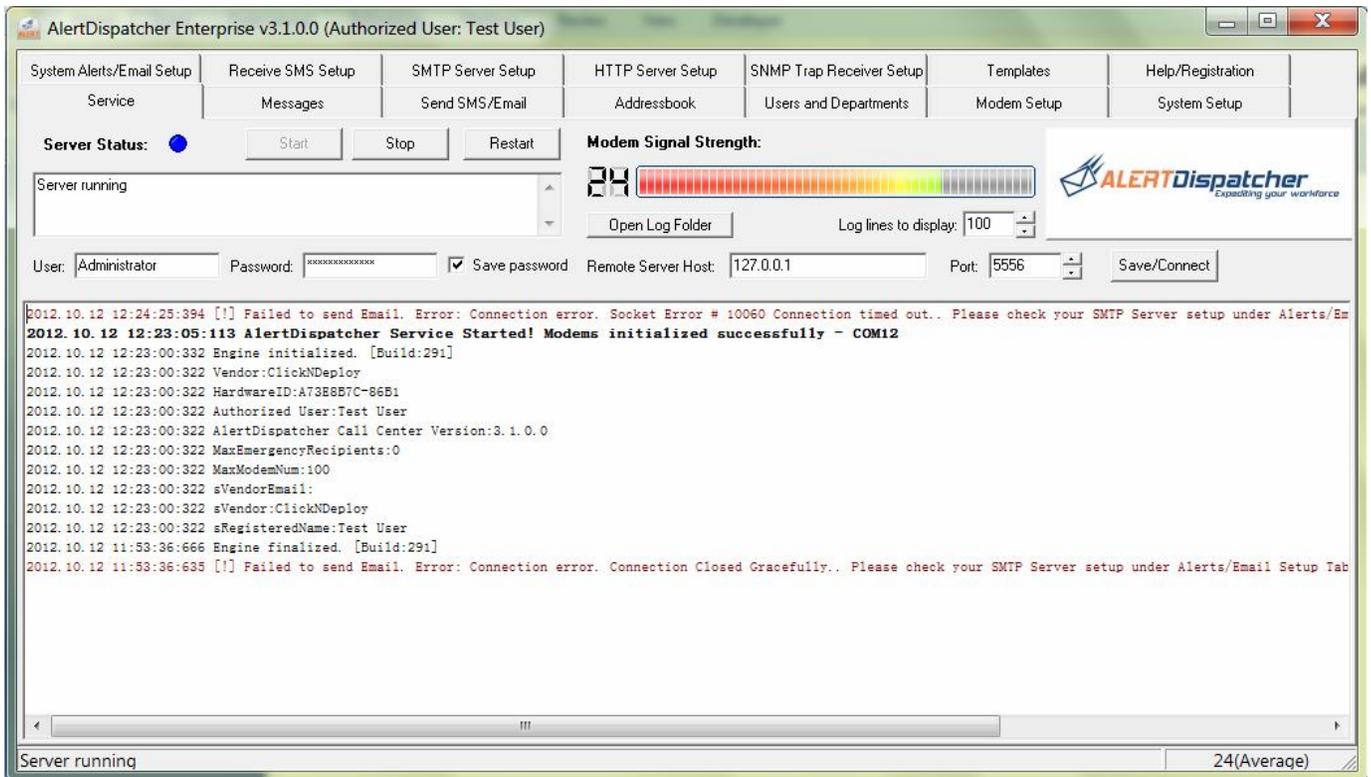
The software key is unique to your machine; please do not register on multiple machines using a single activation key as this will be a breach of license contract and you would risk voiding your license.



If do not wish to purchase a license, you may register as Free User (Option 2) after the evaluation has expired. Note that Free User is limited in terms of features.

**Warning:** *If your evaluation has not expired, please do NOT convert to Free User as API support is not available for Free User and a tagline will be appended to SMS sent. However, Import and Export from CSV which is disabled for evaluation user will be available to Free User.*

After you have applied the registration key, please restart AlertDispatcher Client and Server to confirm that your software has been registered.



Congratulations, you have successfully installed and registered your AlertDispatcher software. Please refer to [Appendix C – FAQ and Tips](#).

If you are still facing problems, send a detailed description of the issue you are facing along with the log files located in C:\Program Files\AlertDispatcher\Log to your vendor.

You may also refer to [Appendix B - Troubleshooting Checklist](#).

## 4. Interfacing with AlertDispatcher using SMTP/HTTP/DOS

### 1). Using AlertDispatcher built-in SMTP Server to send Alerts (Email-to-SMS/Email)

AlertDispatcher has a built-in SMTP Server that listens to port 25 (default). The built-in SMTP Server allows AlertDispatcher to be used as an Email-to-SMS/Email gateway. You can configure MS Exchange or Lotus Notes to forward Emails to AlertDispatcher which will deliver them as SMS and/or Email using configurable rules.

**Note:** This setting is different from the '*SMTP Server*' setting found under '*Alerts/Email Setup*' tab – which allows AlertDispatcher to relay Email (as an Email client) to network based SMTP Servers.

The SMTP interface is required for some of the APIs such as the SQL Server stored procedure. As SMTP is a common protocol, the SMTP interface allows you to send Alerts (SMS/Email) from any programming language or software that can send out Email.

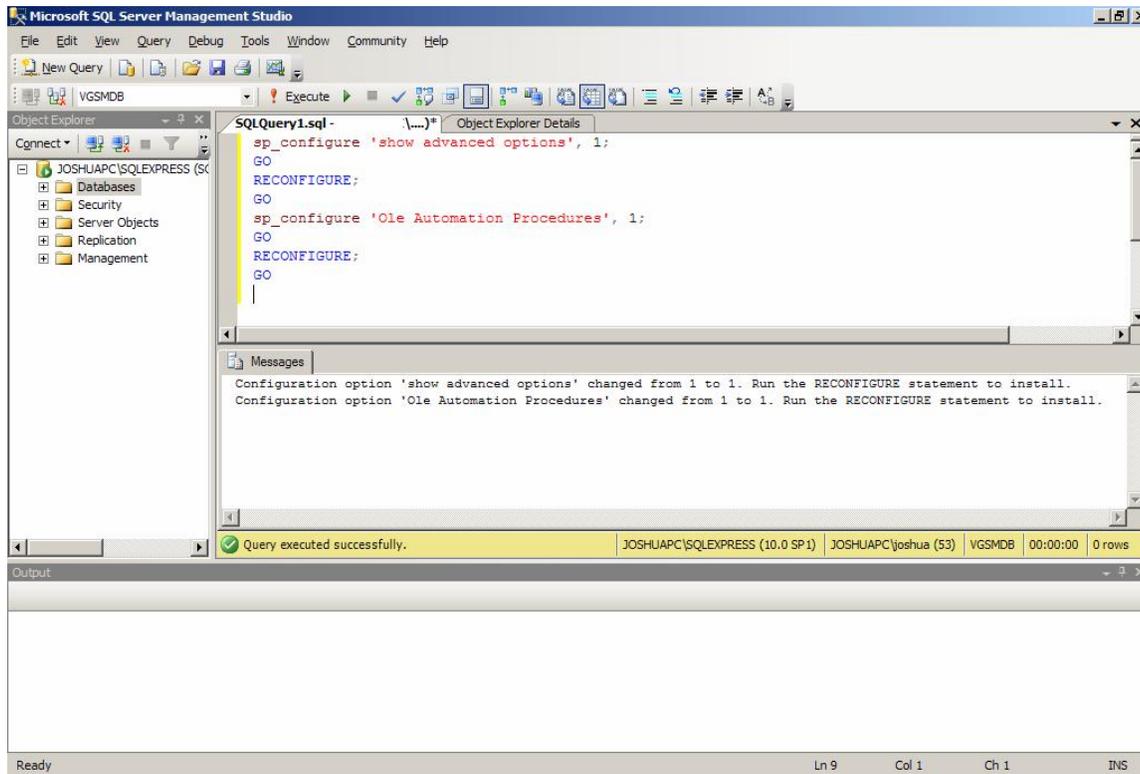
Refer to '*Configure SMTP Server Setup*' for more information.

### 2). Sending Alerts (SMS/Email) by executing an SQL Stored Procedure (MSSQL)

You can find an example stored procedure 'sp\_SQLSMTPMail' found in C:\Program Files\AlertDispatcher\APIs\SQLServer\SP\_SQLSMTPMail.txt to send Emails from Microsoft SQL Server. This stored procedure sends out an Email using CDOSYS dll which must be directed to the machine running AlertDispatcher with the built-in SMTP Server enabled.

To use this stored procedure, first, enabled Ole Automation Procedures using:

```
sp_configure 'show advanced options', 1;
GO
RECONFIGURE;
GO
sp_configure 'Ole Automation Procedures', 1;
GO
RECONFIGURE;
GO
```



Next, create the SQL stored procedure `sp_SQLSMTPMail` on your SQL Server by executing the script within `C:\Program Files\AlertDispatcher\APIs\SQLServer\SP_SQLSMTPMail.txt`

Since `SP_SQLSMTPMail` will send Email to AlertDispatcher's SMTP server, your SQL Server must have network connectivity to AlertDispatcher server, and if there's a firewall running, please ensure that port 25 is opened.

Finally, the following example shows how you can use `sp_SQLSMTPMail` to send Alerts:

```

-----
exec sp_SQLSMTPMail '+44123456789@domain.com',
@vcFrom = 'msggateway@domain.com'
@vcSubject = 'Place Alert Message here',
@vcSMTPServer = localhost
-----

```

**Note:** Replace *'localhost'* with AlertDispatcher IP address or computer name. In the above example, the Alert with the message *'Place Alert Message here'* will be delivered to +44123456789. You can also send to groups created on AlertDispatcher, e.g. `exec sp_SQLSMTPMail 'groupname@domain.com'`. This way, both SMS/Email can be sent at the same time - as per configuration for *'groupname'* in the Addressbook.

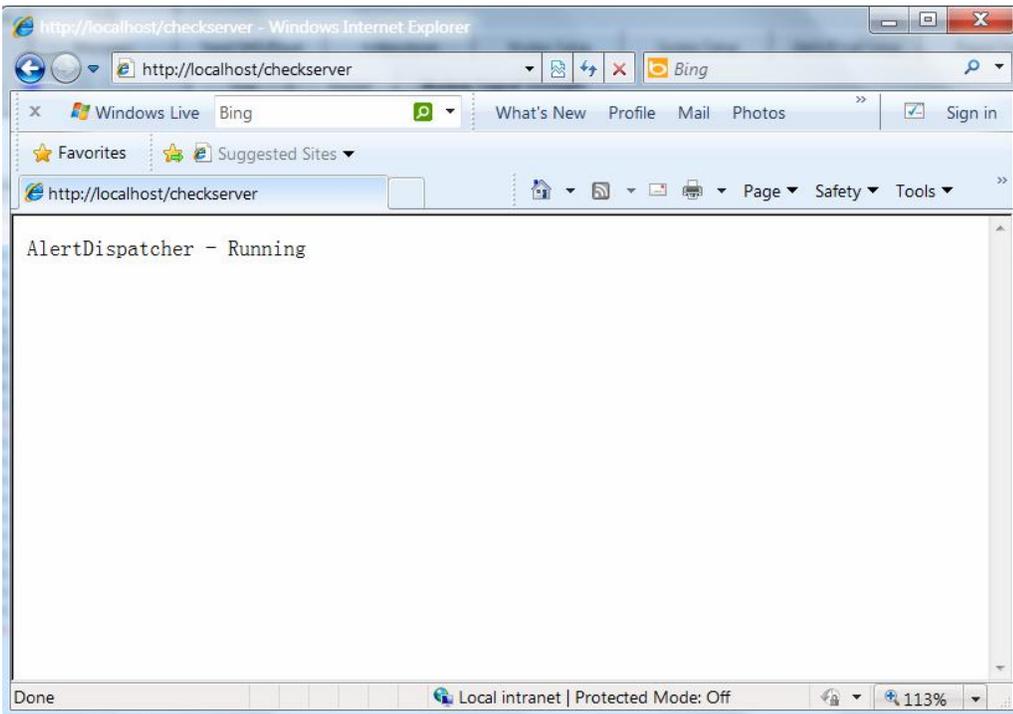
### 3). Sending Alerts (SMS/Email) using HTTP or from a web browser

Besides the SMTP Server, AlertDispatcher also comes with a built-in HTTP or Web Server which you can use to send out Alerts from a HTTP client or your web browser. A web form is also provided for end users. The HTTP Server is set to listen to port 80 by default. If you have another HTTP Server using port 80, you will need to amend this to another port, e.g. port 81 by configuring HTTP Server Setup.

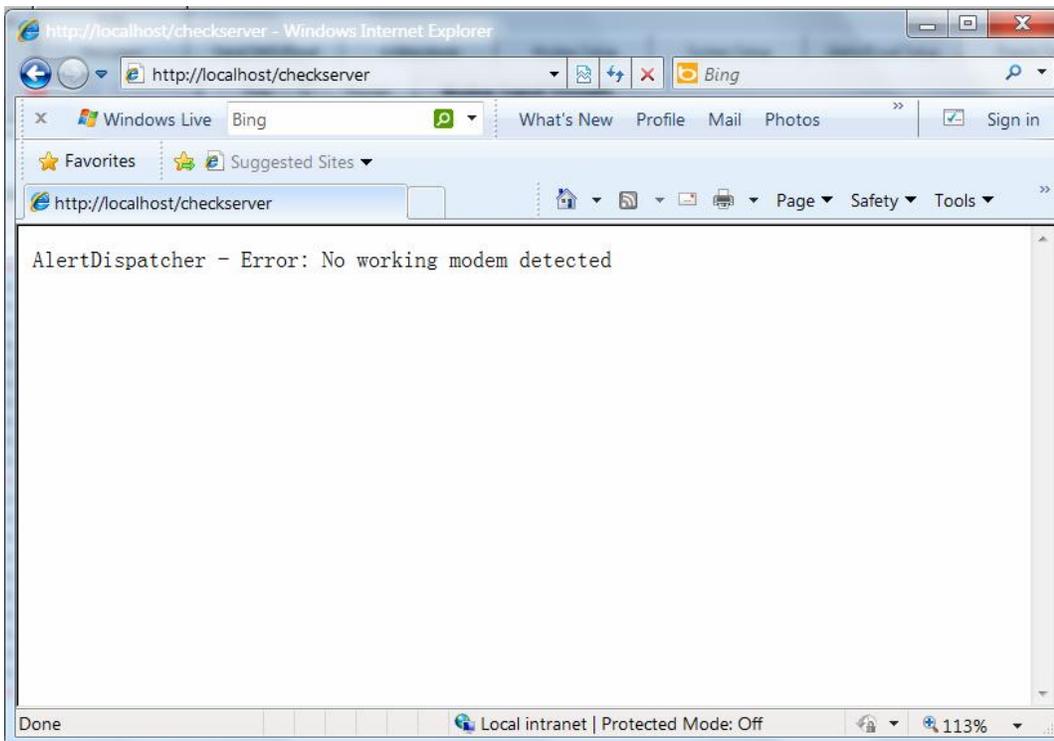
To check whether the HTTP Server is running, go to <http://localhost/> using your web browser. You will see the following login page on successful connection. You may access this URL from a remote PC and download AlertDispatcher Client using the 'Click here to download AlertDispatcher Client' link. No installation is required to run AlertDispatcher Client.



You can check the status of the AlertDispatcher and the modem by going to <http://localhost/checkserver>



If there are modem problems, it will return 'Error:' followed by the error message.



To send an Alert, append command `'sendsms'` followed by the **N** parameter (the Mobile number, Email address, or the Addressbook user/group name - use comma separator if there is more than one item), the **M** parameter (message text), and the optional **P** parameter (message priority), **D** parameter (scheduled date time to send), **MODEMPORT** parameter, **USERNAME** and **PASSWORD** parameters. Only **N** and **M** parameters are compulsory, the rest are optional (of course other than username and password, if required).

e.g. <http://localhost/sendsms?N+=+6590169696&M=Hello World&P=4&D=2010-12-01 20:00:00&MODEMPORT=4>

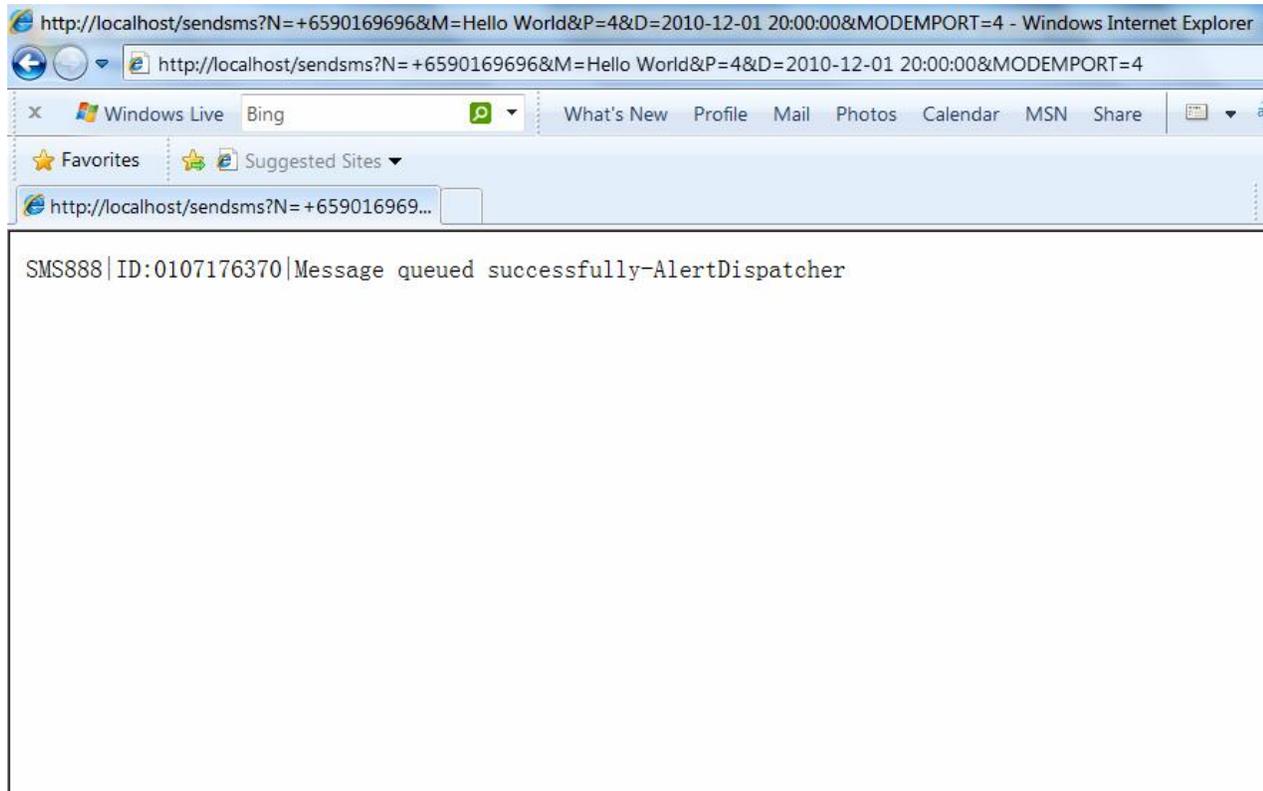
The format for parameter **D** is: YYYY-MM-DD HH:MM:SS

**P** ranges from 1 (lowest priority) to 4 (highest priority). Default is 2.

**MODEMPORT** refers to the COM port of the modem you intend to use. This is optional. If you do not specify this parameter, the server will use each available modem in a rotating round robin manner.

The above URL GET will send "Hello World" to +6590169696 on the 1<sup>st</sup> December 2010 at 20:00:00 hrs using the modem connected to COM 4.

On success, the web server will return: *SMS888/ID:1661540085/Message queued successfully-AlertDispatcher*



'SMS888' indicates send success.

Other return codes:

SMS007|Destination Missing-AlertDispatcher

SMS014|Content Missing-AlertDispatcher

SMS008|Access Denied-AlertDispatcher

SMS015|[Variable Error Message\\*](#)-AlertDispatcher

\*For example, the following would mean the AlertDispatcher is down or not started.

SMS015|Can't connect to 127.0.0.1:5556-AlertDispatcher

'1661540085' is a tracking message ID which you can use to enquire the send status using the command 'sendstatus'.

e.g. `http://localhost/sendstatus?id=1661540085`

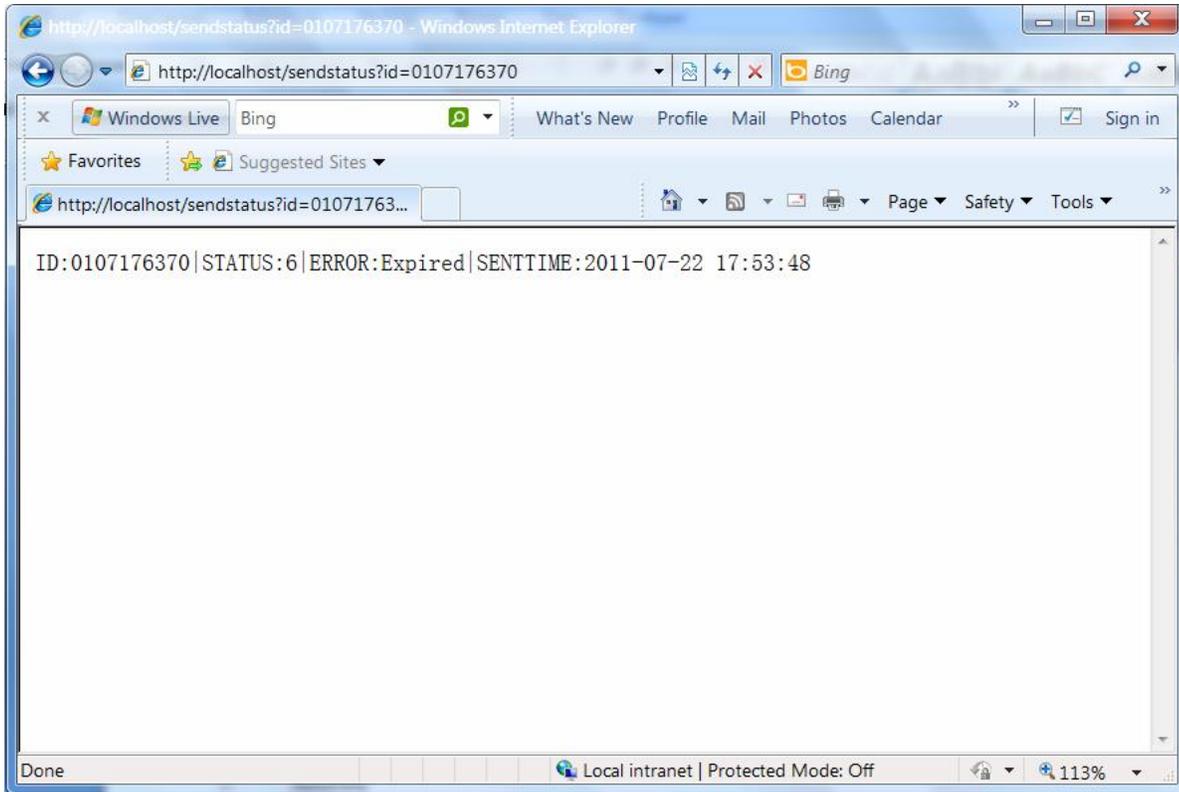
The web server returns: `ID:1661540085 | STATUS:4 | ERROR: | SENTTIME:2011-04-21 01:23:56`

If the tracking ID is not found, which could happen if the message has been deleted, the web server returns:  
`ID:1661540085 | STATUS:0 | ERROR:Message not found`

STATUS refers to the send status – 4 indicates the message has been successfully sent out (see list below for the status code definition).

ERROR refers to the error message if available.

SENTTIME refers to the sent out timestamp in the format YYYY-MM-DD HH:MM:SS .



#### MESSAGE STATUS CODE DEFINITION

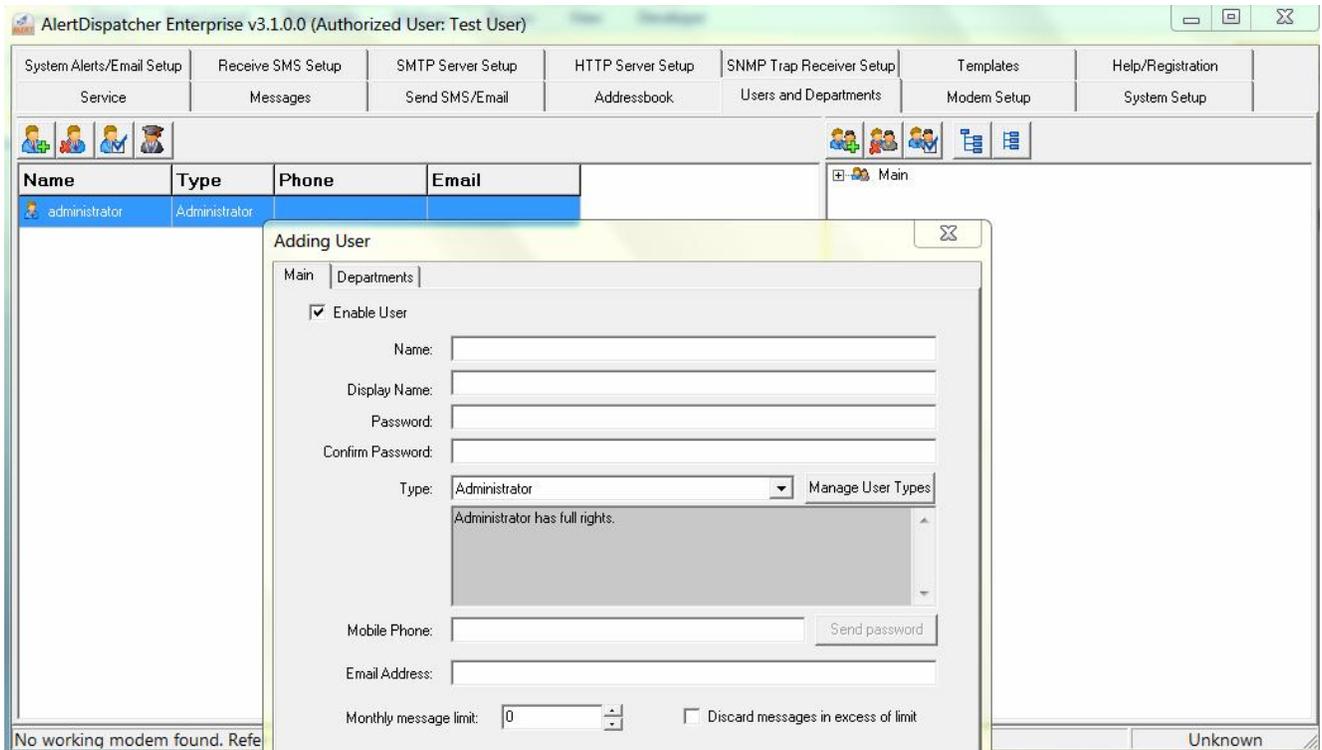
- 0: Unknown
- 1: [Out]WaitingForSend'
- 2: [Out]Sending
- 3: [Out]ReSending
- 4: [Out]Sent
- 5: Aborted
- 6: [Out]Error
- 13: [Out]Waiting
- 14: [Out]PendingAcknowledge
- 15: [Out]Acknowledged
- 16: [Out]Escalated
- 17: [Out]AcknowledgeTimeout

**Note:** If you have filled up the settings for username and password under HTTP Server Setup, you must use the USERNAME and PASSWORD parameter for all requests sent to the HTTP Server.

You may login to the web portal via <http://localhost> to send messages. The user ‘administrator’ (password: ‘administrator’) is created by default.



You may manage users using the ‘Users and Departments’ tab on AlertDispatcher Client.



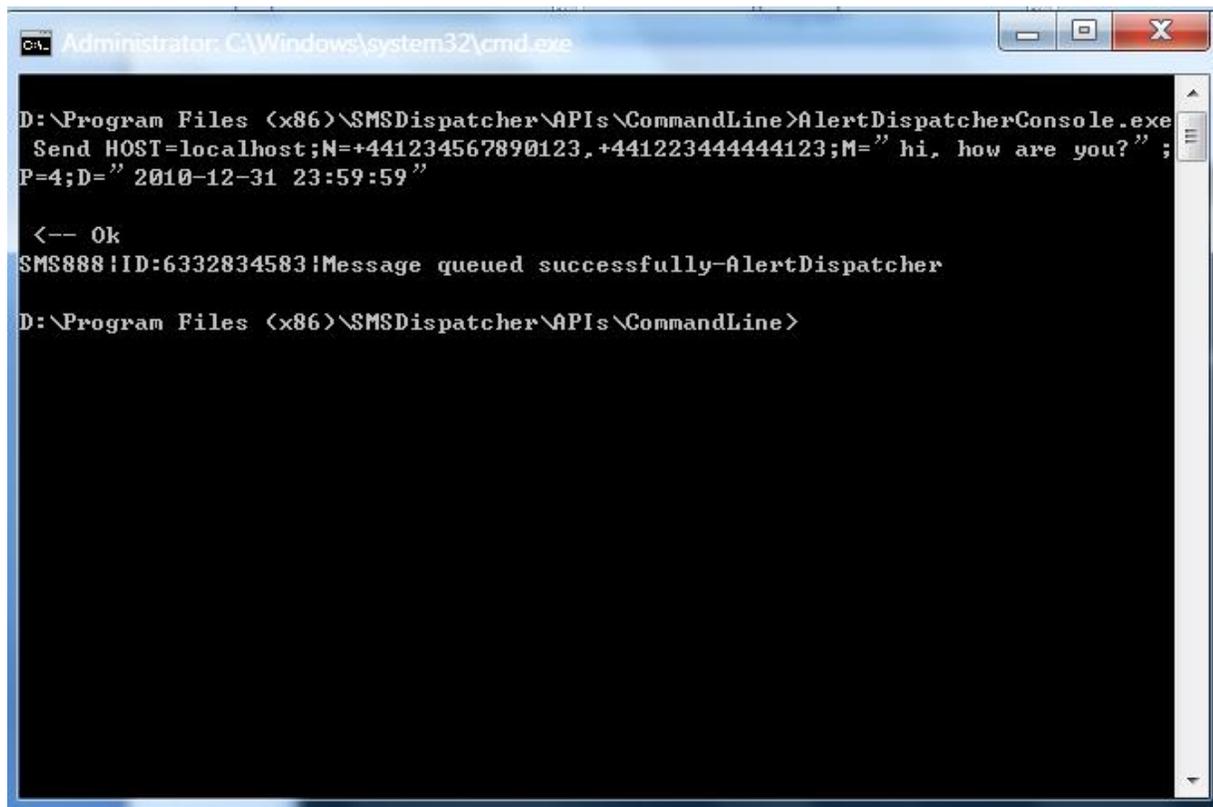
#### 4). Sending Messages/Query Status from Windows Command Line or Batch File

You can also send Alerts (SMS/Email) from command line using C:\Program Files\AlertDispatcher\APIs\CommandLine\AlertDispatcherConsole.exe to a local or remote AlertDispatcher Server.

```
e.g. AlertDispatcherConsole.exe Send
HOST=localhost;N=+441234567890123,+441223444444123;M="hi, how are
you?";P=4;D="2010-12-31 23:59:59"
```

Where **HOST** parameter is the AlertDispatcher Server IP address or hostname (default to localhost), **N** parameter is a list of recipient(s) delimited by commas, **M** parameter is the SMS message, **S** parameter is the subject (for Email), optional **P** parameter is the priority which ranges from 1 (lowest priority) to 4 (highest priority), optional **D** parameter (scheduled date time to send), and optional **MODEMPORT** parameter (0 = Auto).

'SMS888' indicates send success. '6332834583' is a tracking message ID which you can use to enquire the send status using the command 'sendstatus'.



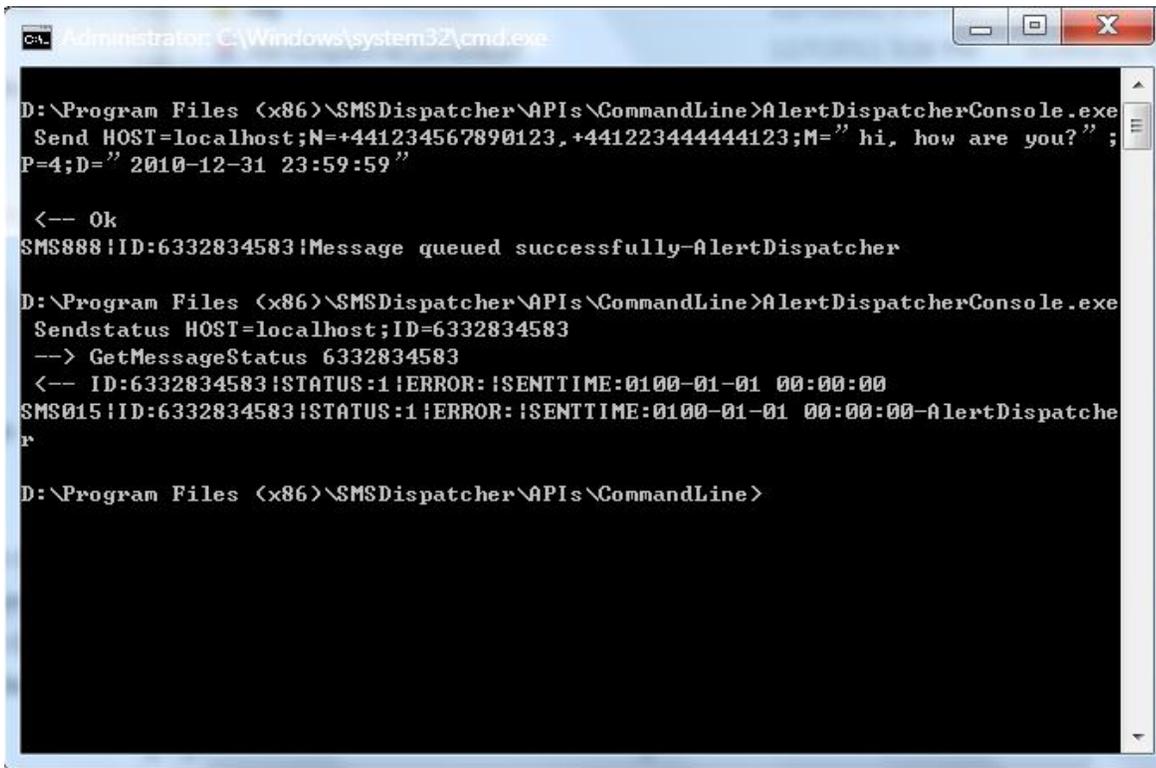
```
Administrator: C:\Windows\system32\cmd.exe
D:\Program Files (x86)\SMSDispatcher\APIs\CommandLine>AlertDispatcherConsole.exe
Send HOST=localhost;N=+441234567890123,+441223444444123;M="hi, how are you?";
P=4;D="2010-12-31 23:59:59"

<-- Ok
SMS888!ID:6332834583!Message queued successfully-AlertDispatcher

D:\Program Files (x86)\SMSDispatcher\APIs\CommandLine>
```

You can query the status of messages sent.

```
e.g. AlertDispatcherConsole.exe Sendstatus HOST=localhost;ID=6332834583
```



```
Administrator: C:\Windows\system32\cmd.exe
D:\Program Files (x86)\SMSDispatcher\APIs\CommandLine>AlertDispatcherConsole.exe
Send HOST=localhost;N="+441234567890123,+441223444444123;M=" hi, how are you?";
P=4;D=" 2010-12-31 23:59:59"

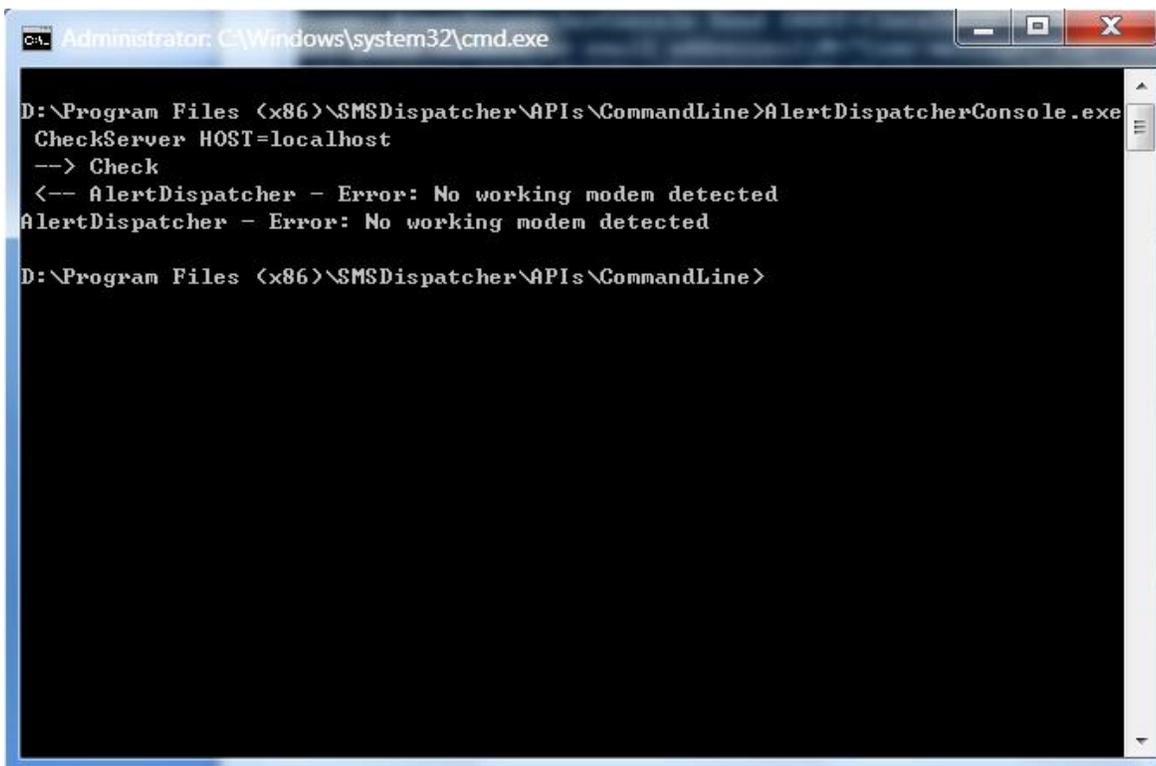
<-- Ok
SMS888!ID:6332834583!Message queued successfully-AlertDispatcher

D:\Program Files (x86)\SMSDispatcher\APIs\CommandLine>AlertDispatcherConsole.exe
Sendstatus HOST=localhost;ID=6332834583
--> GetMessageStatus 6332834583
<-- ID:6332834583!STATUS:1!ERROR:!SENTTIME:0100-01-01 00:00:00
SMS015!ID:6332834583!STATUS:1!ERROR:!SENTTIME:0100-01-01 00:00:00-AlertDispatche
r

D:\Program Files (x86)\SMSDispatcher\APIs\CommandLine>
```

You can also check the status of AlertDispatcher Server.

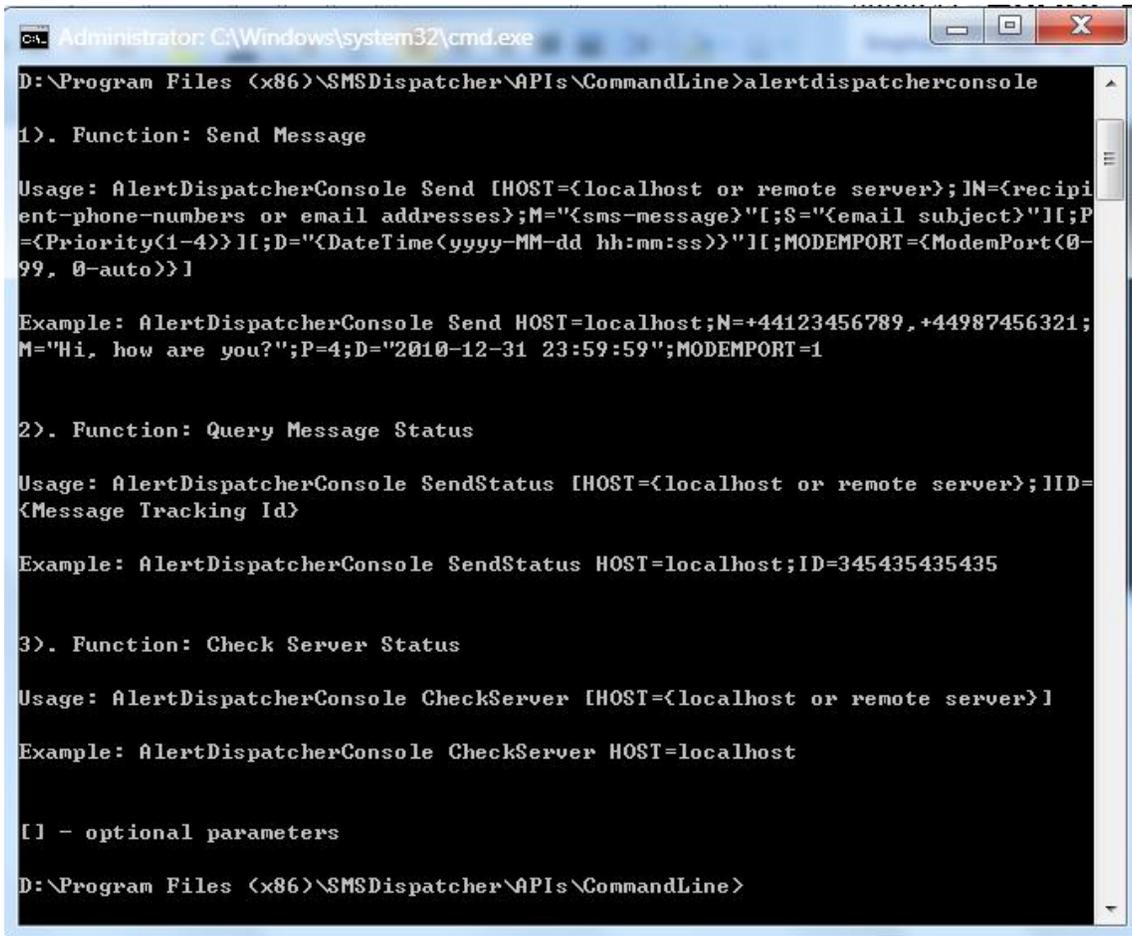
e.g. AlertDispatcherConsole.exe CheckServer HOST=localhost



```
Administrator: C:\Windows\system32\cmd.exe
D:\Program Files (x86)\SMSDispatcher\APIs\CommandLine>AlertDispatcherConsole.exe
CheckServer HOST=localhost
--> Check
<-- AlertDispatcher - Error: No working modem detected
AlertDispatcher - Error: No working modem detected

D:\Program Files (x86)\SMSDispatcher\APIs\CommandLine>
```

Full Syntax:



```
Administrator: C:\Windows\system32\cmd.exe
D:\Program Files (x86)\SMSDispatcher\APIs\CommandLine>alertdispatcherconsole

1). Function: Send Message

Usage: AlertDispatcherConsole Send [HOST=<localhost or remote server>;]N=<recipient-phone-numbers or email addresses>;M="<sms-message>"[;S="<email subject>"]I;P=<Priority(1-4)>]I;D="<DateTime(yyyy-MM-dd hh:mm:ss)>"I[;MODEMPORT=<ModemPort(0-99, 0-auto)>]

Example: AlertDispatcherConsole Send HOST=localhost;N="+44123456789, +44987456321;M="Hi, how are you?";P=4;D="2010-12-31 23:59:59";MODEMPORT=1

2). Function: Query Message Status

Usage: AlertDispatcherConsole SendStatus [HOST=<localhost or remote server>;]ID=<Message Tracking Id>

Example: AlertDispatcherConsole SendStatus HOST=localhost;ID=345435435435

3). Function: Check Server Status

Usage: AlertDispatcherConsole CheckServer [HOST=<localhost or remote server>]

Example: AlertDispatcherConsole CheckServer HOST=localhost

[] - optional parameters

D:\Program Files (x86)\SMSDispatcher\APIs\CommandLine>
```

## 5). Interfacing from Dot Net or Java using COM DLL

Please refer to 'AlertDispatcher DLL API Guide' for more information.

## 5. Appendix A- Preparing your GSM/GPRS modem

### 1). Preparing the GSM modem.

Plug your GSM modem (with working SIM card inserted) into your PC. If you are using a USB modem, Windows will prompt for driver. You will need to insert the modem driver CDROM, and install the driver. If you are using a serial modem, driver is not required.

**Note:**

a). If you are using a USB modem, you must install the modem driver and then find the baud rate and COM port number from your modem driver under Windows Device Manager.



If you are using **Sierra Wireless GL6110 USB modem**, please install the modem driver in your CDROM – path - \Sierra Wireless Modem Driver\XP-2003-2008-Vista-7\USBDriverInstaller.exe.

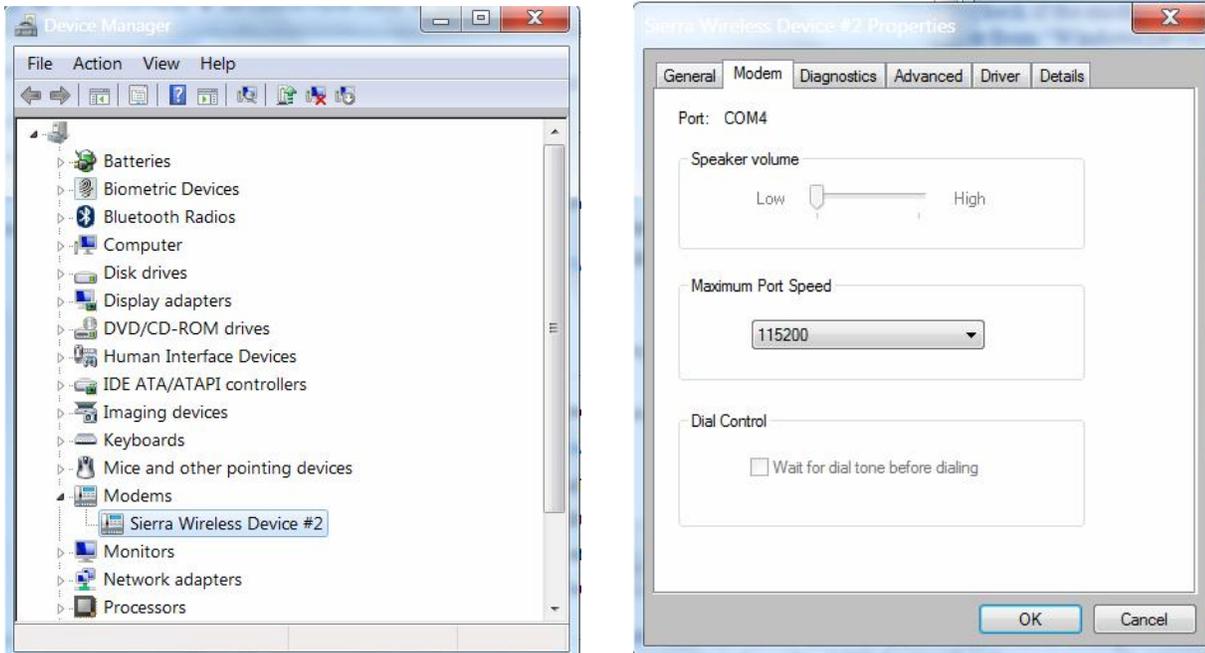
JRE 6 (Java Runtime Environment) is a pre-requisite – the modem driver installer will automatically prompt you if JRE 6 needs to be installed. You can find JRE 6 installer in your CDROM - \Sierra Wireless Modem Driver\XP-2003-2008-Vista-7\USBDriverInstaller.exe - \Sierra Wireless Modem Driver\jre-6u22-windows-i586-s.exe.

**Important:** For 64 bits Windows, you'll also need to install *jre-6u23-windows-x64.exe* in addition to *jre-6u22-windows-i586-s.exe*.

After installing the driver, insert the SIM card\* and then connect the modem to an available USB port. If Windows “Add New Hardware Wizard” appears, please direct Windows to find the driver under c:\Windows\System32\Drivers. If you are using Vista or 7 or 2007, the driver should be automatically detected. The modem should light up after the driver has been properly installed.

\*Note that you should insert the SIM card such that it is facing upwards and golden metal strip nearest to the opening. If you insert the SIM card incorrectly, the modem may not blink – no signal detected.

After that, check the modem COM port assigned to your modem under Windows Device Manager. **The USB modem uses a baud rate of 115200bps**. If you cannot find the Sierra Wireless modem device or the power indicator light does not light up, please check if the modem is properly connected to a working USB port, you may also try removing the modem driver from “Windows Device Manager” and then reboot your PC.



\*Note that the GPRS modem draws considerable USB power so if you are using an USB extension cable or you have connected another USB device that draws too much power (on some PC, power is shared across all the USB ports), the modem may also fail to work or become unstable. You may try removing other USB devices from your PC or using a powered USB hub from a reputable brand such as Belkin.

b). If you are using Wavecom Fastrack Supreme or any serial modem, please ensure that your PC has a DB9 serial port.

If there is no DB9 serial port, please obtain a PCI DB9 serial card (Low profile PCI card is required for small chassis PC/Server). Not all Serial-to-USB cards will work with GSM modems and some are not stable.

You will also need to insert your SIM card carefully in the correct manner – see screen capture below. **The serial modem is usually installed onto COM2 or COM1 at a baud rate of 115200bps.**

\*Note that the antenna connector on the right hand side and you should insert the SIM card such that it is facing upwards and golden metal strip nearest to the opening. If you insert wrongly, the SIM card may drop inside the chassis and you will have to use a screw driver to open the aluminum plate directly above the SIM card opening in order to take it out.

The FASTRACK Supreme has now implemented a SIM connector having a carrier with lock. This helps ensuring the user to have proper SIM card insertion and locked before proper use of GSM network.



**Warning:** If you're using a GSM modem with an attachable antenna, please exercise caution on attaching the antenna to the antenna connector. If there's a nut attached to the modem casing, please ensure it does not turn when you are connecting the antenna to the modem. Failure to do so may cause damage to the modem.

## 2). Checking SIM card.

After you have installed the Modem and the SIM card, turn on the power (for Serial modems), and check that the red or yellow light on the modem blinks after 20 seconds. If it does not blink, please check whether the SIM card is properly inserted and activated by your GSM provider – you need to call them to find out whether it is activated.

The modem may also not blink if there is weak or no network coverage for that SIM card. If network coverage is unavailable, you may try relocating the modem or change to a provider with better network coverage in that location.

**Note:** If you need to change your SIM card, before removing the SIM card, **please always turn off the power supply** or remove the power supply cable from the modem. You may reconnect the power supply after you have installed the new SIM card.

## 6. Appendix B - Troubleshooting Checklist

### 1). SIM Card is activated, Modem is setup properly and connected to the PC

First check that your SIM card is activated and you're able to send SMS using your cellphone. Next check that the modem is attached tightly to the correct PC. If you are using Wavecom modems or compatible devices, the indicator light on the modem should be blinking 15 seconds after powering up. A constant light will mean that the SIM card cannot be detected or network coverage is unavailable.

If the light fails to blink, disconnect the modem from the power source, check that you have inserted the SIM card correctly, and then reconnect the power supply, wait 15 seconds for the modem to boot up.

If network coverage is unavailable, you may try relocating the modem or change to a provider with better network coverage in that location.

Once done, restart AlertDispatcher service and proceed to step 3 to test send an SMS.

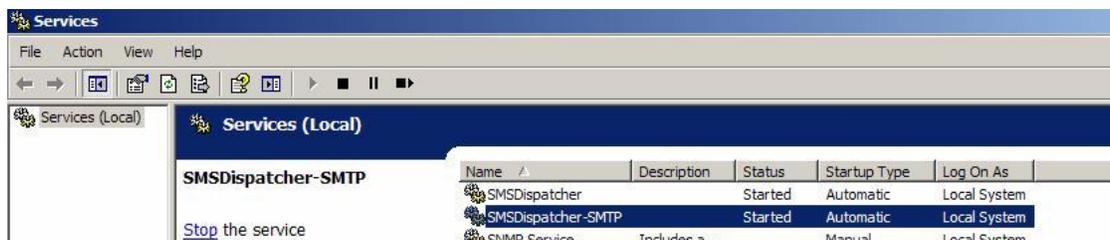
**Note:** If you need to change your SIM card, before removing the SIM card, please **always turn off the power supply** or remove the power supply cable from the modem. You may reconnect the power supply after you have installed the new SIM card.

### 2). Required Services Started, and Windows Firewall configured, AlertDispatcher Client and Service added to Windows DEP exception list (for the case of Vista/2008)

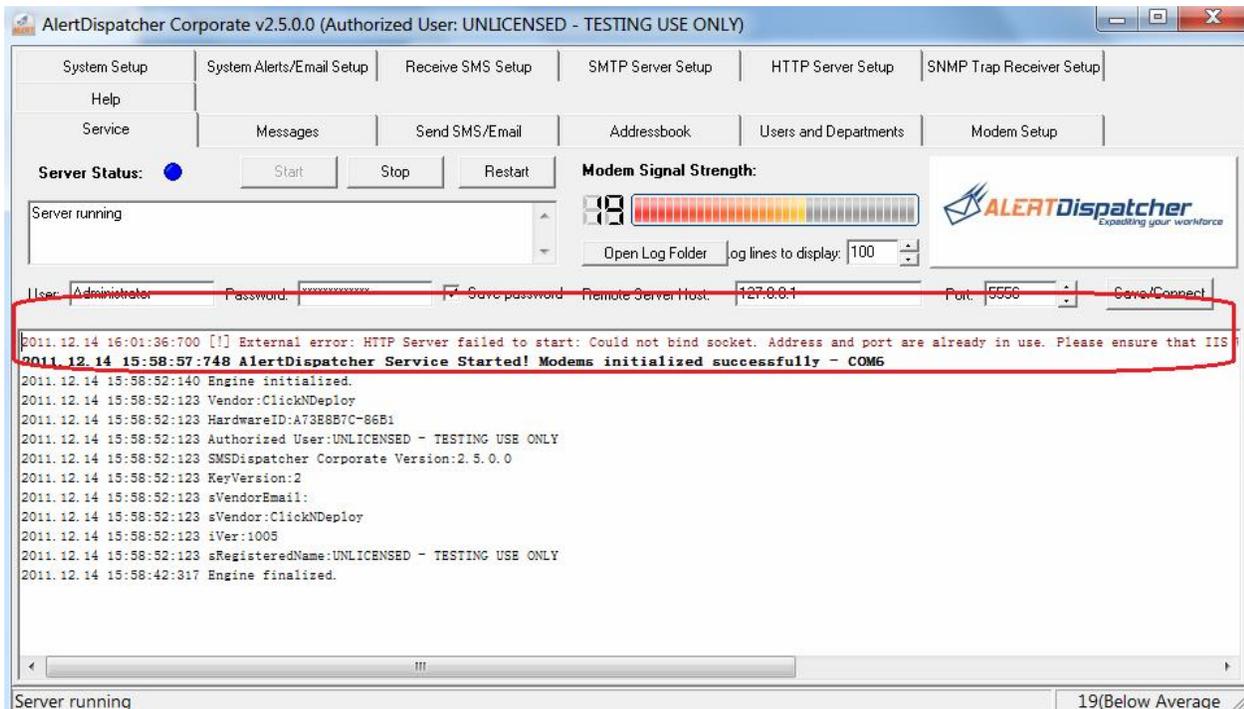
Go to *Start* → *Control Panel* → *Administrative Tools* → *Services*

Ensure that 'AlertDispatcher' has started.

If you intend to use the SMTP, HTTP, or SNMP Trap Receiver interface on AlertDispatcher, please ensure that the services 'AlertDispatcher-SMTP', 'AlertDispatcher-HTTP' and 'AlertDispatcher-SNMP' are running.



In order for these interfaces to work, there must not be conflicting services running on your system occupying the same ports. If there is a conflicting service using the same port, the following error will appear: "Could not bind to socket".



For example, for SMTP Server interface, you may check whether Windows ‘Simple Mail Transfer Protocol (SMTP)’ service exists and is set to run automatically. If yes, stop and disable the service, and then restart ‘AlertDispatcher-SNMP’ service.

For HTTP Server, ensure that Windows World Wide Web Publishing Service, or IIS isn’t running on the same port (default port for HTTP server is 80).

For SNMP Trap Receiver, if you have installed Windows SNMP Trap service, please ensure that the service is stopped or change to a different port (default port for Trap Receiver is 162).

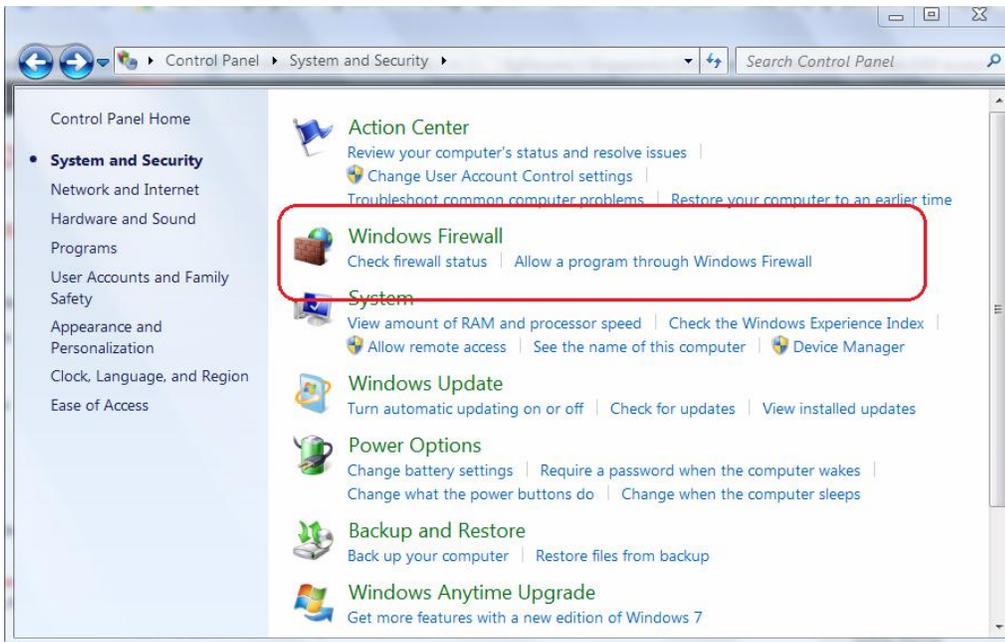
If you need to be able to access AlertDispatcher Server from the network, and there is a firewall running on your system, you must add the ports used by the services you require to your firewall list of “allowed ports”.

<i>Server Protocol</i>	<i>Default Port</i>	<i>Remarks</i>
HTTP Server	80	
SMTP Server	25	
SNMP Trap Receiver	162	
AlertDispatcher Server	5556	<i>Used by AlertDispatcher Client and DLL API</i>

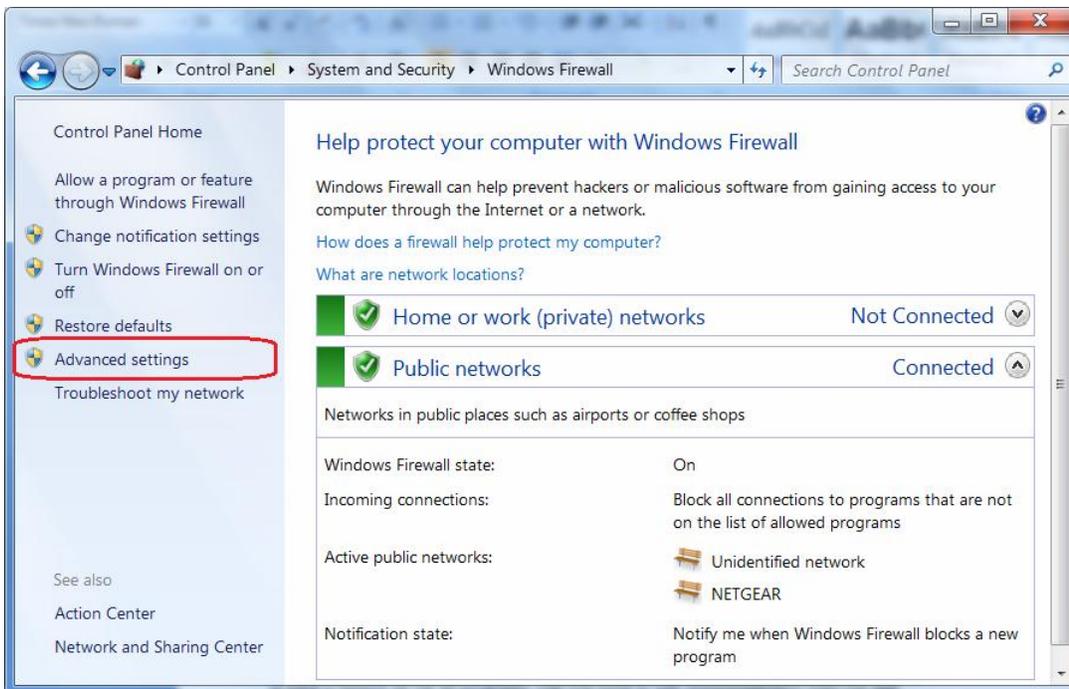
Next, we shall describe how this can be done for Windows Firewall. If you are using a 3<sup>rd</sup> party firewall, check with your IT administrator or the firewall vendor.

To add ports to Windows Firewall exception list:

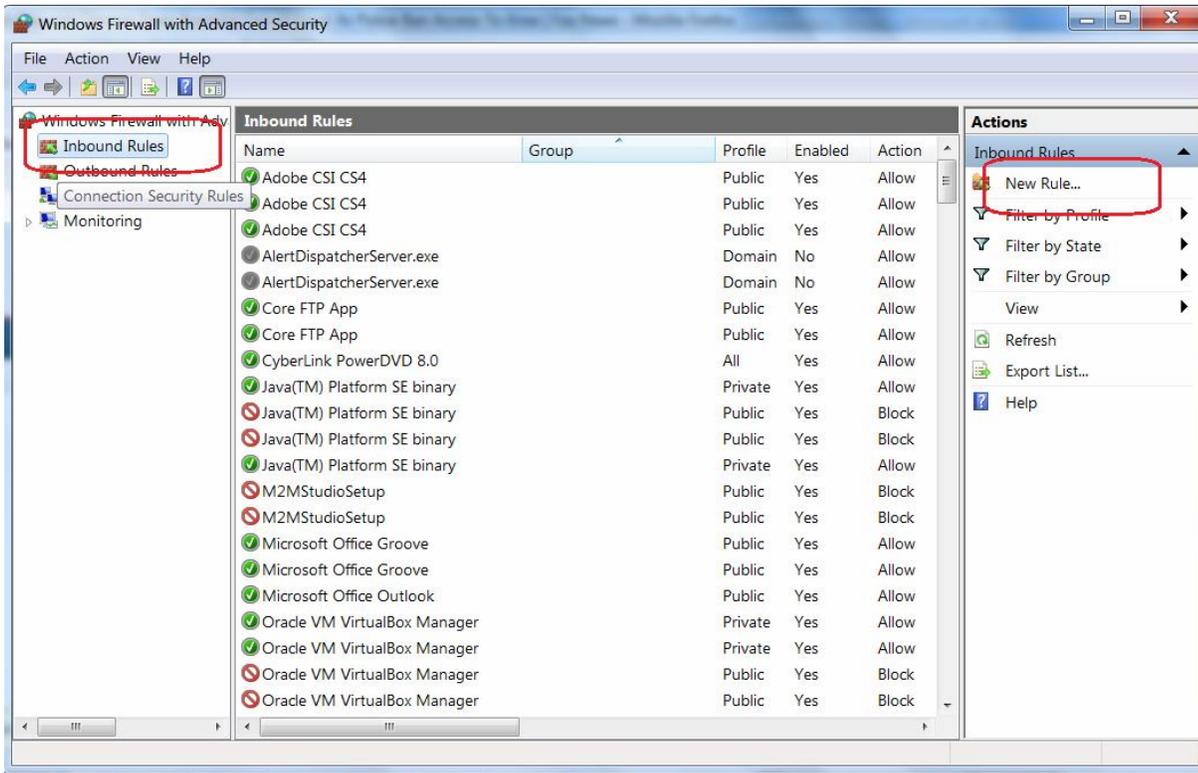
Go to *Start* → *Control Panel* → *Windows Firewall*.



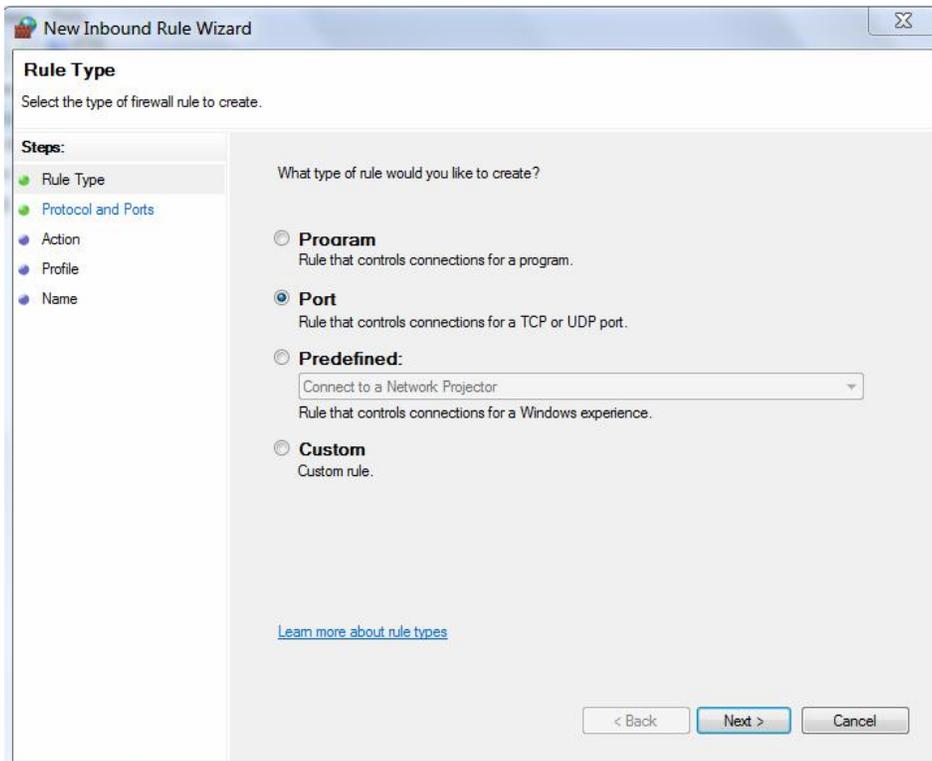
Click “Advanced settings”.



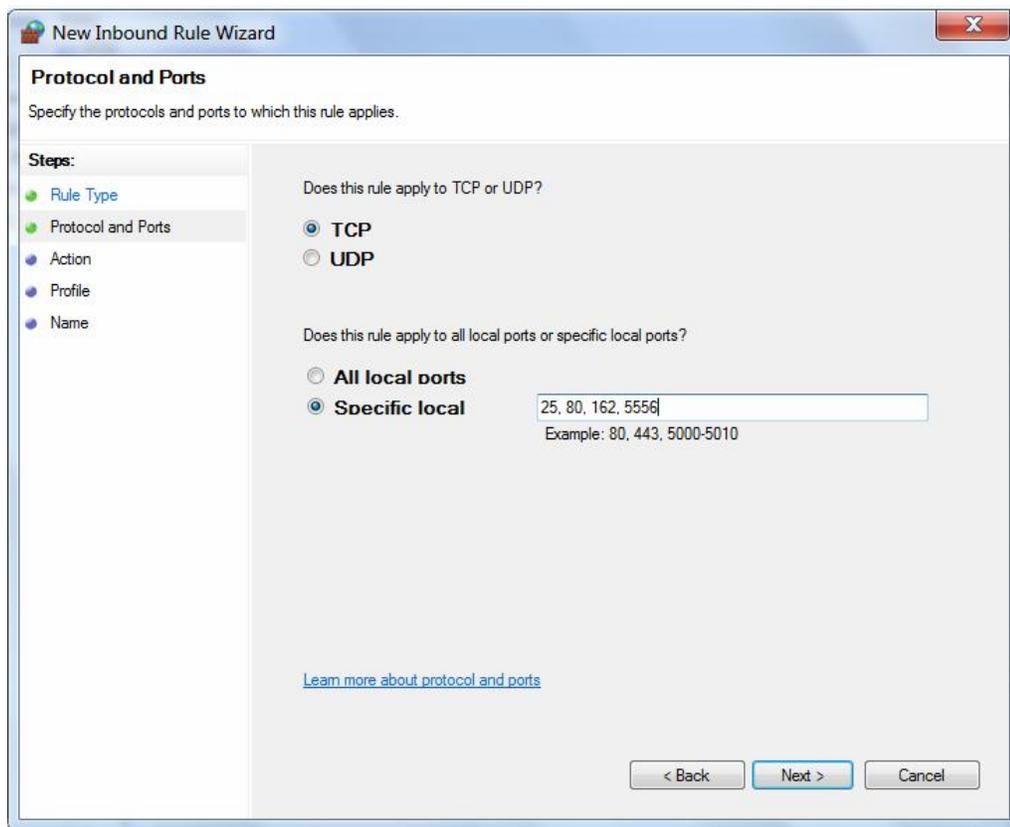
Click Inbound Rules, followed by “New Rule”.



Toggle “Port”, click Next.



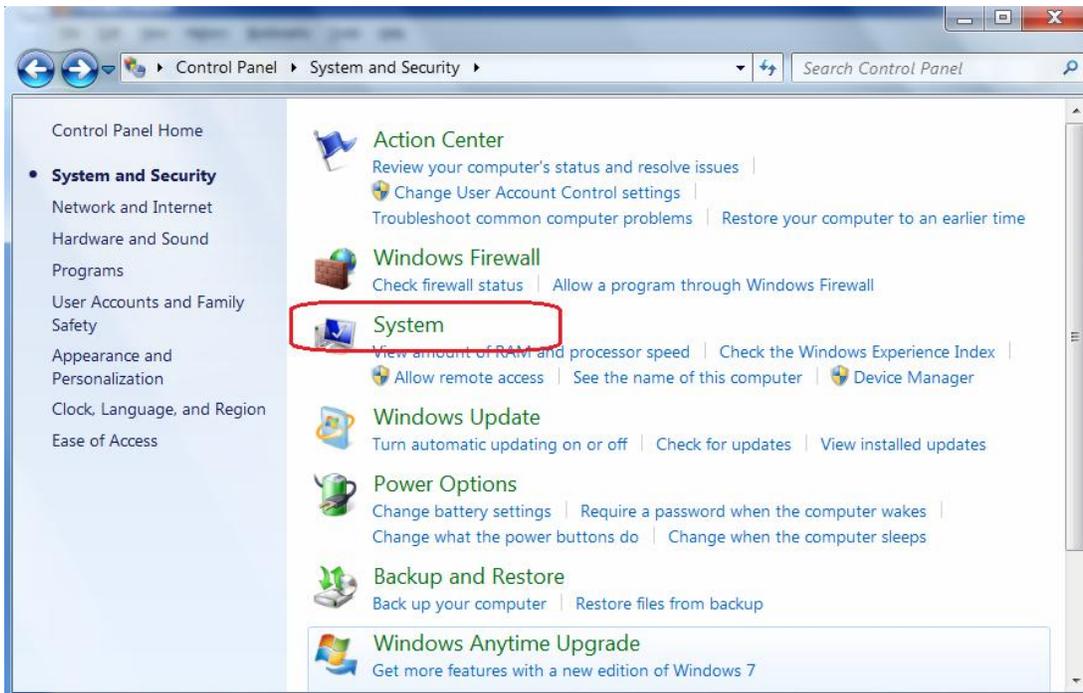
Under “Specific local”, enter “25, 80, 162, 5556” or any other ports you wish to use.



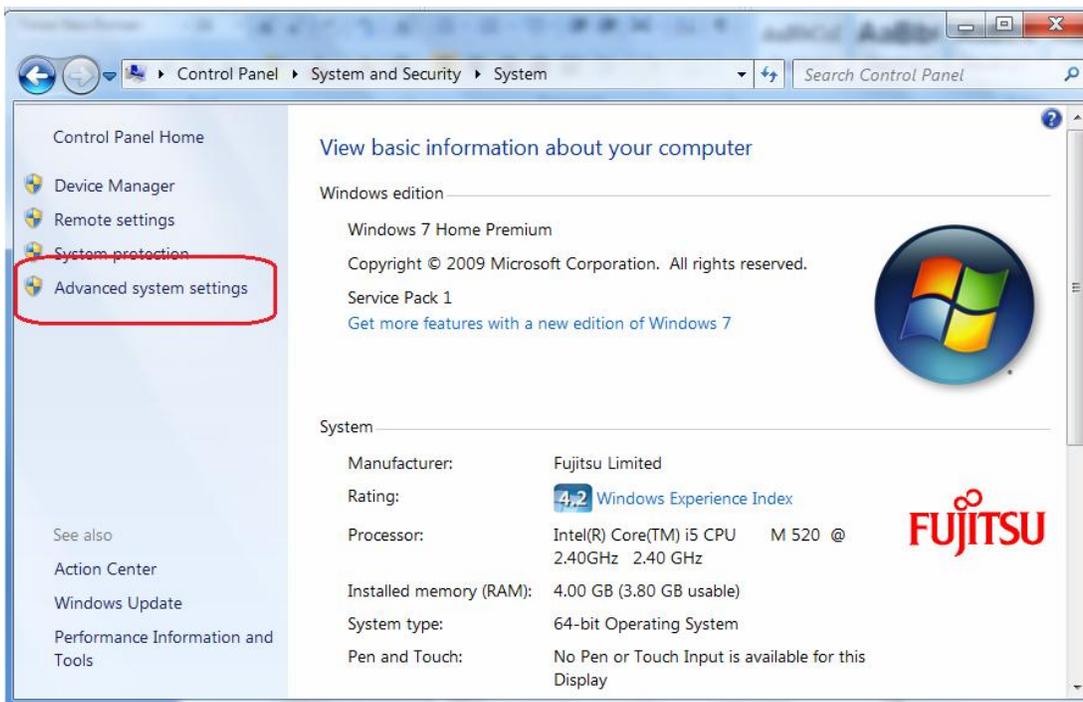
If DEP is turned on for all programs, you will need to add AlertDispatcherClient.exe and AlertDispatcherServer.exe to the exception list. This is usually done automatically by the installer when you install AlertDispatcher for the first time.

**Note:** For Windows 2008, DEP is turned on for all programs by default so this step is essential for Windows 2008.

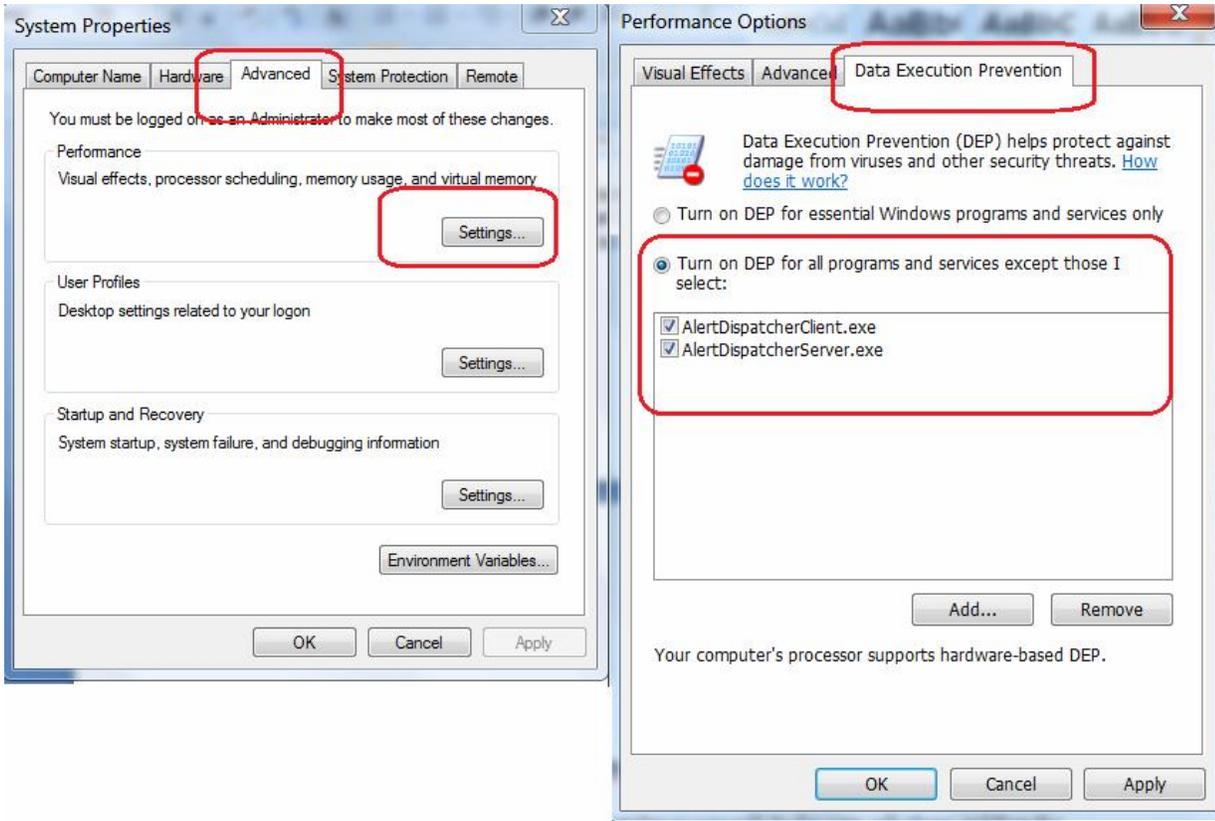
Go to Start → Control Panel → System



Click “Advanced system settings”, “Advanced” tab, followed by “Data Execution Prevention” tab.

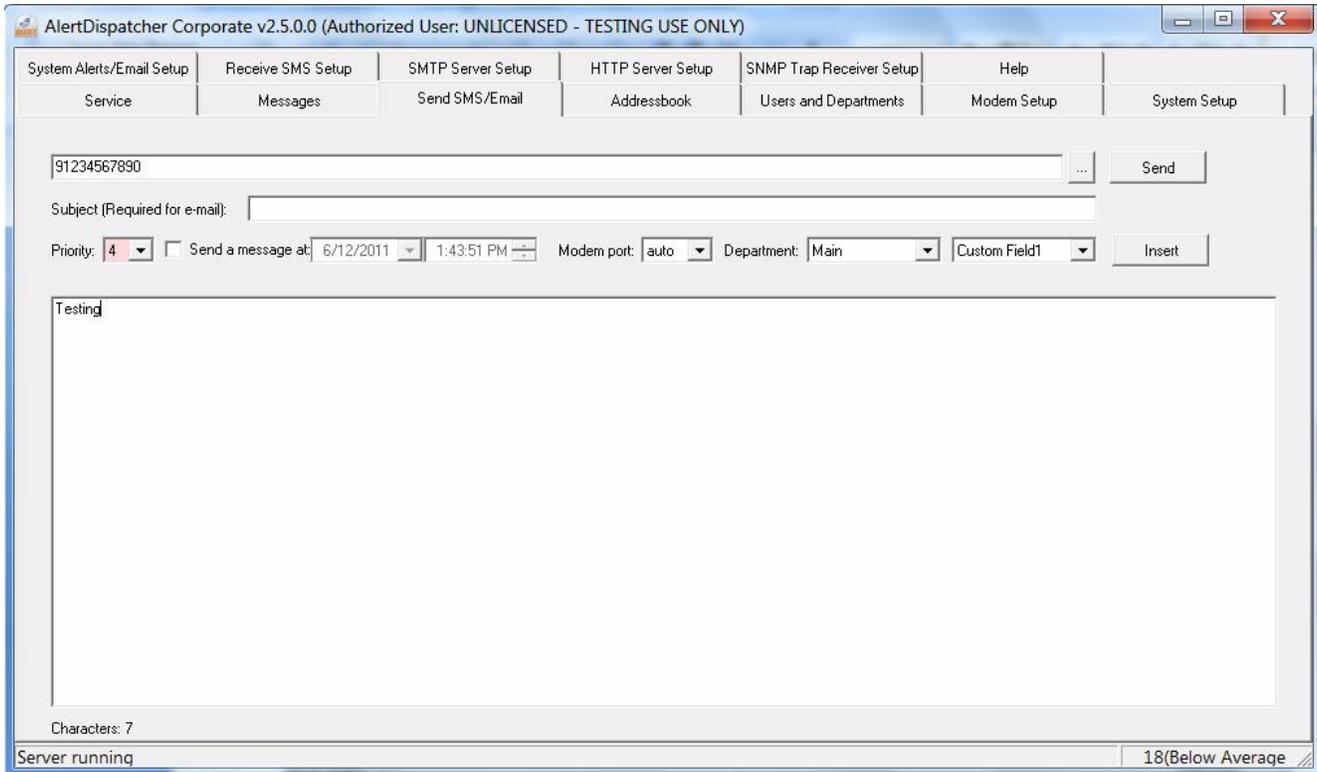


If the radio button for “Turn on DEP for all programs and services except those I select:” is checked, please add C:\Program Files\AlertDispatcher\AlertDispatcherClient.exe and C:\Program Files\AlertDispatcher\AlertDispatcherServer.exe to the exemption list.

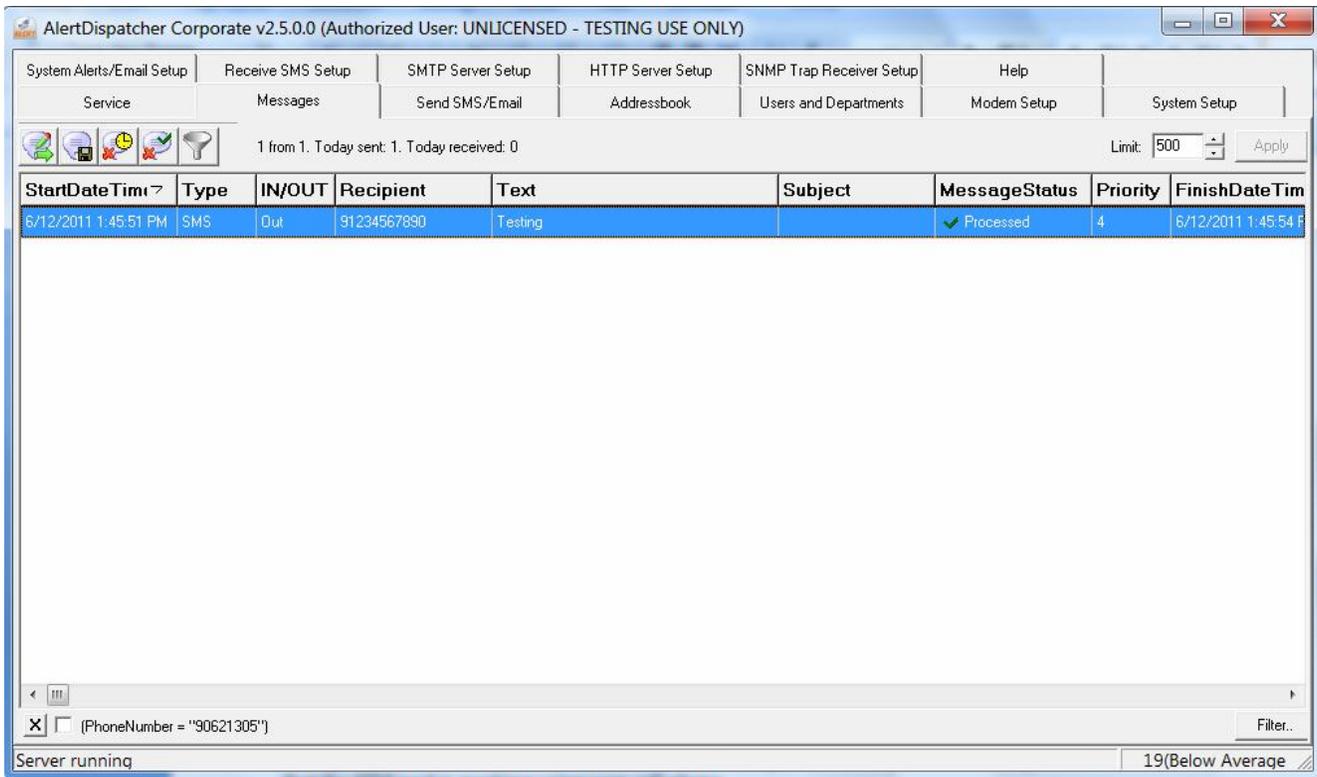


### 3). Send test SMS using AlertDispatcher

Go to 'Send SMS/Email' Tab, type in your phone number as you will do for your cell phone and then the message. Click 'Send'.



If the phone number is correct and the modem is working, you should get the following screen. If not, verify that the SIM card is working using your cell phone.

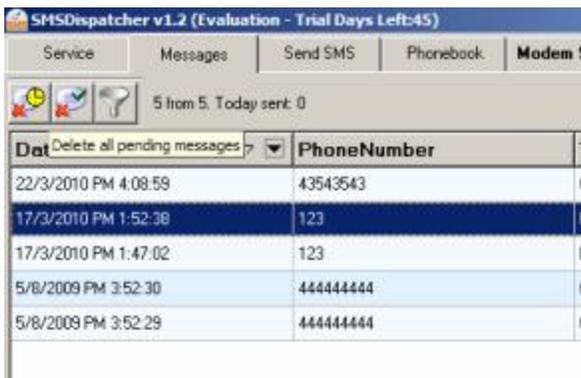


## 7. Appendix C - FAQ and Tips

**1). Question: I do not know how to pause and delete the SMS that I send wrongly.**

**Solution:**

Use the  'Delete all pending messages' to clear the inbox of pending messages.



**2). Question: Where do I find the server and activity logs?**

**Solution:**

They can be found under C:\Program Files\AlertDispatcher\Log.

**3). Question: My modem is connected but I can't send SMS?**

**Solution:**

First stop AlertDispatcher Service. Then disconnect the modem power supply, check that the SIM card is properly inserted, connect the modem power supply, wait 15 seconds, start AlertDispatcher Service, try again.

If this fails, refer to ['Appendix B - Troubleshooting Checklist'](#).