



AlertDispatcher v7.0

How-To Guide

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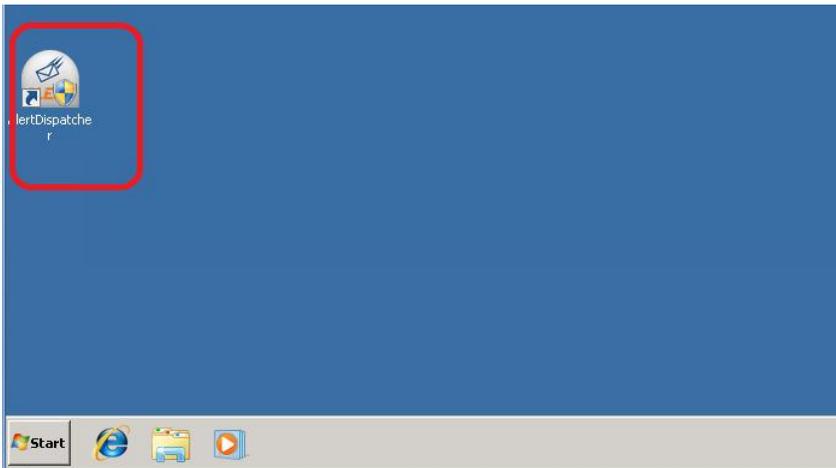
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1. For End User

1). How to Launch AlertDispatcher Client

After you have installed AlertDispatcher, launch the Client from Windows Desktop.

Note: AlertDispatcher Client is only used to configure and manage AlertDispatcher Server. AlertDispatcher Server works as a background service and starts automatically when you boot up your server. You do not need to keep the Client open after you have finished using it.

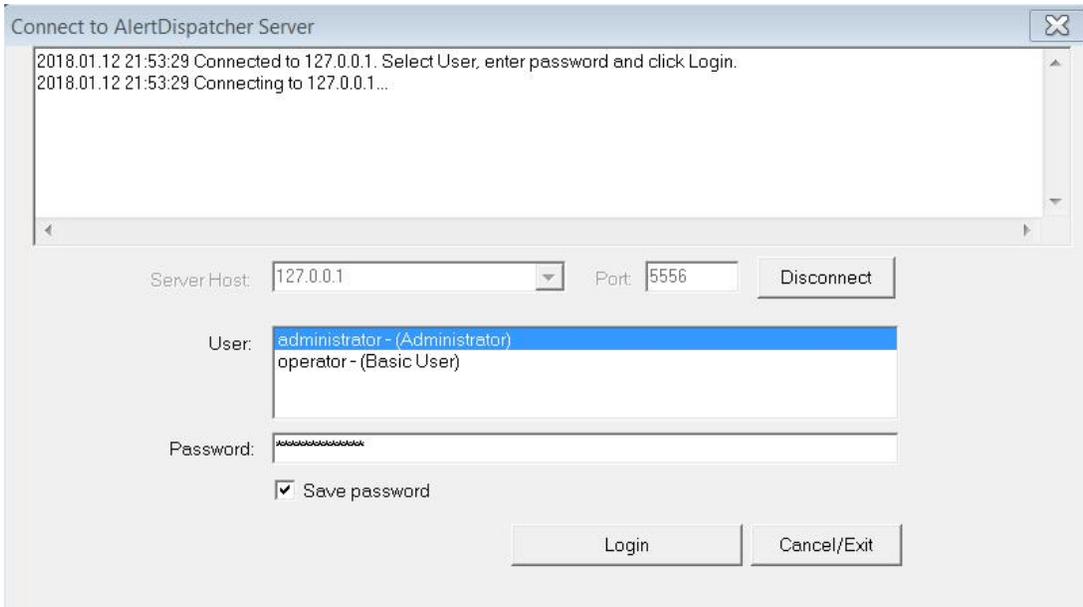


Select User and enter Password to login. The following users are created by default,

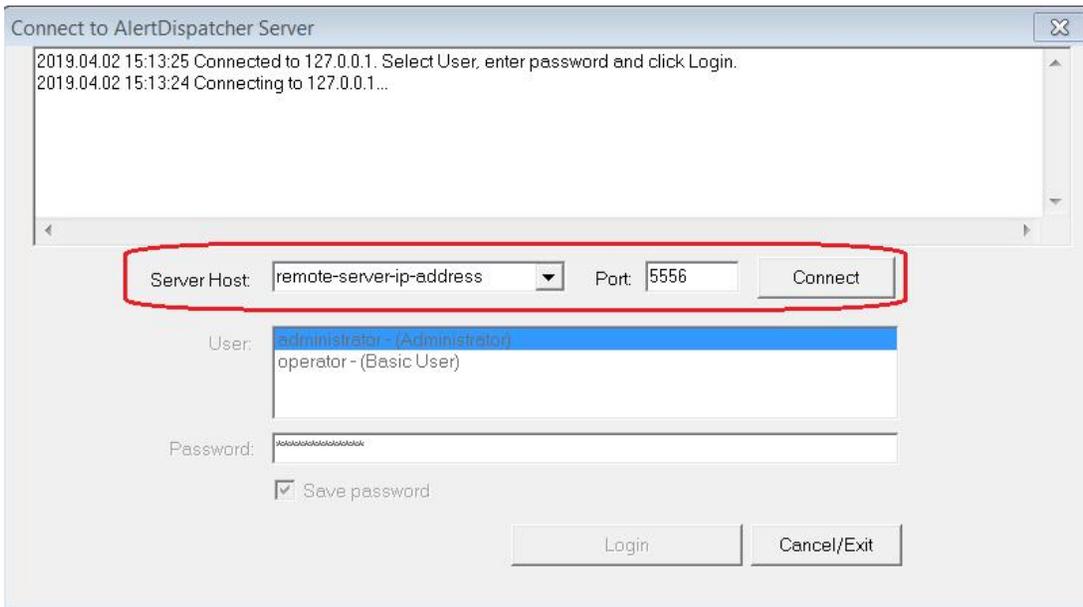
1. administrator user: *'administrator'*, password: *'alert123'*
2. basic user: *'operator'*, password: *'operator'*

An administrator user has full rights while a basic user can only view, send messages and can't delete any message or manage the address book. You are advised to change the administrator user password as soon as possible. The default password for *'operator'* is *'operator'*.

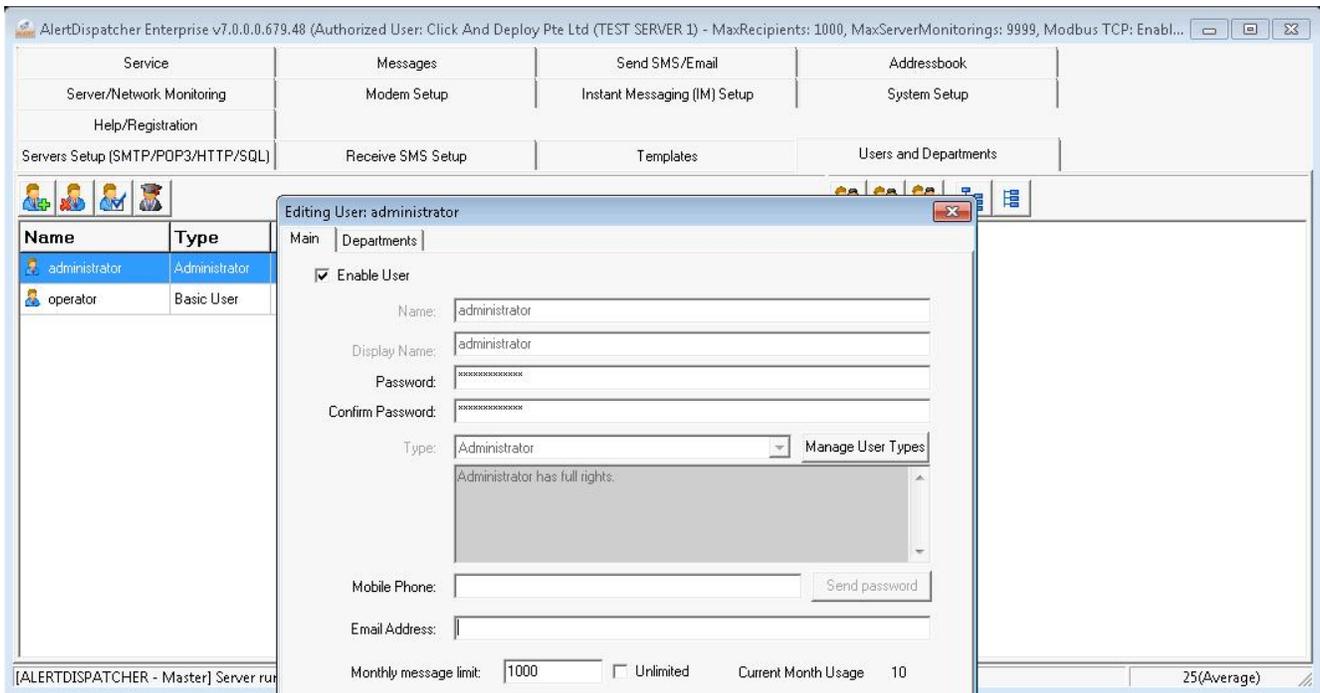
For better security, uncheck "Save password" so that the next user will have to enter password to login.



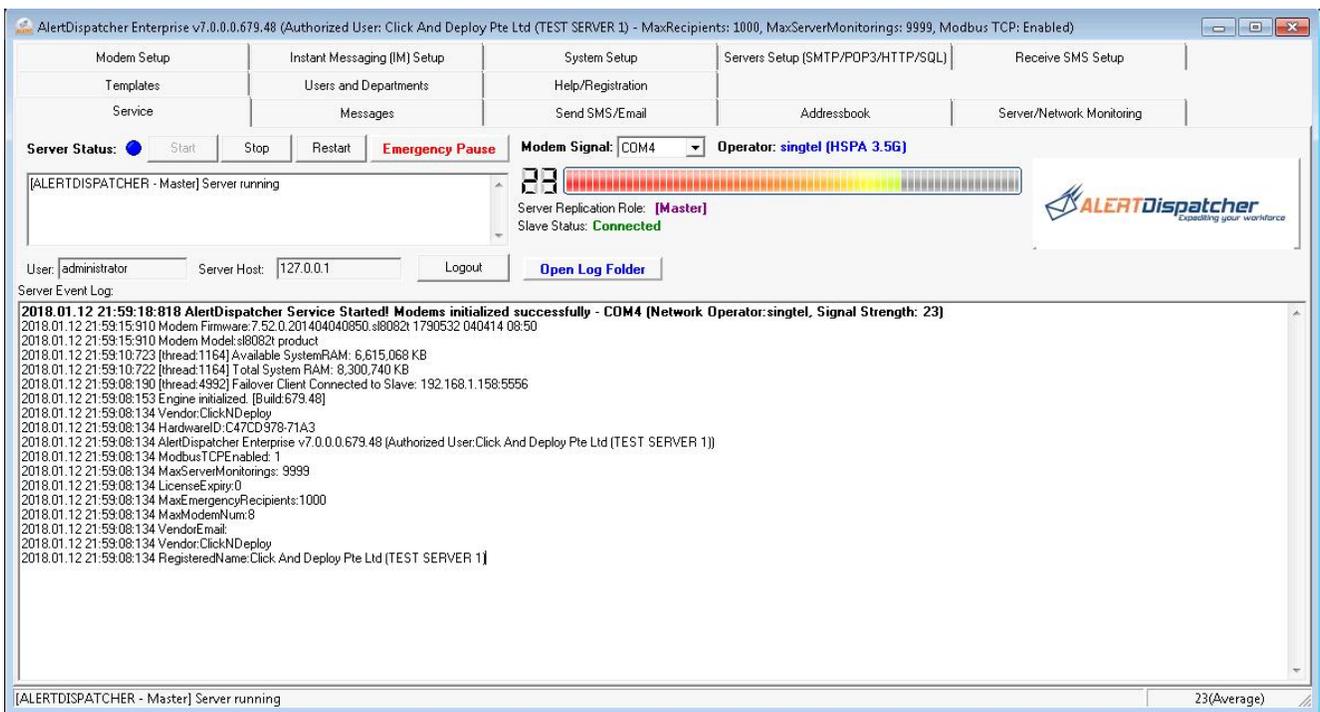
Note: If you're using Corporate or Enterprise License, you can install and connect AlertDispatcher Client to a remote AlertDispatcher Server. If the remote AlertDispatcher server has firewall enabled, then you may need to configure the firewall to "allow" incoming requests to AlertDispatcher TCP port 5556. Refer to Appendix A - How to Add (allow) server ports to Firewall.



Note: You can create new users and change passwords under "Users and Departments" tab.



After successfully login, you will see the following screen.

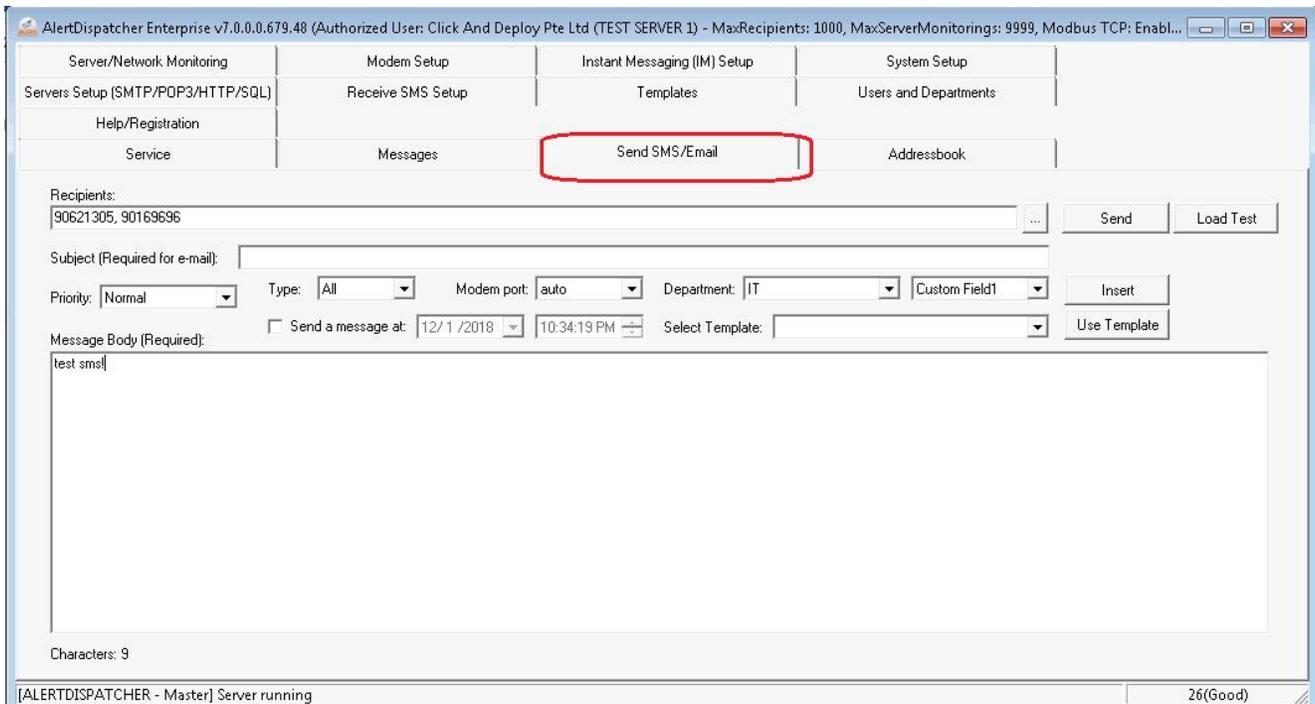


2). How to Send Test Message, Check Status and Troubleshoot Message Failures

a). Sending Test Message from AlertDispatcher Client

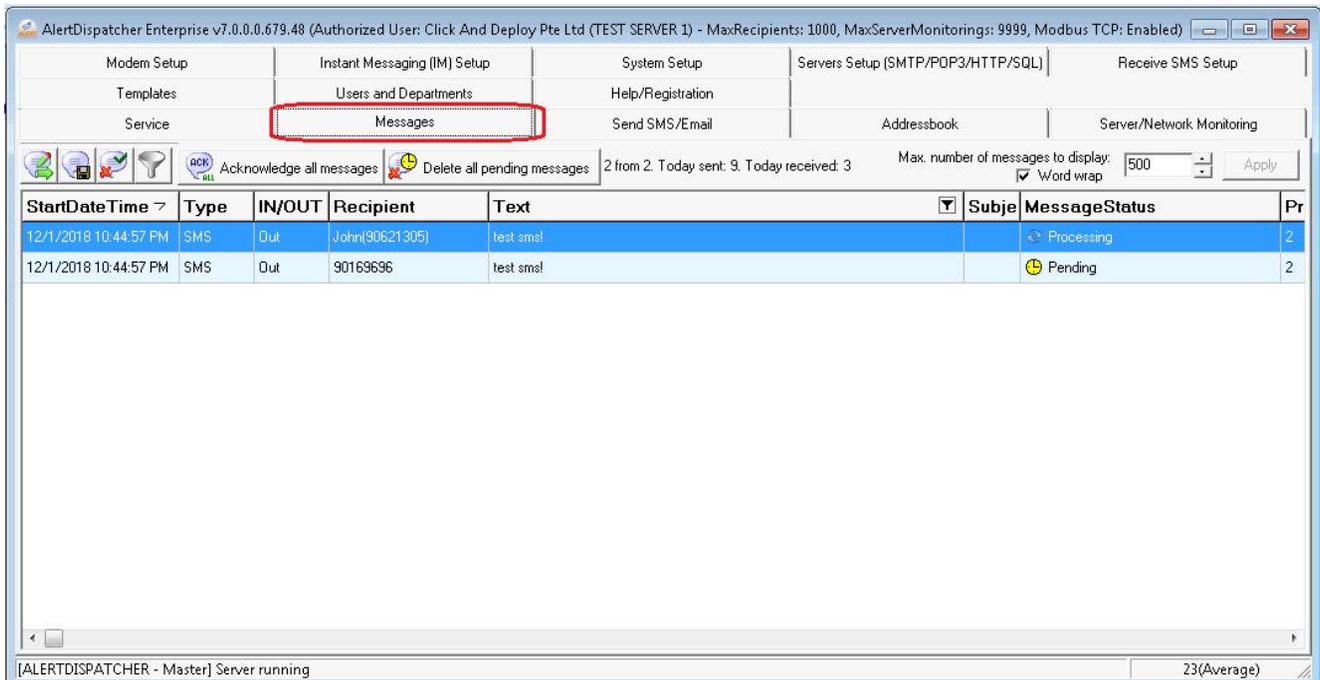
Navigate to the “Send SMS/Email” tab. Click on the “Send” button to send the message to yourself. If there's a backlog of messages that hasn't been sent, you may set your message Priority to "Important" or "Urgent" to bypass any pending message with a Normal priority.

Note: You only need to add the + country code sign unless you're sending to a foreign number.



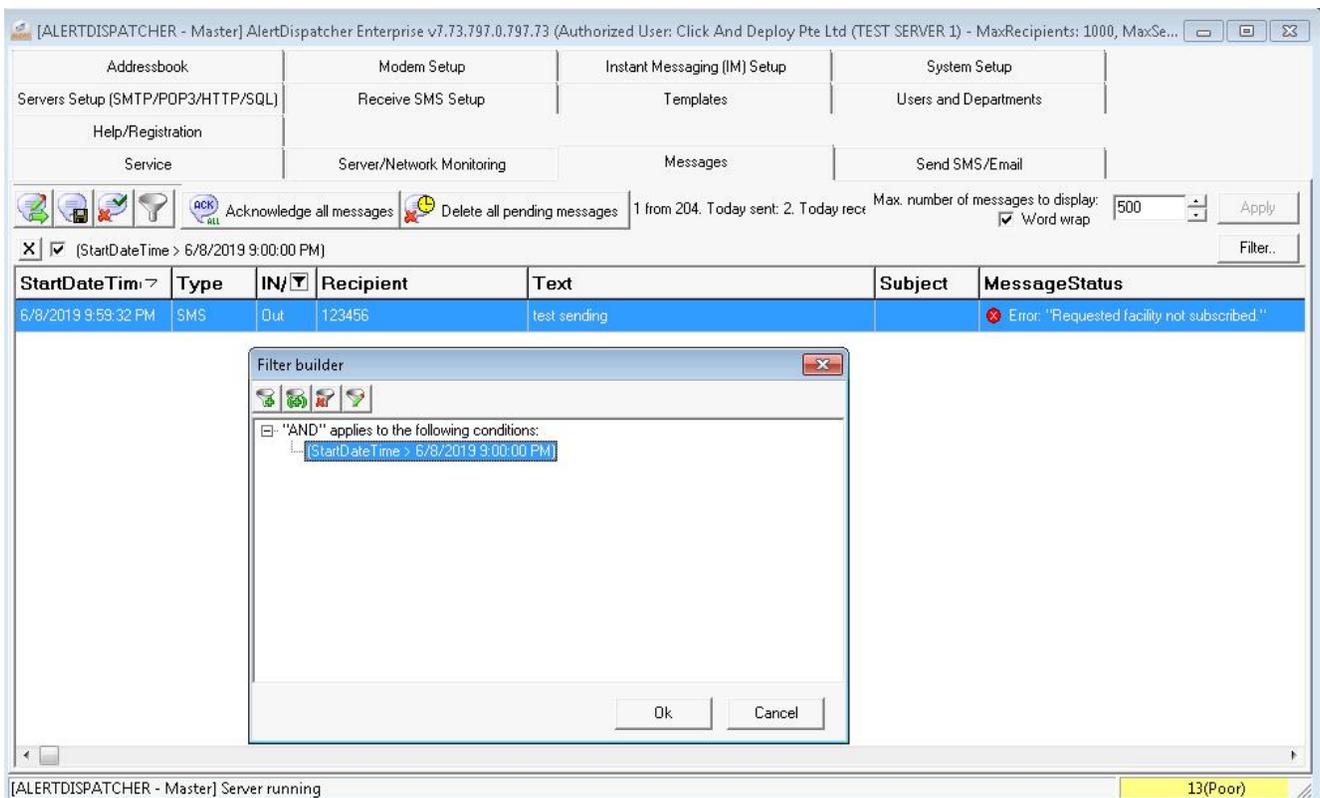
b). Checking Message Send Status on AlertDispatcher Client

Navigate to the “Messages” Tab to check the status of your sent message. The "MessageStatus" column will indicate whether the message is sent or not sent. "Processed" means the message has been successfully sent out. Any send error will be display under "MessageStatus" and will be critical for troubleshooting.



If you can't find your message, you may use the filter button to filter by date and time range and adjust the Max. number of messages to display setting.

Refer to AlertDispatcher logs to see details of errors - [5\). How to Retrieve Logs for Troubleshooting](#)

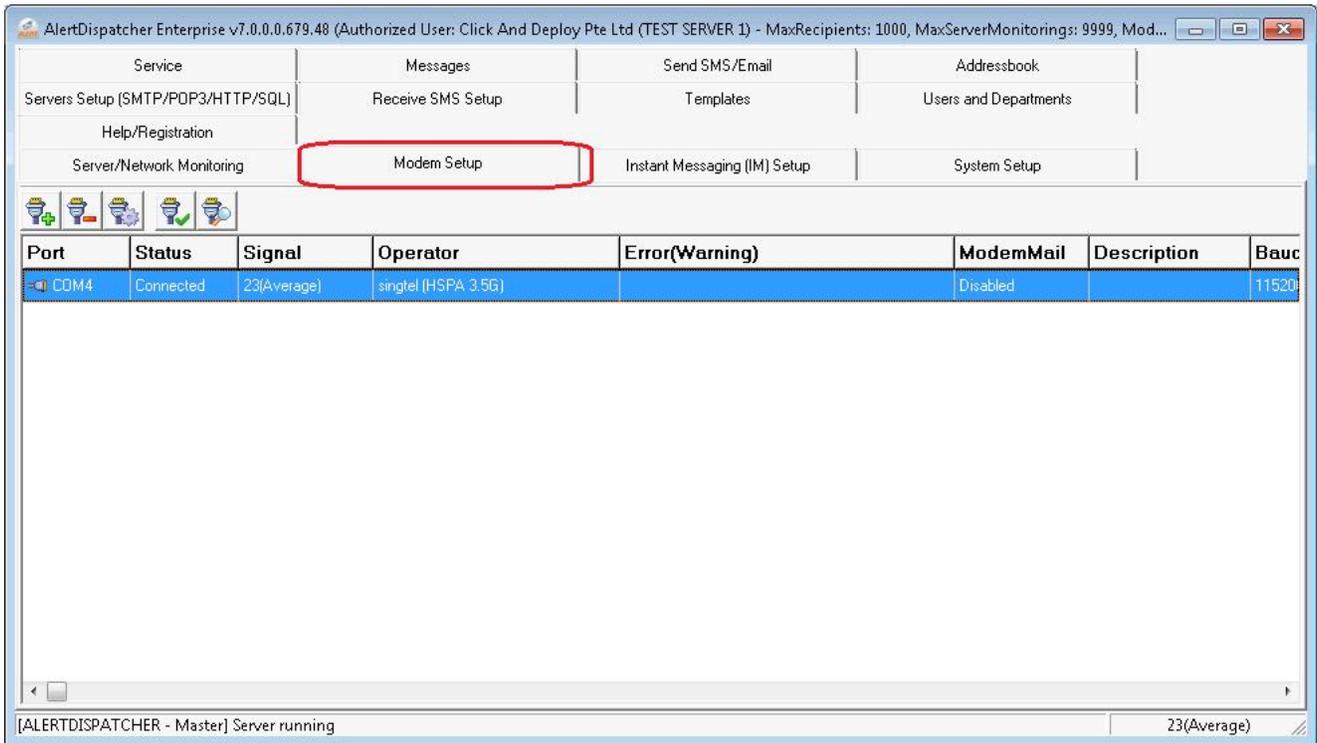


c). Troubleshooting Send SMS/Email and Modem/SMTP Server Issues

For email to be sent out, a valid and working SMTP Server has to be configured. Refer to [2\). How to setup AlertDispatcher to send Email/Alert Emails](#)

For SMS to be sent out, a working modem needs to be configured. If the SMS can't be sent, go to “Modem Setup” and check if the modem is connected, and there is a signal and operator detected. The LED light on the modem must be on and the SIM card properly inserted. Note that some SIM card adapters may not fit well so you may try changing to another SIM card to try out.

Warning: Please read the modem installation guide for the modem you're using before installing/uninstalling the modem /modem driver or when installing/uninstalling the SIM card - <http://www.clickndeploy.com/clients/downloads.php?action=displaycat&catid=19>

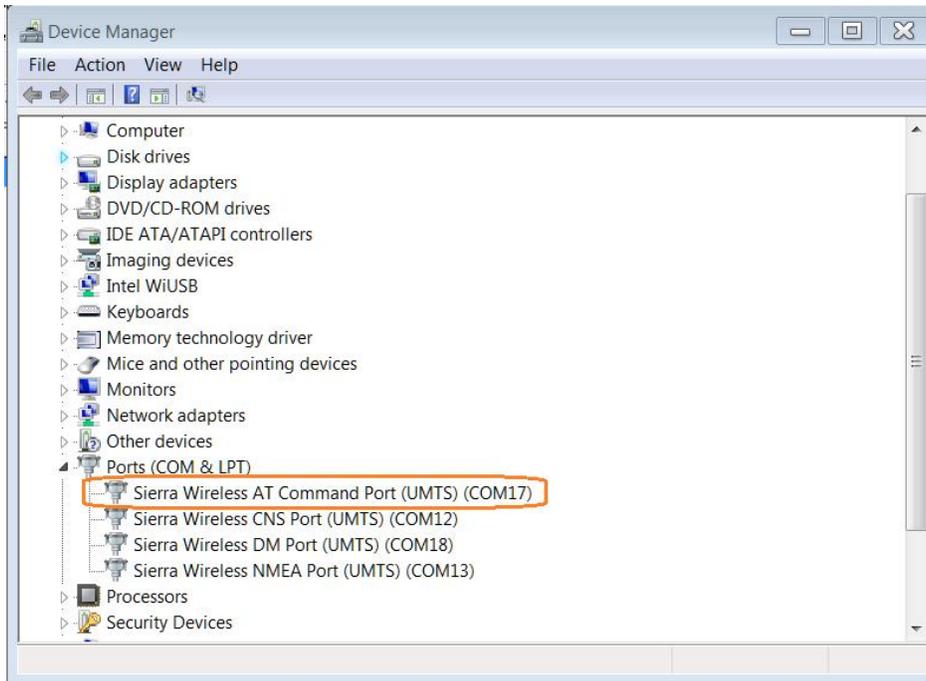


A modem may not be detected due to mis-configured COM port or if the modem driver has not been installed for the modem device.

Go to "Windows Device Manager" and locate the modem device. In the following example, the modem port is COM17. After reconfiguring the modem COM port, it may take up to 30 seconds for the modem to be detected.

If the modem device is "unknown", ensure you have installed the correct USB driver for the modem and right click on the device and select "Update driver software".

Warning: Please do not make any amendments to the Modem Setup unless you know what you're doing!



Under certain conditions, a weak GSM signal may cause SMS messages to fail to send. The GSM signal strength and quality at your deployment location is dependent on the presence of GSM repeaters in the vicinity. Generally speaking, GSM signal will be better in offices than in industrial buildings and data centers, and is especially poor in basements and server rooms enclosed by reinforced concrete walls with fire-rated doors and no windows. If your deployment site has very poor signal, please refer to point 2 and 3.

You can use your cellphone to gauge the signal strength. There should at least be 2 bars. Alternatively, you can also compare the signal strength for various SIM card providers using the software – signal strength will be displayed under Modem Setup and the signal reading will refresh every 20 seconds.

If the signal is very poor at your selected location (1 bar on your cellphone), please consider shifting the entire setup to another location. If you're installing the modem in an enclosed rack, extend the antenna out of the rack. You also may use an "active" USB extender to extend the modem to a location with better signal - [click here for an example](#).

If you're still not able to send your message, contact your mobile carrier company for technical assistance.

d). Troubleshooting Messages Sent From Third Party Systems

Third party systems (interfacing clients) can interface with AlertDispatcher using the following server protocols:

Server Protocol	Message Format	Default Port	Windows Service Name	Log Name
1. HTTP Server	HTTP Request	80	AlertDispatcher-HTTP	HTTPListener.log
2. SMTP Server	SMTP Email	25	AlertDispatcher-SMTP	SMTPListener.log
3. SNMP Trap Receiver	SNMP Trap	162	AlertDispatcher-SNMP	SNMPTrapReceiver.log
4. AlertDispatcher DLL API	N.A.	5556	N.A.	N.A.

For example, for SMTP Email messages sent to AlertDispatcher SMTP Server, you can search the corresponding log file, SMTPListener.log for the keyword "Email received" and find your messages.

Log location: *C:\Program Files (x86)\AlertDispatcher\Log*

```

2019.08.21 16:29:09:566 [thread:5468] [Trace][PrimarySMTPListenerClient] --> IamAlive
2019.08.21 16:29:09:566 [thread:5468] [Trace][PrimarySMTPListenerClient] <-- Ok
2019.08.21 16:29:22:1233 [thread:5468] [Trace][PrimarySMTPListenerClient] <-- ReplicationSlaveStatus: standby||"Replication is not
enabled on this server. Please enable
2019.08.21 16:29:42:341 [thread:5468] [Trace][PrimarySMTPListenerClient] --> IamAlive
2019.08.21 16:29:42:341 [thread:5468] [Trace][PrimarySMTPListenerClient] <-- Ok
2019.08.21 16:29:42:341 [thread:1804] [Trace][PrimarySMTPListenerClient] <>Email received. <>Subject: <>Recipient:82045273@test.com <>Body: Message sent via
AlertDispatcher SMTP Server Protocol
2019.08.21 16:29:48:690 [thread:5468] [Trace][PrimarySMTPListenerClient] --> Send SMTPListener(Primary)|||unencoded|||82045273@test.com
||Message sent via AlertDispatcher SMTP Server Protocol|||0100-01-01 00:00:00|||2|||test@AlertDispatcher.com|||TestSender|||
2019.08.21 16:29:48:690 [thread:5468] [Trace][PrimarySMTPListenerClient] <-- SendOk
2019.08.21 16:29:54:993 [thread:5468] [Trace][PrimarySMTPListenerClient] <-- ReplicationSlaveStatus: standby||"Replication is not
enabled on this server. Please enable
2019.08.21 16:30:15:320 [thread:5468] [Trace][PrimarySMTPListenerClient] --> IamAlive
2019.08.21 16:30:15:320 [thread:5468] [Trace][PrimarySMTPListenerClient] <-- Ok

```

If you can't find the message in SMTPListener.log, check if firewall is enabled on your AlertDispatcher PC and if so, you need to add firewall exception - see [A. How to Add \(allow\) server ports to Firewall](#)

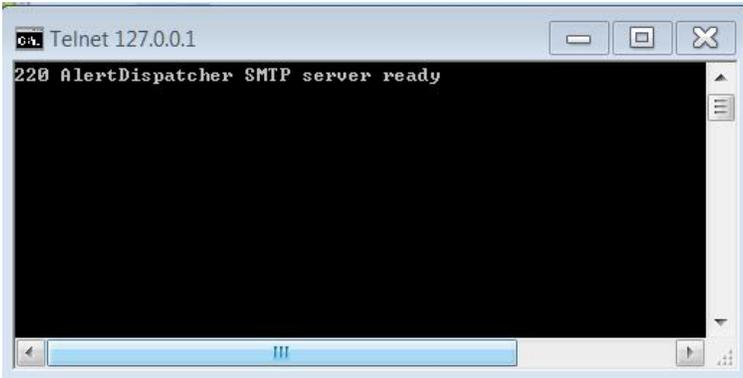
For hardware or switch based firewalls, please check your network administrator. You can use the telnet test from another PC on the same network to confirm that the port is opened - see [b\). How to verify your SMTP Server credentials using Windows Telnet Client and Blat.](#)

```

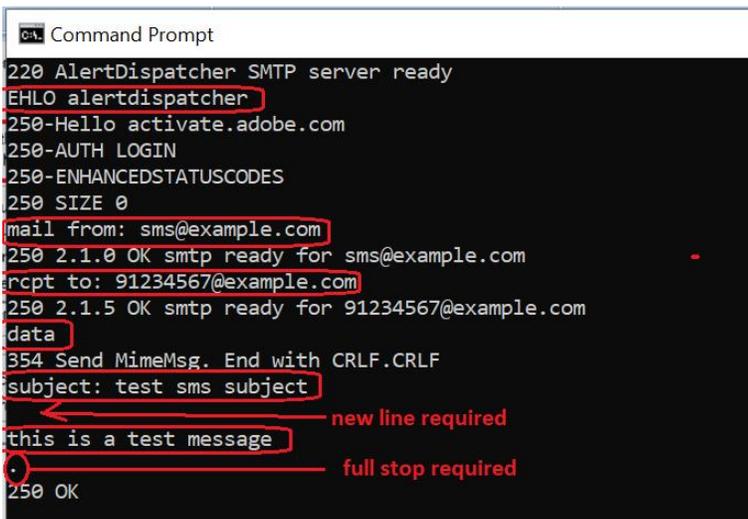
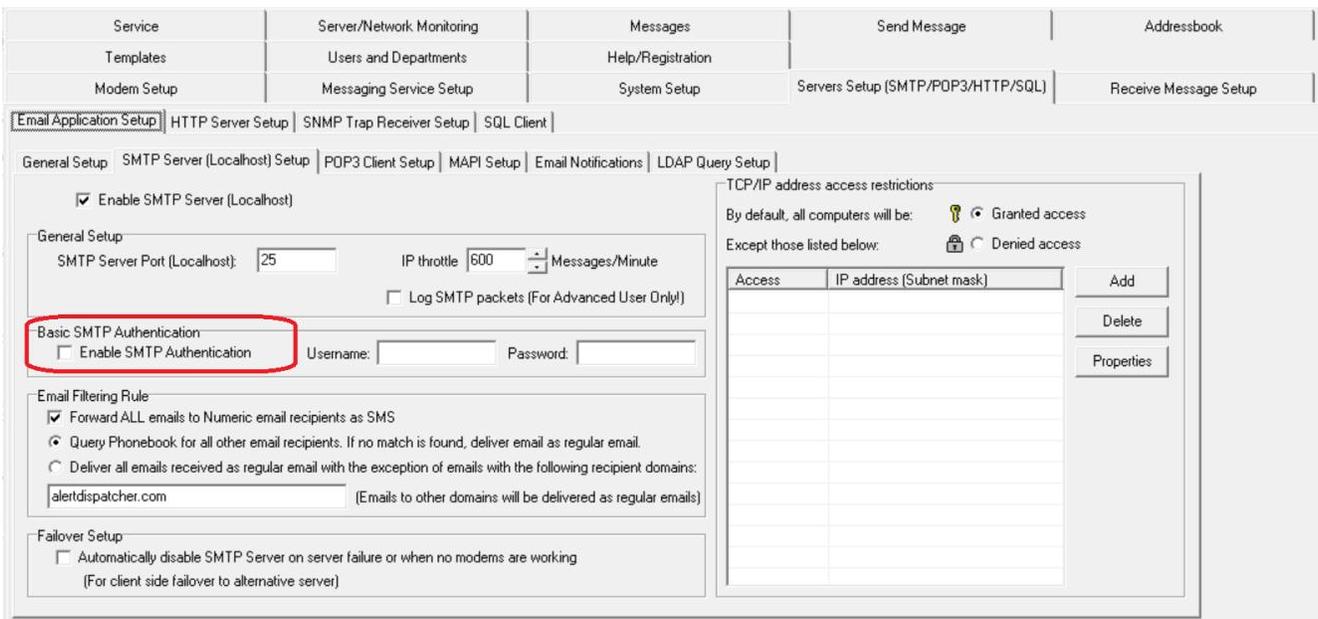
C:\Windows\system32\cmd.exe
C:\Users\Admin>telnet 127.0.0.1 25

```

If you get "220 AlertDispatcher SMTP server ready", this means the SMTP port is open and you will be able to send email to AlertDispatcher SMTP server.



You can use Telnet Client to send email to AlertDispatcher SMTP server using the commands marked in red. Please ensure that Basic SMTP Authentication is unchecked for this test.



“250 OK” response means that the email is successfully sent.

```

EHLO alertdispatcher
mail from: sms@example.com
rcpt to: 91234567@example.com
data
subject: test sms subject

this is a test message
.
    
```

The email will appear in AlertDispatcher as shown below.

Templates	Users and Departments	Help/Registration		
Modem Setup	Messaging Service Setup	System Setup	Servers Setup (SMTP/POP3/HTTP/SQL)	Receive Message S
Service	Server/Network Monitoring	Messages	Send Message	Addressbook

1 from 1. Today sent: 0. Today received: 0
Max. number of messages to display Word wrap

Created Date	Type	IN/OUT	Recipient	Text	Subject
2/8/2021 8:41:32 pm	SMS	Out	91234567	this is a test message	

If there's no issue with firewall or network access, please check the interfacing system logs for further clues on why the message hasn't been transmitted.

Take note that if SMTP authentication username and password is set on the interfacing system, you need to configure the same for AlertDispatcher. Basic authentication is disabled by default.

The screenshot shows the 'SMTP Server Setup' configuration window. The 'Basic SMTP Authentication' section is highlighted with a blue box. It contains the following settings:

- Enable SMTP Authentication
- Username: test
- Password: ****

Other visible settings include:

- Enable SMTP Server
- SMTP Server Port: 25
- IP throttle: 5000 Messages/Minute
- Log SMTP packets (For Advanced User Only!)
- 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

The status bar at the bottom indicates '[ALERTDISPATCHER - Master] Server running' and '13(Poor)'.

Once AlertDispatcher successfully receives the email sent from interfacing system, it will be reflected on AlertDispatcher Client. Note that this will happen regardless of whether the message can be successfully processed by AlertDispatcher.

Modem Setup	Instant Messaging (IM) Setup	System Setup	Servers Setup (SMTP/POP3/HTTP/SQL)	Receive SMS Setup
Templates	Users and Departments	Help/Registration		
Service	Server/Network Monitoring	Messages	Send SMS/Email	Addressbook

Acknowledge all messages Delete all pending messages

1 from 259. Today sent: 2. Today received: 0

 Max. number of messages to display:

(Text = "protocol")

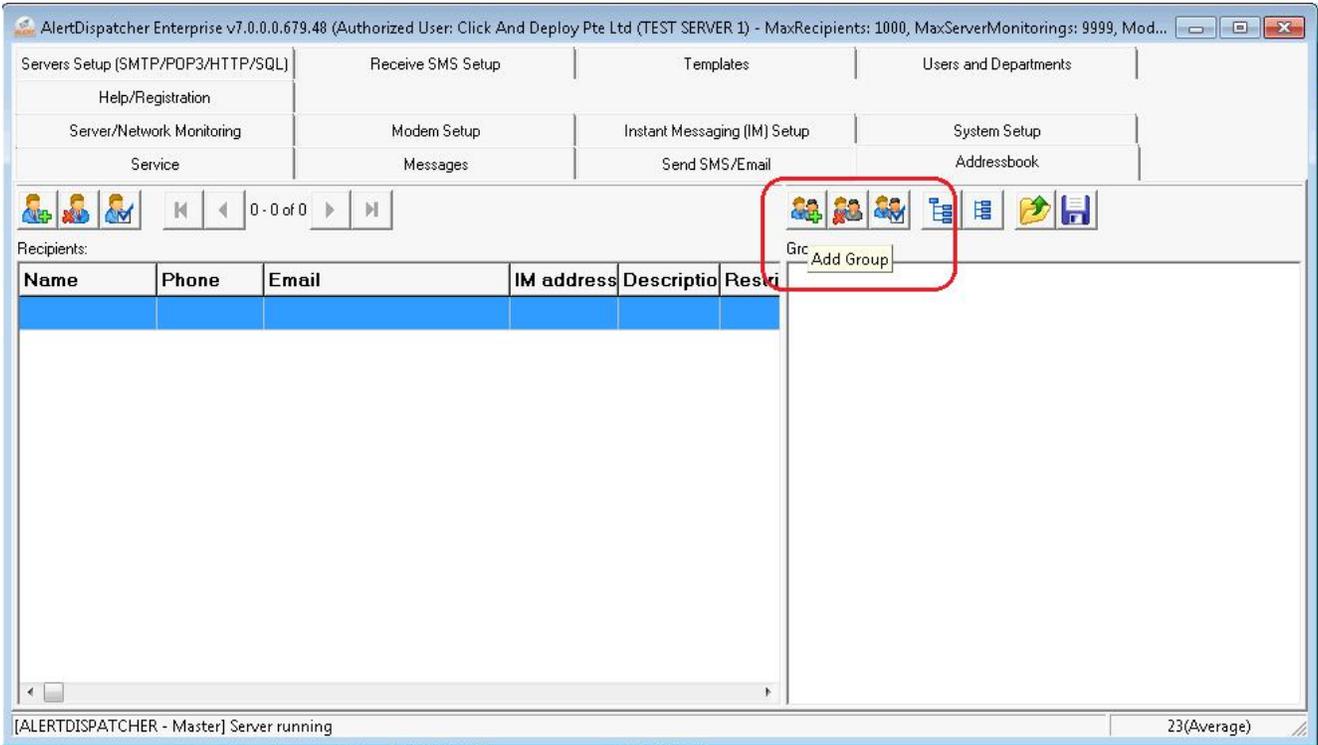
StartDateTime	Type	IN/OU	Recipient	Text	Subject	MessageStatus	Rul	FinishDateTime	Client
21/8/2019 4:29:48 PM	SMS	Out	starhubnew2182045273	Message sent via AlertDispatcher SMTP Server		✓ Processed		21/8/2019 4:29:52 PM	SMTP (Maste

[ALERTDISPATCHER - Master] Server running 11(Very poor)

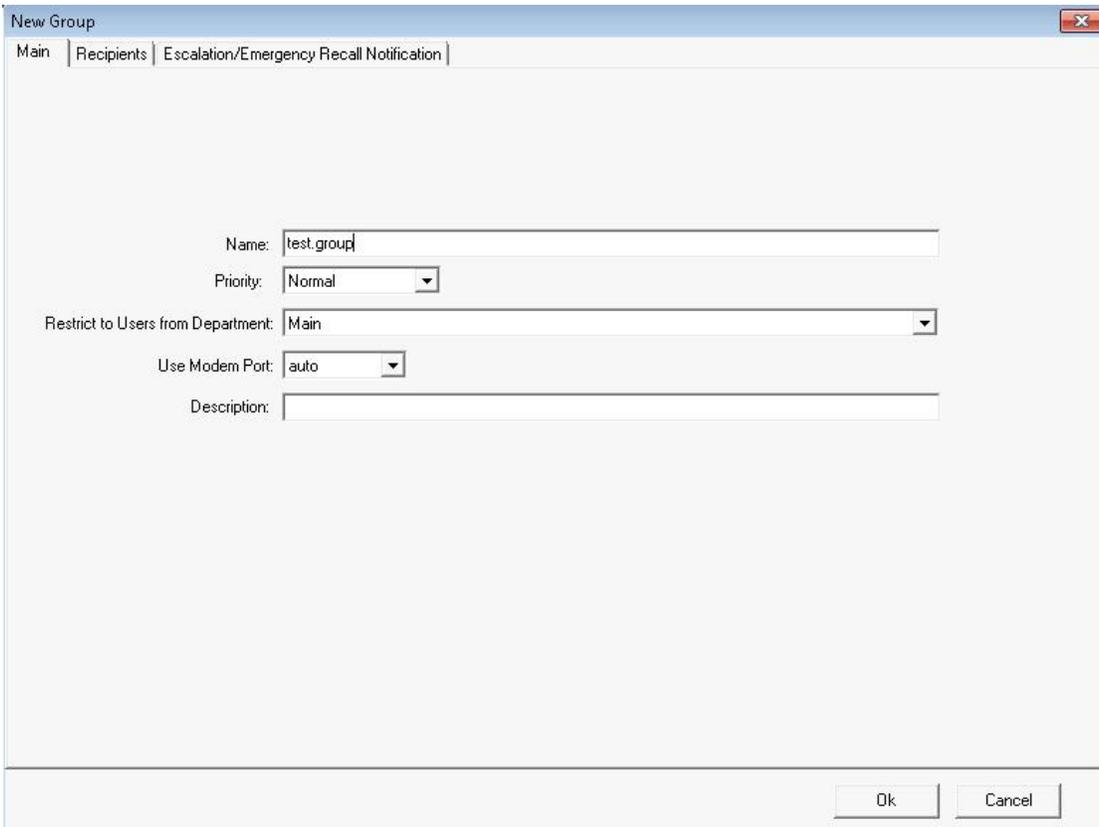
3). How to use the Addressbook and setup Escalation

a). Adding Group and Recipient

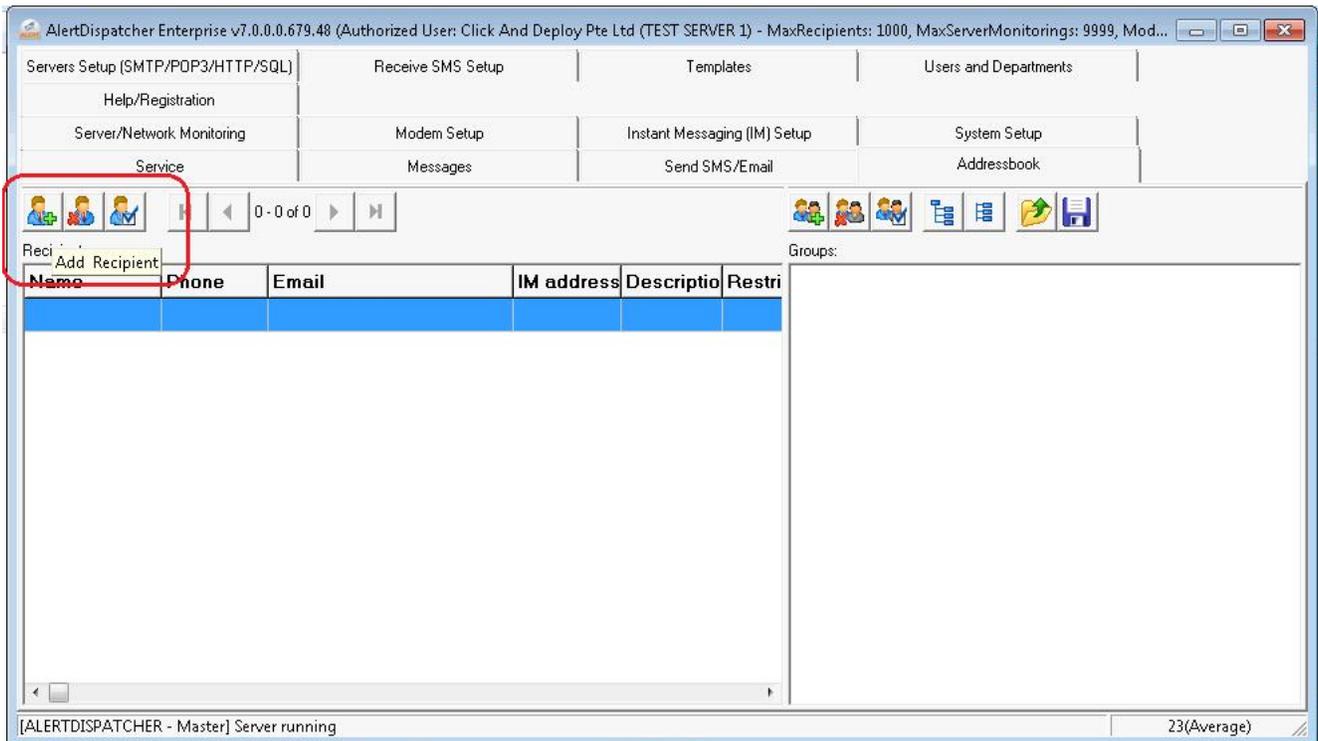
Navigate to the “Addressbook” tab, and then click on the “Add Group” icon.



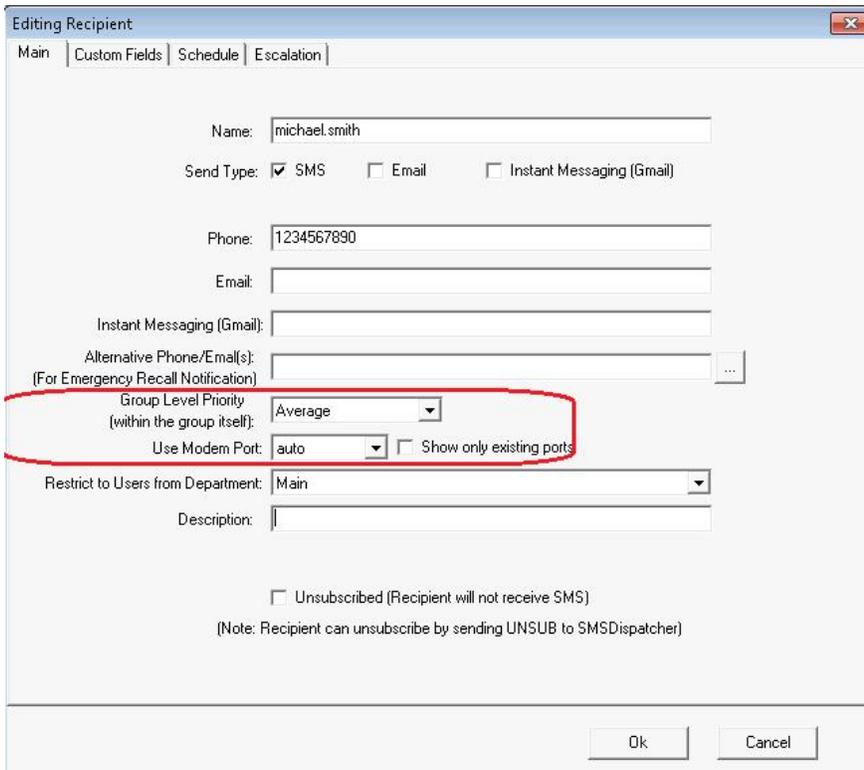
You can assign priority to your group. Messages sent to groups with higher priority will be sent out first.



Next, click on “Add Recipient” button to create recipients.



You can assign group level priority to recipients. If you have a modem pool, you can select the preferred modem to use for the recipient. This is useful if you need to split sent messages across different SIM cards for accounting purpose. For example, each SIM card may have a free SMS limit of X number of SMS per month. To optimise your usage, you would want to split your messages across the modem pool.

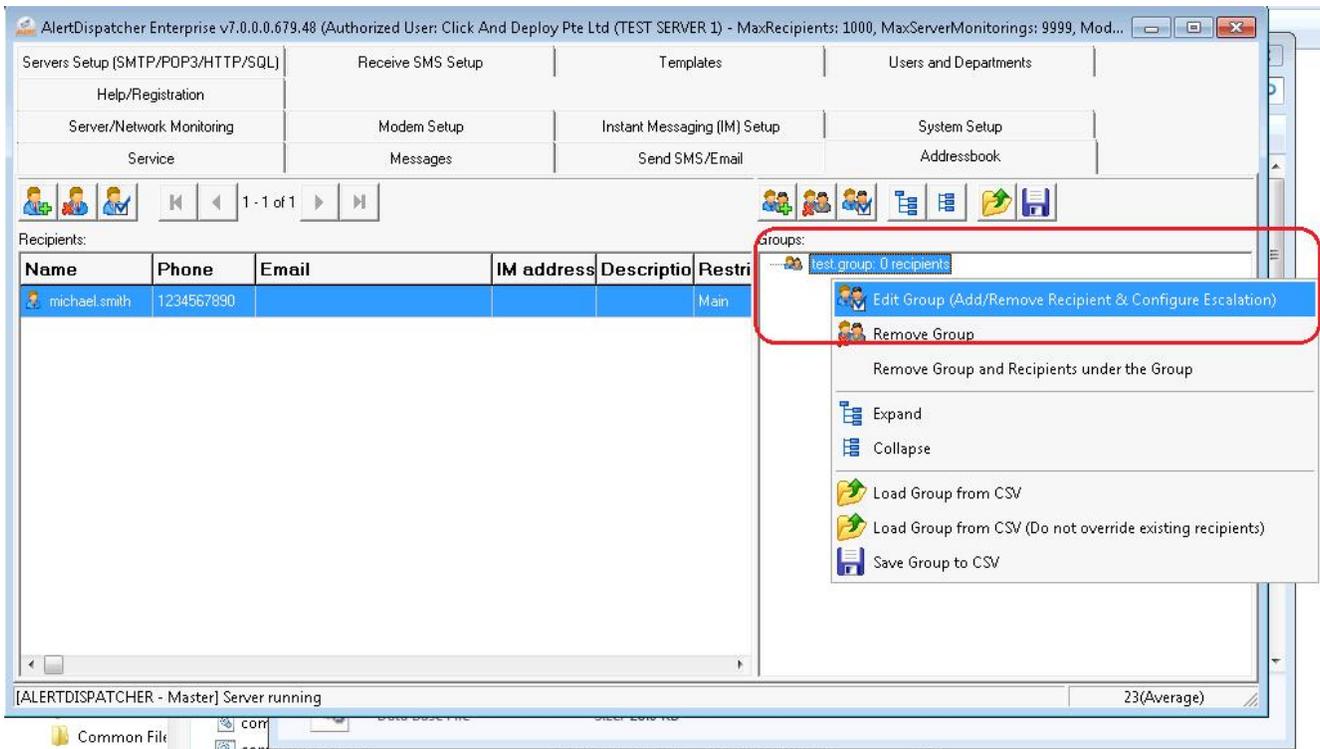


The screenshot shows the 'Editing Recipient' dialog box with the following fields and options:

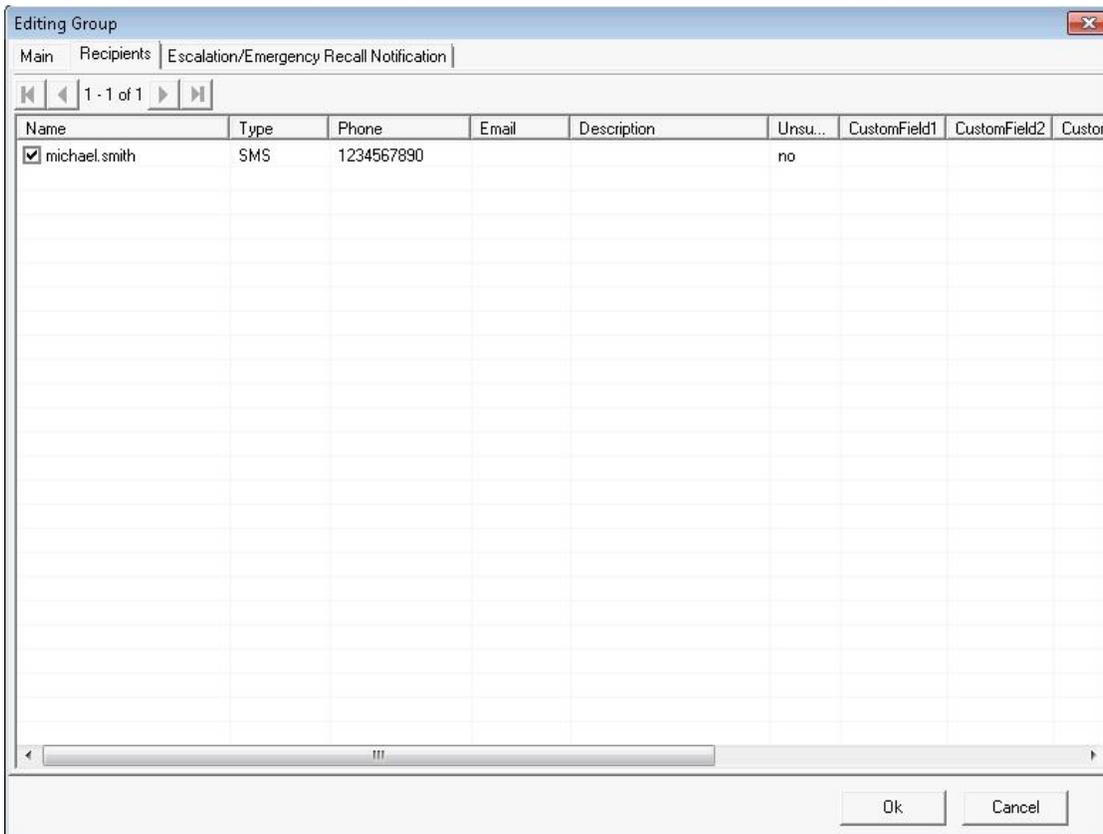
- Name: michael.smith
- Send Type: SMS Email Instant Messaging (Gmail)
- Phone: 1234567890
- Email: [Empty]
- Instant Messaging (Gmail): [Empty]
- Alternative Phone/Email(s): [Empty] ...
- (For Emergency Recall Notification)
- Group Level Priority (within the group itself): Average (highlighted with a red circle)
- Use Modem Port: auto (highlighted with a red circle) Show only existing ports
- Restrict to Users from Department: Main
- Description: [Empty]
- Unsubscribed (Recipient will not receive SMS)
- (Note: Recipient can unsubscribe by sending UNSUB to SMSDispatcher)

Buttons: Ok, Cancel

To assign recipients to the group you have just created, right click on the group, select “Edit Group (Add/Remove recipient & Configure Escalation)”. Alternatively, you can just double click on the group itself.



Use the checkboxes to add recipients to the group.



b). Setting up Basic Escalation

i. Overview

To ensure that critical messages are received and acted upon by recipients, you can define an escalation sequence for an addressbook group so that messages sent to the group need to be acknowledged by recipients within a defined time interval, failing which they will be escalated to the next level of recipients or resent to the same group.

There are two types of escalation that can be enabled for groups : a). *Basic Escalation*, and b). *Emergency Recall Notification*.

For Basic Escalation, any of the recipients from the group may acknowledge the message on behalf of the entire group. However, for Emergency Recall Notification, all recipients must personally acknowledge the escalation messages sent to them. Any recipient that has not acknowledged will receive escalation messages as configured.

Any Basic Escalation message that is not acknowledged by any of the recipients that received the message can be escalated up to 10 times:

1. Escalate (resend) message to a recipient or group (or back to the original escalation group).
2. Ring phone (for 6 seconds) of a recipient or group of recipients (fixed line phone supported).
3. Call phone till pickup of a recipient or group of recipients (fixed line phone supported).

There are 2 ways to configure Basic Escalation. The most popular way is to send to a group of recipients and hope that any of the recipient will acknowledge. If no acknowledgement is received after a defined time interval, the message is escalated to another group of recipients, e.g. the managers. This method is useful in reaching a group of recipients as quickly as possible, which is useful in case not everyone is able to receive or read the message in time. For example, some recipients might have turned off their phones or maybe asleep.

The other way is to send to just 1 recipient (you can add only 1 recipient to the group), and then escalate to a 2nd recipient if that single recipient does not acknowledge, and then if the 2nd recipient also does not acknowledge, escalate to 3rd recipient and so on.

Note: For discussion purpose, 'escalation messages' refers to messages that require recipient acknowledgement, and 'escalation groups' refers to groups with either basic escalation or emergency recall notification configured.

ii. How to configure Basic Escalation for Addressbook Groups

To setup Basic Escalation for an addressbook group, under “*Escalation/Emergency Recall Notification*” tab, select “*Basic Escalation*”. If Basic Escalation is enabled, escalation messages sent to the group must be acknowledged by any recipient in the group by SMS or Email reply.

You can configure AlertDispatcher to escalate the message to another recipient or group if no one acknowledges within the defined time interval, resend to the same group, or ring/call recipient phones (cellular/fixed line). Up to 10 levels of escalations can be configured.

Recipients can include comments in their acknowledgement SMS/Email and these comments will be forwarded to other recipients. The acknowledgment footnote is configurable.

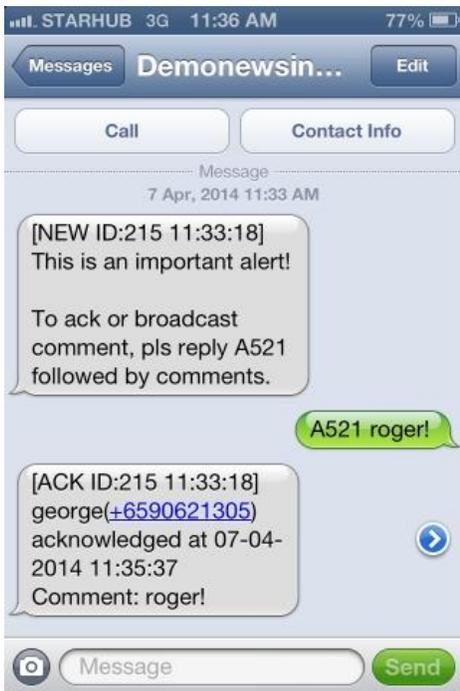
If you want to allow recipients to acknowledge all escalation messages received using a single reply, you can enable “*Acknowledging any message will acknowledge all messages sent to the recipient*”. This makes it more convenient for the recipient but the downside is we can’t ensure that the recipient has actually received or read all the messages.

You can exempt specific messages bearing certain keywords from the acknowledgement requirement using the “*Do NOT escalate messages if message contains ANY of the following keywords*” setting.

iii. Acknowledging by SMS reply

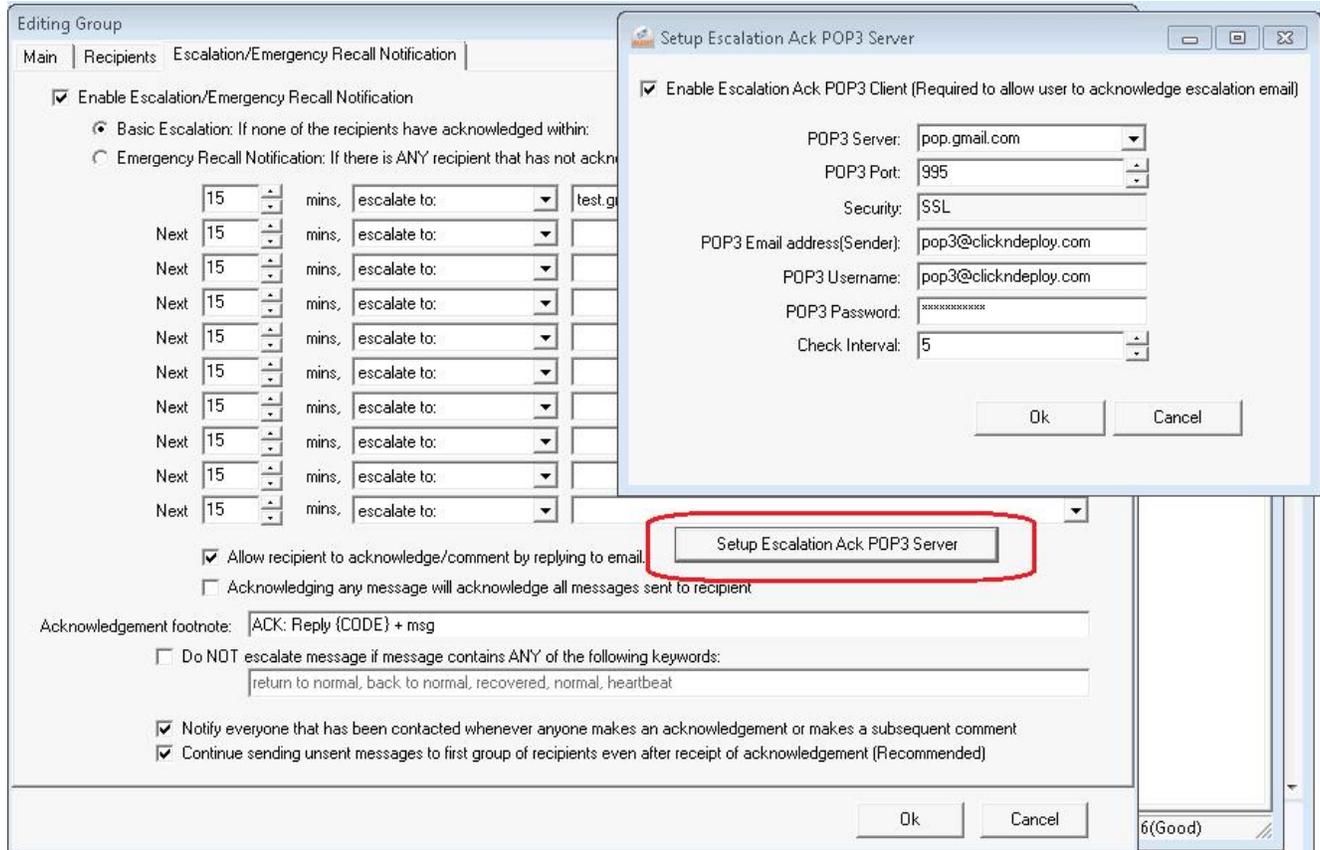
Recipients can acknowledge escalation messages received via SMS by replying a code. Multiple messages can be acknowledged in a single reply by including all the acknowledgement codes (comma separated), e.g. A123, A456, A678.

Alternatively, if "Acknowledging any message will acknowledge all messages sent to the recipient" setting is enabled, a recipient can acknowledge all messages by acknowledging any of the escalation messages received.



iv. Acknowledging by Email reply

In order to allow recipients to acknowledge by email reply, you must enable "Allow recipients to acknowledge/comment by replying to email" setting and configure the POP3 Server and User credentials using the "Setup Escalation Ack POP3 Server" button.



If the POP3 Server and User credential is incorrect, the following error will be shown:

AlertDispatcher Enterprise v7.0.0.0.679.48 (Authorized User: Click And Deploy Pte Ltd (TEST SERVER 1) - MaxRecipients: 1000, MaxServerMonitorings: 9999, Mod...)

Server/Network Monitoring Modem Setup Instant Messaging (IM) Setup System Setup

Servers Setup (SMTP/POP3/HTTP/SQL) Receive SMS Setup Templates Users and Departments

Help/Registration

Service Messages Send SMS/Email Addressbook

Server Status: Start Stop Restart Emergency Pause Modem Signal: COM4 Operator: singtel (HSPA 3.5G)

[ALERTDISPATCHER - Master] Server running 26 Server Replication Role: [Master] Slave Status: Connected

User: administrator Server Host: 127.0.0.1 Logout Open Log Folder

Server Event Log:

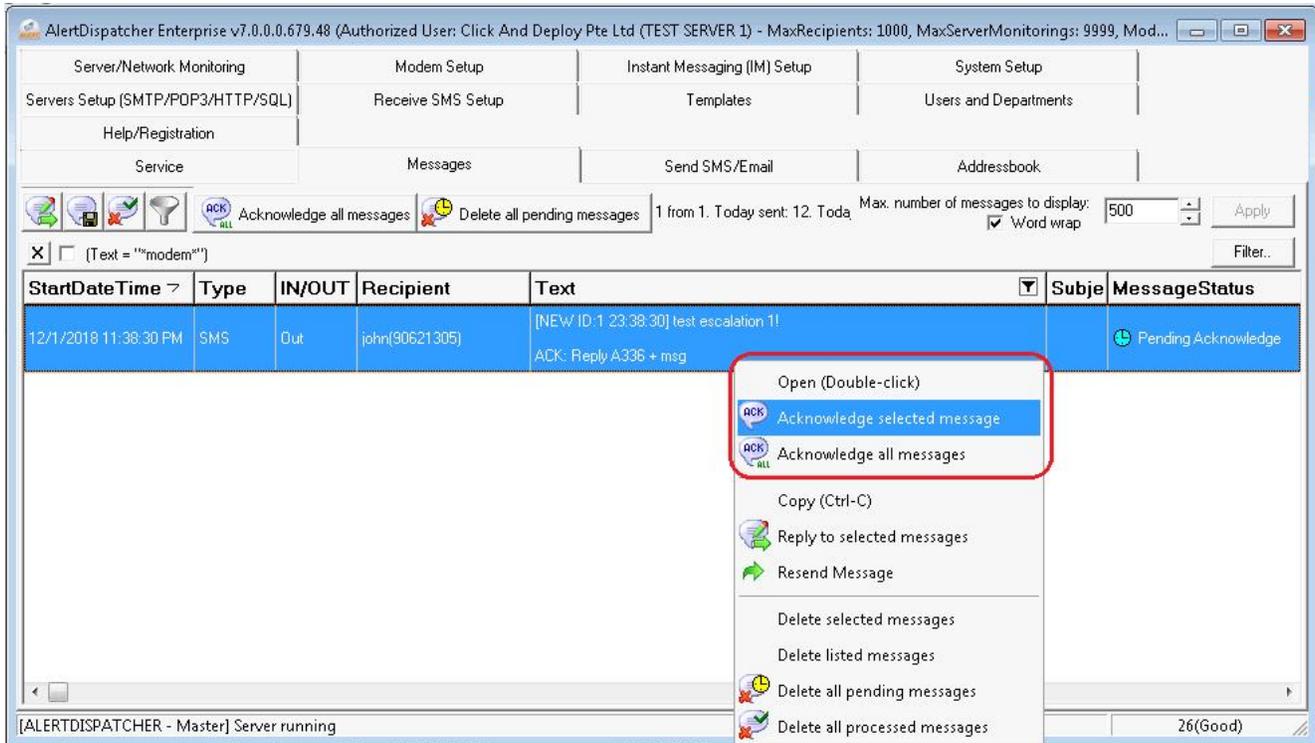
2018.01.12 23:32:19:902 [thread:6104] !! Escalation Ack POP3 server pop.gmail.com not available. Error:ERR [AUTH] Username and password not accepted.
2018.01.12 23:30:14:337 AlertDispatcher Service Started! Modems initialized successfully - COM4 (Network Operator:singtel, Signal Strength: 26
2018.01.12 23:30:11:311 Modem Firmware:7.52.0.201404040850_s18082i_1790532_040414_08:50

2018.01.12 23:30:11:311 Modem Model:s18082i product
2018.01.12 23:30:05:991 [thread:1824] Database recovered
2018.01.12 23:30:05:929 [thread:1824] Available SystemRAM: 6,613,204 KB
2018.01.12 23:30:05:929 [thread:1824] Total System RAM: 8,300,740 KB
2018.01.12 23:30:00:874 [thread:5592] Available SystemRAM: 6,613,004 KB
2018.01.12 23:29:49:143 [thread:5592] Available SystemRAM: 6,613,404 KB
2018.01.12 23:29:49:143 [thread:5592] Total System RAM: 8,300,740 KB
2018.01.12 23:29:44:354 [thread:5540] Available SystemRAM: 6,609,764 KB
2018.01.12 23:29:32:342 [!!!] Database error: Database exception Open log - file:\Log\
2018.01.12 23:29:32:311 [thread:5540] Available SystemRAM: 6,616,860 KB
2018.01.12 23:29:32:311 [thread:5540] Total System RAM: 8,300,740 KB
2018.01.12 23:29:28:972 [thread:984] Failover Client Connected to Slave: 192.168.1.158:5556
2018.01.12 23:29:28:848 Engine initialized. [Build:679.48]
2018.01.12 23:29:28:832 Vendor:ClickNDeploy
2018.01.12 23:29:28:832 HardwareID:C47CD978-71A3

[ALERTDISPATCHER - Master] Server running 26(Good)

v. Acknowledging via AlertDispatcher Client Console

A PC operator can acknowledge any or all escalation messages on behalf of recipients on the AlertDispatcher client interface.



As previously mentioned, up to 10 levels of escalation actions can be assigned for each group. You can escalate the message to another recipient or group, back to the same group or call a recipient phone (cellular/fixed line).

c). Setting up Emergency Recall Notification

i. Overview

While Basic Escalation allows any recipient in the group to acknowledge on behalf of the group, Emergency Recall Notification requires that every recipient in the addressbook group personally acknowledge the message sent to them. Any recipient that has not acknowledged will receive escalation messages as configured.

The Emergency Recall feature is especially useful in emergency or disaster scenarios where you would want reach out a group of recipients and can be initiated by a user via SMS or AlertDispatcher Web Login.

ii. How to configure Emergency Recall for Addressbook Groups

To setup Emergency Recall Notification an addressbook group, under “Escalation/Emergency Recall Notification” tab, select “Emergency Recall Notification”. Up to 10 levels of escalations can be configured.

The screenshot shows the 'Editing Group' dialog box with the 'Escalation/Emergency Recall Notification' tab selected. The 'Enable Escalation/Emergency Recall Notification' checkbox is checked. Under 'Emergency Recall Notification', there are 10 levels of escalation, each with a 5-minute interval and a specific action. The actions include resending to recipients, ringing or calling recipients, and sending reports. There are also checkboxes for allowing recipients to acknowledge by replying to email, acknowledging all messages, and requiring confirmation for Emergency Recall Notification messages. The 'Acknowledgement footnote' is 'ACK: Reply Ok1' and the 'Alternative contact header' is '*URGENT:Pls help forward this msg to {RecipientName}({RecipientPhone})!'. There is a 'Setup Escalation Ack POP3 Server' button and 'Ok'/'Cancel' buttons at the bottom.

If you want to allow recipients to acknowledge all Emergency Recall messages received using a single reply, you can enable "Acknowledging any message will acknowledge all messages sent to the recipient". This makes it more convenient for the recipient but the downside is we can't ensure that the recipient has actually received or read all the messages.

If "Require send confirmation for Emergency Recall Notification messages received from user via SMS or Email" setting is enabled, users can review and then choose to confirm the message.

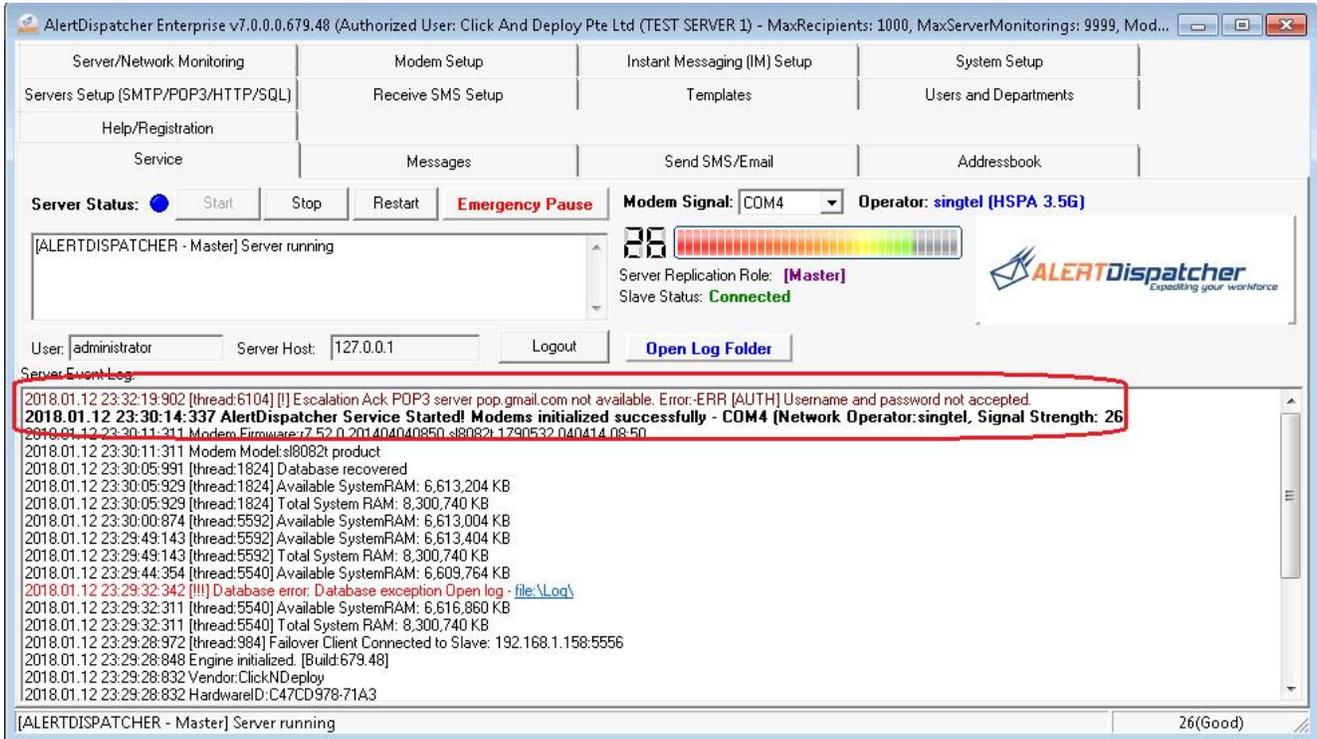
If you want to allow recipients to acknowledge by email reply, you must enable "Allow recipients to acknowledge/comment by replying to email" setting and configure the POP3 Server and User credentials using the "Setup Escalation Ack POP3 Server" button.

The screenshot displays the 'Editing Group' configuration window with the 'Escalation/Emergency Recall Notification' tab selected. The 'Enable Escalation/Emergency Recall Notification' checkbox is checked. Under 'Emergency Recall Notification', a list of escalation steps is shown, each with a 'Next' label, a '5' minute interval, and an escalation action. A 'Setup Escalation Ack POP3 Server' dialog box is overlaid on top, containing the following fields:

- Enable Escalation Ack POP3 Client (Required to allow user to acknowledge escalation email)
- POP3 Server: pop.gmail.com
- POP3 Port: 995
- Security: SSL
- POP3 Email address(Sender): pop3@clickndeploy.com
- POP3 Username: pop3@clickndeploy.com
- POP3 Password: [masked]
- Check Interval: 5

Buttons for 'Ok' and 'Cancel' are present at the bottom of the dialog box. The background window also includes checkboxes for 'Allow recipient to acknowledge/comment by replying to email', 'Acknowledge any message will acknowledge all messages sent to recipient', and 'Require send confirmation for Emergency Recall Notification messages received from user via SMS or Email'. The 'Alternative contact header' field contains the text: *URGENT:Pls help forward this msg to {RecipientName}({RecipientPhone})!

If the POP3 Server and User credentials is incorrect, the following error will be shown:

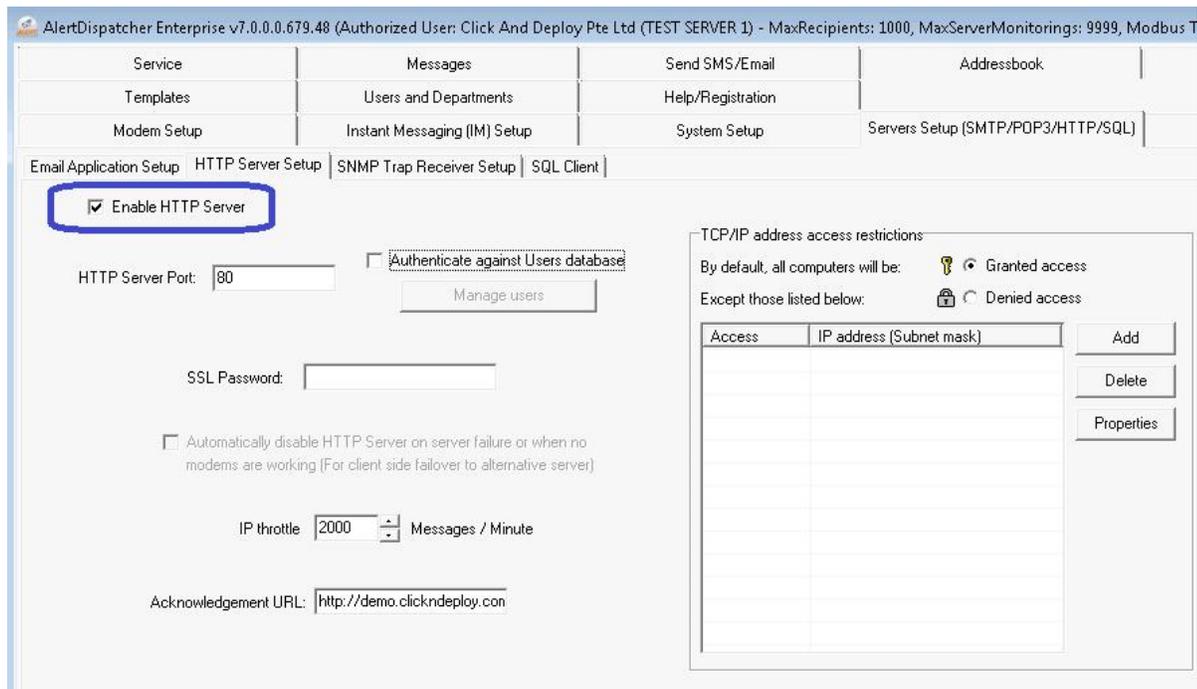


iii. Initiating Emergency Recall via AlertDispatcher Web Login

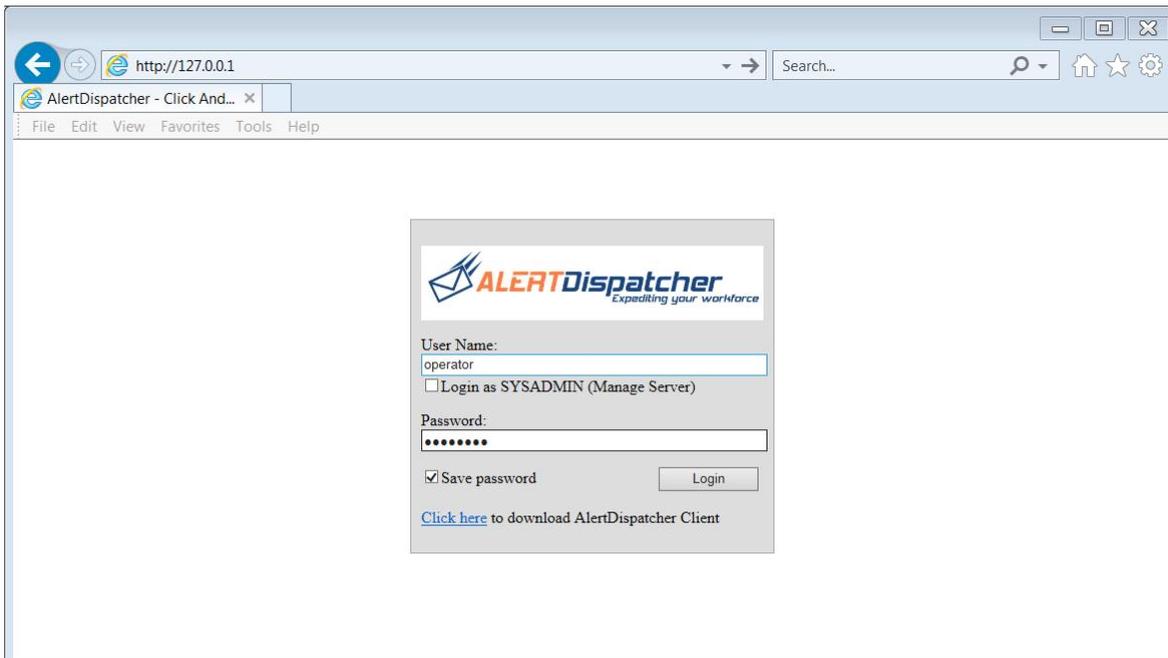
The best way to initiate an Emergency Recall is through the AlertDispatcher Web Login as you can monitor the progress of the recall real-time on your browser.

For Web Login to work, AlertDispatcher HTTP Server must be enabled. If you need to allow users to access the Web Login remotely from another workstation on the network, please ensure that Windows firewall does not block the configured HTTP Server Port (by default port 80).

Note: If there's another conflicting web server using the default port 80, you should change the AlertDispatcher HTTP Server Port, e.g. to port 8000.

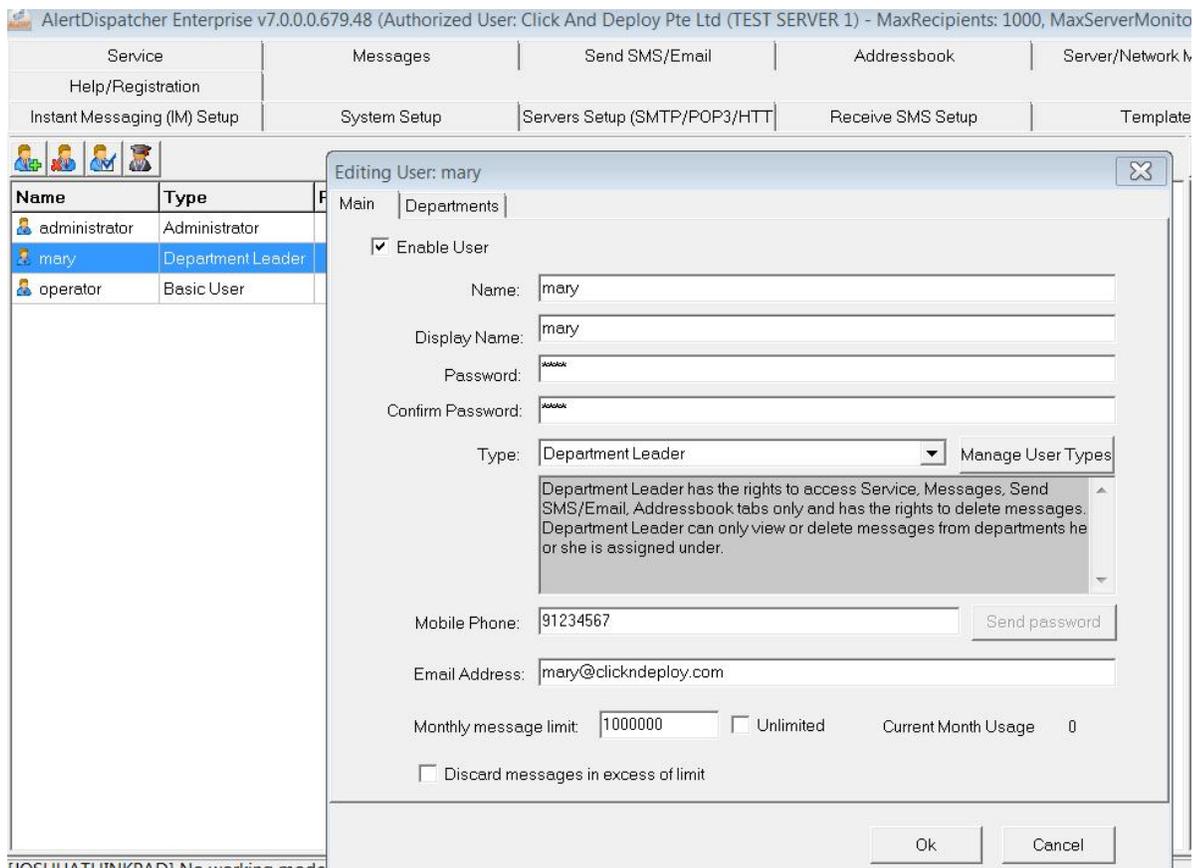


To test, access AlertDispatcher Web Login page on AlertDispatcher Server locally through your web browser, e.g. <http://127.0.0.1/>

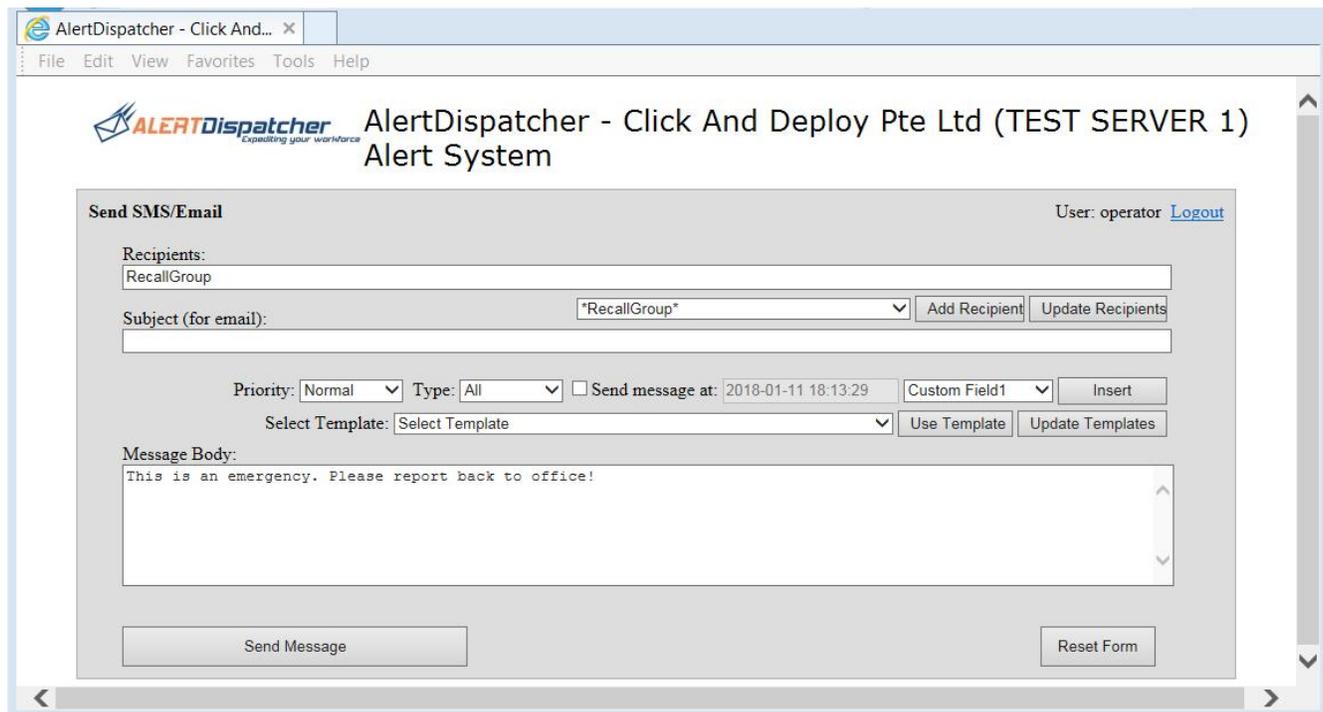


For login user, you can create a new user under "*Users and Departments*" tab, or you can use the automatically created "operator" user to login (default password: "operator").

Note: Please change this password as soon as possible using the "*Users and Departments*" tab to prevent unauthorized usage.



After you have successfully login, select the group that is configured for Emergency Recall Notification, compose your message, and click "Send Message".



Send SMS/Email

Recipients:
RecallGroup

Subject (for email):

Message Body:
This is an emergency

SMS888ID:wE8CM

Send

ACK report for Emergency Recall Notification ID:18 21:37:34

From: operator()
To: RecallGroup
Time: 2018-01-11 21:37:34
Message: This is an emergency. Please report back to office!

SENT: 2/2 (ACKED: 1/2 ~ NACK 1/2) QUEUED: 0/2 FAILED: 0/2

NACK(Sent but not yet acknowledged):	Recipient Contact	Comments	Description	Alternative Contact
mary	84987668			starhubnew2 (82045273)

FAILED(Failed to send):	Recipient Contact	Comments	Description	Alternative Contact
N.A.				

QUEUED(Pending in send queue):	Recipient Contact	Comments	Description	Alternative Contact
N.A.				

ACKED(Recipient acknowledged):	Recipient Contact	Comments	Description	Alternative Contact
John	90621305	21:52:54: ok roger!		mary(84987668)

Print Refresh Now

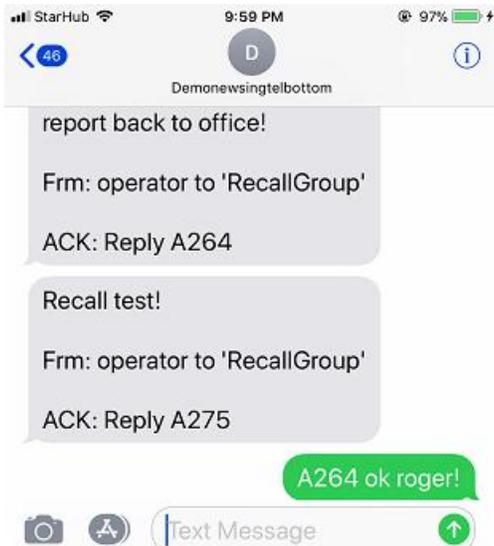
User: operator [Logout](#)

Add Recipient Update Recipients

018-01-11 18:13:29 Custom Field1 Insert

Use Template Update Templates

Reset Form



iv. Initiating Emergency Recall via SMS

A user can also initiate an Emergency Recall remotely by sending an SMS to the server.

SMS Format:

"Send {GroupName} {Message}"

The requirement is that *"Enable Receive SMS"* and *"Enable forward to Addressbook"* settings under *"Receive SMS Setup"* tab must be enabled. For security, the user's mobile phone number must be found in the addressbook (recipient) or inside one of the login users (setup under *"Users and Departments"* tab).

Note: You can restrict this capability to login users only by enabling the *"Restrict function to Users only"* setting under *"Receive SMS Setup"*, *"Forward to Addressbook"* tab.

AlertDispatcher Enterprise v7.0.0.0.679.48 (Authorized User: Click And Deploy Pte Ltd (TEST SERVER 1) - MaxRecipients: 1000, MaxServerMonitorings: 9999, Modbi

Help/Registration	Service	Messages	Send SMS/Email	Addressbook
Instant Messaging (IM) Setup	System Setup	Servers Setup (SMTP/POP3/HTTP/SQL)	Receive SMS Setup	

Enable Receive SMS

Forward to Addressbook | Forward to Email | Execute SQL | Execute HTTP GET | Execute DOS Command | Alert Users (Buzzer/Balloon)

Enable forward to Addressbook (Restricted to Users and Addressbook Recipients)

Forward received messages with the keyword to Addressbook recipient that follows the keyword
(use comma delimiter if more than one recipient)

Example:

User Admin sends to Server:
"send operations, sales, technical All staff to report to work in 1 hour's time"

Server send to Operations, Sales, Technical :
"All staff to report to work in 1 hour's time"
Frm: Admin (96612345) at 2012-01-20 16:20:11"

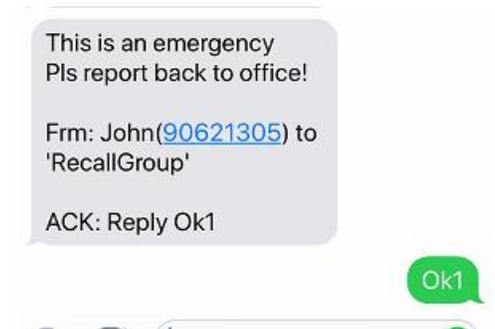
Restrict function to Users only

Append original sender to forwarded message

In the following example, a user initiates an Emergency Recall to "RecallGroup" group by sending an SMS "Send recallgroup This is an emergency. Pls report back to office!".

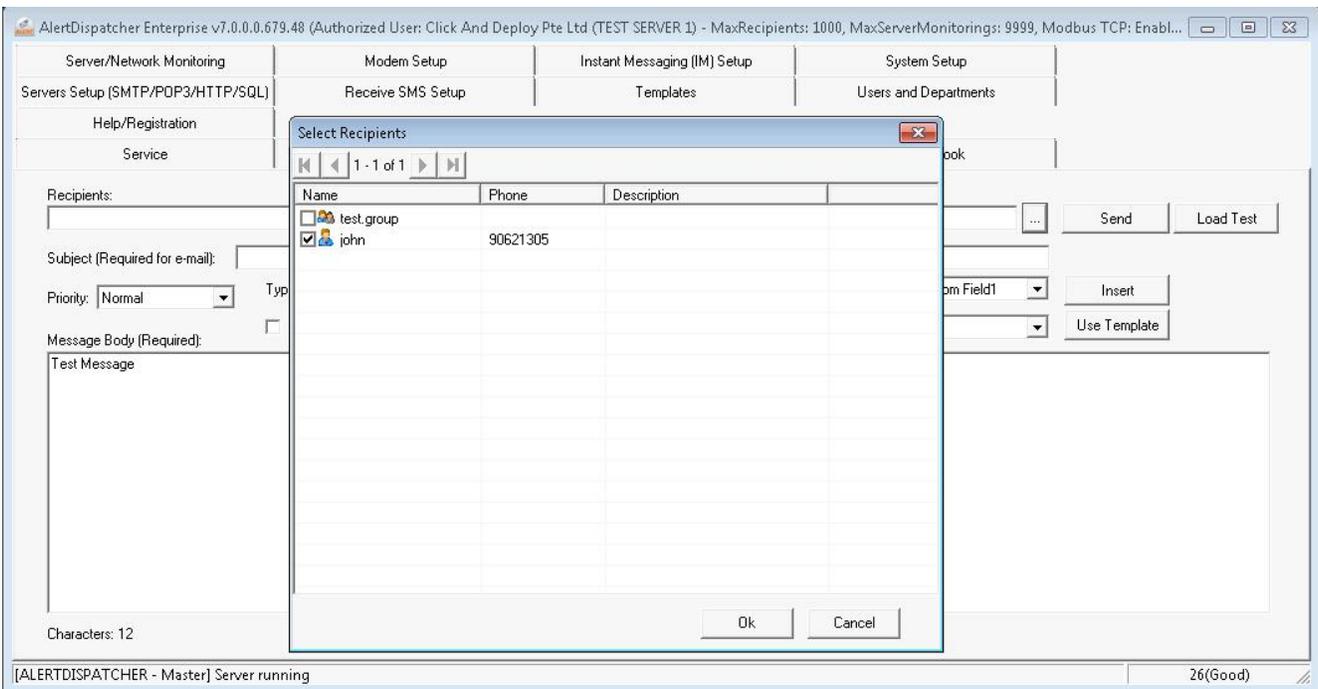
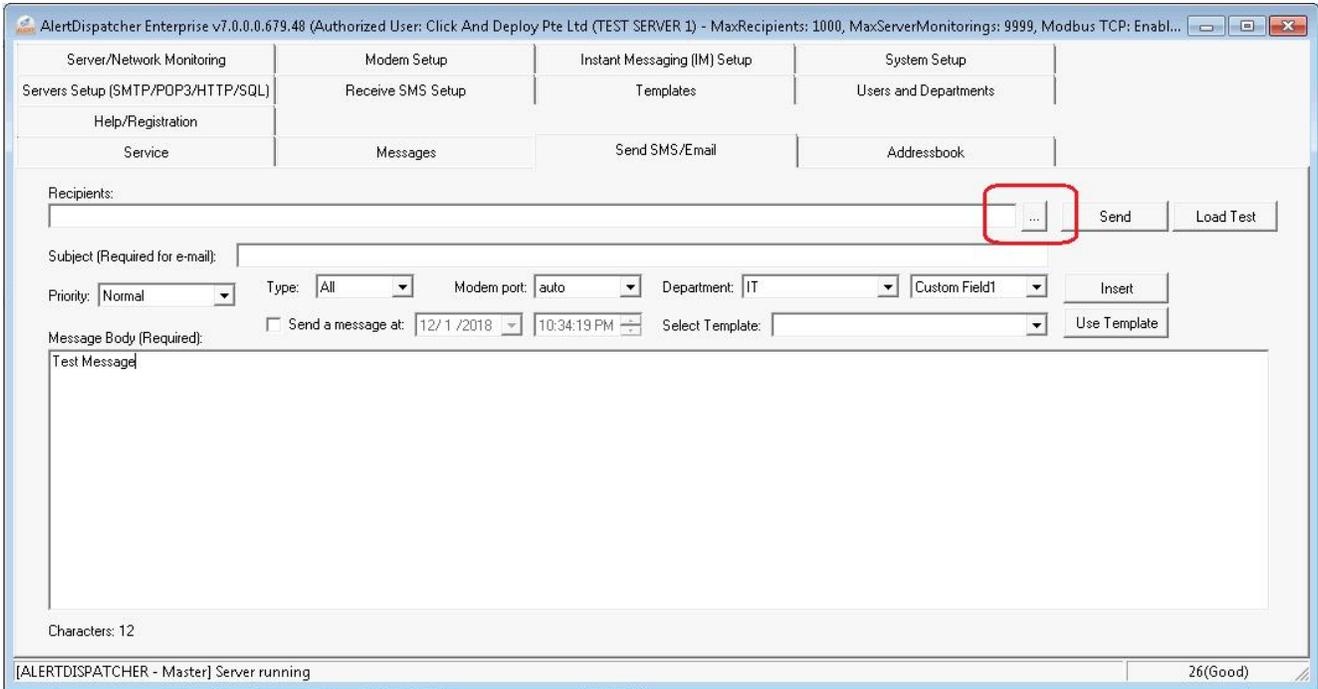


A recipient receives the SMS and sends Ok1 to acknowledge.



d). Send Test Message

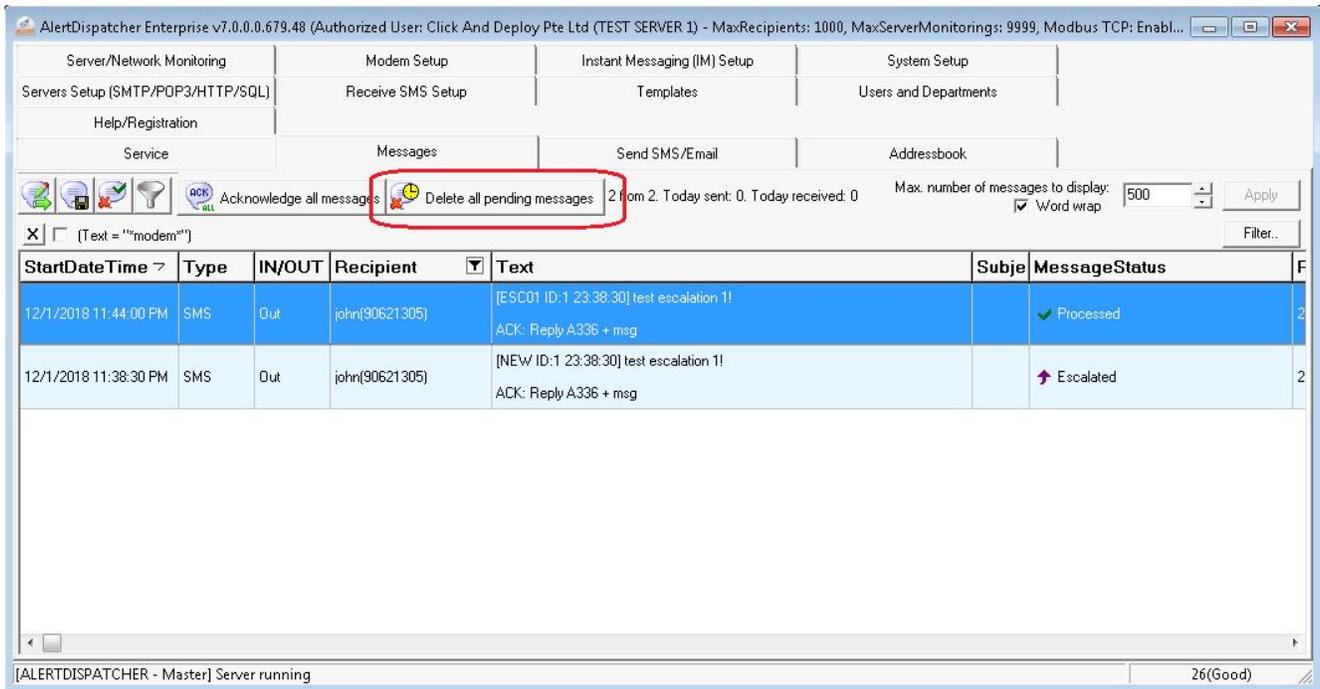
To test your newly created addressbook group, navigate to the “Send SMS/Email” tab, click on the ‘...’ button and select the group.



Click “Send” button to send the message.

4). How to Delete Pending Messages

You can all delete pending messages (messages that have not been sent out by the system) by right clicking on the message grid and select “Delete all pending messages”.



6). How to Retrieve Logs for Troubleshooting

You can retrieve your logs by clicking on the “Open Log Folder” button.

The most useful logs are the AlertDispatcherServer, AlertDispatcherServer_events and AlertDispatcherSignal logs. If you're interfacing 3rd party applications with AlertDispatcher, the relevant logs include SMTPListener, HTTPListener and SNMPTrapReceiver logs.

Note: Logs will be automatically archived to the \archive subfolder when they reach 10MB in size. To identify which archived log is relevant, please sort the files by date and then open log file to verify that it contains the log when the error occurred.

To obtain support from your vendor, you'll also need to submit your AlertDispatcher database and configuration. Refer to the "*Log Submission Guide*" on how to obtain the relevant files to your vendor for further technical assistance - <http://www.clickndeploy.com/clients/dl.php?type=d&id=41>

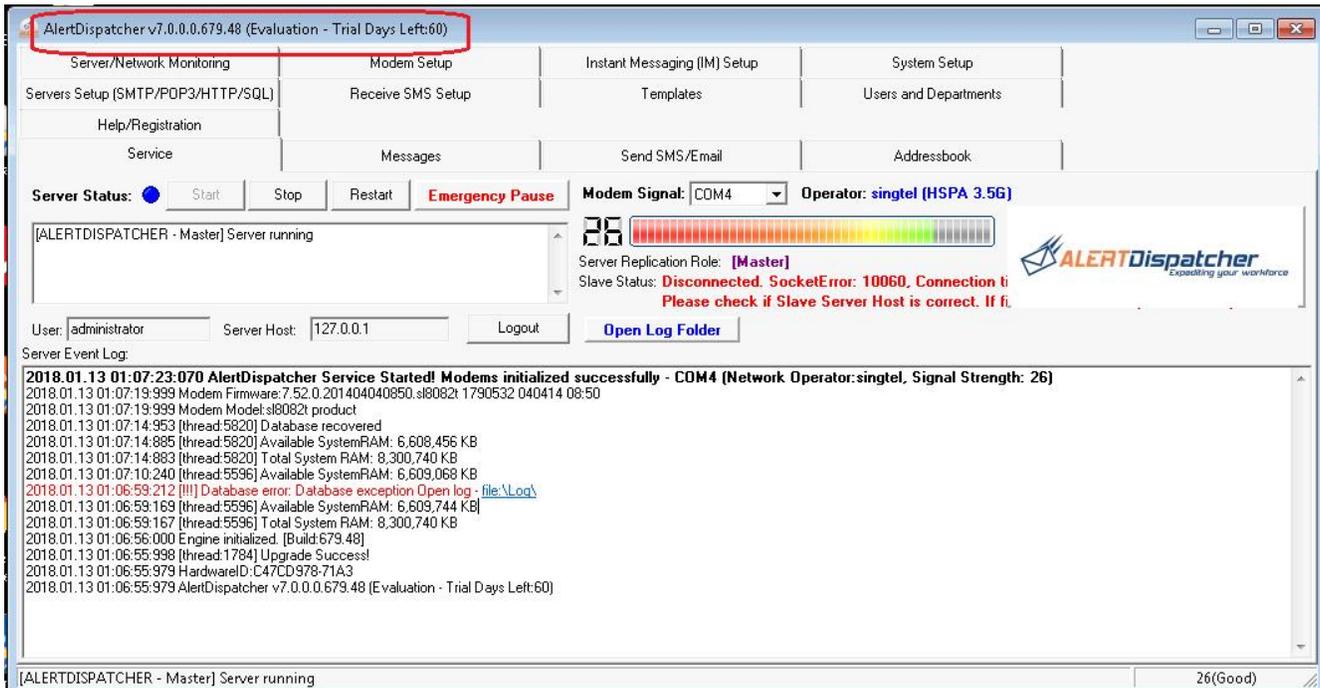
The screenshot displays the AlertDispatcher Enterprise v7.0.0.0.679.48 web interface. The top navigation bar includes sections for Server/Network Monitoring, Modem Setup, Instant Messaging (IM) Setup, System Setup, Servers Setup (SMTP/POP3/HTTP/SQL), Receive SMS Setup, Templates, Users and Departments, Help/Registration, Service, Messages, Send SMS/Email, and Addressbook. The main status area shows the Server Status as 'Start', 'Stop', 'Restart', and 'Emergency Pause'. The Modem Signal is set to 'COM4' and the Operator is 'singtel (HSPA 3.5G)'. A signal strength indicator shows 26. The Server Replication Role is 'Master' and the Slave Status is 'Connected'. The user is 'administrator' and the Server Host is '127.0.0.1'. The 'Open Log Folder' button is highlighted with a red box. The Server Event Log shows the following entries:

```
2018.01.13 00:15:14:671 AlertDispatcher Service Started! Modems initialized successfully - COM4 (Network Operator:singtel, Signal Strength: 26)
2018.01.13 00:15:11:457 Modem Firmware:7.52.0.201404040850.sl8082t1790532 040414 08:50
2018.01.13 00:15:11:457 Modem Model:8082t product
2018.01.13 00:15:05:997 [thread:4456] Available SystemRAM: 6,614,176 KB
2018.01.13 00:15:05:997 [thread:4456] Total System RAM: 8,300,740 KB
2018.01.13 00:15:01:192 [thread:4988] Failover Client Connected to Slave: 192.168.1.158:5556
2018.01.13 00:15:01:146 Engine initialized. [Build:679.48]
2018.01.13 00:15:01:099 Vendor:ClickNDeploy
2018.01.13 00:15:01:099 HardwareID:C47CD978-71A3
2018.01.13 00:15:01:099 AlertDispatcher Enterprise v7.0.0.0.679.48 (Authorized User:Click And Deploy Pte Ltd (TEST SERVER 1))
2018.01.13 00:15:01:099 ModbusTCPEEnabled: 1
2018.01.13 00:15:01:099 MaxServerMonitorings: 9999
2018.01.13 00:15:01:099 LicenseExpiry:0
2018.01.13 00:15:01:099 MaxEmergencyRecipients:1000
2018.01.13 00:15:01:099 MaxModemNum:8
2018.01.13 00:15:01:099 VendorEmail:
2018.01.13 00:15:01:099 Vendor:ClickNDeploy
2018.01.13 00:15:01:099 RegisteredName:Click And Deploy Pte Ltd (TEST SERVER 1)
```

2. For Administrator

1). How to activate AlertDispatcher license using Activation Code

Once you have successfully setup and configured your AlertDispatcher installation, the software will work for 60 days without license activation. To use beyond 60 days, please activate your license by SMS or Internet.



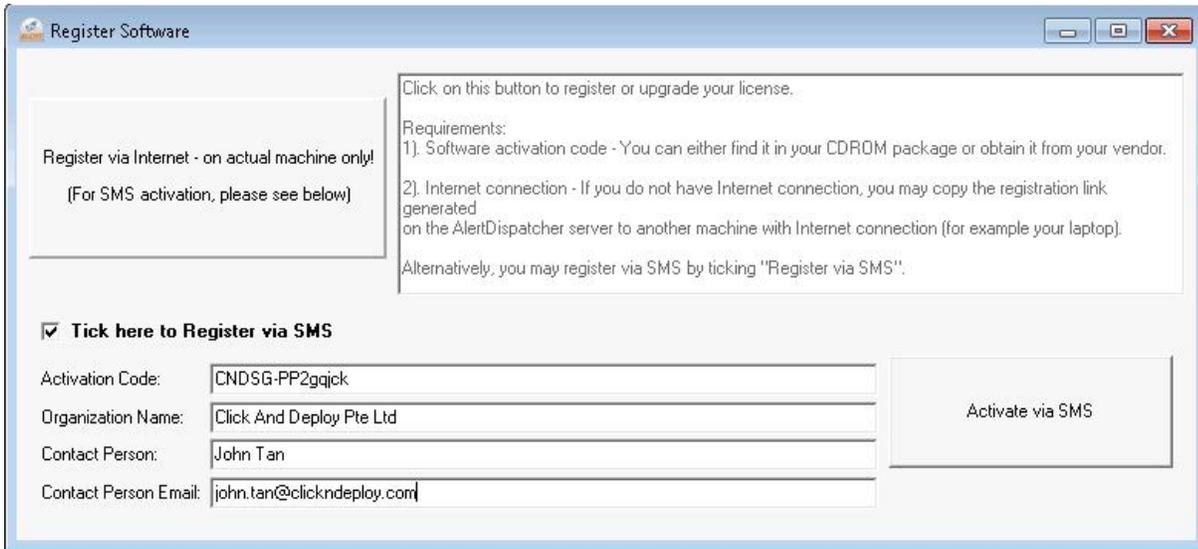
To register, run AlertDispatcher Client, and click on the 'Register Software' button on the splash screen. Alternatively, you can launch AlertDispatcher Client and navigate to the "Help/Registration" Tab on the main page.



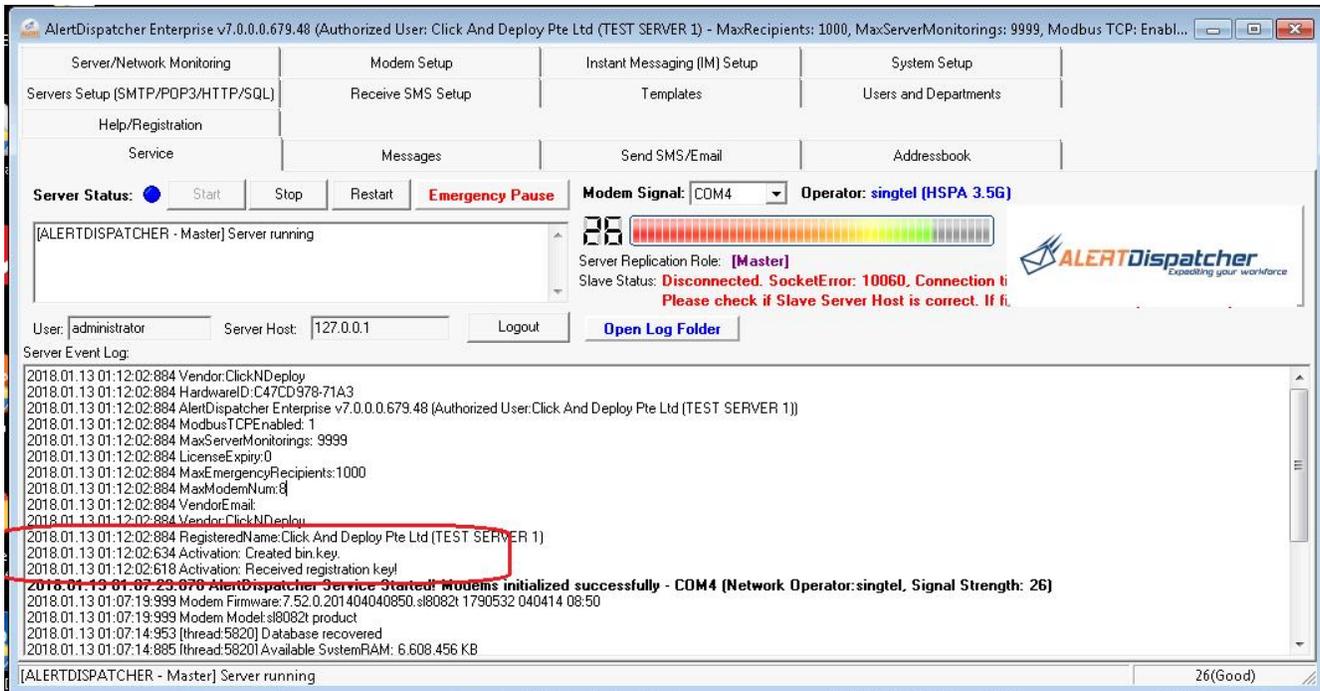
You may register via Internet or via SMS.

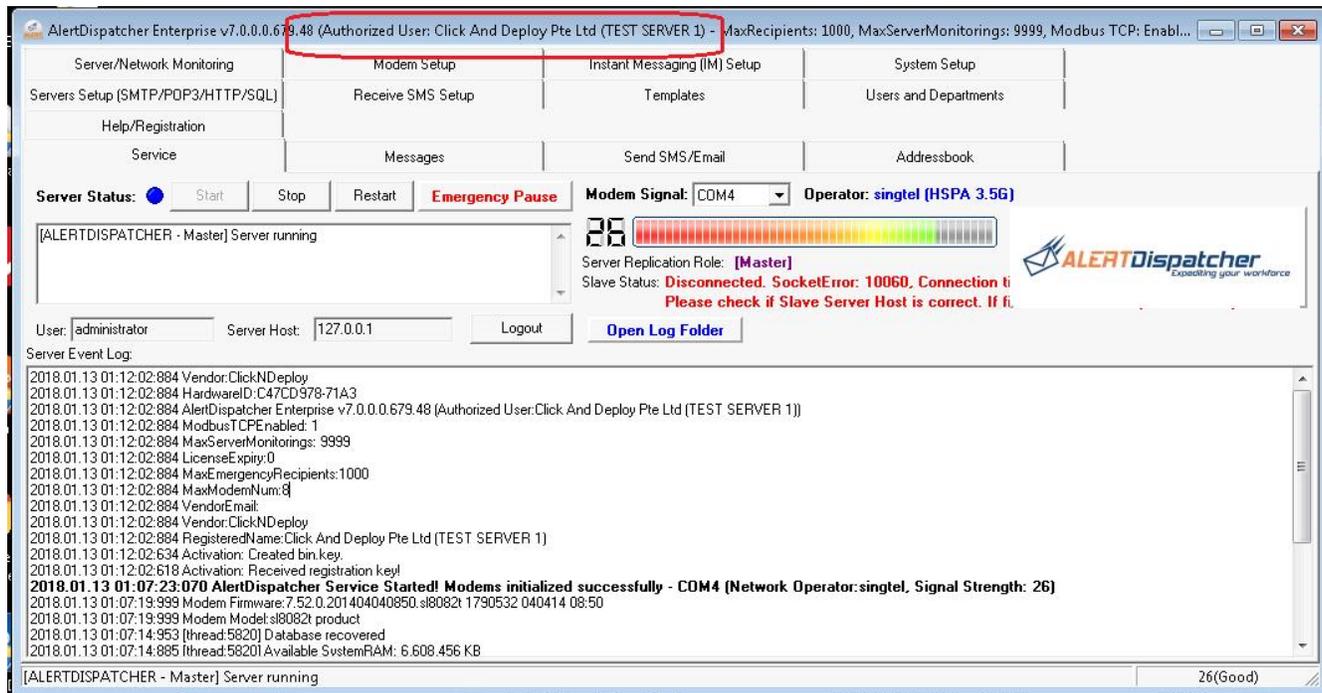
a). Register via SMS (Modem and SIM Card required)

If you **do not** have access to Internet connection, you may try to register **via SMS** by ticking the checkbox "Register via SMS". If you are not able to tick "Register via SMS", please ensure you have configured a modem and inserted a working SIM card and restart AlertDispatcher service. You may send a test SMS to verify your configuration is correct.



Upon receiving the license key via SMS, the "Evaluation - Trial Day Left" should be replaced by "Authorized User" as shown below. You may need to manually restart AlertDispatcher Service to see the new license.





If SMS activation don't work for you, you can activate via Internet by copying the registration link generated on the AlertDispatcher server (which does not have Internet) to another machine with Internet connection (for example your laptop).

Warning: You must not generate the registration link using AlertDispatcher installed on your laptop as the key generated using your laptop will work for your laptop but will fail to work on the server.

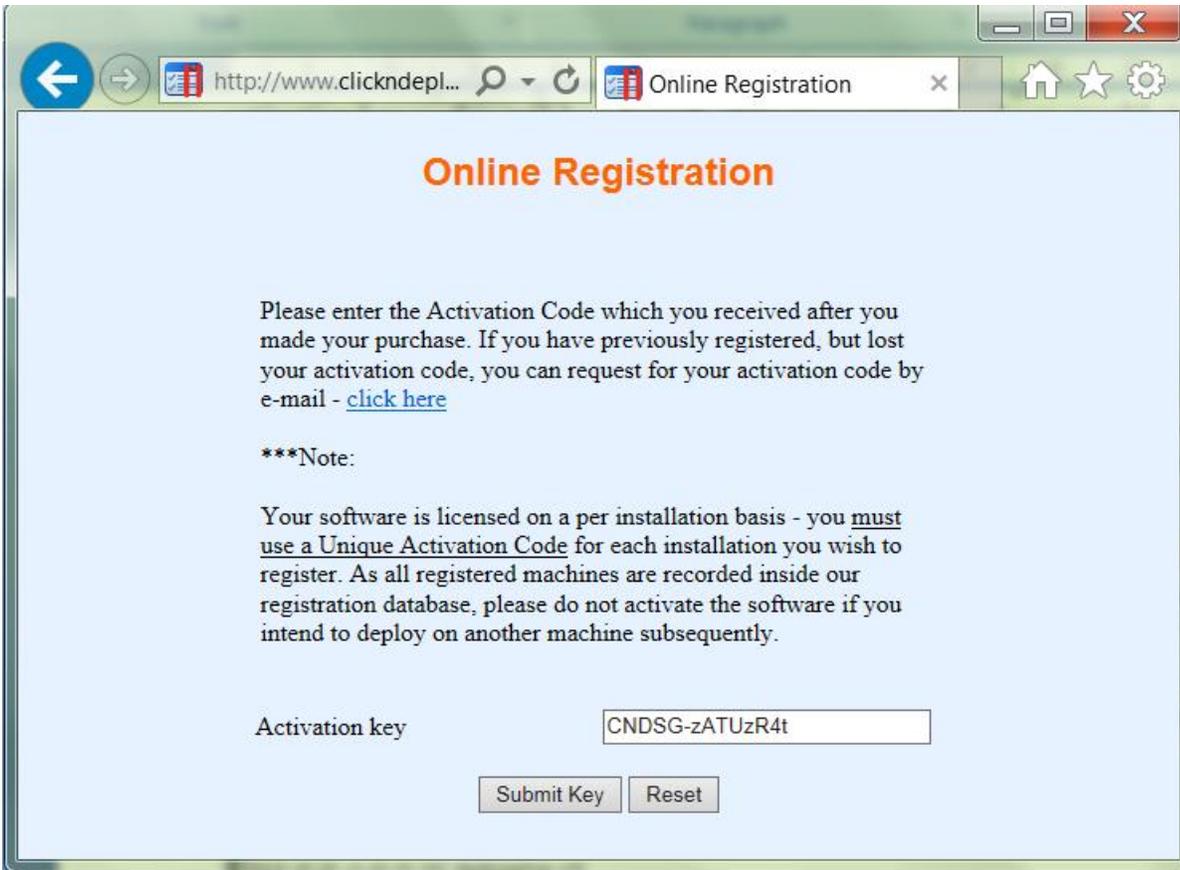
b). Register via Internet

After clicking "Register via Internet", enter your license Activation Code, e.g. "CNDSG-zATUzR4t".

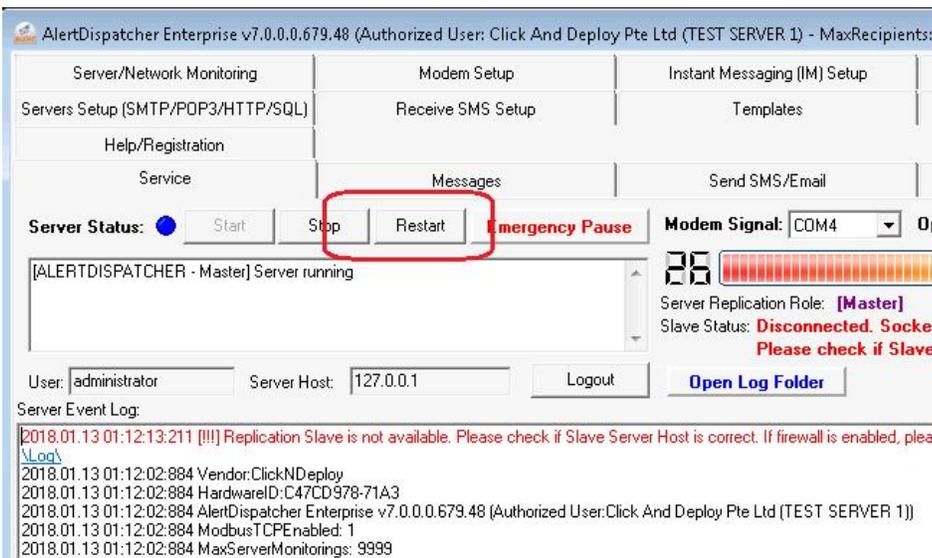
Note: If you do not have Internet access on your AlertDispatcher PC, you can copy the browser link generated on AlertDispatcher PC to a laptop or office PC with Internet access to continue with the registration. Please do not attempt to install AlertDispatcher on your laptop and try to perform the activation as the key won't work on the actual PC.

You can find the Activation Code on your CDROM or the Email sent to you after you have made your order. If you do not have this code, please contact your software vendor. The software code will be sent to you by Email. Please check your spam folder if you cannot find your activation Email.

The Activation Code is unique to your machine; please do not use it to register multiple machines as it may cause the Activation Code to be voided.



After you have applied downloaded the registration key (for case of Internet registration), please restart AlertDispatcher Service to confirm that your software has been registered.



Upon successful activation, the "Evaluation - Trial Day Left" should be replaced by "Authorized User" as shown below.

AlertDispatcher Enterprise v7.0.0.0.679.48 (Authorized User: Click And Deploy Pte Ltd (TEST SERVER 1) - MaxRecipients: 1000, MaxServerMonitorings: 9999, Modbus TCP: Enabl...

Server/Network Monitoring Modem Setup Instant Messaging (IM) Setup System Setup

Servers Setup (SMTP/POP3/HTTP/SQL) Receive SMS Setup Templates Users and Departments

Help/Registration

Service Messages Send SMS/Email Addressbook

Server Status: Start Stop Restart Modem Signal: COM4 Operator: singtel (HSPA 3.5G)

[ALERTDISPATCHER - Master] Server running

26

Server Replication Role: **[Master]**
Slave Status: **Disconnected. SocketError: 10060. Connection ti**
Please check if Slave Server Host is correct. If fi

User: administrator Server Host: 127.0.0.1

Server Event Log:

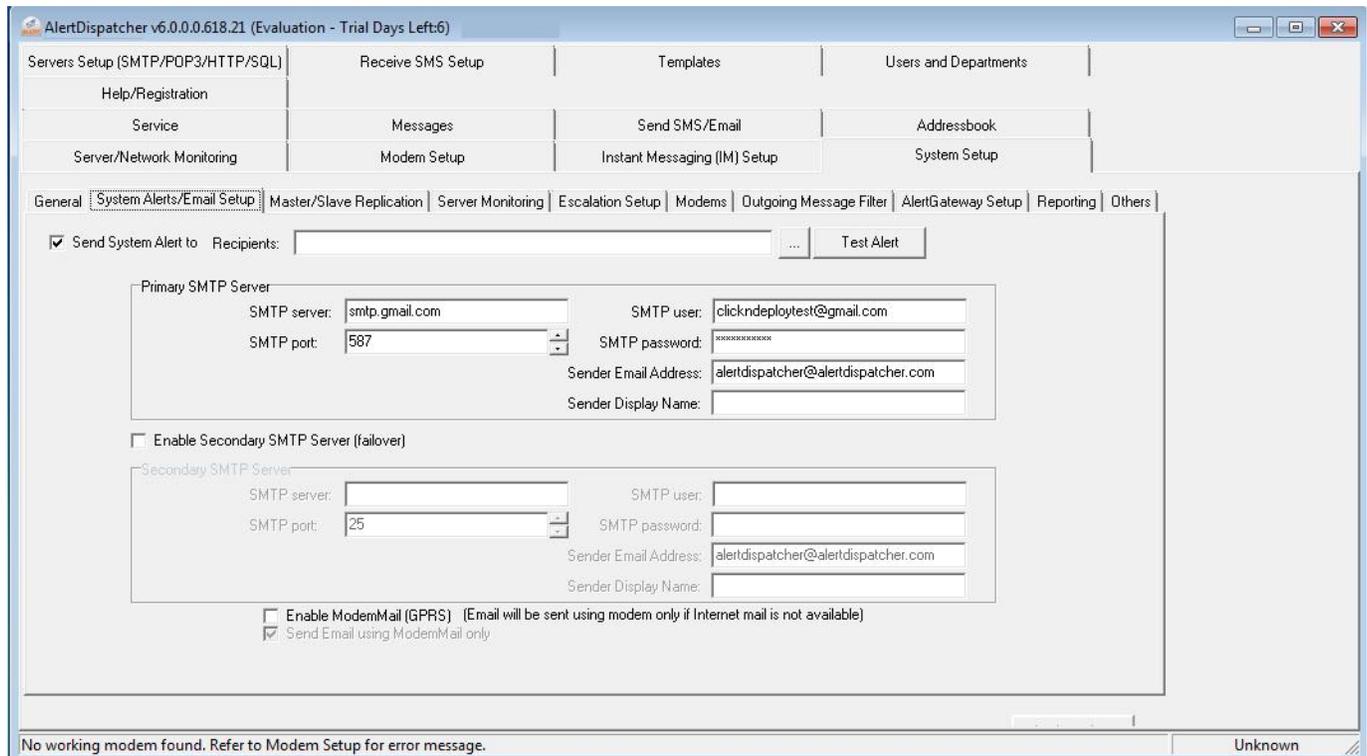
```
2018.01.13 01:12:02:884 Vendor:ClickNDDeploy
2018.01.13 01:12:02:884 HardwareID:C47CD979-71A3
2018.01.13 01:12:02:884 AlertDispatcher Enterprise v7.0.0.0.679.48 (Authorized User:Click And Deploy Pte Ltd (TEST SERVER 1))
2018.01.13 01:12:02:884 ModbusTCPEabled: 1
2018.01.13 01:12:02:884 MaxServerMonitorings: 9999
2018.01.13 01:12:02:884 LicenseExpiry: 0
2018.01.13 01:12:02:884 MaxEmergencyRecipients:1000
2018.01.13 01:12:02:884 MaxModemNum:4
2018.01.13 01:12:02:884 VendorEmail:
2018.01.13 01:12:02:884 Vendor:ClickNDDeploy
2018.01.13 01:12:02:884 RegisteredName:Click And Deploy Pte Ltd (TEST SERVER 1)
2018.01.13 01:12:02:634 Activation: Created bin.key.
2018.01.13 01:12:02:618 Activation: Received registration key!
2018.01.13 01:07:23:070 AlertDispatcher Service Started! Modems initialized successfully - COM4 (Network Operator:singtel, Signal Strength: 26)
2018.01.13 01:07:19:999 Modem Firmware:7.52.0.201404040850.sl8082t 1790532 040414 08:50
2018.01.13 01:07:19:999 Modem Model:sl8082t product
2018.01.13 01:07:14:953 [thread:5820] Database recovered
2018.01.13 01:07:14:885 [thread:5820] Available SystemRAM: 6.608.456 KB
```

[ALERTDISPATCHER - Master] Server running 26(Good)

2). How to setup AlertDispatcher to send Email/Alert Emails

In order for AlertDispatcher to send out Emails, you must configure the Primary SMTP Server under “*System Alerts/Email Setup*”.

AlertDispatcher can be configured to send a system alert message (Email/SMS) on encountering a modem or system error. You can configure the system alert recipient under “*Send System Alert to:*”. This is highly recommended if you are using AlertDispatcher for a critical purpose.



a). Configure Primary SMTP Server and credentials and Gmail SMTP example

Obtain the following SMTP Server settings from your company email administrator and ensure the firewalls are opened for the SMTP Server port and AlertDispatcher Server IP address. Note that username and password is not always required.

1. SMTP Server address (IP address or hostname).
2. SMTP Server port, e.g. port 25.
3. SMTP username (if authentication is required).
4. SMTP password (if authentication is required).
5. Sender Email address (required for some email servers).

Click "Test Alert" to test send an email and check the Messages tab for the MessageStatus.

General | System Alerts/Email Setup | Master/Slave Replication | Server Monitoring | Escalation Setup | Modems | Outgoing Message Filter | AlertGateway Setup | Reporting

Send System Alert to Recipients: [] [Test Alert]

Primary SMTP Server

SMTP server: smtp.gmail.com SMTP user: clickndeploytest@gmail.com

SMTP port: 587 SMTP password: []

Sender Email Address: alertdispatcher@alertdispatcher.com

Sender Display Name: []

Note:

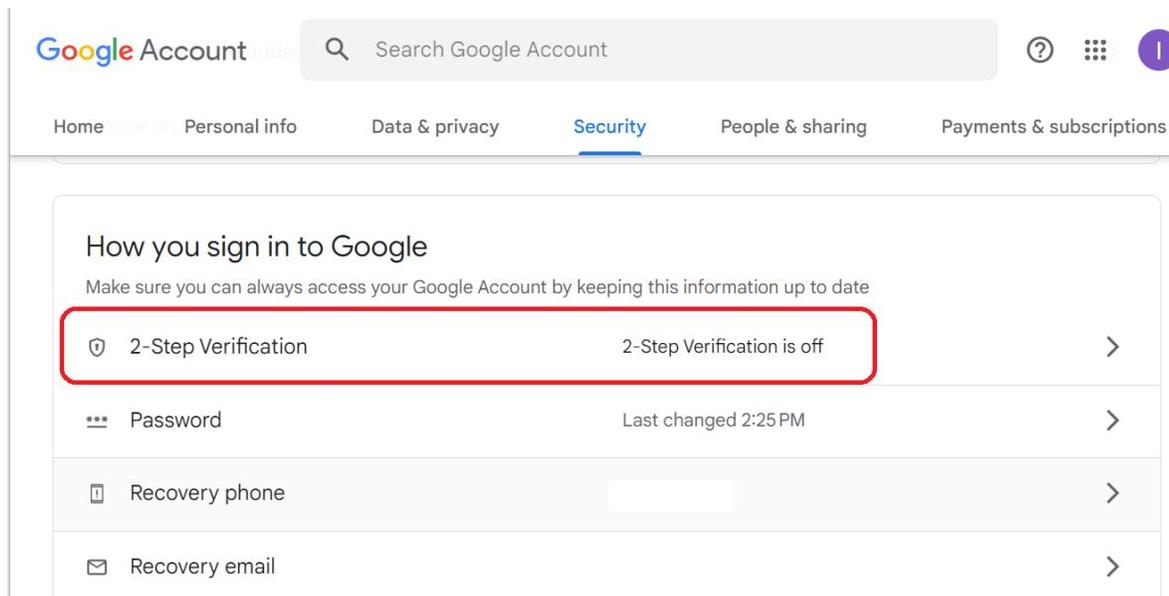
1). As far as possible, do not use your email account or an existing email account just in case you need to change your password in the future, and forget to update the password set on AlertDispatcher. Create a new email account, e.g. alertdispatcher@yourcompanydomain.

2). If you do not have a company email or SMTP Server, you can use your ISP SMTP Server or register a free GMAIL account (GMAIL SMTP Server uses port 587 instead of the standard port 25). Take note that GMAIL has a daily send limit of 2000 emails a day.

In order to enable SMTP access from your setup, you must also login to your GMAIL account on the same workstation you installed AlertDispatcher and perform the following steps:

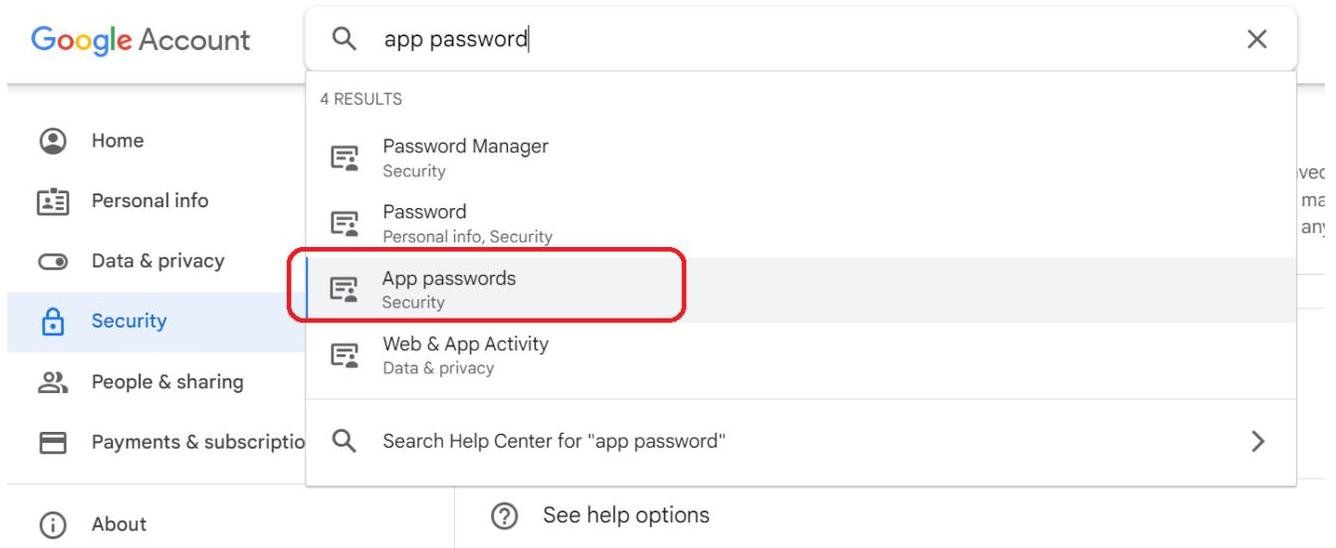
1. Enable 2-Step Verification.

After you have created the Gmail account, go to Google account, Security and enable 2-Step Verification. This is needed to be able to setup an App password that you can use to send emails from AlertDispatcher.

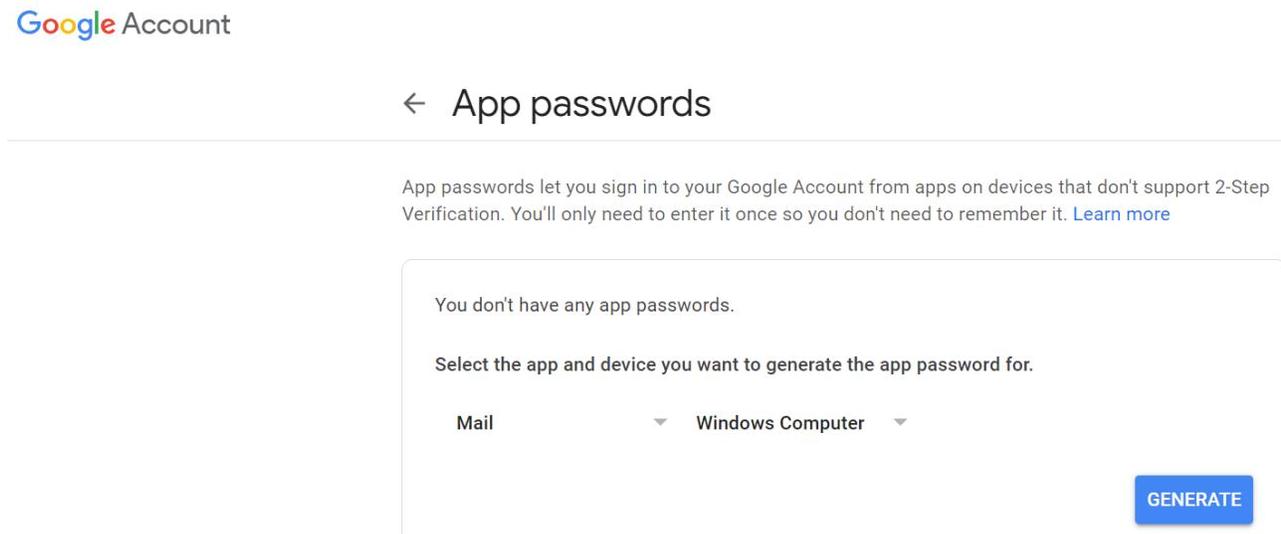


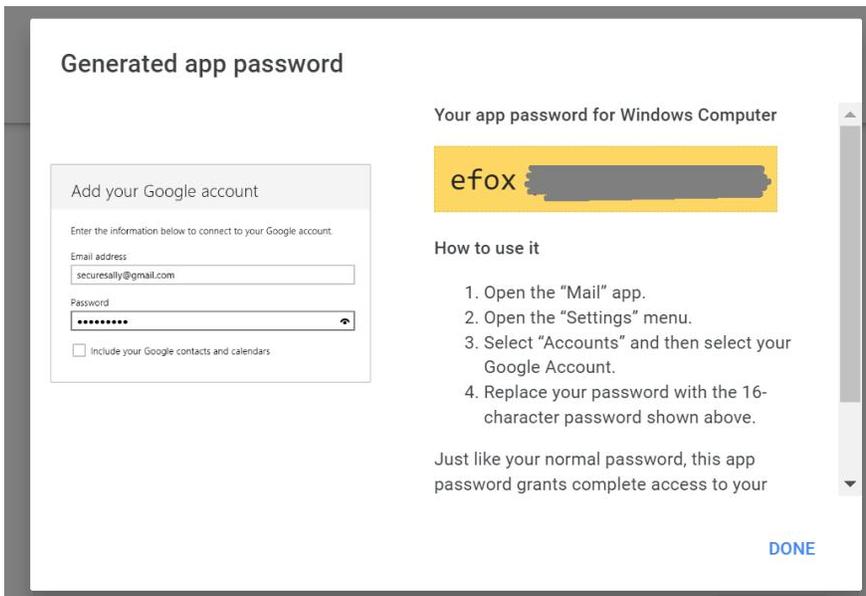
2. Generate App password

Search for App passwords.



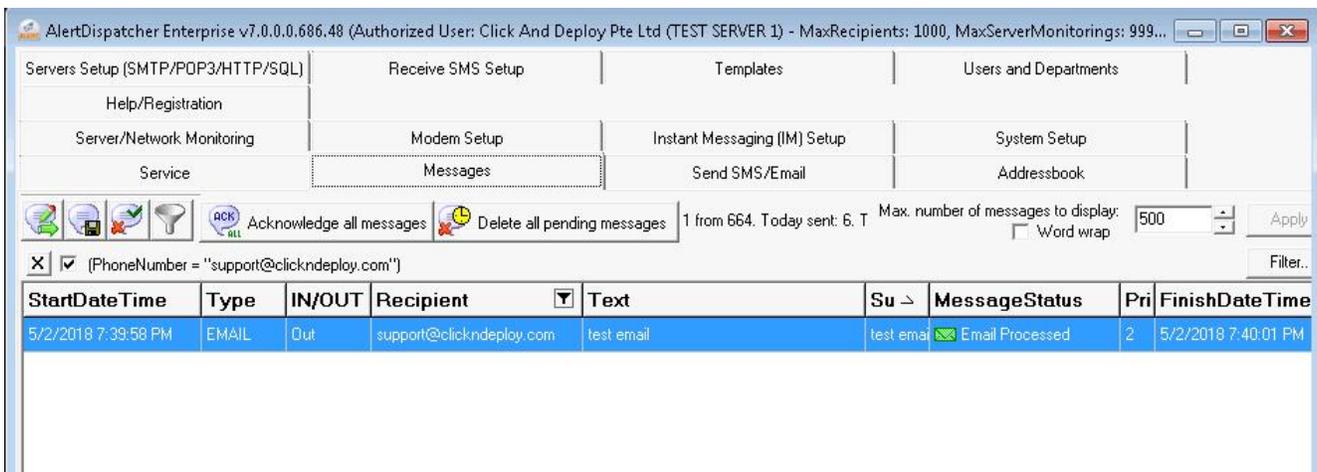
Generate App password.



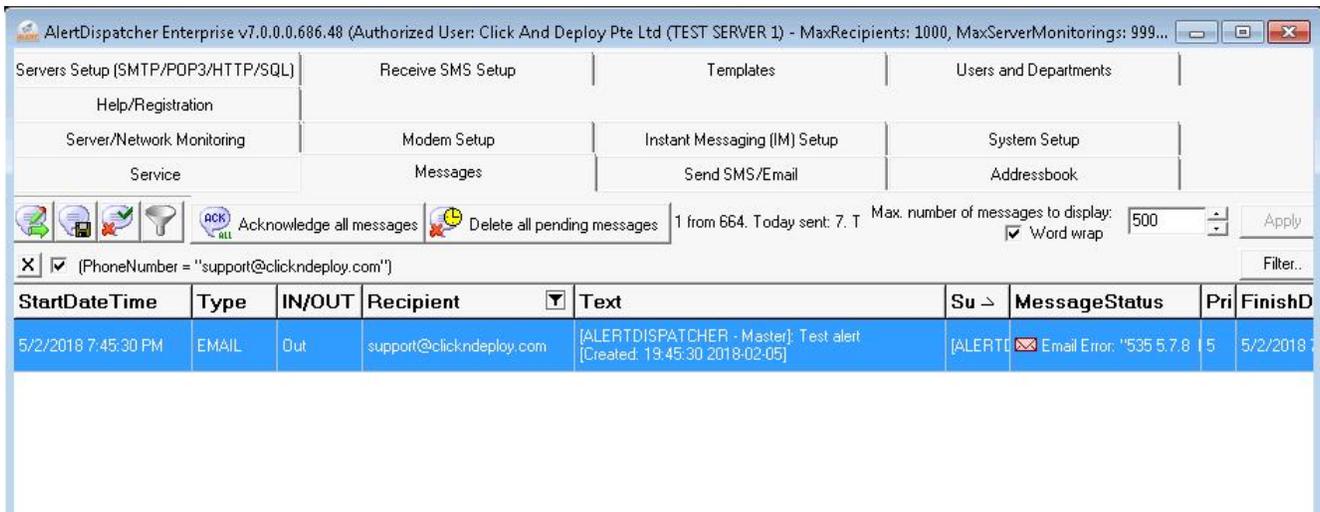


This app password will be your SMTP password (instead of your Gmail password).

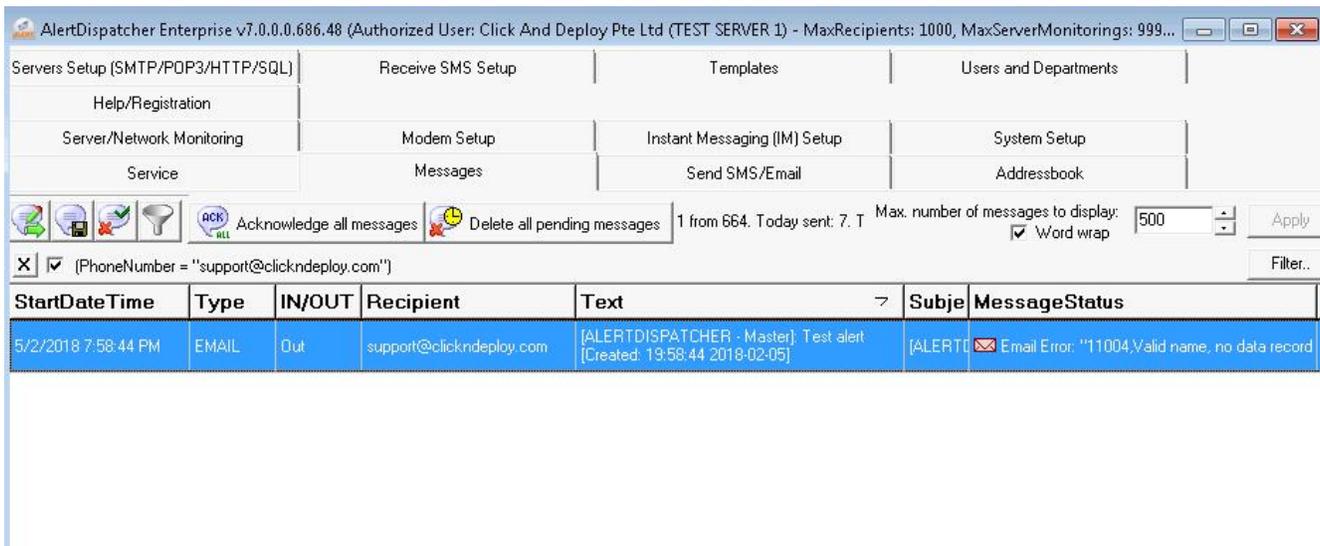
The following screen shows a successful test.



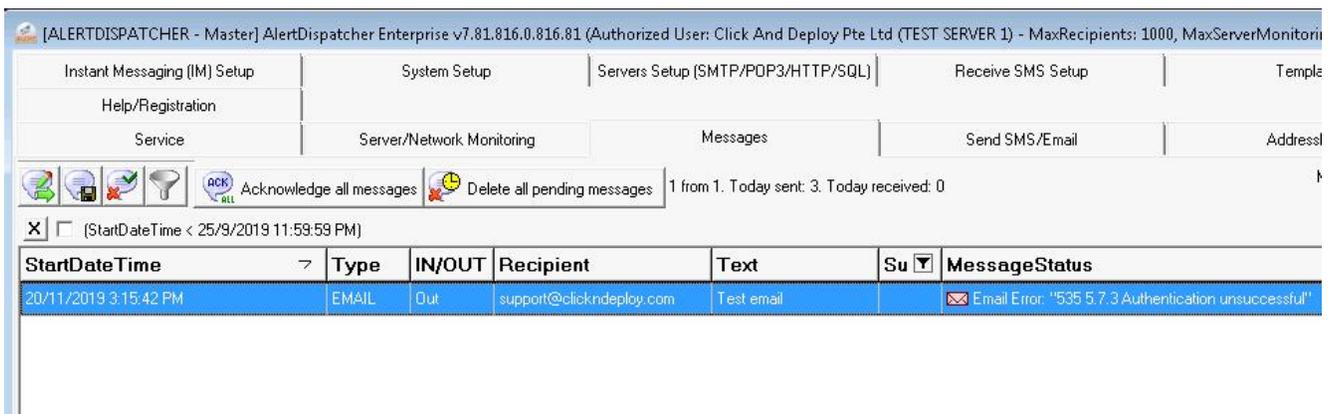
If the SMTP Server setup is not correctly configured or if your AlertDispatcher hasn't been authorized to send email to the SMTP Server, the error will be shown under MessageStatus column. Please show this error to your company email server administrator.



Error: "11004,Valid name, no data record of requested type" is a socket error, and indicates that AlertDispatcher is unable to connect to the SMTP Server. Please check if the configured Primary SMTP Server and Port are correct, and there is no firewall blocking the connection.



If the SMTP Server is configured correctly and there is network connectivity but the email is still being rejected by the SMTP Server, you might receive the following error:

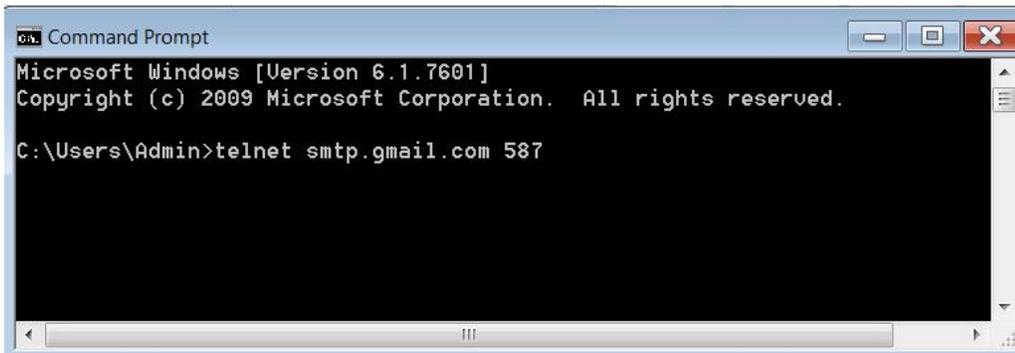


Please check EmailSenderSMTPDebug.log - refer to [5\). How to Retrieve Logs for Troubleshooting](#)

b). How to verify your SMTP Server credentials using Windows Telnet Client and Blat.

You can use Windows Telnet Client to check network connectivity and open port access to the SMTP Server. To determine if your SMTP Server credentials are correct, you will need to use an SMTP client such as Blat - Blat is a free command-line based SMTP client.

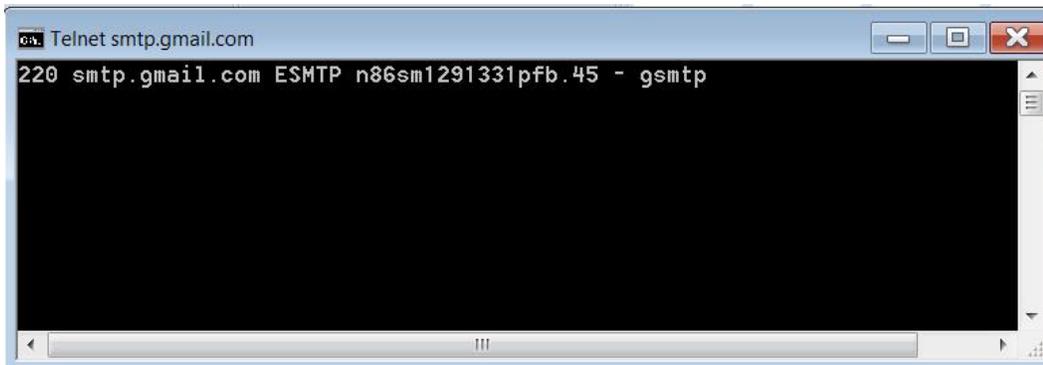
On your AlertDispatcher installation, launch Telnet client to verify that you are able to connect to the SMTP Server. The following example tries to connect to GMAIL SMTP Server at port 587. Note: Your corporate email server may use port 25 instead,



```
Command Prompt
Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.

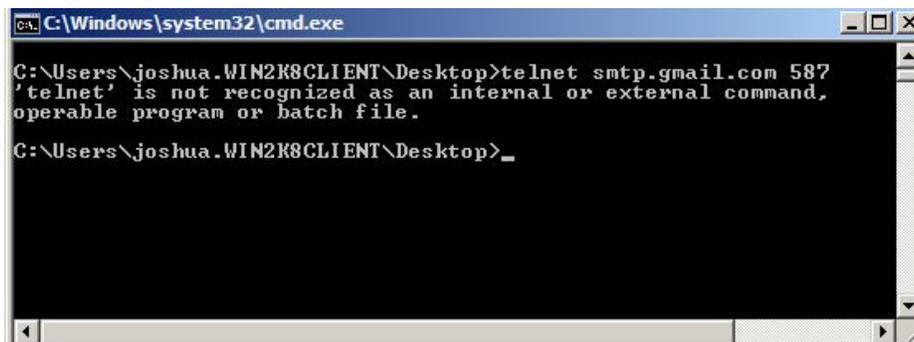
C:\Users\Admin>telnet smtp.gmail.com 587
```

On successful connection, it will return the code "220".



```
Telnet smtp.gmail.com
220 smtp.gmail.com ESMTP n86sm1291331pfb.45 - gsmtp
```

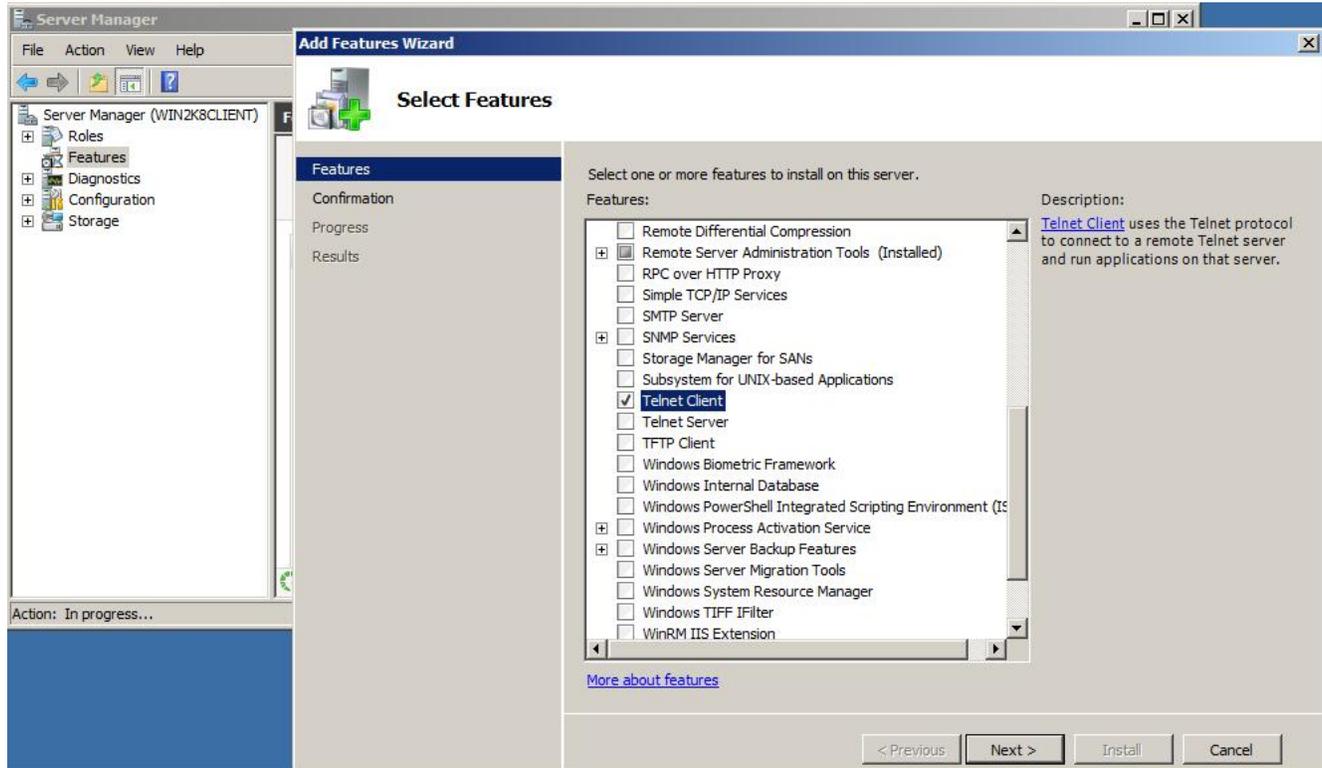
If you're getting the error "'telnet' is not recognized as an internal or external command", this means Telnet Client is not installed on your Windows machine.



```
C:\Windows\system32\cmd.exe
C:\Users\joshua.WIN2K8CLIENT\Desktop>telnet smtp.gmail.com 587
'telnet' is not recognized as an internal or external command,
operable program or batch file.

C:\Users\joshua.WIN2K8CLIENT\Desktop>_
```

To install Telnet Client, go to *Windows Control panel -> Programs and Features -> Turn Windows features on or off -> Server Manager -> Features -> Add Feature*, and then add Telnet Client.



If Telnet works, but you're still not able to send email successfully, you can test using the free command line SMTP client Blat which you can download from <http://www.clickndeploy.com/downloads/blat-smtp.zip>.

For testing with SMTP Server without authentication:

```
blat -server {smtp-server-hostname} -port {smtp-port} -t {to-recipient} -f {sender-email} -subject {email-subject} -body {email-body}
```

Example:

```
blat -server localhost -port 25 -t 12345@clickndeploy.com -f test@clickndeploy.com -subject "test subject" -body "test body"
```

```

C:\> Command Prompt
D:\Data\ClickAndDeploy\Testing Tools\smtp\blat262.full\blat-smtp>blat -server localhost -port 25 -t 12345@clickndeploy.com -f test@clickndeploy.com -subject "test subject" -body "test body"
Blat v2.6.2 w/GSS encryption (build : Feb 25 2007 12:06:19)

Sending stdin.txt to 12345@clickndeploy.com
Subject: test subject
Login name is test@clickndeploy.com

D:\Data\ClickAndDeploy\Testing Tools\smtp\blat262.full\blat-smtp>

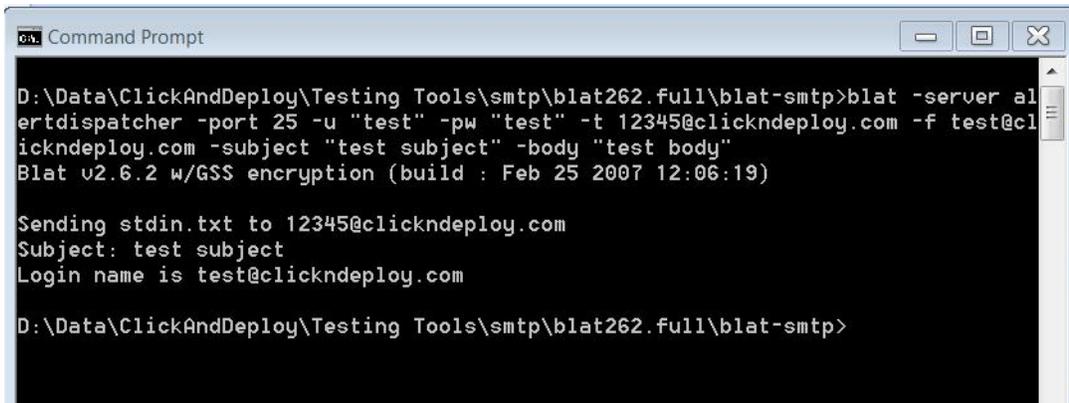
```

For testing with SMTP Server with authentication:

```
blat -server {smtp-server-hostname} -port {smtp-port} -u {username} -pw {password} -t {to-recipient} -f {sender-email} -subject {email-subject} -body {email-body}
```

Example:

```
blat -server localhost -port 25 -u "test" -pw "test" -t 12345@clickndeploy.com -f test@clickndeploy.com -subject "test subject" -body "test body"
```

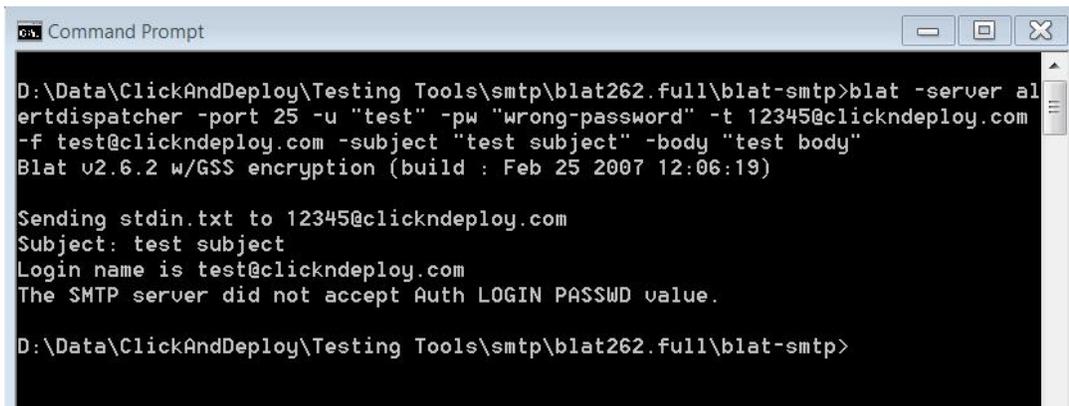


```
Command Prompt
D:\Data\ClickAndDeploy\Testing Tools\smtp\blat262.full\blat-smtp>blat -server al
ertdispatcher -port 25 -u "test" -pw "test" -t 12345@clickndeploy.com -f test@cl
ickndeploy.com -subject "test subject" -body "test body"
Blat v2.6.2 w/GSS encryption (build : Feb 25 2007 12:06:19)

Sending stdin.txt to 12345@clickndeploy.com
Subject: test subject
Login name is test@clickndeploy.com

D:\Data\ClickAndDeploy\Testing Tools\smtp\blat262.full\blat-smtp>
```

If password is wrong:



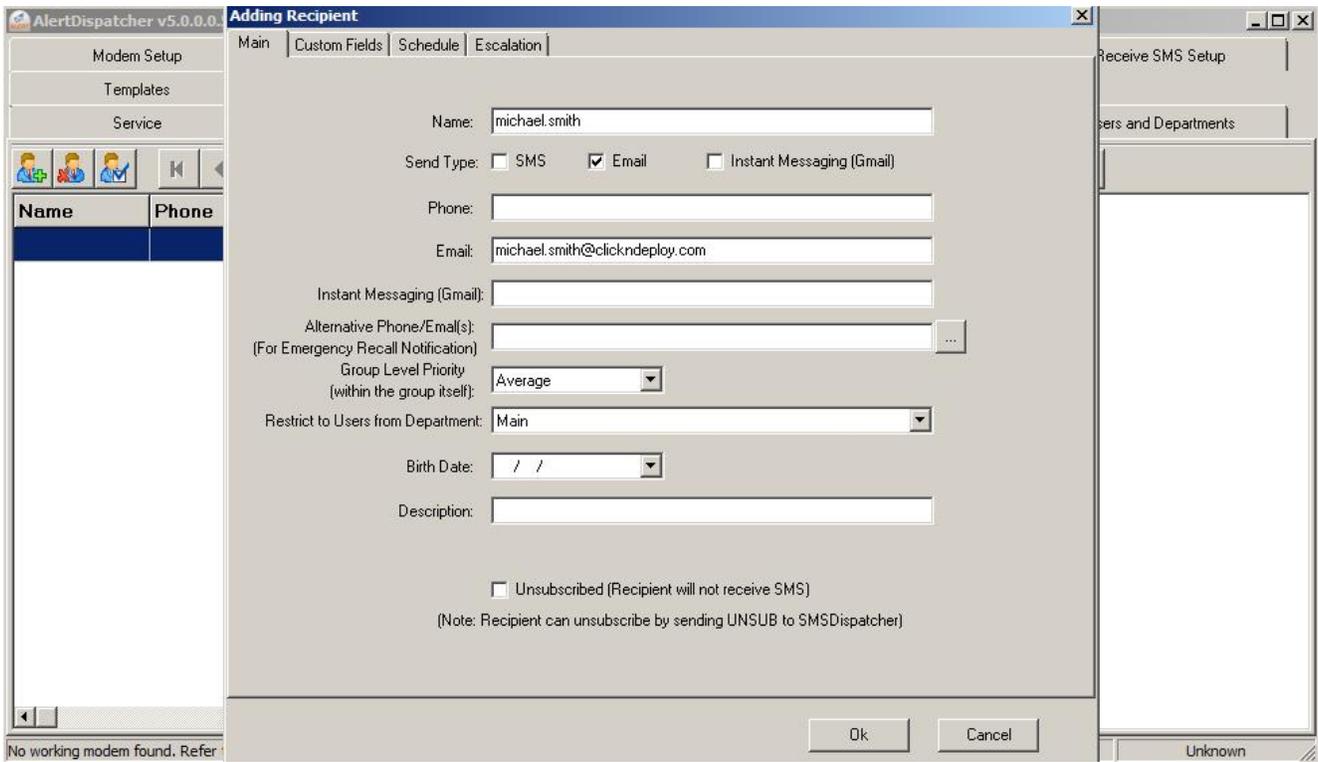
```
Command Prompt
D:\Data\ClickAndDeploy\Testing Tools\smtp\blat262.full\blat-smtp>blat -server al
ertdispatcher -port 25 -u "test" -pw "wrong-password" -t 12345@clickndeploy.com
-f test@clickndeploy.com -subject "test subject" -body "test body"
Blat v2.6.2 w/GSS encryption (build : Feb 25 2007 12:06:19)

Sending stdin.txt to 12345@clickndeploy.com
Subject: test subject
Login name is test@clickndeploy.com
The SMTP server did not accept Auth LOGIN PASSWD value.

D:\Data\ClickAndDeploy\Testing Tools\smtp\blat262.full\blat-smtp>
```

c). Configure email recipients in the Addressbook

To send email through the Addressbook, you can add the recipient email address as shown below.



3). How to setup AlertDispatcher High Availability (Master/Slave Cluster Redundancy)

If you are using the Enterprise License, you can setup Master/Slave cluster redundancy on AlertDispatcher installations using 2 different "*Operation Modes*", a). *Active Master/Active Slave* (default), b). *Active Master/Passive Slave*.

Note: For both operation modes, changes to Users, Addressbook, Template, System Alert Recipient and Daily Heartbeat setting can only be done on the Master node and will be replicated to the Slave node. Refer to

When configured as "*Active Master/Active Slave cluster*" (the default setting), both Master and Slave nodes will process messages sent to them concurrently (by interfacing application) and act as backup for each other (2-way message replication) in the event of failover of either node. To ensure that there is no duplicate messages, the interfacing application should only send to one node at any one time and be able to enact a failover to the other node.

When configured as "*Active Master/Passive Slave cluster*", messages sent by the interfacing application to the Slave node will be ignored until the Master node is offline. If the interfacing application can send the same message to both nodes, this setup confers an additional level of high availability. The message sent to Slave node (passive) will be ignored as long as the Master node is online. In the event of failure of the Active Master, the message sent to the Passive Slave node will be processed and sent out.

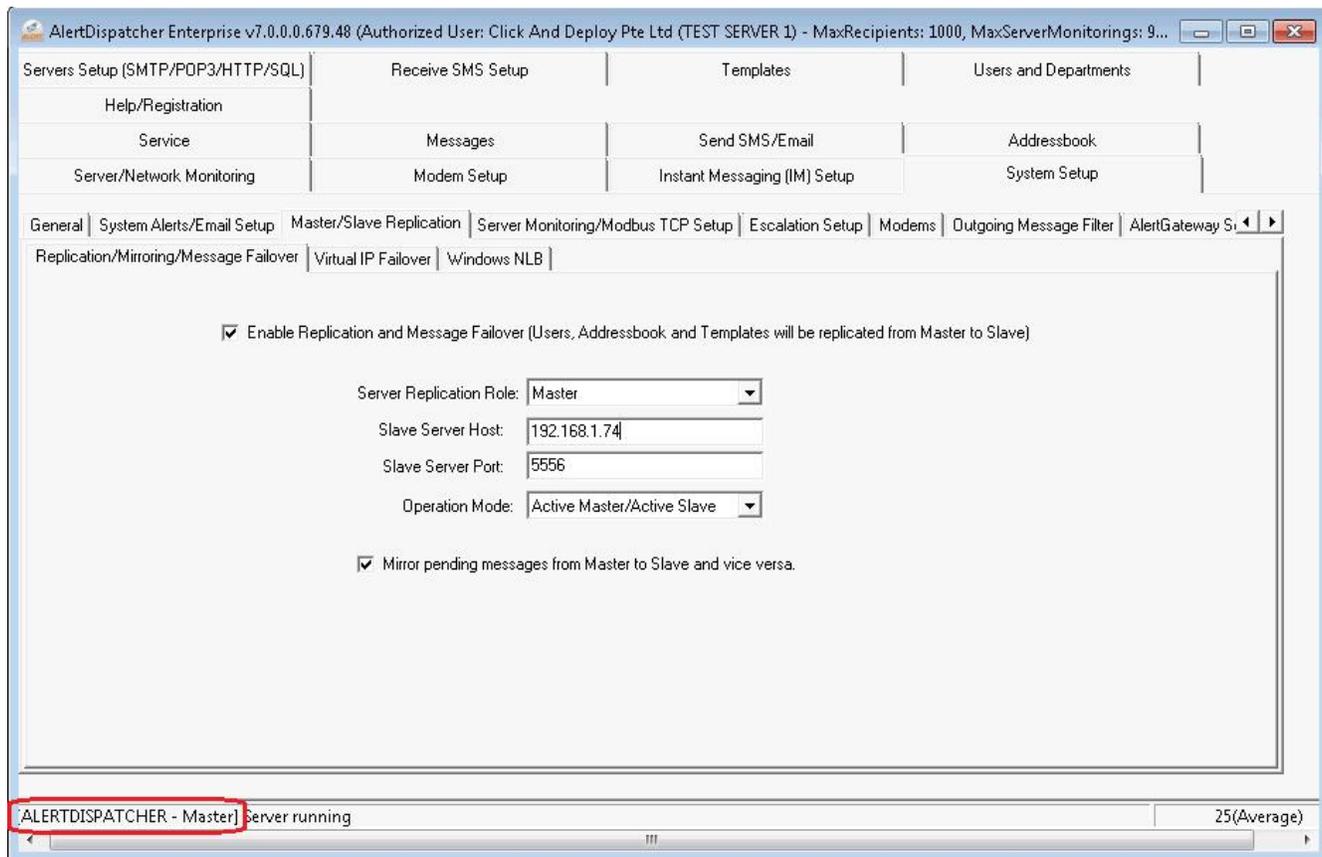
a). Active Master/Active Slave Operation Mode

To configure your AlertDispatcher as Active Master/Active Slave, first enable the setting *"Enable Replication and Message Failover (Users, Addressbook and Templates will be replicated from Master to Slave)"* to enable automatic message failover (both ways) across the Master and the Slave node.

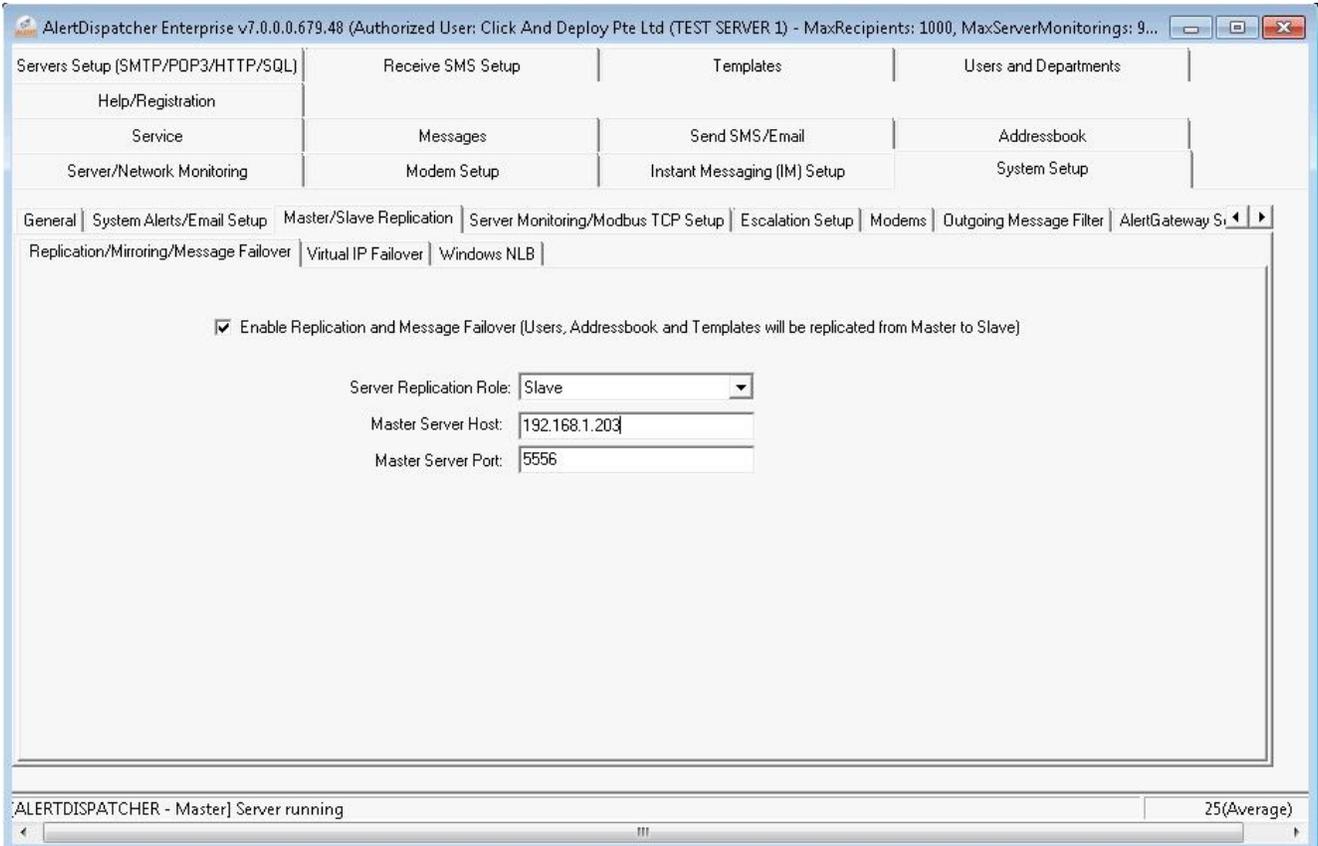
The *"Enable Replication and Message Failover"* setting does not ensure message persistency, so messages already queued on a node that failed will be lost. To ensure message persistency, you need to enable an additional setting *"Mirror pending messages from Master to Slave and vice versa"*. This setting provides additional high availability by replicating messages queued on either Slave or Master node on the other node. If a particular node fails or crashes, pending messages that are in queue in the failed node will be sent using the other node automatically. This is possible because all queued messages will be replicated on the other node.

Note: Firewall may prevent Master and Server from connecting to each other so if you have firewall enabled on either or both servers, please add firewall rule to "allow" AlertDispatcher TCP port 5556. Refer to [Appendix A - How to Add \(allow\) server ports to Firewall](#).

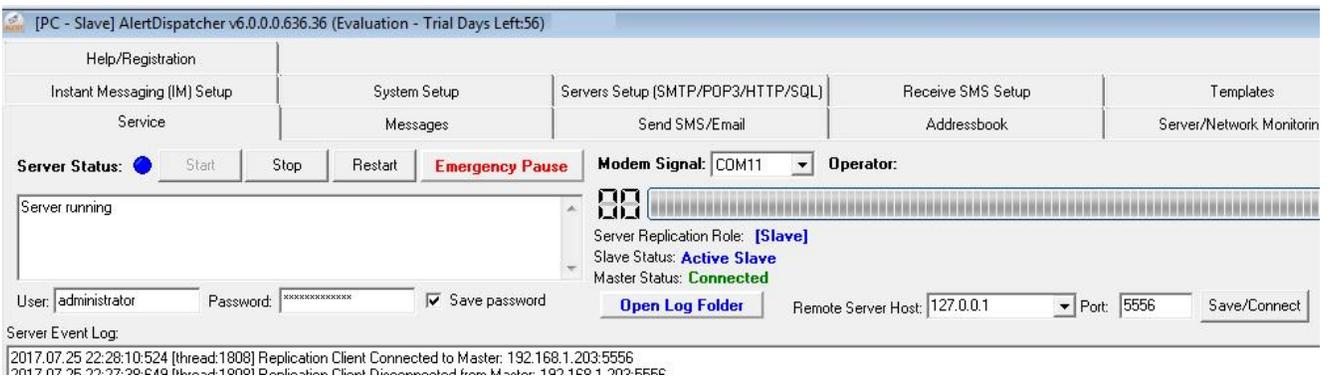
In the following example, the Active Master node IP address is 192.168.1.203 and the Active Slave node IP address is 192.168.1.74.

Active Master Node:

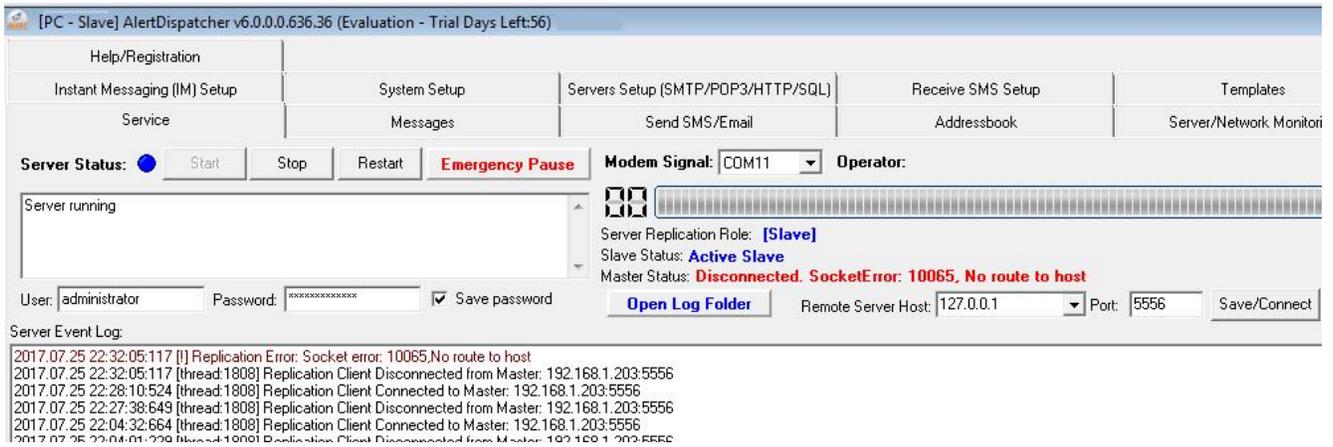
Active Slave Node:



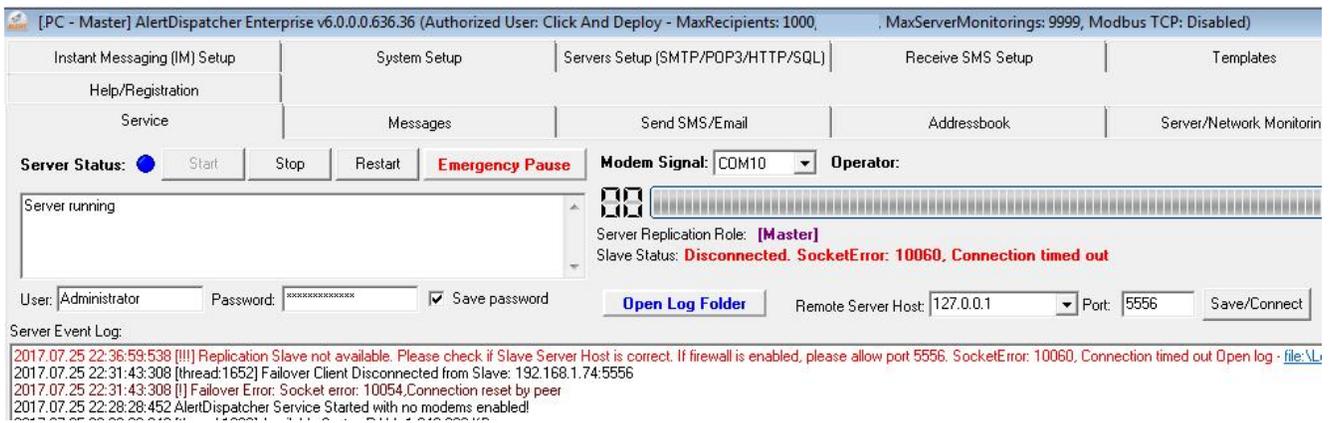
The connection status to the Active Master is displayed on the Active Slave. The following screen shows Active Slave as connected to the Active Master.



The following shows Active Slave as disconnected from the Active Master.



The disconnected status is also displayed on the Active Master.



b). Active Master/Passive Slave Operation Mode

To configure your AlertDispatcher as Active Master/Passive Slave, first enable the setting *"Enable Replication and Message Failover (Users, Addressbook and Templates will be replicated from Master to Slave)"* to enable automatic message failover (both ways) across the Master and the Slave node.

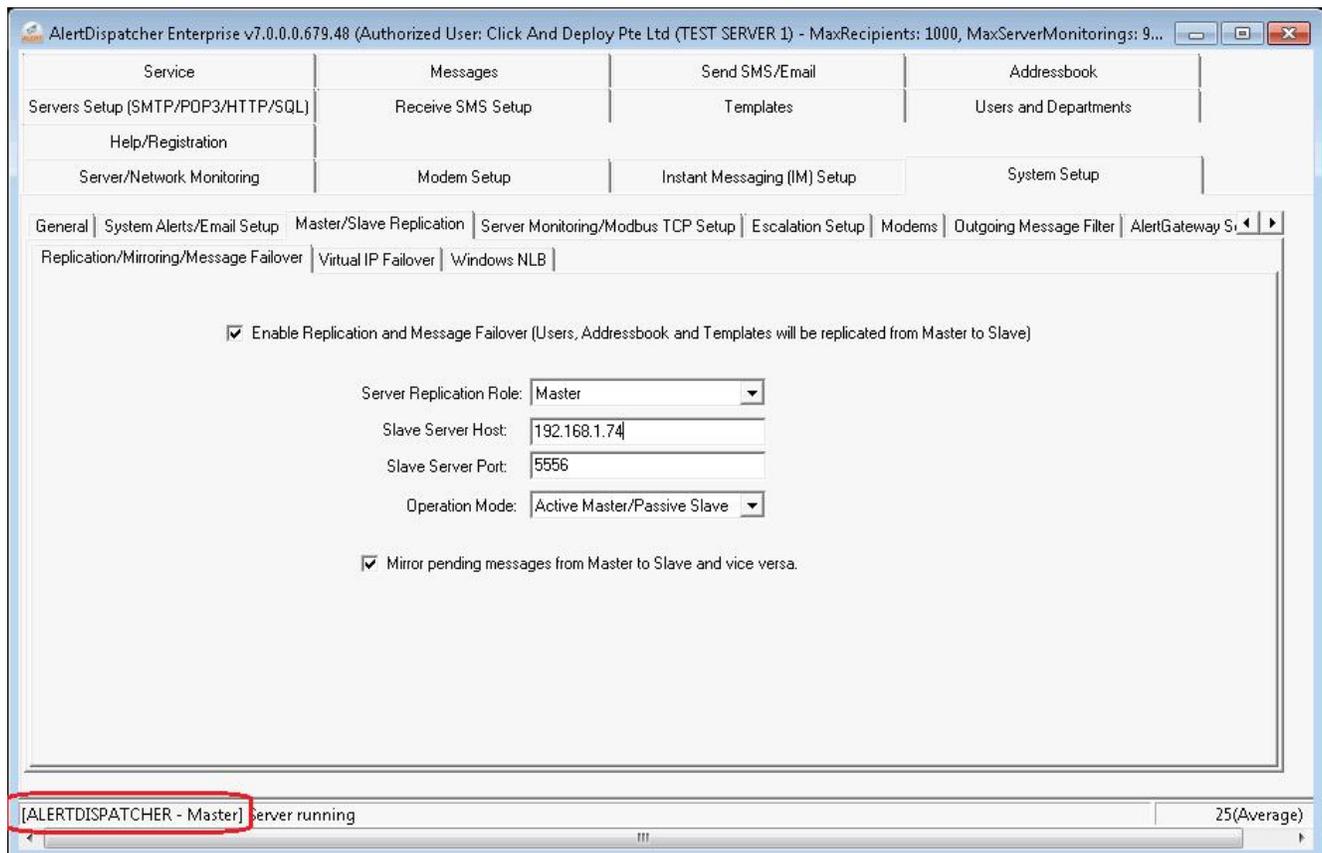
The *"Enable Replication and Message Failover"* setting does not ensure message persistency, so messages already queued on a node that failed will be lost. To ensure message persistency, you need to enable an additional setting *"Mirror pending messages from Master to Slave and vice versa"*.

This setting provides additional high availability by replicating messages queued on either Slave or Master node on the other node. If a particular node fails or crashes, pending messages that are in queue in the failed node will be sent using the other node automatically. This is possible because all queued messages will be replicated on the other node.

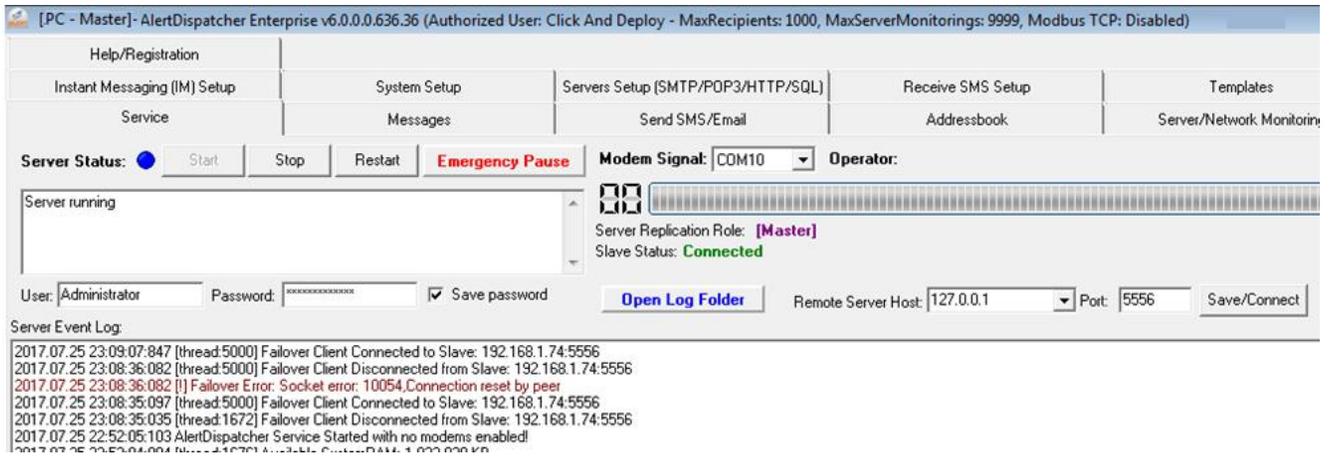
Note: Firewall may prevent Master and Server from connecting to each other so if you have firewall enabled on either or both servers, please add firewall rule to "allow" AlertDispatcher TCP port 5556. Refer to [Appendix A - How to Add \(allow\) server ports to Firewall](#).

In the following example, the Active Master node IP address is 192.168.1.203 and the Passive Slave node IP address is 192.168.1.74.

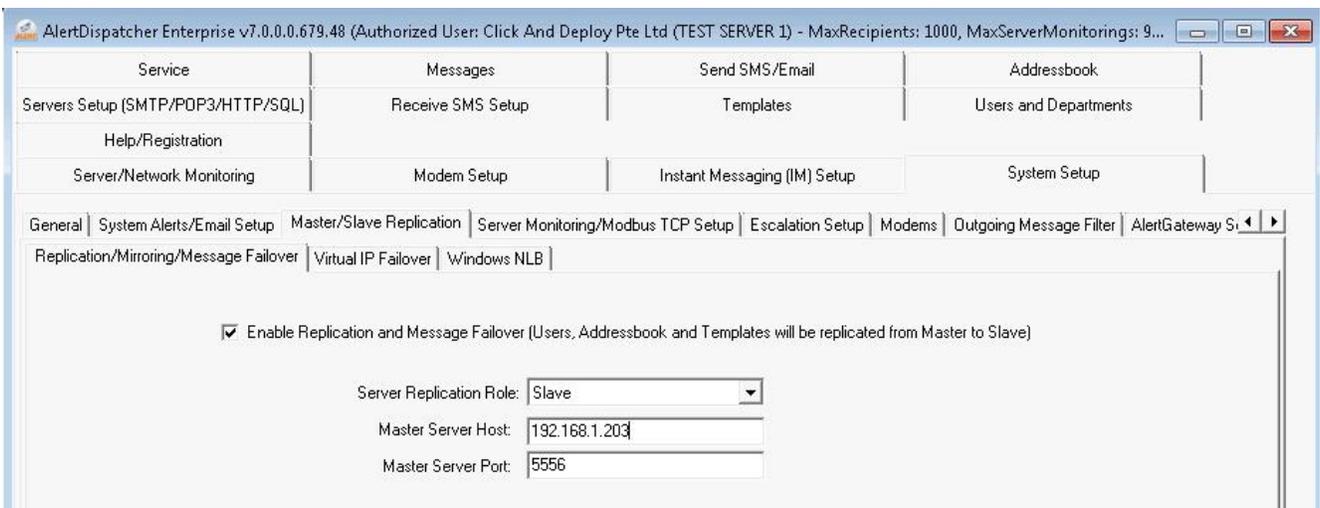
Active Master Node:



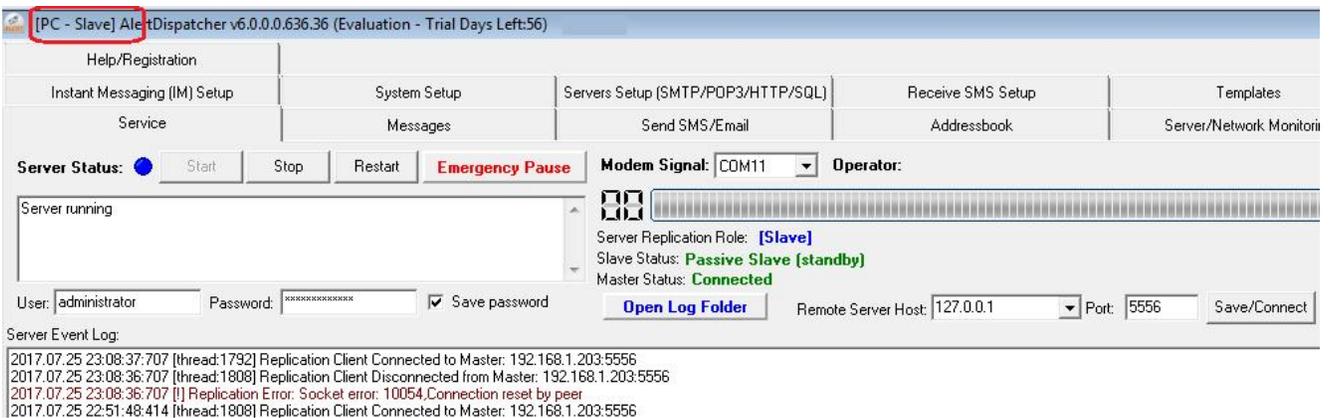
In the following screen, the Active Master is shown as connected to the Passive Slave.



Passive Slave Node:



In the following screen, the Passive Slave is shown as connected to the Active Master. The Passive Slave status is "Standby" which means it doesn't process any messages until the Active Master is down or becomes disconnected from the Passive Slave.



The following screen will be shown if the Passive Slave is disconnected from the Active Master. The Passive Slave status will then change to "failover" which means all messages sent to it will be processed.

[PC - Slave] AlertDispatcher v6.0.0.0.636.36 (Evaluation - Trial Days Left:56)

Instant Messaging (IM) Setup | System Setup | Servers Setup (SMTP/POP3/HTTP/SQL) | Receive SMS Setup | Templates

Help/Registration

Service | Messages | Send SMS/Email | Addressbook | Server/Network Monitoring

Server Status: Start Stop Restart **Emergency Pause** Modem Signal: COM11 Operator:

Warning: Replication Error.

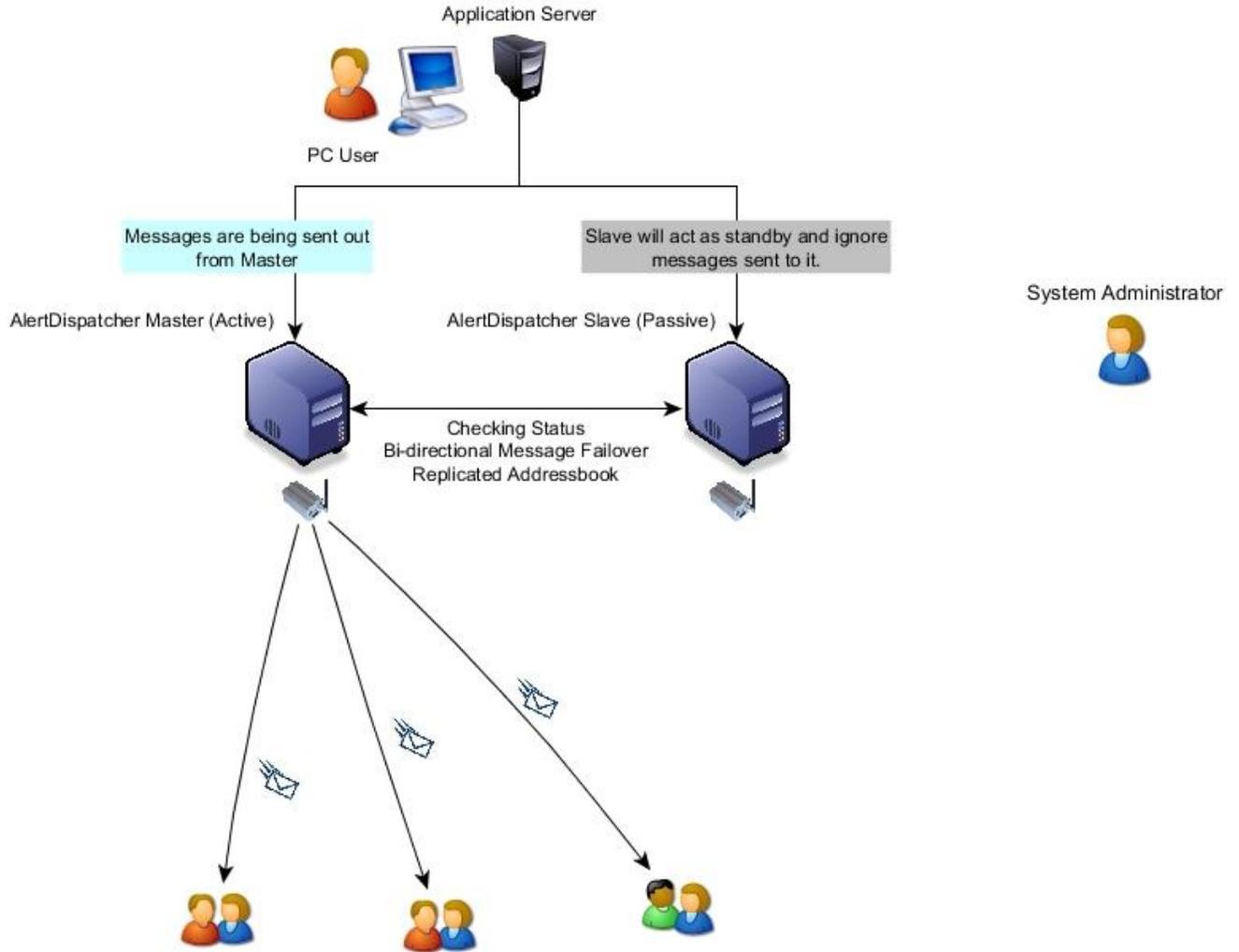
Server Replication Role: **[Slave]**
Slave Status: **Passive Slave (failover)**
Master Status: **Disconnected. SocketError: 10065, No route to host**

User: administrator Password: Save password **Open Log Folder** Remote Server Host: 127.0.0.1 Port: 5556 Save/Connect

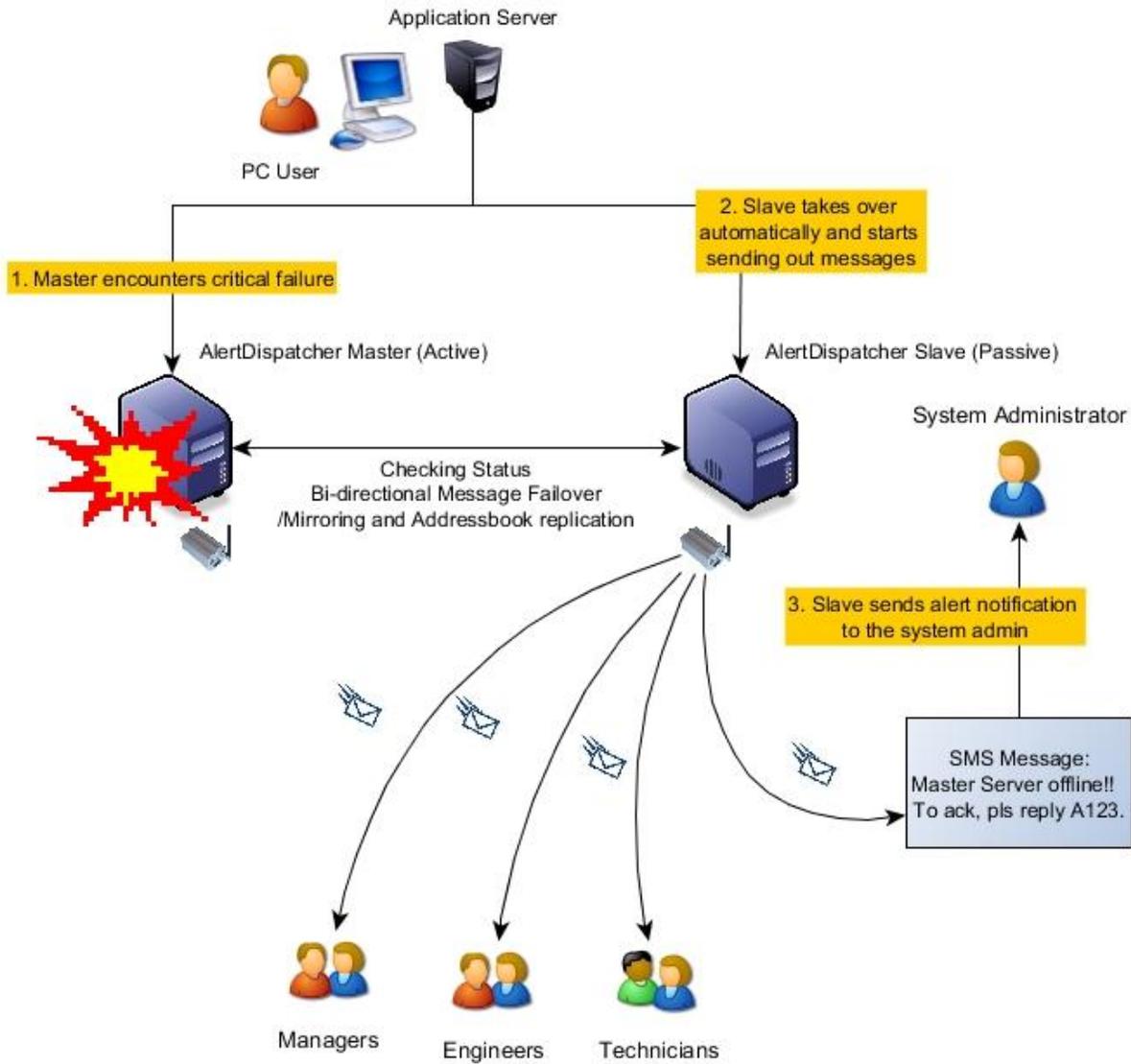
Server Event Log:

```
2017.07.25 23:25:53:606 [!!!!] Replication Master not available. Please check if Slave Server Host is correct. If firewall is enabled, please allow port 5556. SocketError: 10065, No route to host Open log - file:\Log\
2017.07.25 23:20:58:497 [!] Replication Error: Socket error: 10065, No route to host
2017.07.25 23:20:58:497 [thread:1792] Replication Client Disconnected from Master: 192.168.1.203:5556
2017.07.25 23:20:58:497 [!] Replication Error: Socket error: 10054, Connection reset by peer
2017.07.25 23:15:44:106 [thread:1792] Replication Client Connected to Master: 192.168.1.203:5556
2017.07.25 23:15:13:463 [!] Replication Error: Socket error: 10061, Connection refused
2017.07.25 23:15:13:463 [thread:1792] Replication Client Disconnected from Master: 192.168.1.203:5556
```

The following diagram shows normal operation for an Active Master/Passive Slave cluster.



Upon failure of the Active Master node, the Passive Slave takes over and starts processing messages.



4). How to configure Moxa NPort to allow AlertDispatcher to connect a modem via network

Directly connecting a modem to the server using USB or Serial cable is the most reliable way of deploying a modem, but this may not be possible for the following scenarios, 1). AlertDispatcher is installed on a virtual machine, 2). There is no network in the server room and the modem needs to be relocated to another room.

You can connect an RS232 serial modem to your computer network using a serial device server such as the Moxa NPort - https://www.moxa.com/product/NPort_5110.htm.

Due to the greater risk of failure for such a deployment as compared to a deployment in which the modem is directly connected to the server, we will recommend using 2 sets of modems and device servers for redundancy.

Tip: Before configuring the NPort device, please obtain the network configuration information (IP address/Netmask/Gateway) from your IT department, and confirm that the necessary firewall ports are all opened. As some corporate networks may not allow Broadcast search across VLANs, it's recommended that you configure the NPort network settings by connecting it to your laptop directly.

Procedure:

- 1). Connect the serial cable of your modem to the NPort device. Connect the NPort device to your switch using an RJ45 cable. Your switch must support 10/100 Mbps.
- 2). Install the latest version of Moxa NPort Administrator on your AlertDispatcher server (or VM guest instance). For convenience, you can download Moxa NPort Administrator and NPort Windows Driver Manager [from this link](#) (pls check if it's the latest version from Moxa website).

Note: If you encounter the "Fail to start Real COM driver" during installation, you'll not be able to create a virtual COM Port on Windows so you'll need to install the NPort Windows Driver Manager which will be used in step 5. You'll still be able to search and configure your NPort device using Moxa NPort Administrator.

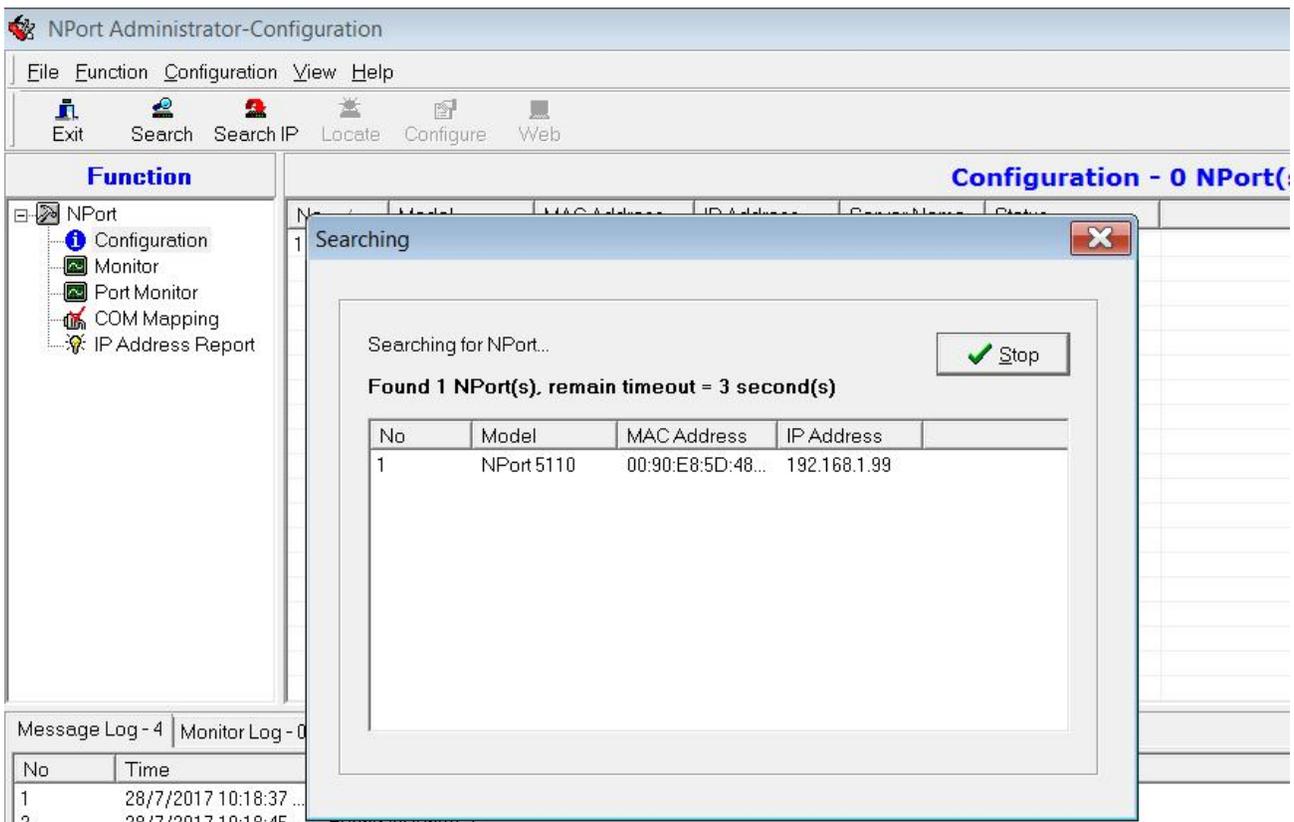
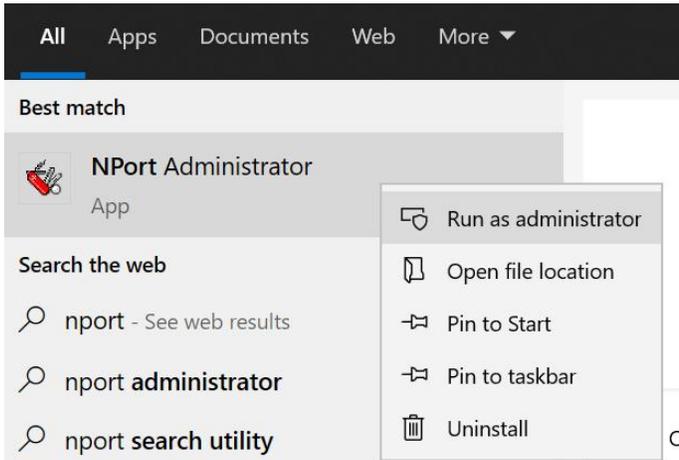


If there is a firewall between your Server and the NPort device (both Windows and Network firewall), please ensure that TCP Port 80, 950, 966 and UDP Port 4800 are open for your Moxa NPort device and assigned IP address.

[For NPort 5000 Series; NPort 5000A, NPort IA5000A, NPort P5150A, NPort W2x50, NE-4100 and MiiNePort Series] – Device Servers

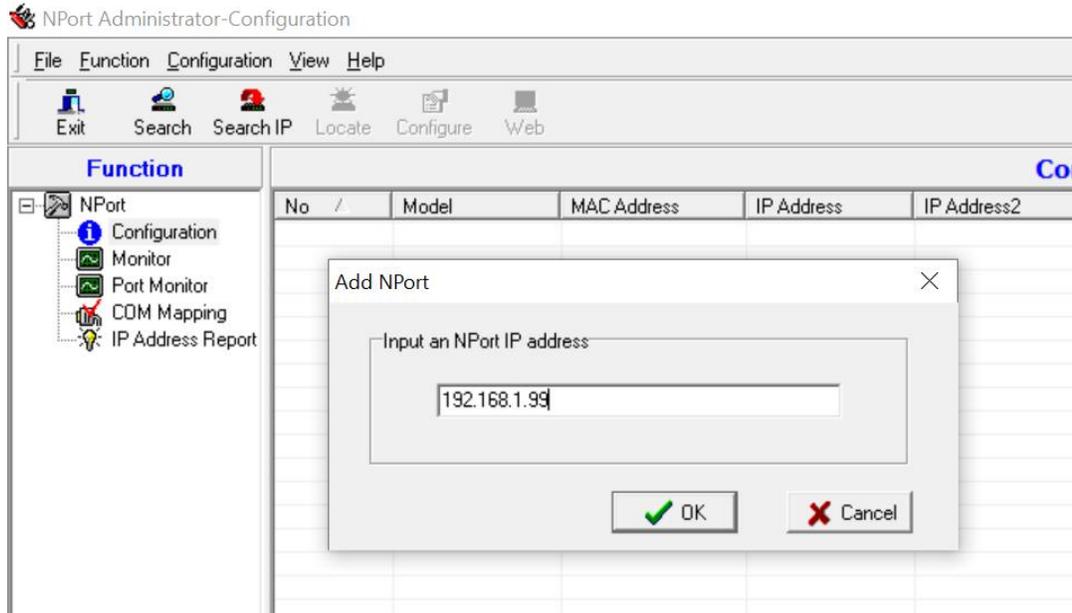
Protocol	Port No.	Purpose
TCP	80	Web Console
TCP	950(~965)	Data Port
TCP	966(~981)	Command Port
UDP	4800	Broadcast, Monitor, Get current settings, RealCOM Port mapping

3). Run NPort Administrator (**right click to run as administrator**) and click "Search". If UDP Port 4800 is open on your NPort device and the NPort is connected to the same network or VLAN, you should be able to automatically locate your modem (or modems) as shown below.

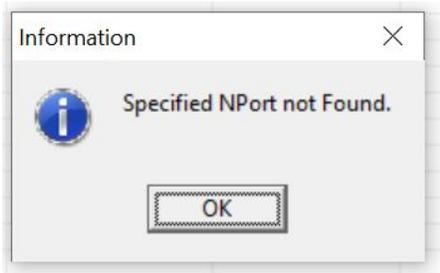


Note: If broadcast is blocked and you're unable to locate your NPort device using the "Search" button, please configure NPort network settings by connecting it to your laptop directly - if you fail to connect to the device from your laptop, please reset the NPort device to factory default using the reset button on the device.

Once this is done, reconnect the NPort device back to your network, and then click "Search IP" and enter the NPort assigned IP address.



If this fails, it means UDP Port 4800 is blocked. You'll need to install NPort Windows Driver Manager to manually input the NPort IP address. Skip step 4 and proceed to step 5, Install NPort Driver Manager section.



4). Right click on the NPort device to unlock it. The default password is: **moxa**.

Configure the network for your NPort device. Please use a static IP address that is on the same subnet as your AlertDispatcher machine. For example, if your AlertDispatcher machine is 192.168.1.100, the NPort device IP address can be 192.168.1.101. If a different subnet is used, please consult a network expert on how to connect.

After you have configured the NPort device network, you should be able to PING the NPort device.

Warning: Please double check your network configuration and ensure that the IP address assigned is valid and available as you may not be able to connect to the device again if the configuration is wrong. After configuring the network, always record the NPort network settings.

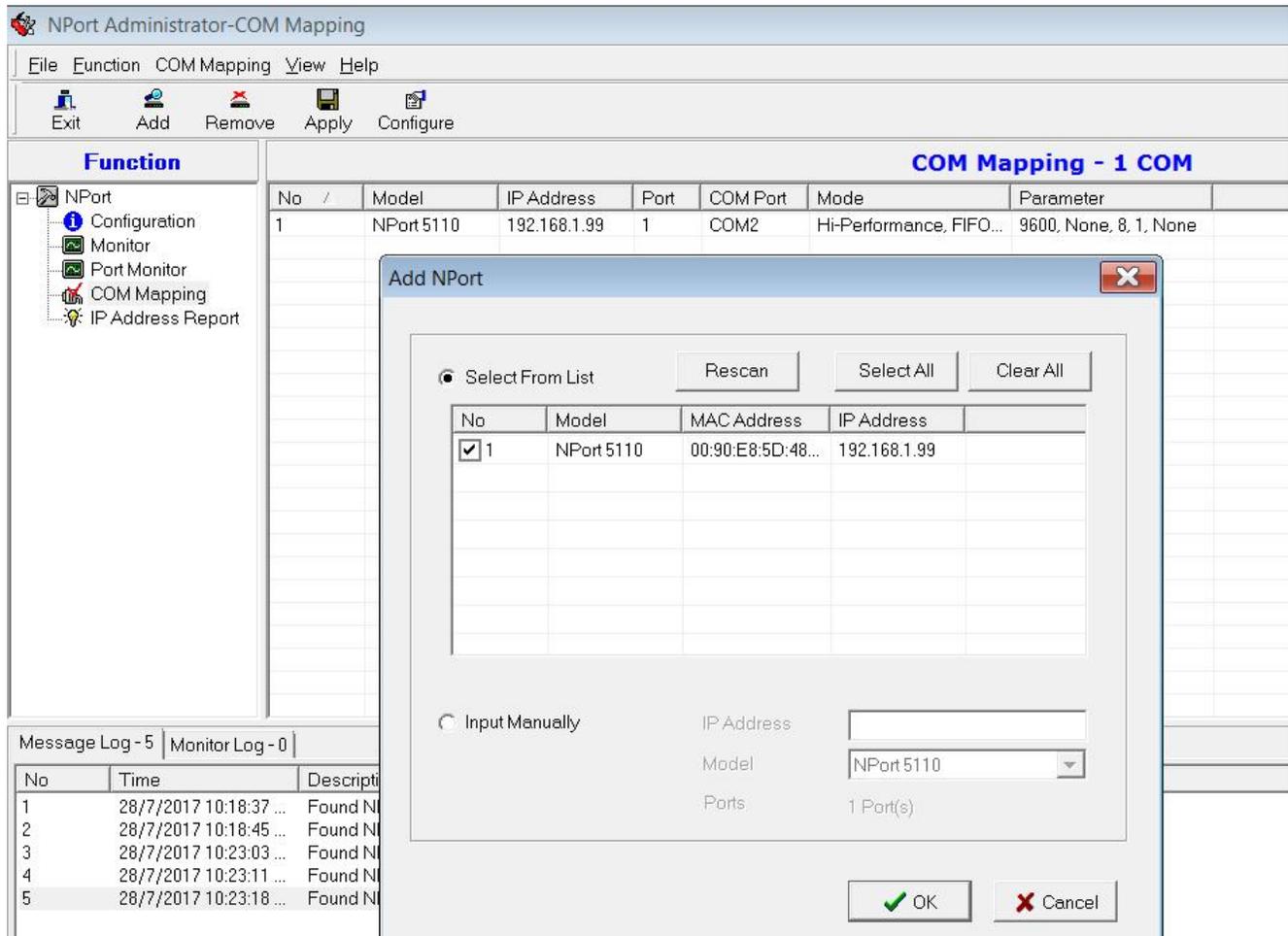
The screenshot displays the NPort Administrator-Configuration software interface. The main window is titled "Configuration" and is divided into several sections:

- Information:** Model Name (NPort 5110), MAC Address (00:90:E8:5D:48:12), Serial Number (4247), Firmware Version (Ver 2.7), and System Uptime (0 days, 00h:27m:01s).
- Accessible IPs:** A tabbed interface with "Basic" and "Network" tabs. The "Network" tab is active, showing fields for IP Address (192.168.1.99), Netmask (255.255.255.0), Gateway (192.168.1.1), IP Configuration (Static), DNS Server 1 (192.168.1.1), and DNS Server 2.
- Auto Warning:** A section with a "Modify" checkbox and an "Enable SNMP" checkbox (checked).
- IP Address Report:** A section with a "Community Name" field (public), Location, and Contact fields.
- Password:** A section with a "Modify" checkbox.

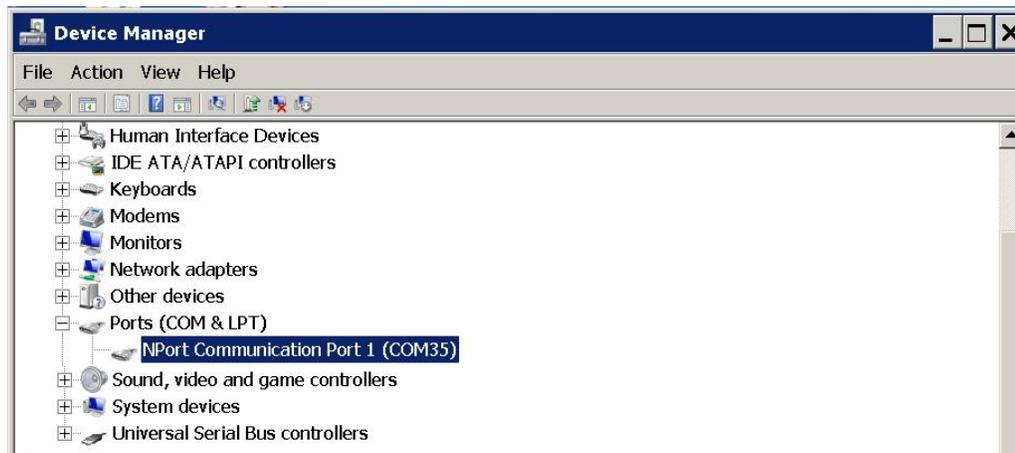
At the bottom of the window, there is a message: "Click the 'Modify' check box to modify configuration" and two buttons: "OK" and "Cancel".

No	Time
1	28/7/2017 10:18:37 ...
2	28/7/2017 10:18:45 ...
3	28/7/2017 10:23:03 ...
4	28/7/2017 10:23:11 ...
5	28/7/2017 10:23:18 ...

5). Right click on "COM Mapping", select "Add Target" and add the modem for this server. Take note of the COM Port for the newly added modem as you will use this COM Port when you configure AlertDispatcher. Click "Apply" to save the configuration.

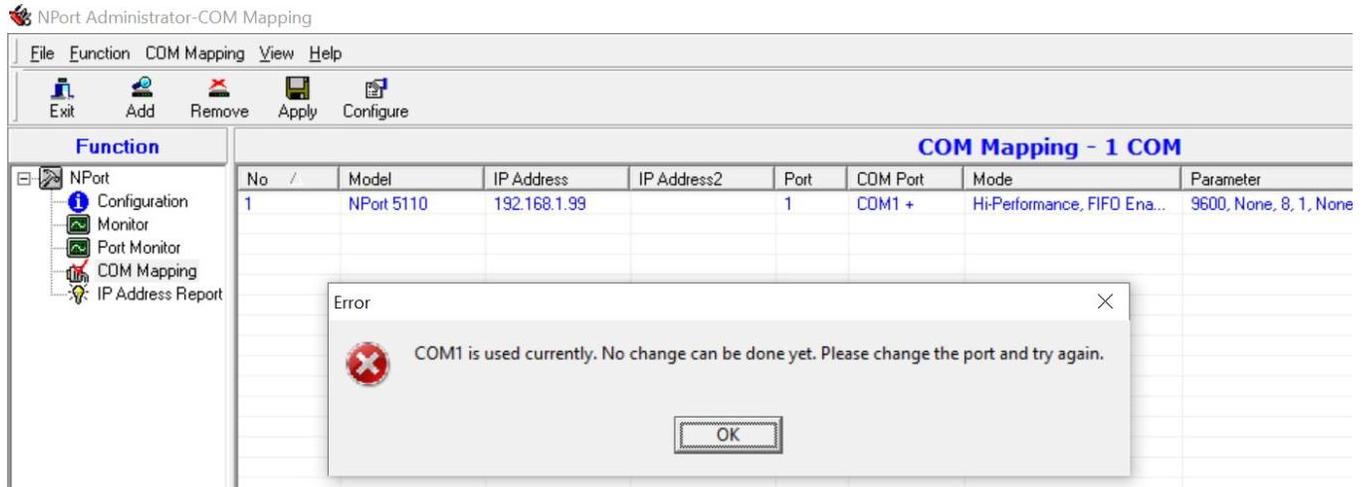


If the COM port is successfully added, it will appear on Device Manager under Ports (COM & LPT).



Note: If you are getting the error “COM is used currently. No change can be done yet. Please change the port and try again.” you’ll need to install NPort Windows Driver Manager in order to add the virtual COM port to your server.

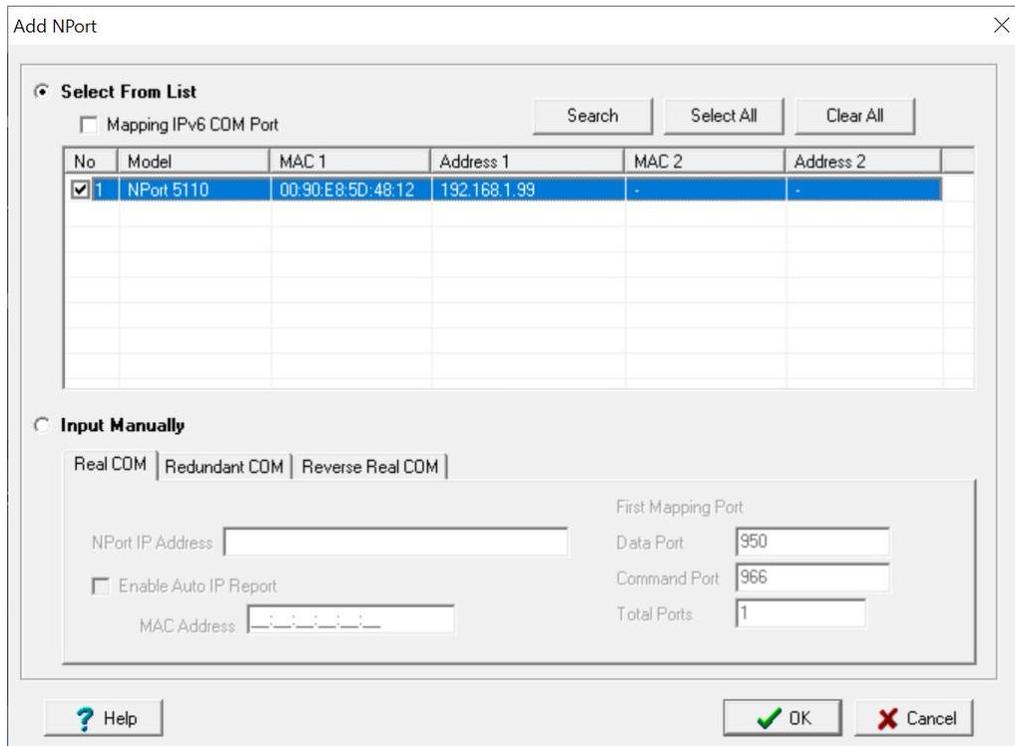
This error will usually arise if you received the error *“Fail to start Real COM driver”* when installing Moxa NPort Administrator. Do not uninstall the original NPort Administrator as you will still need to use it manage your NPort device.

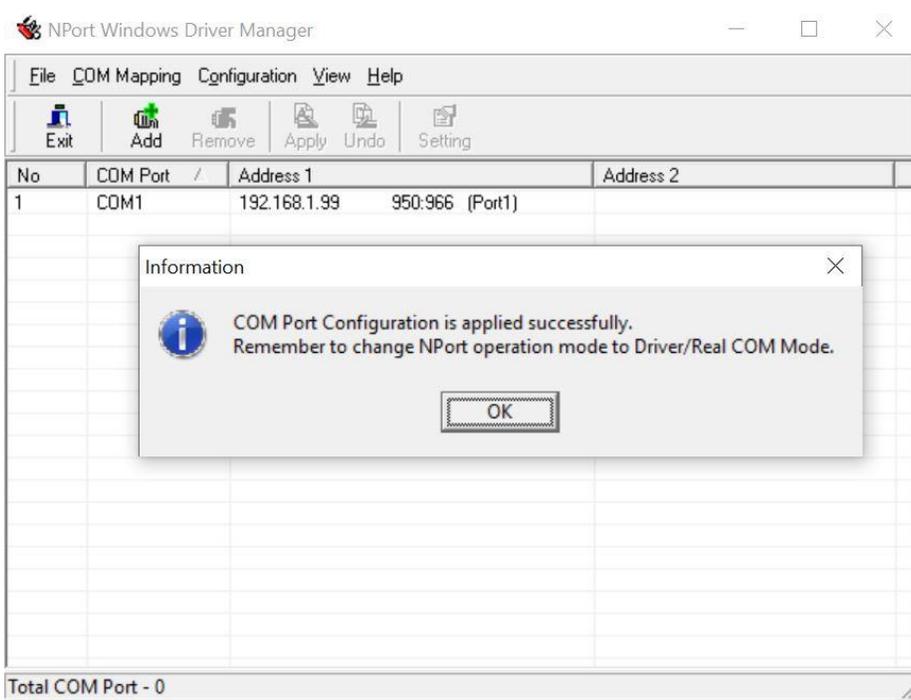


Download and install NPort Windows Driver Manager from - http://www.clickndeploy.com/downloads/NPort_Administrator.zip

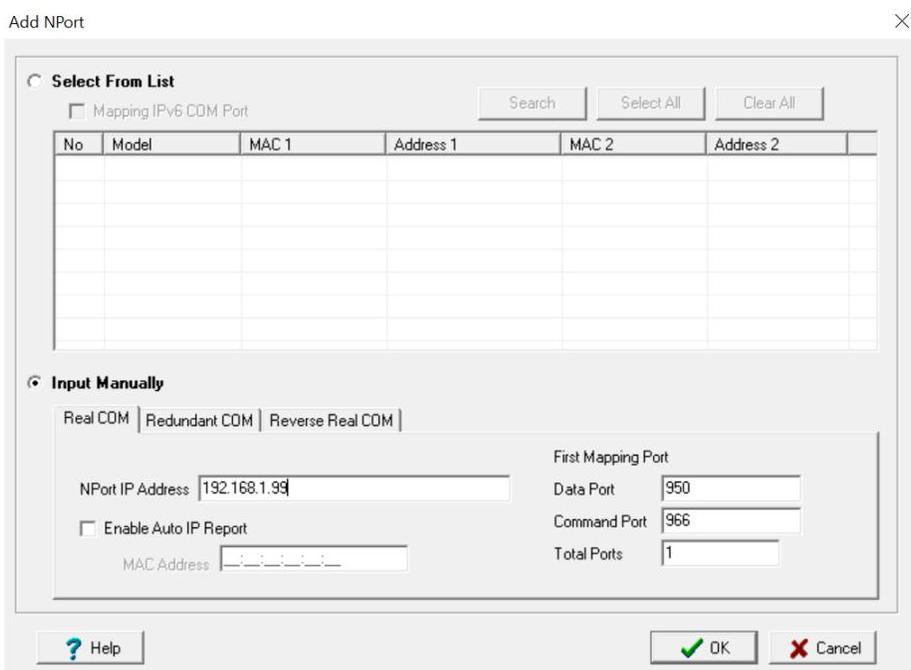
Note: Configuration of NPort Device (IP address, etc) is still done using NPort Administrator.

Launch NPort Windows Driver Manager and map your NPort to a COM Port on Windows. Click *“Apply”* button.

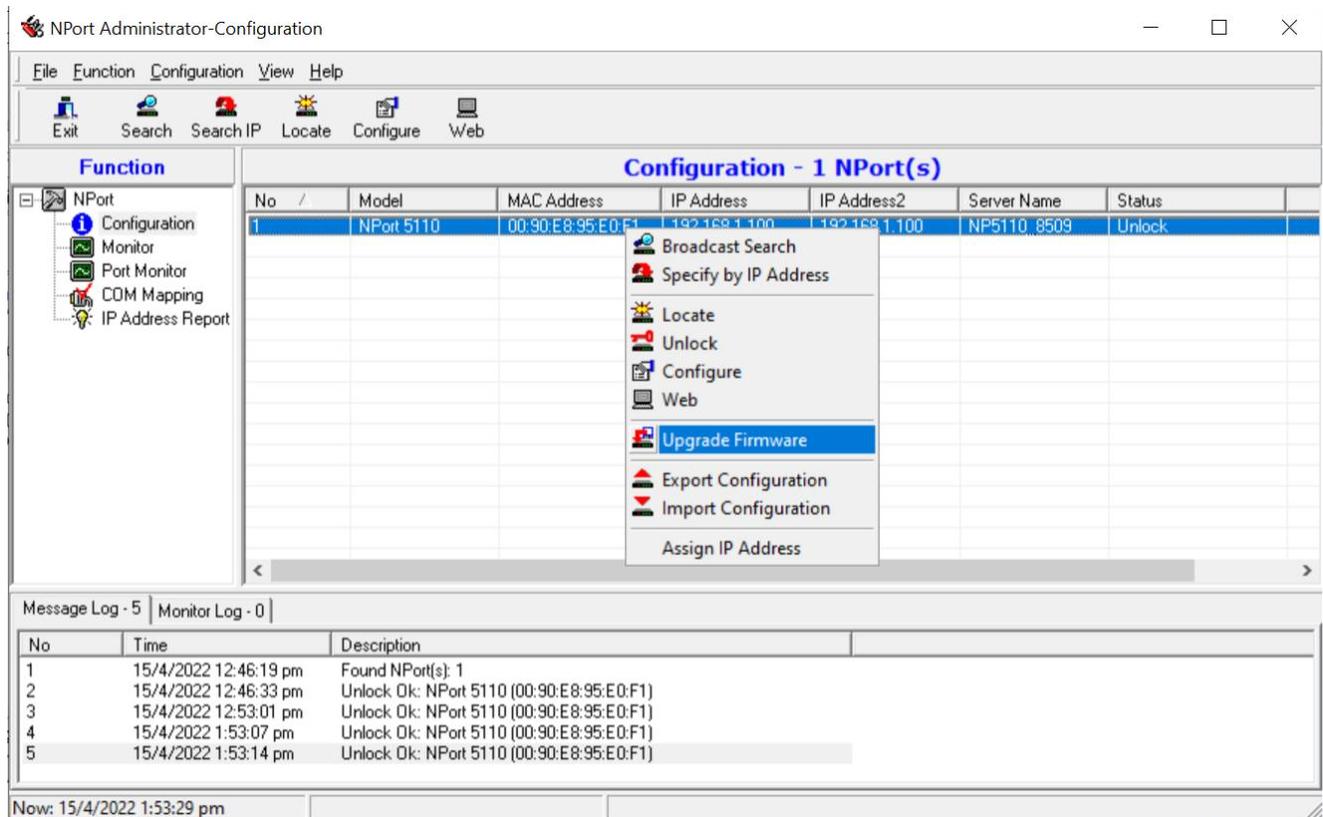
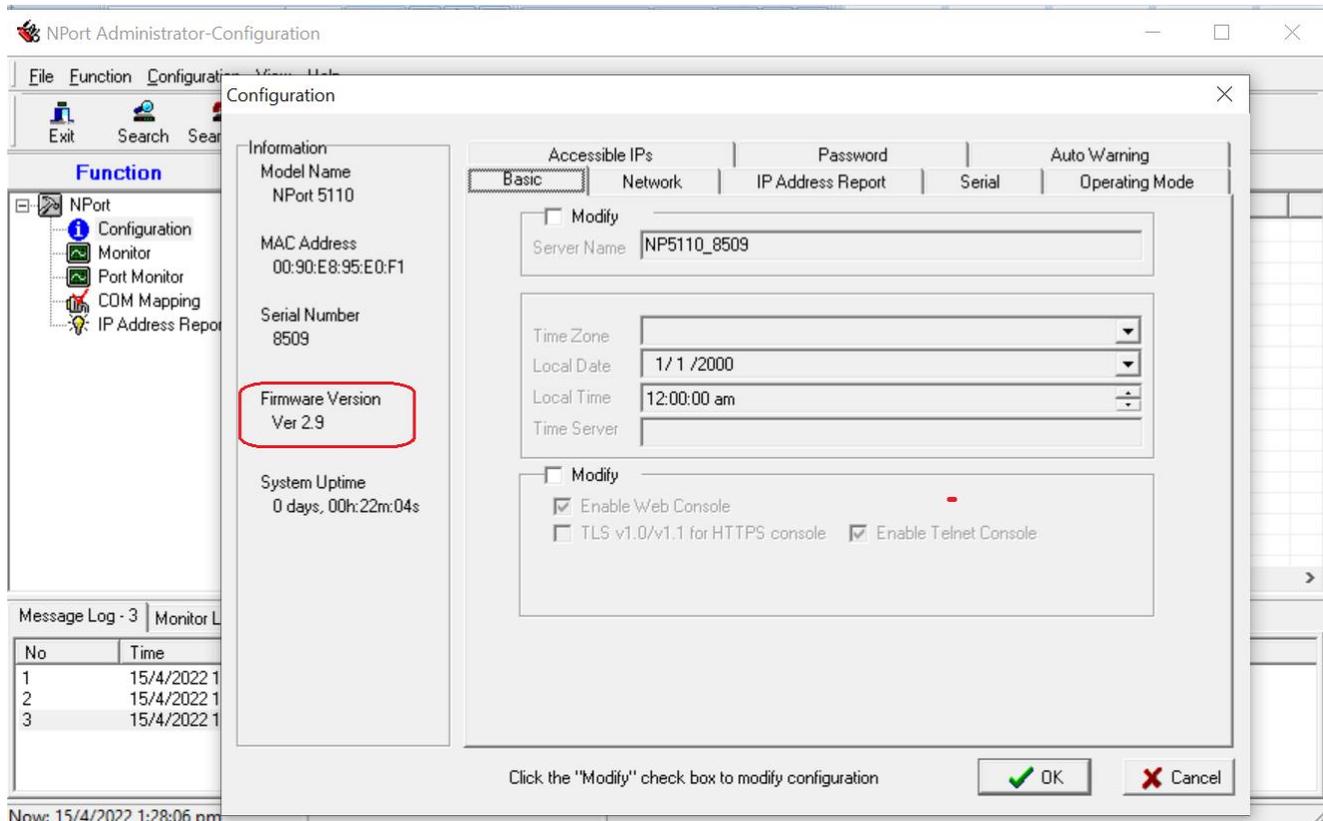




If you're unable to Search for the NPort Device, please use the "Input Manually" option. After that click "Apply" button and proceed to step 7.



6). If you're told by your vendor to upgrade your firmware, you can do this using the NPort Administrator.



The screenshot shows the NPort Administrator-Configuration application window. A modal dialog box titled "Configuration - 1 NPort(s)" is open, displaying a progress bar and the text "Processing, please wait...". A "Cancel" button is visible in the top right of the dialog. Below the progress bar is a table with the following data:

No	Model	MAC Address	IP Address	IP Address2	Status
1	NPort 5110	00:90:E8:95:E0...	192.168.1.100	192.168.1.100	Write Flash - 10%

At the bottom of the application window, there is a "Message Log" section with the following entries:

No	Time	Message
2	15/4/2022 12:4	
3	15/4/2022 12:5	
4	15/4/2022 1:53	
5	15/4/2022 1:53:14 pm	Unlock OK: NPort 5110 (00:90:E8:95:E0:F1)
6	15/4/2022 1:57:31 pm	Firmware Updated: NPort 5110 (00:90:E8:95:E0:F1)

The status bar at the bottom left of the application window shows the current time: "Now: 15/4/2022 1:58:00 pm".

AlertDispatcher Enterprise v6.0.0.0.633.28 (Authorized User: Click And Deploy3 - MaxRecipients: 1000, M...

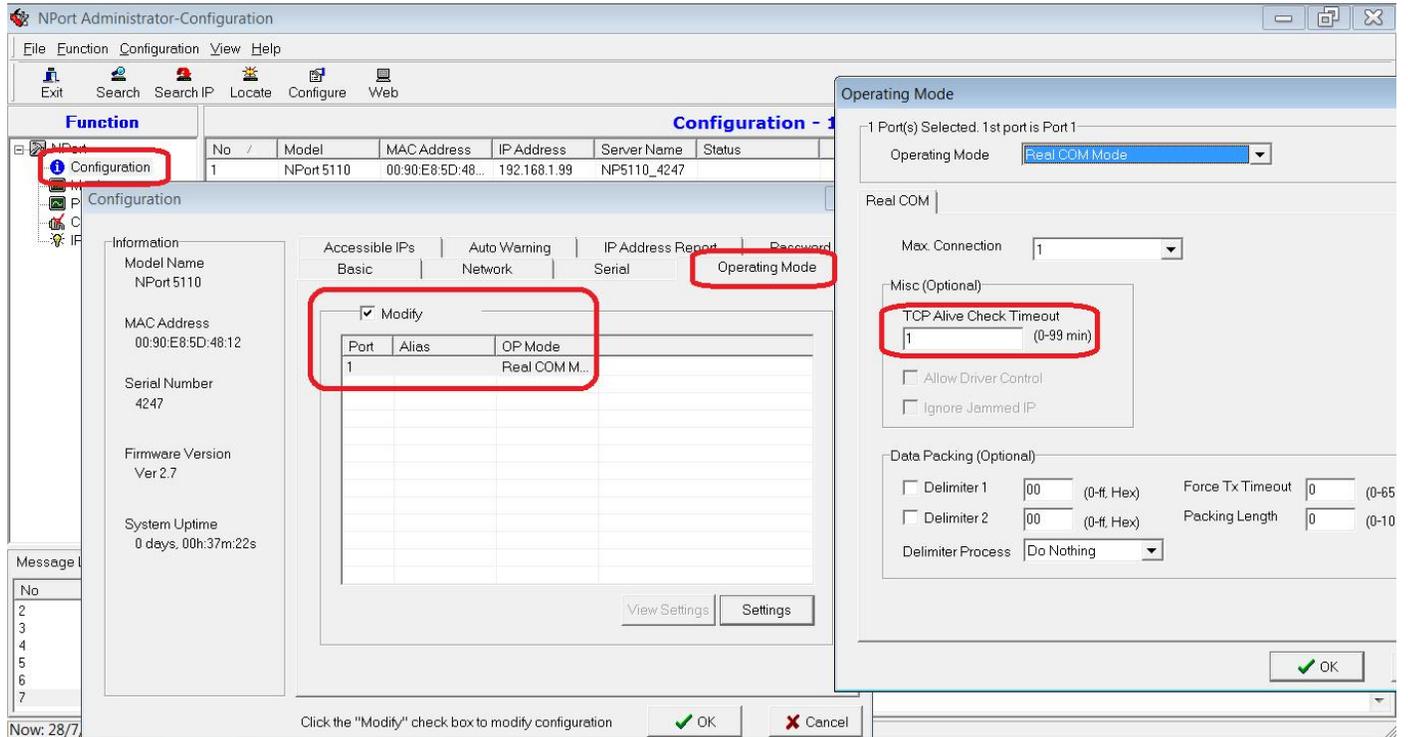
Service	Messages	Send SMS/Email	Addressbook
Servers Setup (SMTP/POP3/HTT	Receive SMS Setup	Templates	Users and Departments
Help/Registration			
Server/Network Monitoring	Modem Setup	Instant Messaging (IM) Setup	System Setup

Port Status Signal Operator Error(Warning) ModemMail Des

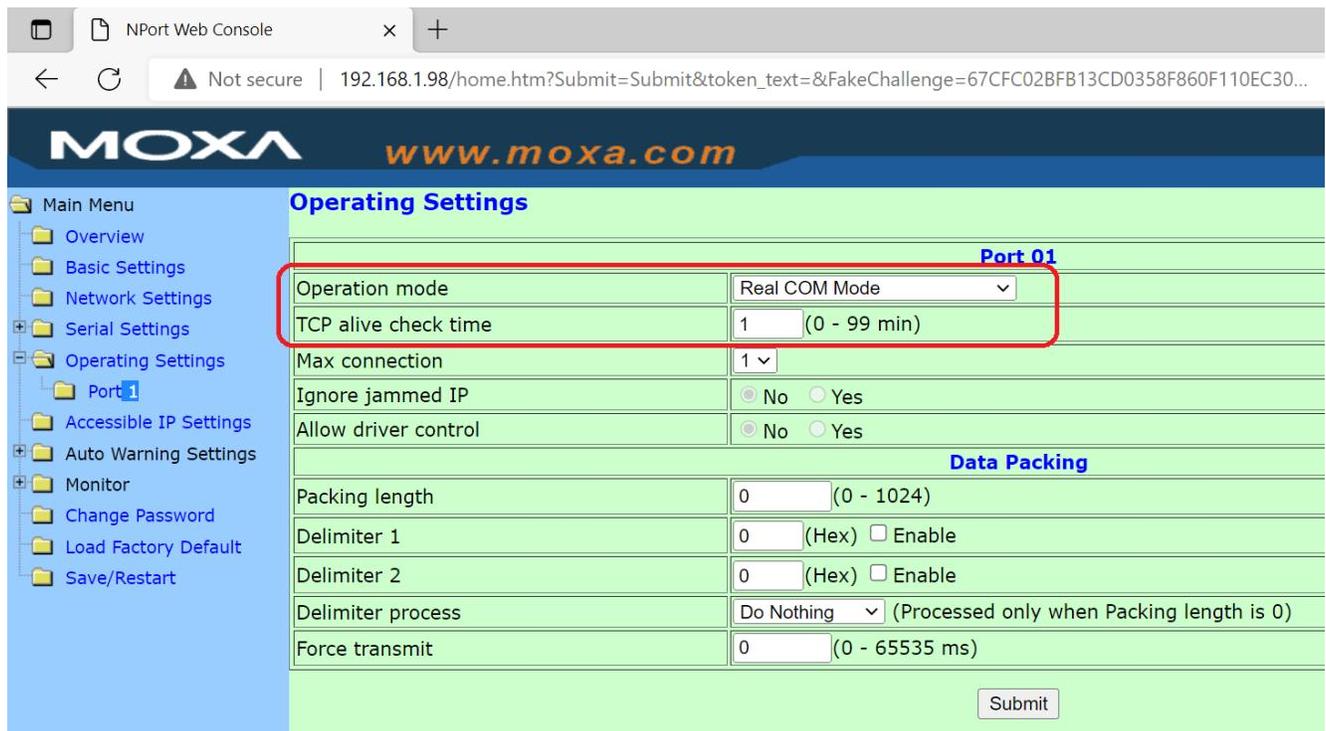
COM2	Error	Unknown		COM Port Not Found. The system cannot find the COM port sp	Disabled	
------	-------	---------	--	--	----------	--

No working modem found. Refer to "Modem Setup Tab" for error message. Unknown

7). Next, using NPort Administrator, click on Configuration, double click on your NPort Device. Modify the TCP Alive Check Timeout of your Modem Port or Ports from 7 min (default) to 1 min. This setting is necessary to ensure that the NPort Device can be redetected within 1 minute of any network disruption.



Note: If you're unable to use NPort Administrator to access your NPort device, you can configure the TCP Alive Check Timeout using a web browser.



Troubleshooting notes:

If AlertDispatcher fails to detect the Modem via the added COM port, perform the following:

Step 1: Ensure the serial cable is tightly connected to the NPort and modem device. The modem power is turned on and SIM card properly inserted. You may test the modem using your laptop to confirm that it is working. If this doesn't work, proceed to Step 2.

Step 2: Check if there's another AlertDispatcher installed on another Windows machine that is connected to the same NPort device/Modem. Disable the modem port on that AlertDispatcher. Disable all Firewall including Network firewalls. If this doesn't work, proceed to Step 3.

Step 3. Disable the modem port under AlertDispatcher "Modem Setup". Remove all the COM ports added under COM Mapping, click "Apply" and then reboot your server. Launch NPort administrator or NPort Windows Driver again, and then select "Add Target" under COM Mapping. If the COM ports have changed, update the COM ports configured under AlertDispatcher, "Modem Setup".

Step 4. Reset the IP address of NPort device to a new IP address (unused) and repeat step 3.

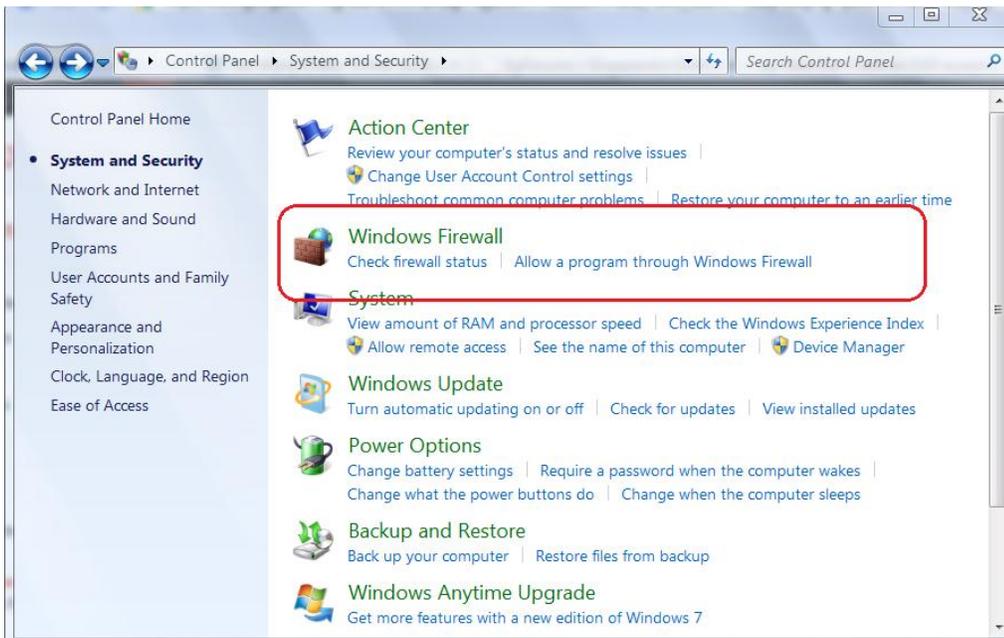
3. Appendix

A. How to Add (allow) server ports to Firewall

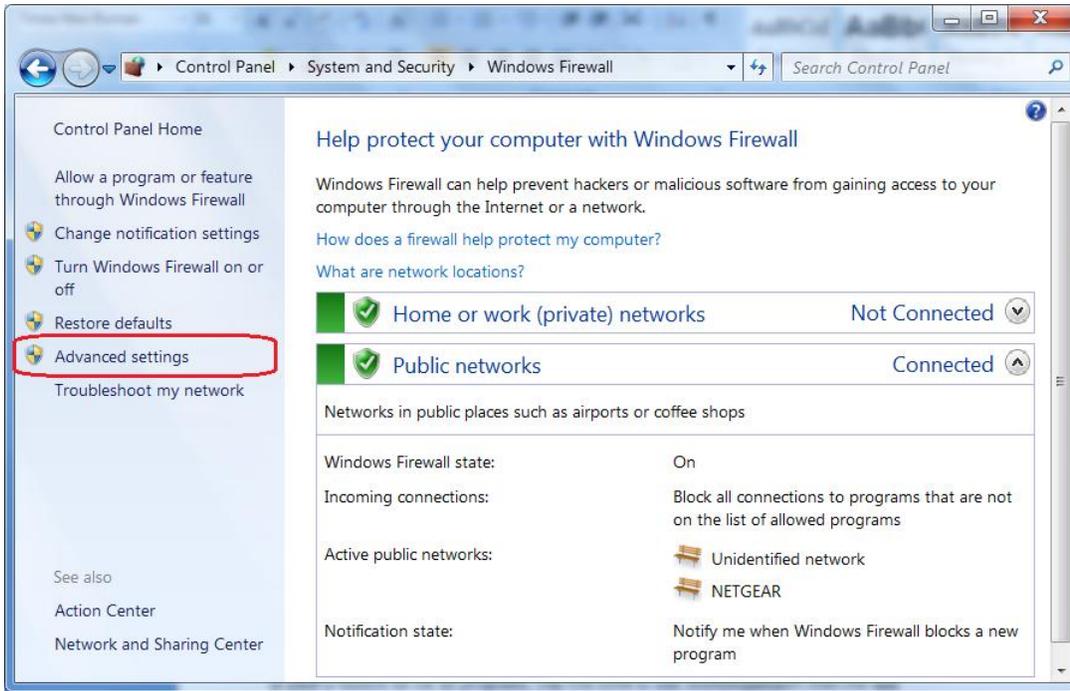
If you need to be able to access AlertDispatcher Server from the network, you must add the ports used by the services you require to your firewall list of “allowed ports” if firewall is active.

To add port exceptions to Windows Firewall exception list:

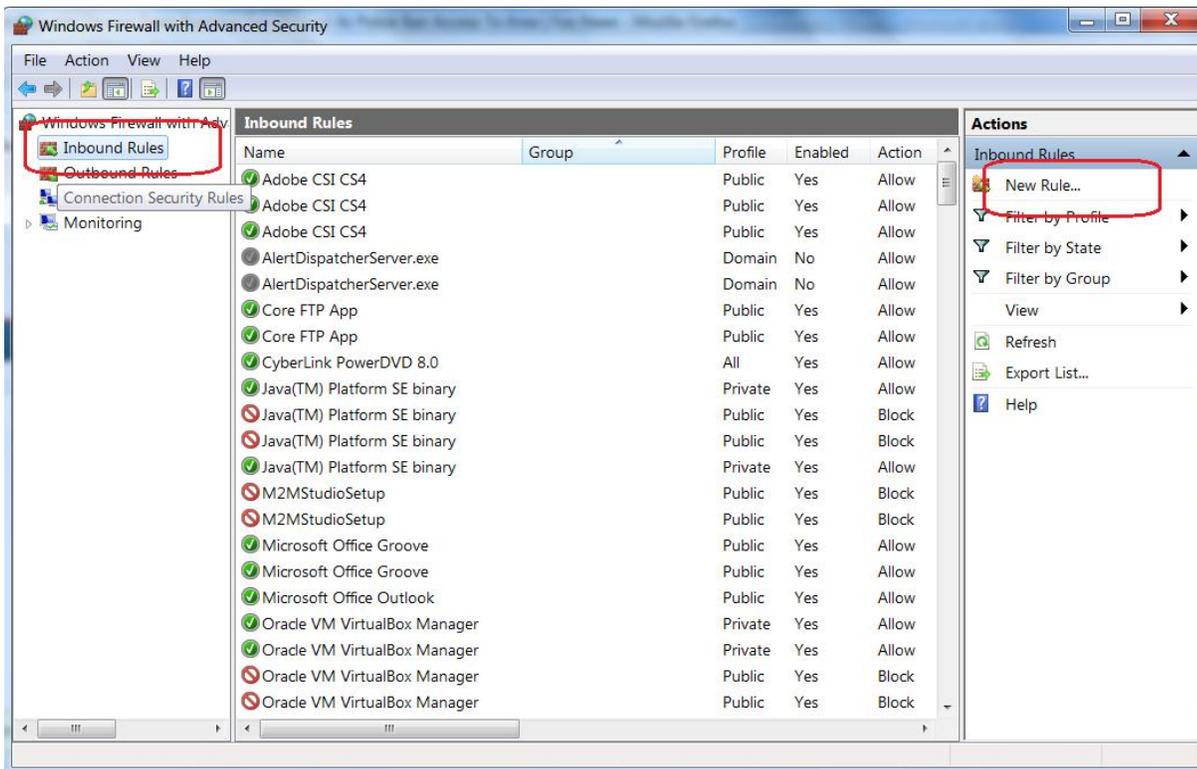
Go to *Start* → *Control Panel* → *Windows Firewall*.



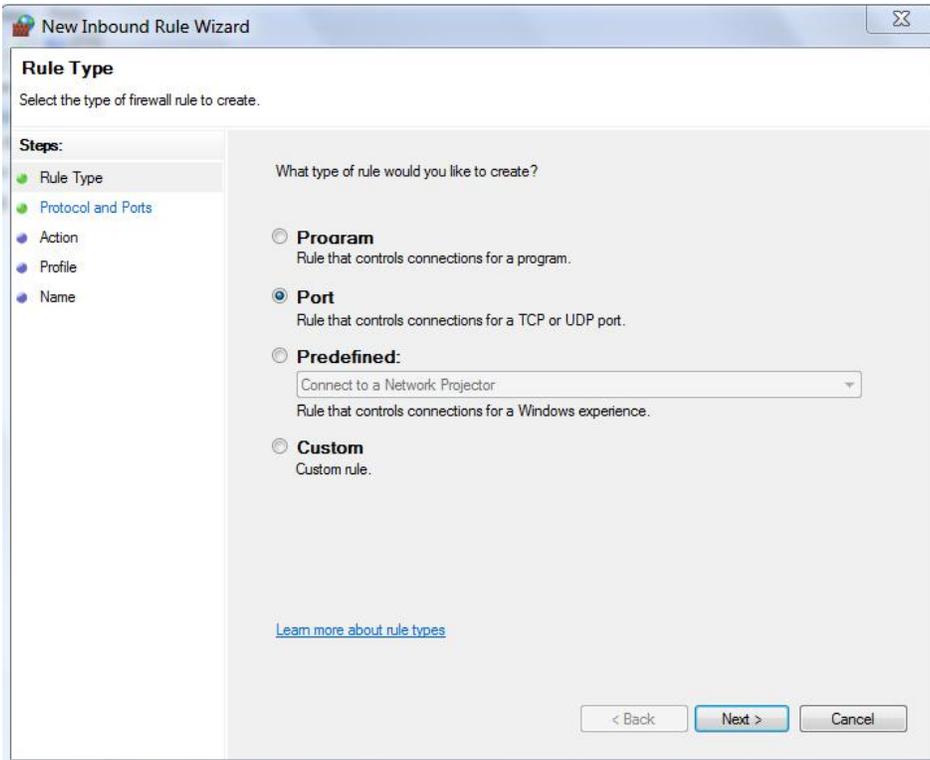
Click “Advanced settings”.



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 you are using a 3rd party firewall, check with your IT administrator or the firewall vendor.

<i>Server Protocol</i>	<i>Default Port</i>	<i>Remarks</i>
1. HTTP Server	80	<i>Used by AlertDispatcher Client, DLL API and AlertDispatcher High Availability (Master/Slave Cluster Redundancy)</i>
2. SMTP Server	25	
3. SNMP Trap Receiver	162	
4. AlertDispatcher Server	5556	