



# 2sms IBM Lotus Notes Tech Guide

## **Overview**

This database application allows customers to send business SMS messages using the 2sms text messaging service.

This document explains how the application works, and how to configure it.

The Using Database document explains how to send Business SMS messages, define fixed messages, manage SMS workflow and run reports.

## **Requirements**

### **Lotus Notes / Domino**

Server - Domino 5+. Tested on version 6 and 7.

Client - Notes 5.x. Tested to v6.x and to v7.x. This solution has not been tested on 8.x

### **2sms account**

You will require a 2sms account in order to send Business SMS messages from this application. Please visit [www.2sms.com/register.aspx](http://www.2sms.com/register.aspx) for a free, no obligation trial account. You will be issued with a 2sms UserID and Password, which you will need within this application. Call +44 1234 757 800 or +1 224 353 2600 for support.

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Issue No./Date	2.0 10-Nov-09
Classification	N/A

## Application Description

Please click on the sections to expand them to access more information.

(Click on the the Green arrows to expand.)

This form is used to Create SMS Messages.

Full instructions for sending SMS messages are in the 'Using Application' document.

## Create SMS Message

The screenshot shows a web interface for creating an SMS message. At the top, there is a navigation bar with icons and labels for 'Send', 'Address', 'Send New SMS Messages', and 'Cancel'. Below this is a form with three main sections: 'Send to Address', 'Message', and 'Options'. The 'Send to Address' section has a text input field and a 'Send to Address' button. The 'Message' section has a 'Use Standard Message' button and a 'From:' text input field. The 'Options' section has a checkbox for 'Email me delivery report' and a 'Send' button. Below the form is a 'Message Stats' section with a table showing 'Maximum size' (160 characters), 'Message Length' (19), and 'Remainig Characters' (141).

Message Stats	
Maximum size	160 characters
Message Length	19
Remainig Characters	141

## Fields

[EnterSendTo] Recipient list field. Names/numbers of all message recipients.

For US customers, enter the number in the domestic 10 digit format, e.g.  
703 742 5424

for non US customers, the application supports various valid mobile phone number formats:

countryCode areaCode mobileNumber e.g. 44 7777 333 333

For UK users, areaCode MobileNumber e.g. 07777 333 333\*

\*The default country code as setup in the database profile (see below) is applied to the phone number during message delivery.

Spaces between numbers are permitted but not required,  
e.g. 07777 333 333 can be entered 07777333333

[Message] Message body. Maximum 160 characters

[Email] Flag to indicate the delivery report will be emailed to the Message creator.

## Actions

<Send> Submit the message, i.e. save and close the message document.

<Address> Show the Addressing dialog to permit selection of names from any available address book

<New Message> Open a [Message] form

<Cancel> Cancel the current message.

<Resolve Numbers Now> Available from the ACTIONS menu only.

Resolve all recipients against all available address books.

This operation is normally performed by the server on once a message has been submitted.

This action is provided to permit users to resolve recipient names to mobile numbers client side.

Over large address books client side use of this action will offer poor performance.

<Use Standard Message> Displays the list of all available Standard Messages. The user may select one to append the data to the current Message.

## Security

Message creation Any database AUTHOR or DEPOSITOR.

Message read Message author (provided at least AUTHOR access is available). Holders of the [Data Admin] role.

## Events

[PostOpen] Initialise a NotesTimer event to ensure character number calculation occurs as data is entered in the [Message] field.

[Postrecalc] Resolve all recipients against the local Name and Address Book

[QuerySave] Resolve all recipients against the local Name and Address Book

## Fixed Message

This form is used to set up fixed messages. Fixed messages are pre-recorded messages that can be used when you later decide to send a message to your mobile phones. Customers use fixed messages when the content they wish to send is the same each time, or when they wish to use a template so that they can fill in information.

Examples include:



'Please send in your time sheets by Thursday 3pm in order to secure payment on Friday.'

'The meeting on x at venue y has been confirmed'

'There is an email outage. Please don't call the help desk. We will SMS you when resolved.'

Once set up, fixed messages can be used in the 'Send SMS messages' form to save time.

Full instructions on how to set up Fixed messages are given in the 'Using database' document.

 Save & Close
  Save & Use

Use this form to create 'Fixed messages' which can then be used when sending messages.

Message	<input type="text"/>
Choose who can use Fixed messages (Leave blank to impose no limitations)	<input type="text"/>
	<input type="button" value="Pick"/>
	<input type="button" value="Save Settings"/>

### Fields

- [Message] Message body. Maximum 160 characters
- [Readers] List of users able to read and so use the Standard Message.

### Actions

- <Save & Close> Saves and closes the document.
- <Save & Use> Available in EDIT mode only.  
Saves the document and opens a new Message based on the current Standard Message
- <Use> Opens a new Message based on the current Standard Message

### Security

- Message creation/Editing Holders of the [Data Admin] role only.
- Message read No restrictions unless placed upon the document using the [Readers] field. See above.

### Events

- [PostOpen] Initialise a NotesTimer event to ensure character number calculation occurs as data is entered in the [Message] field.

## SMS User settings

This form is used to configure connectivity to 2sms and the default country code. Please note, **only 1 copy of this document is required**, and if you create two or more, the application will not work.

Save & Close

**Service Configura**

Username:	
Password:	
Default country code:	44
Send messages:	<input checked="" type="radio"/> Over HTTP (Server requires access to the internet) <input type="radio"/> As email (Server must be able to submit email to internet)
Upload location:	http://www.2sms.com/xml/xml.jsp

### Field description

- [Username] Username with 2sms. (Visit [www.2sms.com/register.aspx](http://www.2sms.com/register.aspx) if you need one.)
- [Password] Password with 2sms (email [support@2sms.com](mailto:support@2sms.com) if forgotten)
- [Upload Location] URL to the service provider HTTP service. The default is <http://www.2sms.com/xml/xml.jsp>, and we recommend that you do not change this default.
- [Default Country Code] Default country code applied to message not prefixed with '+',  
e.g. US customers should enter 1  
e.g. UK customers on +44 enter 44

Note: If you need to edit this document, contact [support@2sms.com](mailto:support@2sms.com) for help.

### Actions

- <SAVE & CLOSE> Save & Close document
- <NEW MESSAGE> Create a new message













### Security

- Create, Edit, Read AUTHORS with the [DB Admin] role

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## Events

None

- ▼  Configuration
  -  Fixed messages
  -  Set up Account
- ▼  Send SMS
  -  1. Address awaiting resolution
  -  2. Waiting to be sent
  -  3. Sent Messages
- ▼  Txn Report
  -  All Messages by period
  -  All Messages by User
  -  Delivered Messages by period
  -  Delivered Messages by User

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## Configuration

- Fixed Messages List of all fixed messages
- Set up Account Listing of configuration document. Please make sure only one version of this document exists.

### Send SMS

1. Awaiting Resolution Messages with one or more unresolved recipient not yet processed by the [ResolvePublic] agent. By default, an Agent runs this process once every 5 minutes. To process immediately, click on the 'Resolve Now' button to action immediately.
2. Awaiting to be sent Resolved messages awaiting submission to the service provider by the [SendSMS] agent. By default, an Agent runs this process once every 5 minutes. To process immediately, click on the 'Send Now (Server Side)' button to action immediately.
3. Sent Messages Sent messages sorted by date created. (descending)

### Txn report

- All Messages by period All messages categorised by period
- All Messages by User All messages categorised by author, subcategorised by date/period sent
- Delivered Messages by User Successfully delivered (and partially successfully) messages by author. Message credit data totalled by period
- Delivered Messages by period Successfully delivered (and partially successfully) messages by date/period sent. Message credit data totalled by period

### 3. Agents

[ResolvePublic] LotusScript Agent used to resolve recipients that could not be resolved against the message authors personal address book.

This agent should run on schedule to suit delivery requirements.

[SendSMS] Recommended as often as possible to reduce message delays.  
Java Agent used to process the contents of the Outbox:

1. Submit all resolved messages
2. Email delivery reports to messages authors.

This agent should run on schedule to suit delivery requirements.

We recommend that you run this as often as possible to reduce message delays.

4.1. Sign this template.

4.2. Create a database from this template.

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4.3. Setup the Access Control list (ACL) with roles [Data Admin] and [DB Admin].

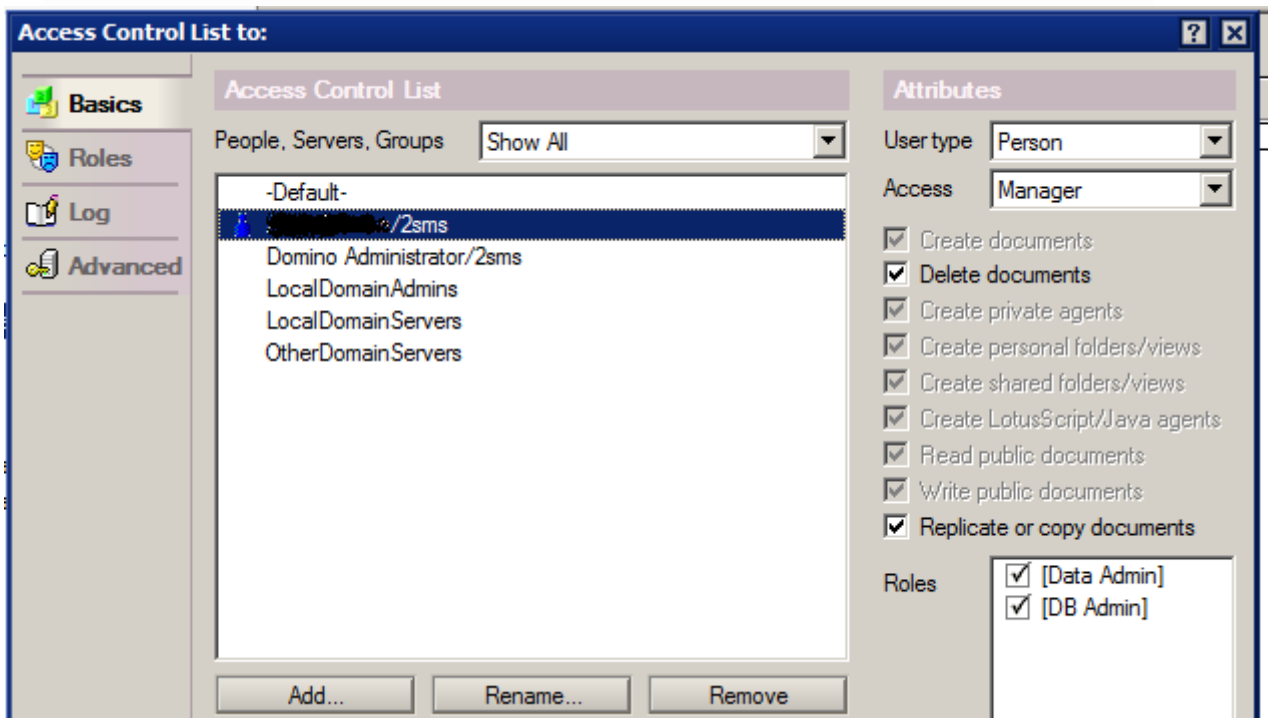
4.4. Add an admin group/name with both [Data Admin] and [DB Admin] roles.

We recommend adding:

- Domino Administrator
- Local Domain Admins
- Local Domain Servers
- Other Domain Servers

(This is a Security decision for your organisation.)

4.5. Ensure the host server has the [DB Admin] and [Data Admin] roles enabled.



4.6. Ensure you are a member of the Admin group, with [DB Admin] role.

4.7 Remove any 2sms entries from your ACL.


4.8. Configure your application by setting your SMS user settings.

4.8.1 Select the DB profile document as shown.

The screenshot shows the 'SMS v4.0.1 (server version)' configuration window. The 'Send SMS' folder is expanded, showing '1. Address awaiting resolution'. The 'DBProfile' document is selected, showing a date of '02/11/2009 14:24:19'. A table below shows the document details.

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#### 4.8.2 Select Edit

 Save & Close

### Service Configura

Username:	<input type="text"/>
Password:	<input type="password"/>
Default country code:	<input type="text" value="44"/>
Send messages:	<input checked="" type="radio"/> Over HTTP (Server requires access to the internet) <input type="radio"/> As email (Server must be able to submit email to internet)
Upload location:	<input type="text" value="http://www.2sms.com/xml/xml.jsp"/>

#### 4.8.2 Enter your 2sms Username and Password

Complete the fields as described below:

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Field	Values
Username	2sms account id/username. If you do not have one, contact <a href="http://www.2sms.com/register.aspx">www.2sms.com/register.aspx</a> .
Password	2sms account password.
Default country code	(Note the database profile is a secure document only available to [DB Admin] role holders therefore this information will be secure provided this role is secure) US customers please enter 1 in this field. If you do not, your messages will fail.  Country code to prefix all numbers that begin with zero, for example use 44 to convert the number 07777 123 456 to 447777123456.
Send messages	Choose delivery mechanism.  Where your server has access to the internet use HTTP (this may require modifications to your firewall).  Where the server does not have access to HTTP but can route email to the internet (either directly or indirectly) use the email option.  HTTP is <b>preferred</b> to email because it permits real time validation of user account and message data format (incl. phone numbers). The email method is submission only, no feedback is provided to the application to confirm successful message acceptance for delivery.
Upload location	Only available where messages are to be sent over HTTP. Enter the URL of the xml messaging service.
Email address	Get this information from the service provider Only available where messages are to be sent over email. Enter the email address of the SMS hub. Get this information from the service provider.

4.8.3 Save the document by clicking either on 'Save Settings' or 'Save & Close'.

4.9. Schedule agents to run as according to the delivery schedule required (recommended every 5 minutes). By default, these are set to 5 minutes.

4.10. Grant users rights to create documents as DEPOSITOR or AUTHOR.

## How do I sign up for a free trial account to test this service?

Visit <http://www.2sms.com/register.aspx> for a free, fully functional trial account.

## How do I get support?

US : Call 224 353 2600 or email [support-US@2sms.com](mailto:support-US@2sms.com)

UK : Call 0800 65 222 77 or email [support-UK@2sms.com](mailto:support-UK@2sms.com)

Rest of World : Call+ 44 (0) 1234 757 800 or email [support@2sms.com](mailto:support@2sms.com)

## How are recipient names resolved to Mobile Phone numbers?

During the Message <SEND> (or a refresh F9) operation the local address book is searched for all recipient names.

Any name located that has a non-null [CellPhoneNumber] field is resolved.

Once a Message has been sent (or as a result of the <RESOLVE NUMBERS> action) all available Public address books are searched for recipient names. The [CellPhoneNumber] is used in each instance as the source of mobile phone number data.

## How are duplicates dealt with?

The first match chosen is always used.

## What phone number formats are accepted?

US customers -

+<CountryCode> <AreaCode> <PhoneNumber>, e.g. +44 7777 333 333

Where the country code is omitted a default (as defined by the Database Administrator in the Database Profile) is used.

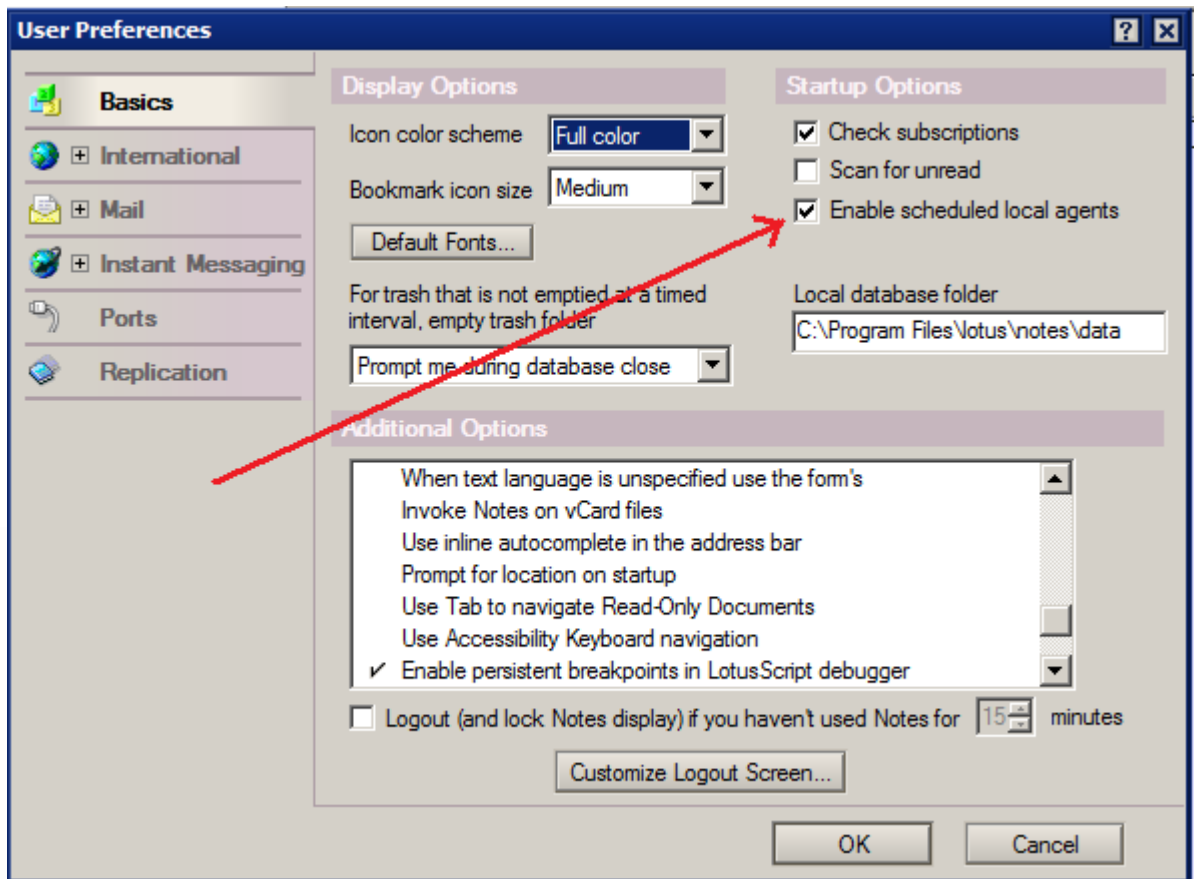
## What do I have to do if I am running this application from a local Notes installation not a server?

For users using the Application on their local copy of Lotus notes only, please ensure that their user profile is set to allow the scheduling of local agents.

Enter File / Preferences / User Preferences and check the box as shown.

Then click on OK.

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## Using the application

### Send Message

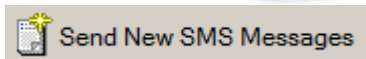
Before reading this document, please ensure you have read the 'About' document.

- a. It is assumed that you have installed the application using the instructions in the 'About Document'.
- b. It is assumed that you have configured the 'SMS user settings' using the instructions in the 'About Document'.
- c. It is assumed that you have set up the ACL and Roles using the instructions in the 'About Document'.

1. To send an SMS, you need to load the 'Send SMS messages' form either from the Menu



or one of the Send SMS buttons



2. When you have done this, a form will appear.

Send to  
Address

Message  
Use a Fixed Message

Options  Email me delivery report

Send

**Message Stats**

Maximum size	160 characters
Message Length	0
Remainig Characters	160

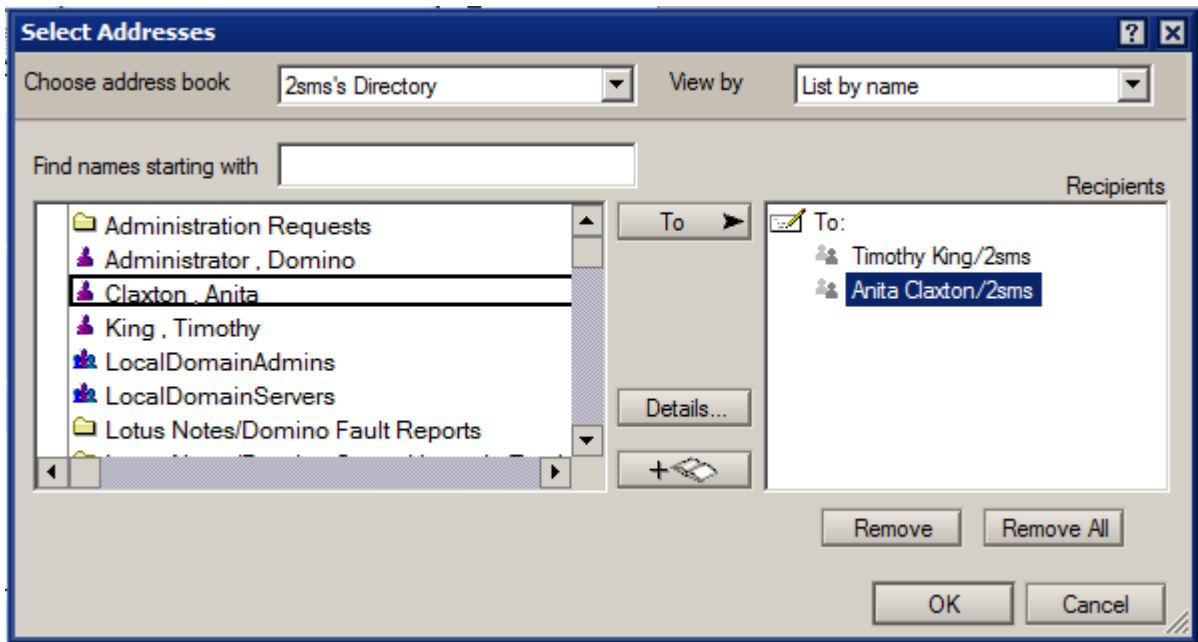
3. You need to enter two pieces of information.

3.1 Who you are sending messages to

3.1.1 Option 1, enter mobile phone numbers separated by a comma. Please note the format required is either your national format, e.g. 07nnnnnnnn for UK, or the international format, e.g. +447nnnnnnnn. US customers should enter 10 digit mobile phone number including area code. Do not enter ( or ) or - or spaces between the number. You must enter a comma between numbers if sending to more than one mobile phone number, e.g. 0712345678, 0787654321

3.1.2 Option 2, use the Lotus Notes address book. Click on the **Address** button to bring up the Lotus Notes address book.

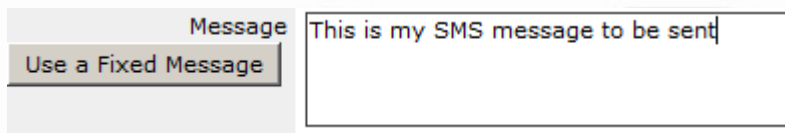
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Select the people you wish to send a message to by double clicking on them. The application also supports groups. The application will use the mobile phone number stored in the field 'cell phone' as the number to send to, and this must be stored either in domestic format or international format. Click OK to finish.

### 3.2 Your message

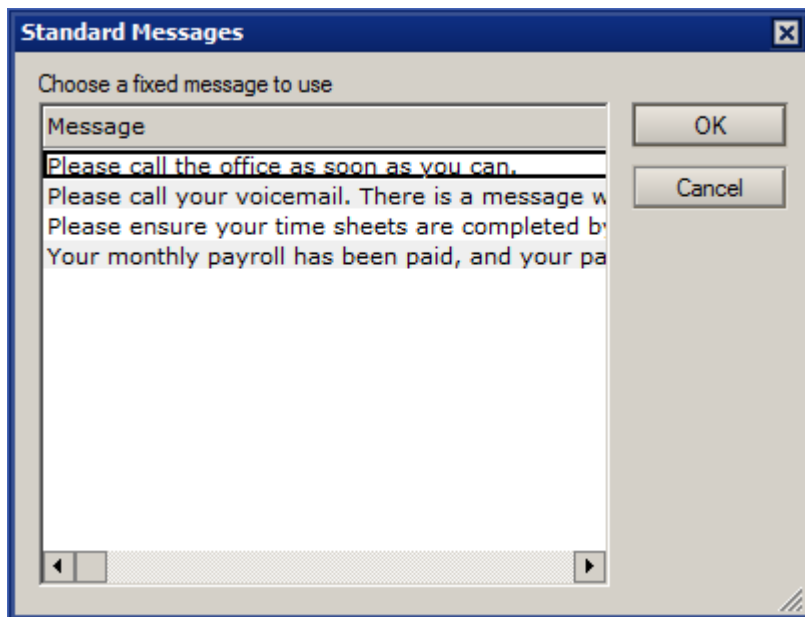
3.2.1 Option 1 is to enter your message in the message field.



Type your message until done.

3.2.2 Option 2 is to select a fixed message 

Clicking on the Use a Fixed Message will bring up a list of pre-recorded Fixed messages.



Click on the message you wish to use. Then click on OK.

4. Click on the Send button

This section explains how you can manage your SMS messages sent.

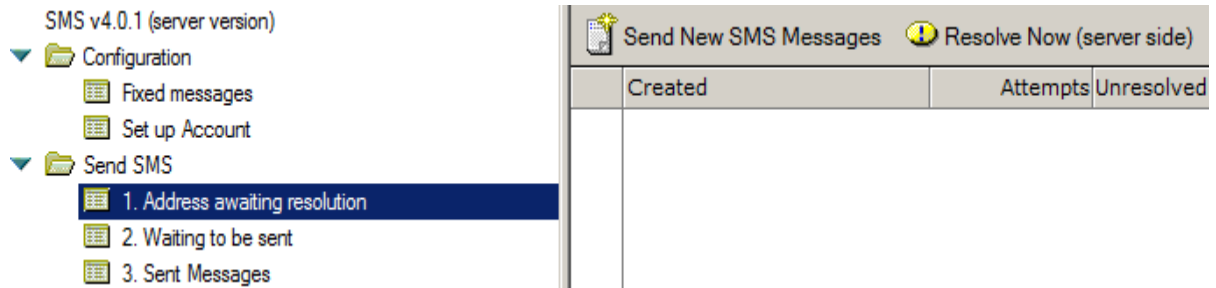
1. It is important to note that the SMS message you have just sent is not sent immediately It is queued for processing.
2. The time it takes to process is determined by the time interval you specified at set-up, when the processing Agents were configured. The default is that every 5 minutes, your messages are processed. You can change this value by following the instructions in the 'About' document.
3. The processing can comprise of 2 stages.
  - 3.1 Resolving address books - used to resolve mobile phone numbers to the people in your address book that you have selected.

3.2. Sending the SMS message. Used to actually send the SMS message.

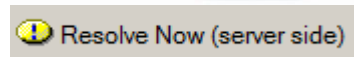
4. Forcing an immediate processing

4.1. To force an immediate address book resolve,

4.1.1 Visit the Send SMS menu as shown. Select 1. Address waiting resolution.



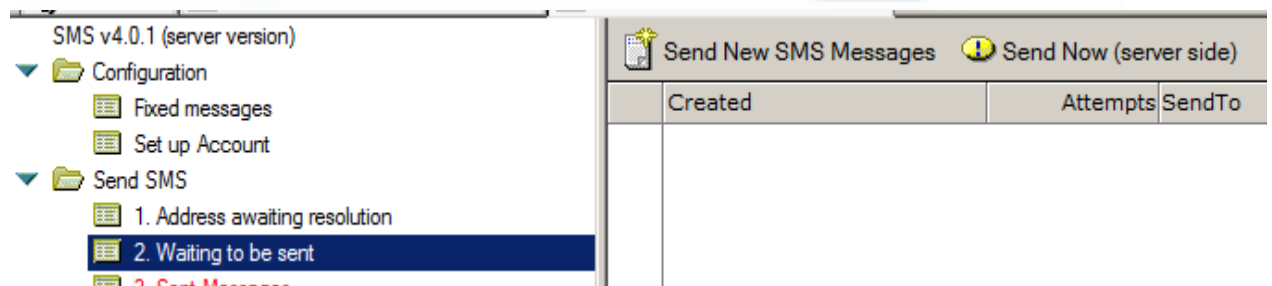
4.1.2. Click on the Resolve Now button



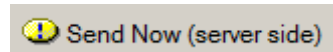
4.1.3 Please note, you will need to force an 'Immediate Send' (next section) to actually transmit the SMS message.

4.2 To force an immediate send,

4.2.1 Visit the Send SMS menu as shown. Select 2. Waiting to be Sent.



4.2.2 Click on the Send Now button

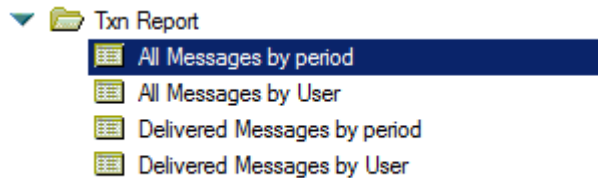


4.2.3 You messages will be sent. (Assuming you have an internet connection.)

## Reports

There are a series of reports available to view the messages you have sent.

Select the report you wish to view.



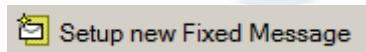
Alternatively, visit [www.2sms.com](http://www.2sms.com), login to your account and run reports from your account on the web site.

## Fixed Message

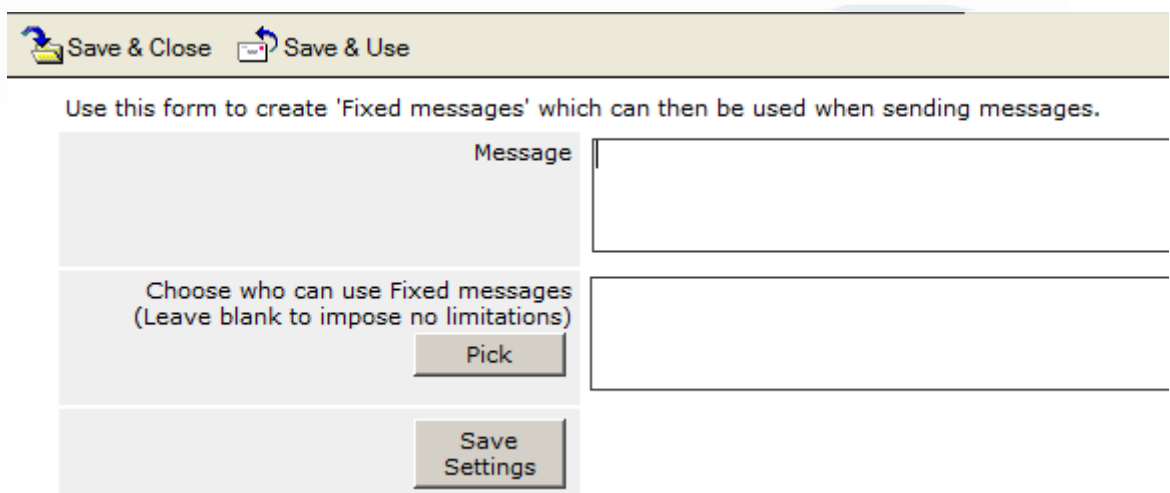
To add a fixed message, you need to access the Fixed message screen either from the menu



or using the Fixed message button which is displayed in the reports section.



You need to do two things.

A screenshot of a form titled 'Fixed Message'. At the top, there are two buttons: 'Save & Close' and 'Save & Use'. Below them is a text box with the instruction: 'Use this form to create 'Fixed messages' which can then be used when sending messages.' The form has three main sections: 1. A large text area labeled 'Message'. 2. A section labeled 'Choose who can use Fixed messages (Leave blank to impose no limitations)' with a 'Pick' button. 3. A 'Save Settings' button at the bottom.

Define the Fixed message

Message

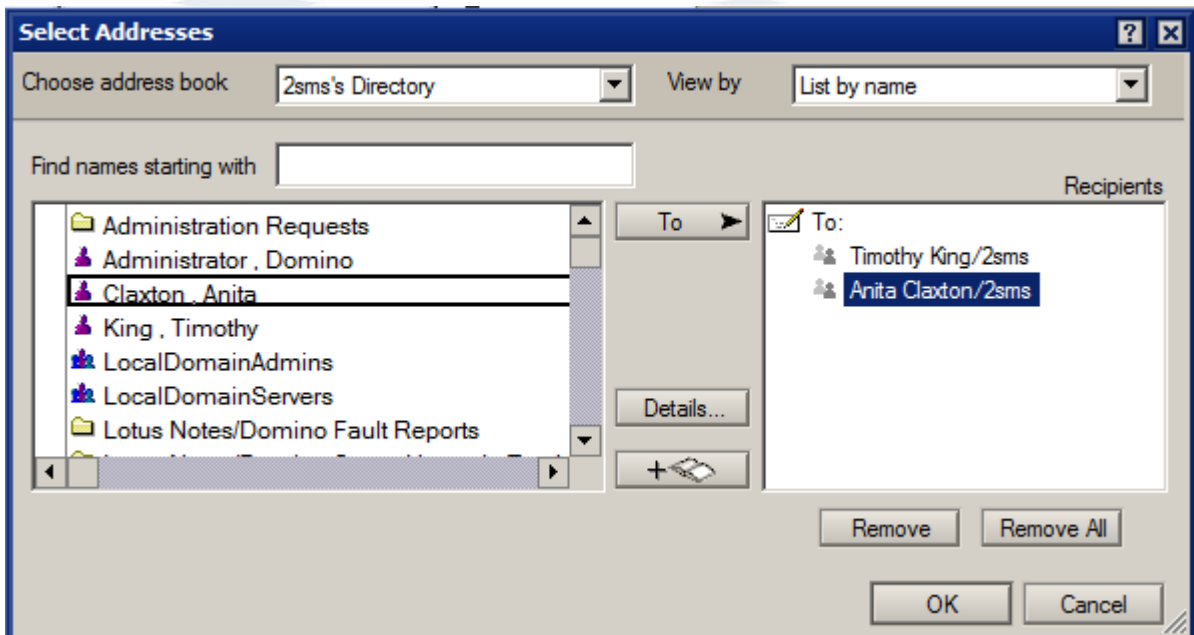
Simply type in your fixed message.

Optionally, restrict who can access the Fixed message.

Click on the 'Pick' button

Choose who can use Fixed messages  
(Leave blank to impose no limitations)

Select the People from your address book you wish to give access to the Fixed message to, and select OK. Note, the default access is anyone using the application can access fixed messages.



Click on the 'Save Settings' or 'Save & Close' button



To delete or edit a fixed message, use the Fixed message report

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Message	Last Modified
Please call the office as soon as you can.	02/11/2009 12:00
Please call your voicemail. There is a message waiting for you.	02/11/2009 12:00
Please ensure your time sheets are completed by the normal time.	02/11/2009 12:00
Your monthly payroll has been paid, and your payslip has been issued.	02/11/2009 12:00

Either delete the message you do not want, or select, edit it and save.

