SMSRelay

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Company Wide SMS Messaging Solution

Arten Science, providing Quality and Innovative Software Solutions

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SMS Relay Suite: Introduction

Overview

SMSRelay Suite consists of three programs which cater for all the SMS messaging requirements of your business. In addition SMSRelay is seamlessly integrated with ContaxCRM Premium Contact Management Software: www.contaxcrm.co.uk

SMSRelay is the gateway for your SMS messages. Running on a single computer or server it takes care of sending and archiving the messages.

ArtenSMS is a desktop client, available for Windows, Apple Macintosh and Linux, allowing you to send free format SMS messages from your computer.

SMSBatch allows you to send the same SMS message to groups of people, for example to inform customers or suppliers of something urgent or important. SMSBatch also runs on Windows, Apple Macintosh and Linux.

SMSRelay can send SMS messages created from many types of software. It is easily interfaced to your existing in-house or custom systems and can even send messages created from batch files or scripts.

Because SMSRelay handles the actual sending of the SMS messages, Internet access is only needed on the computer running SMSRelay.

SMSRelay Suite is licensed to a single company for installation on as many computers as you like, no 'per user' fees.

Simple to setup and use, and with full telephone and email support, SMSRelay Suite will prove indispensable for dealing with your SMS messaging needs.

Detail

SMSRelay is an application designed to run on a server with internet access. It monitors a particular designated network share for XML text files. These XML files contain a telephone number a message and a sender.

When SMSRelay finds one or more of these files it reads the information and then sends it as an SMS message via the 2SMS gateway. It then moves the XML file to the 'Sent' directory and appends the date and time to the filename.

SMSRelay handles messages longer than the 160 characters allowed by the SMS protocol. It does this by automatically splitting the message for you, and sending it as two consecutive SMS messages.
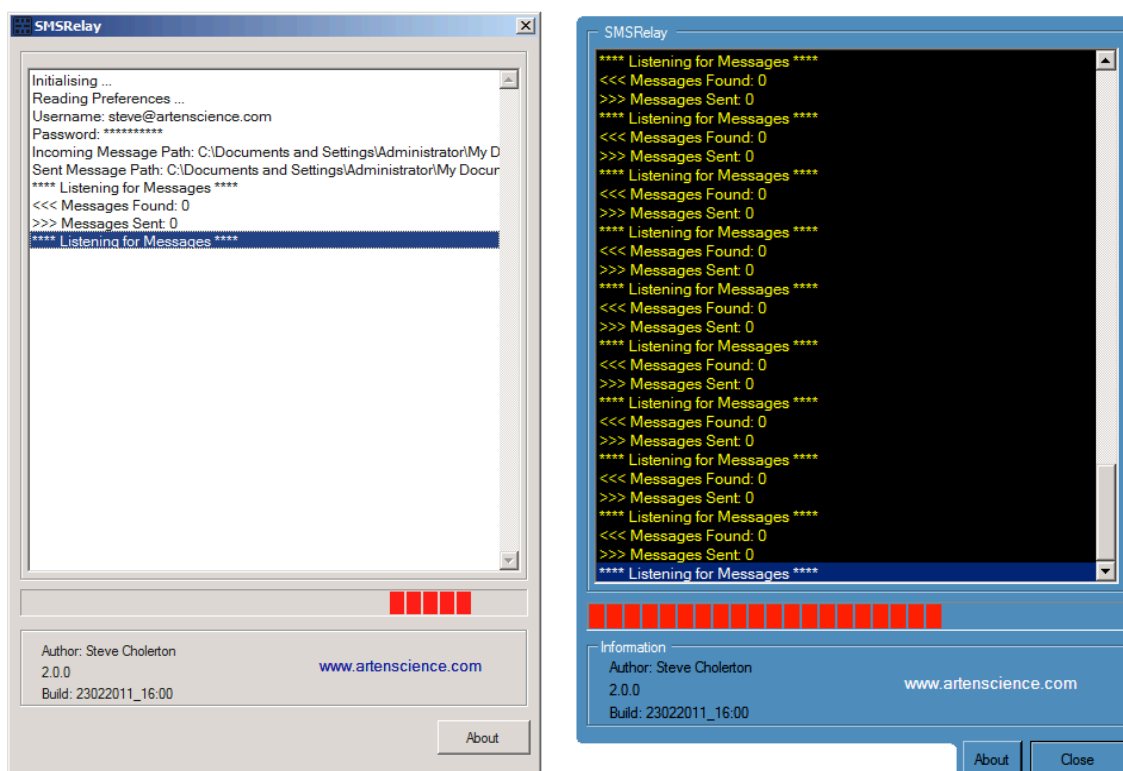
A default 'signature' can be setup within the SMS settings file, for example: ' - From: Arten Science Limited'. This can be overwritten on an individual message basis by specifying the <From> parameter in the local individuals SMS message file, for example: 'From: Steve at Arten Science'.

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The window of SMSRelay, if using the FUNKY skin, although irregularly shaped and having no title bar, can be dragged to a new position on the screen by clicking anywhere around the edge of the window and then dragging.

For both skins the window position is saved when the program is closed and it reopens in the same position next time. I have prevented the program from saving the co-ordinates of any additional monitors, because of the problems that can occur if the additional monitor is subsequently removed.

SMSRelay has two interface skins which are chosen by editing the configuration file. The two different interface skins are shown below:

On it's own SMSRelay can handle SMS messages dropped in the 'Waiting' directory by any of your existing applications or batch files with little modification to them, ideal for companies running custom internal software.

The SMSRelay Suite can be modified and customised to your requirements, at additional cost. Contact Arten Science Limited http://www.artenscience.com for details.

With SMSRelay all the messages are handled centrally by SMSRelay and stored on the server after they are sent.

Installation for each user is minimal and requires only Xcopy deployment with minimal configuration.

SMSRelay can be installed on several computers or servers within your organisation or group of companies. Only one account with 2SMS will be necessary.

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SMSRelay Installation & Configuration

Please review the Requirements section of this document before proceeding, you may need to install the Microsoft .NET Framework if it is not already installed on your computer.

Assuming the .NET Framework is installed, installation is just a matter of unzipping SMSRelay into a directory on your computer or server. The computer must have internet access. I suggest the following location:

C:\SMSRelay\Program

The next step is to setup the directories where the XML messages will be written and the directory where they will be stored when sent. I suggest the following:

\\SERVERNAME\Waiting
\\SERVERNAME\Sent

The last step is to edit the SMSRelayGeneralSettings.Xml file. This is the Configuration file. This can be edited with any text editor.

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Configuration Settings

Here are the settings that you will need to edit for your particular configuration:

Username
`<UserName>`steve@steve.com`</UserName>`
This is the logon to your account at 2SMS.

Password
`<PassWord>letmein</PassWord>`
This is the password to your 2SMS account.
Note: Access to the SMSRelay program directory should be restricted.

Incoming Message Path
`<IncomingMessagePath>C:\SMSRelay\Waiting</IncomingMessagePath>`
This is the path where Outgoing messages are looked for by SMSRelay

Sent Message Path
`<SentMessagePath>C:\SMSRelay\Sent</SentMessagePath>`
This is the path where Sent messages are put by SMSRelay

From
`<From>Arten Science Limited</From>`
This is the default "from' setting for each SMS Message and is appended to the message.

Interval
`<Interval>60000</Interval>`
How often SMSRelay polls for new messages, in milliseconds. 60000 = 1 Minute.

Screen Style
`<ScreenStyle>FUNKY</ScreenStyle>`
ScreenStyle accepts two parameters:
> *FUNKY*
> *YAWN*

Test Status
`<TestStatus>FALSE</TestStatus>`
For Production use this setting should be set to FALSE.

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ArtenSMS Installation & Configuration

Installation for ArtenSMS is similar regardless of whether you are using Mac OSX, Windows XP, Windows Vista or Linux.

<u>Executable Name</u>

Mac OSX   -   ArtenSMS
Windows   -   ArtenSMS.exe
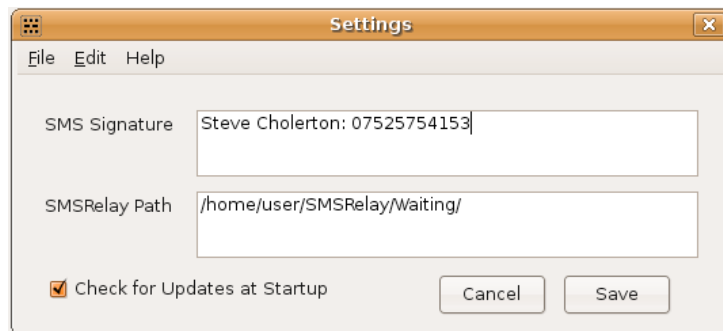Linux   -   ArtenSMS-Linux

<u>Installation</u>

The installation file for each platform is supplied as a zipped (compressed) file. Create a folder on your computer called SMSRelay. Double click to view the contents of the Zip file and drag the executable from the Zip file to the SMSRelay folder.   Installation is now complete.

To run ArtenSMS double click the executable in the SMSRelay Folder.

<u>Configuration</u>

The first time you run ArtenSMS the preferences window is opened.   The screenshot below is from the Linux version.

The SMS Signature is the text that you wish to appear automatically at the end of each text you send. As shown above it is useful to input your name and number here.

The SMSRelay Path is the path to the shared directory where SMSRelay is configured to retrieve the Xml SMS Messages.   The person who installed SMSRelay will be able to advise on the path to input here.

If you wish ArtenSMS to check for the latest version each time you run the program you should select the 'Check for Updates at Startup' checkbox. If you wish instead to check for updates manually, this can be done via the 'Check for Updates ...' menu option.

When you have finished inputting your preferences push the Save button.

If you wish to edit these preferences in future you should select the 'Preferences' option from the menu bar.

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SMSBatch Installation & Configuration

Installation for SMSBatch is similar regardless of whether you are using Mac OSX, Windows XP, Windows Vista or Linux.

<u>Executable Name</u>

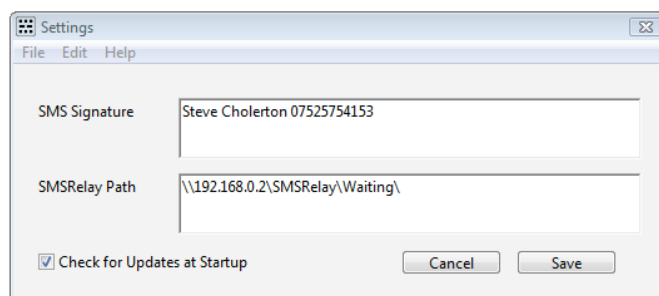|		
Mac OSX	-	SMSBatch
Windows	-	SMSBatch.exe
Linux	-	SMSBatch-Linux

<u>Installation</u>

The installation file for each platform is supplied as a zipped (compressed) file. Create a folder on your computer called SMSRelay. Double click to view the contents of the Zip file and drag the executable from the Zip file to the SMSRelay folder. Installation is now complete.

To run SMSBatch double click the executable in the SMSRelay Folder.

<u>Configuration</u>

The first time you run SMSBatch the preferences window is opened. The screenshot below is from the Windows Vista version.

The SMS Signature is the text that you wish to appear automatically at the end of each text you send. As shown above it is useful to input your name and number here.

The SMSRelay Path is the path to the shared directory where SMSRelay is configured to retrieve the Xml SMS Messages. The person who installed SMSRelay will be able to advise on the path to input here.

If you wish SMSBatch to check for the latest version each time you run the program you should select the 'Check for Updates at Startup' checkbox. If you wish instead to check for updates manually, this can be done via the 'Check for Updates ...' menu option.

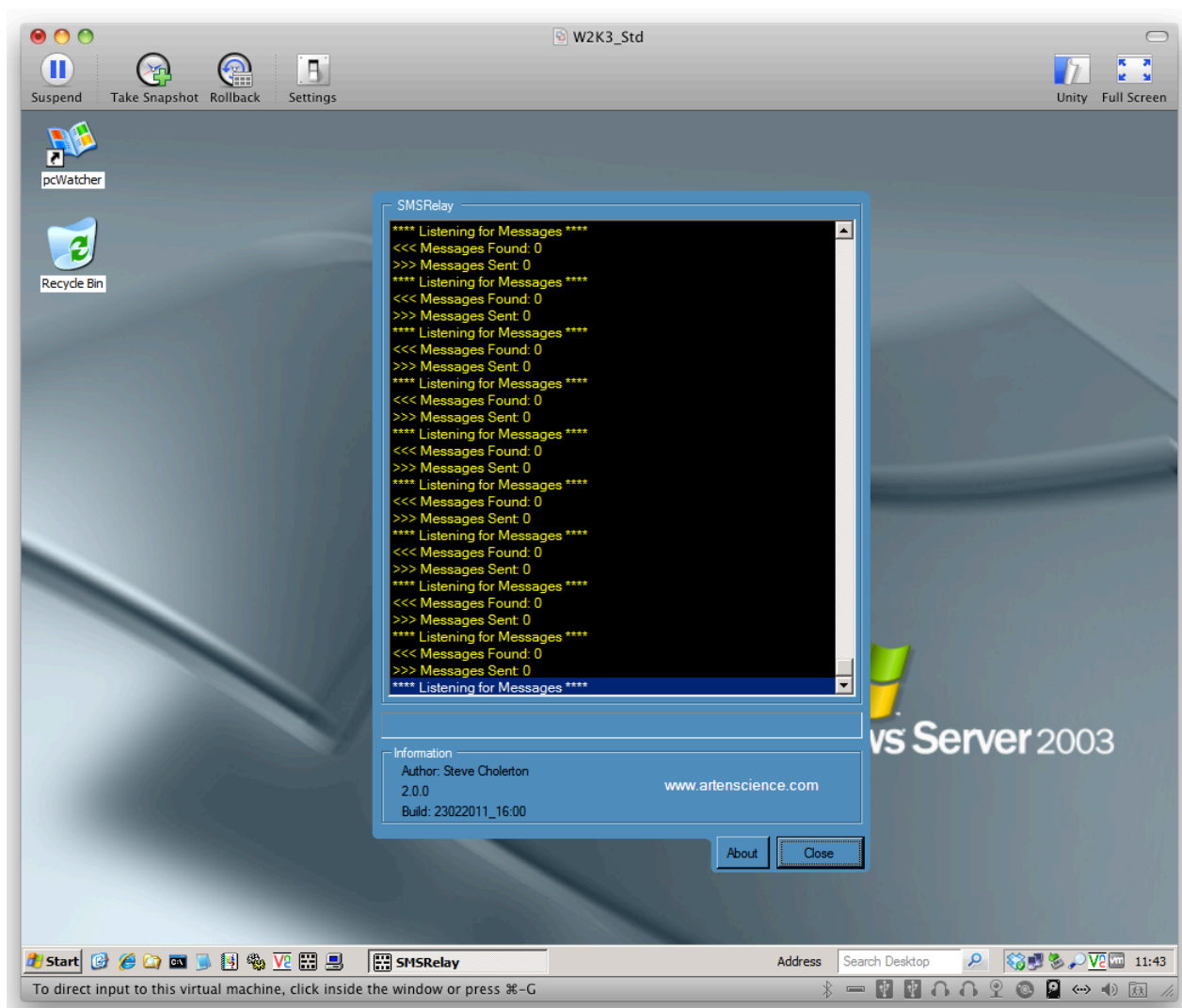When you have finished inputting your preferences push the Save button.

If you wish to edit these preferences in future you should select the 'Preferences' option from the menu bar.

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Using SMSRelay

Once SMSRelay is installed and configured the program should be launched and left to run. No user intervention is required.

It may be worth checking the screen from time to time as information regarding 'failed sends' as well as the amount of messages you have left on your account are displayed here.

SMSRelay running on a Windows 2003 Server Virtual Machine running on an Apple MacBook Pro running OSX 10.6.6

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Using ArtenSMS

ArtenSMS allows you to send one-off SMS messages using your computer rather than your mobile phone. The screenshot below is from the Mac OSX version.
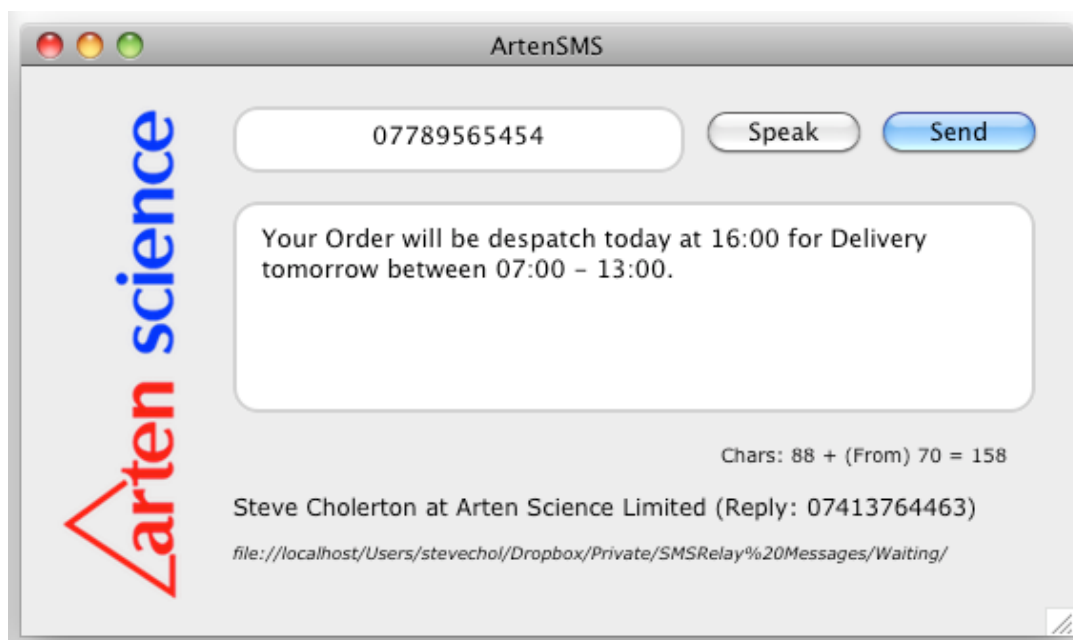
Enter the number of the message recipient into the input field to the right of 'Number'. Enter the message you wish to send into the input field to the right of 'Message'.

Messages over 160 characters will be sent as two consecutive messages. The amount of characters you have used are shown in the lower right of the screen, the figure to the far right includes the reply text and number of characters used by SMSRelay to format the message. In this case the message shown above is 79 characters.

When you have finished typing your message press the 'Send SMS' button.   Your message will be saved to the 'Waiting' directory and picked up, parsed and sent by SMSRelay the next time it polls.

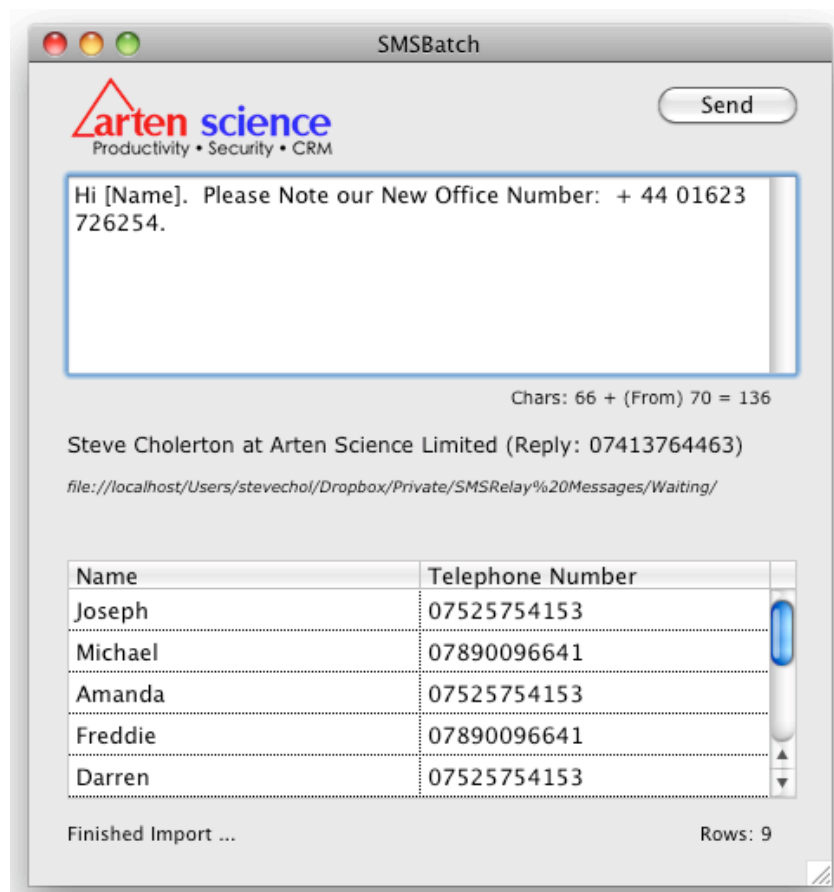Note: The format of the number can be any of the following:

07525754153
447525754153
+447525754153

Using SMSBatch

SMSBatch allows you to use your computer to send the same SMS message easily and quickly to a select group of individuals. An example might be informing your customers or suppliers of something urgent or important.

The screenshot below is from the Mac OSX version.

The list of names and numbers can be imported from either a Tab Delimited or Comma Separated file. This can usually be easily obtained by exporting from your Customer / Supplier database or Address Book software.

Once you have imported the names and numbers you can type the message you wish to send. Select the names in the list that you wish to receive the message and push the 'Send' button. Your message will be saved to the 'Waiting' directory and picked up, parsed and sent by SMSRelay the next time it polls.

If you wish to reference the name of the individual within the message, use the [Name] placeholder. When the message is sent this will be replaced by the name of the individual, giving a personalised look to the message.

Messages over 160 characters will be sent as two consecutive messages. The amount of characters you have used are shown in the lower right of the screen, the figure to the far right includes the reply text and number of characters used by SMSRelay to format the message.

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Interfacing Your Own Applications with SMSRelay

To enable your applications to create files that will be sent as SMS messages by SMSRelay, it is necessary to do two things.

1.   Create an XML text file
2.   Save this file in the 'Waiting' directory

The format of the text file is as follows:

```xml
<?xml version="1.0" encoding="utf-8"?>
<SMS>
   <Number>NUMBER_HERE</Number>
   <Message>MESSAGE_TEXT_HERE</Message>
   <From>SENDER_HERE</From>
</SMS>
```

The parameters shown in blue should be replaced by the telephone number of the recipient, the message text you want to send and the senders name.

Your own software can add extra information to the message without affecting the parsing done by SMSRelay. For example both the ArtenSMS and SMSBatch client software add the following to the message:

```xml
<NetworkID>192.168.0.215 / 255.255.255.0 / 00:1D:4F:4B:F8:91</NetworkID>
```

This information is stored with the archived message and is useful from an auditing perspective.

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SMSRelay Test / Debug Mode

SMS Relay has a Test/Debug Mode built in:
Set Parameter in SMSRelayGeneralSettings.Xml to TRUE

With TEST Mode enabled two extra buttons appear on the screen, TEST A and TEST B. In addition, in Test Mode automatic polling of the 'Waiting' directory is disabled.

Test A

Test A is designed to test the interface from SMSRelay to the SMS Server.   An SMS Message is sent using the following details from the SMSRelayGeneralSettings.Xml file.

Mobile Number: `<TestNumber>07525754153</TestNumber>`
Message: `<TestMessage>This is a Test</TestMessage>`

In addition the Version and Build Number of SMSRelay and the Date and Time are appended to the end of the test message.

Information relating to the test is shown on the SMSRelay screen.

Test B

Test B is designed to test the complete operation of SMSRelay.   It will effectively run the same routine that the polling system does, but it does it just the once.   This is useful for running a controlled sequence of tests.

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Notes and Tips

The 'Sent' directory will eventually be populated with hundreds or thousands of small Xml files, this will eventually degrade performance. It would be wise to instigate an archive procedure at a regular interval to clear down this directory.

SMSRelay does not have to run on the same computer as the directories where the files are stored. It does however need Read/Write access to those two directories.

You may experience firewall / proxy server issues depending on your network and security configuration. You need HTTP Port 80 access to 2SMS at 66.117.39.254 and 62.232.20.2 and HTTPS Port 443 access to 2SMS at 66.117.39.254 and 62.232.20.2. You should allow access to www.2sms.com on your proxy server, if you have one installed. You should also check that you have access to www.2sms.com/xml/xml.jsp . This will probably be an error response but as long as it is not a 404 or similar it should be ok.

If you are running a screen DPI setting other that the standard 96 DPI you may have problems with the windows displaying incorrectly when using the FUNKY skin. To adjust the DPI setting go to the Display Control Panel, select the Settings tab then the Advanced button. The DPI can be selected from the DPI Setting drop down menu. Future versions of SMSRelay will cater for non standard DPI settings automatically.

SMSRelay is designed to work with 2SMS as the provider of the SMS Gateway.
http://www.2sms.com/secure/default.aspx

2SMS provides trial accounts with thirty free messages (at the time of writing) if you do not already have an account and you wish to evaluate the trial version of SMSRelay.

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Requirements

SMSRelay

Required Files
SMSRelay.Exe
SMSRelayGeneralSettings.Xml
SMSRelayScreenSettings.Xml

System Requirements
Microsoft Windows XP, 2003 Server, Vista, 2008 Server
Microsoft .NET Framework V2.0 Installed on XP / 2003 Server
Microsoft .NET Framework V3.5 Installed on Vista / 2008 Server

ArtenSMS and SMSBatch

These programs consist only of an executable for the relevant platform. The platform can be either Windows XP, Windows Vista, Windows Server 2003, Windows 98, Macintosh OSX or Linux with GTK+ 2.x They require only R/W access to the SMSRelay 'Waiting' Directory.

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SMSRelay Trial Version Limitations

The words 'Trial Version' shown on the screen.

The words '**SMSRelay Trial_Version ** appended to the end of each txt message.

'Trial Version' is shown under 'License' on the About window.

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2SMS.COM

2SMS.COM is the provider I have chosen to work with for the supply of SMS text bundles. 2SMS (http://www.2sms.com) provide the final gateway that performs the actual delivery of the message to your recipient.

I have used 2SMS for many years and have found them to be reliable with high availability and fast delivery of SMS messages. The prices for SMS text bundles vary according to the size of the bundle purchased. The minimum bundle size at the time of writing is 1000 text messages.

It is easy to setup an account with 2SMS. For trial purposes you can register for an account with 30 (at the time of writing) free messages.

From their website 2SMS provide a full and detailed history of all messages sent and details of your account status, messages remaining etc.

For more details see the 2SMS website.

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