NowSMS Quick Start Guide #1:
Using NowSMS with GSM modems – Sending SMS Messages

This application note describes how to install a GSM modem for use by NowSMS to send SMS messages.

A GSM modem is a specialized type of modem which accepts a SIM card, and operates over a subscription to a mobile operator, just like a mobile phone. From the mobile operator perspective, a GSM modem looks just like a mobile phone.

For the purpose of this document, the term GSM modem is used as a generic term to refer to any modem that supports one or more of the protocols in the GSM evolutionary family, including the 2.5G technologies GPRS and EDGE, as well as the 3G technologies WCDMA, UMTS, HSDPA and HSUPA.

A GSM modem exposes an interface that allows applications such as NowSMS to send and receive messages over the modem interface. The mobile operator charges for this message sending and receiving as if it was performed directly on a mobile phone. To perform these tasks, a GSM modem must support an "extended AT command set" for sending/receiving SMS messages, as defined in the ETSI GSM 07.05 and and 3GPP TS 27.005 specifications.

GSM modems can be a quick and efficient way to get started with SMS, because a special subscription to an SMS service provider is not required. In most parts of the world, GSM modems are a cost effective solution for receiving SMS messages, because the sender is paying for the message delivery.

A GSM modem can be a dedicated modem device with a serial, USB or Bluetooth connection, such as the Falcom Samba 75 used in this document. (Other manufacturers of dedicated GSM modem devices include Wavecom, Multitech and iTegno.) To begin, insert a GSM SIM card into the modem and connect it to an available USB port on your computer.

A GSM modem could also be a standard GSM mobile phone with the appropriate cable and software driver to connect to a serial port or USB port on your computer. Any phone that supports the "extended AT command set" for sending/receiving SMS messages, as defined in ETSI GSM 07.05 and/or 3GPP TS 27.005, can be supported by the Now SMS/MMS Gateway. Note that not all mobile phones support this modem interface.

Modem vs. Phone

Due to some compatibility issues that can exist with mobile phones, using a dedicated GSM modem is usually preferable to a GSM mobile phone. This is more of an issue with MMS messaging, where if you wish to be able to receive inbound MMS messages with the gateway, the modem interface on most GSM phones will only allow you to send MMS messages. This is because the mobile phone automatically processes received MMS message notifications without forwarding them via the modem interface.

It should also be noted that not all phones support the modem interface for sending and receiving SMS messages. In particular, most smart phones, including Blackberries, iPhone, and Windows Mobile devices, do not support this modem interface at all. Additionally, Nokia phones that use the S60 (Series 60) interface, which is Symbian based, only support sending SMS messages via the modem interface, and do not support receiving SMS via the modem interface.

Installation

When you install your GSM modem, or connect your mobile phone to the computer, be sure to install the appropriate Windows® modem driver from the device manufacturer.

To simplify configuration the Now SMS/MMS Gateway will communicate with the device via this driver. If a Windows® driver is not available for your modem, you can use either the "Standard" or "Generic" 33600 bps modem driver that is built into the operating system.

A benefit of using a Windows® modem driver is that you can use Windows® diagnostics to ensure that the modem is communicating properly with the computer when you install your GSM modem or connect your phone.

To define which modems are to be used by the gateway, select the "SMSC" tab from the gateway configuration dialog box (see Fig. 1, right).

If no modems are yet to be defined, only the "Add" button will be available on the screen - select "Add".

Fig. 1

In the next window (Fig. 2), select "GSM Phone or Modem" from the list and click OK.
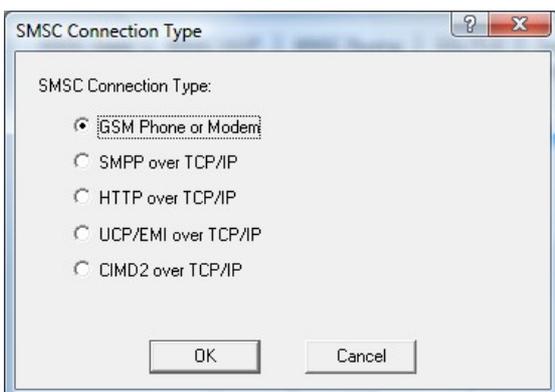
Fig. 2
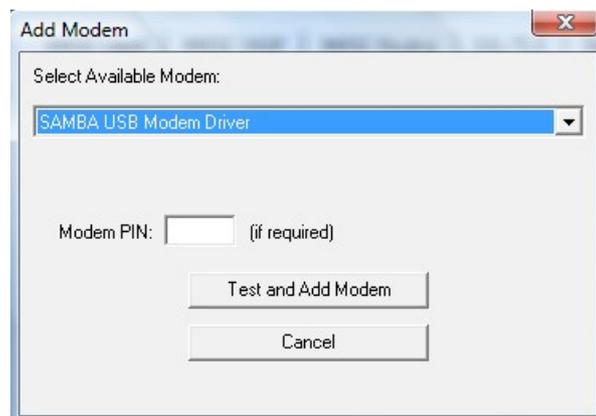
Fig. 3

Next select an available modem and press the "Test and Add Modem" button (see Fig. 3 above). The gateway will then attempt to initialize the modem, and confirm that the modem supports the necessary interfaces to send and receive SMS and MMS messages.

The modem will only be added to the configuration if the gateway confirms that it can communicate fully with the modem.

If the SIM card for the modem requires a 4-digit PIN, please supply it in the field provided.
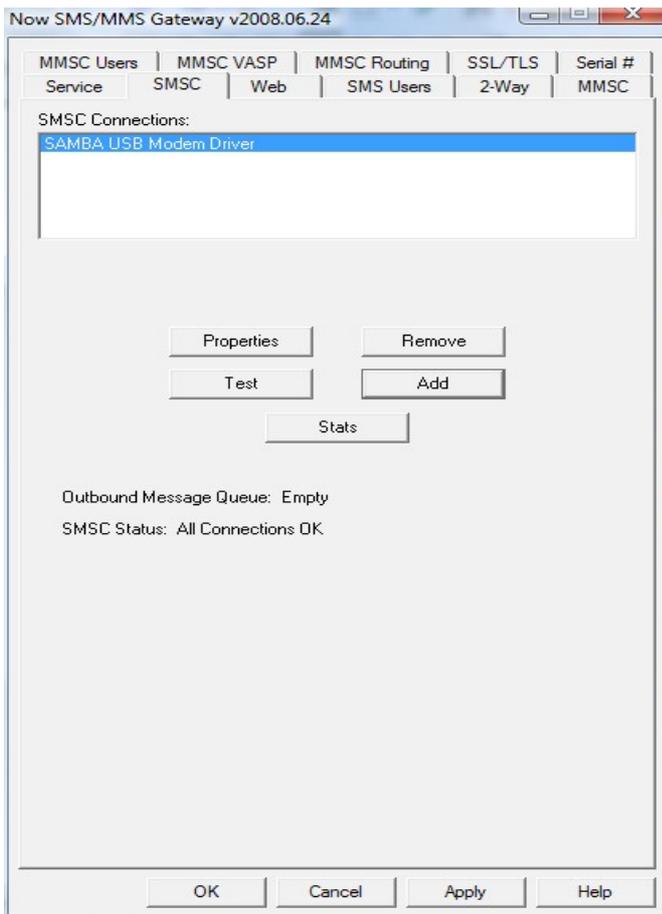
Fig. 4

Caution: If you are using a SIM that has a PIN you must enter the pin or your SIM will be blocked by your mobile operator.

You will then see the screen showing the modem you have selected (Fig. 4).

NowSMS is now ready to use the modem for sending SMS messages.

Additional topics such as receiving SMS messages, and sending and receiving MMS messages, will be covered in additional quick start guides.

Please note that even if you are only interested in using NowSMS to send MMS messages, you should complete the configuration steps for sending SMS messages with your modem in order to verify that the modem is working correctly.

For additional information on sending SMS messages, please refer to the manual that is located in the NowSMS program group under the Windows Start menu.