Technical Tip 17

SMS Comfort Troubleshooting API

An **application programming interface** (**API**) is a source code interface that a library provides to support requests for services to be made.
In the API term the concept is meant to represent any well defined interface between two separate programs. SMS comfort and the customer's application

A ***demo application*** has been written in C# and in Delphi. In this separate class which the DLL encapsulated, are made. The source code of these class are included and may be used. These class treated also the callbacks and put them in ordinary events, usefully for numerous applications.

The demo tool is a complete working application and has been intended as a **test material** and as programming example for the API.

Procedures and callbacks

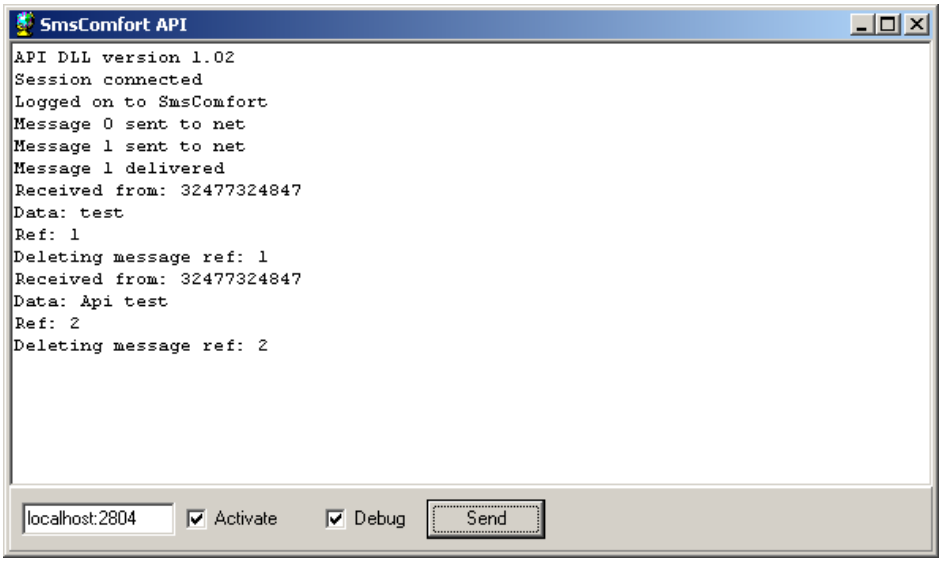
All voids and callbacks use the stdcall calling convention. This means that the parameters are passed on to the stack in order from right to left and that the called void releases the stack.

Installation requirements.

SMS comfort server must be a part of your network with a fixed IP address. The server must not be dedicated to SMS comfort.

SMS comfort API tool

Send and receive messages.



API log from SMS Comfort

Socket error detection

31/01/2008 21:19:24 **Error: Api error 10053 Connection aborted**
31/01/2008 21:19:26 (2) GSM < AT+CSQ
31/01/2008 21:19:26 (2) GSM > +CSQ: 21,99
31/01/2008 21:19:26 (2) GSM > OK
31/01/2008 21:19:26 (2) GSM < AT+CMGL=0
31/01/2008 21:19:26 (2) GSM > OK
31/01/2008 21:19:26 (2) GSM < AT+CMGL=1

Sending SMS from API tool to Mobile

31/01/2008 21:19:59 (2) GSM < AT+CMGL=0
31/01/2008 21:19:59 (2) GSM > OK
31/01/2008 21:19:59 (2) GSM < AT+CMGL=1
31/01/2008 21:19:59 (2) GSM > OK
31/01/2008 21:20:03 **Api data received, Ref 0, Dest 32477324847, Data TEST, Notification True**
31/01/2008 21:20:03 (2) GSM < AT+CMGS=18
31/01/2008 21:20:03 (2) GSM >
31/01/2008 21:20:03 (2) GSM < 7912374151616F631000B912374374248F70000A704D4E2940A
31/01/2008 21:20:03 (2) GSM < □
31/01/2008 21:20:05 (2) GSM >
31/01/2008 21:20:05 (2) GSM > +CMGS: 122
31/01/2008 21:20:05 (2) SMS message sent to net
31/01/2008 21:20:05 **Api SentToNet, ref 0**
31/01/2008 21:20:05 (2) GSM > OK
31/01/2008 21:20:16 (2) GSM < AT+CSQ
31/01/2008 21:20:16 (2) GSM > +CSQ: 21,99
31/01/2008 21:20:16 (2) GSM > OK
31/01/2008 21:20:16 (2) GSM < AT+CMGL=0
31/01/2008 21:20:16 (2) GSM > +CMGL: 1,0,,167
31/01/2008 21:20:17 (2) GSM >

31/01/2008 21:20:17 (2) GSM > OK
31/01/2008 21:20:17 (2) GSM < AT+CMGD=1
31/01/2008 21:20:17 (2) GSM > OK
31/01/2008 21:20:17 (2) GSM < AT+CMGL=1
31/01/2008 21:20:17 (2) GSM > OK
31/01/2008 21:20:24 **Api data received, Ref 1, Dest 0477324847, Data TEST, Notification True**
31/01/2008 21:20:24 (2) GSM < AT+CMGS=17
31/01/2008 21:20:24 (2) GSM >
31/01/2008 21:20:24 (2) GSM < 07912374151616F631000A9140772384740000A704D4E2940A
31/01/2008 21:20:24 (2) GSM < □
31/01/2008 21:20:26 (2) GSM >
31/01/2008 21:20:26 (2) GSM > +CMGS: 123
31/01/2008 21:20:26 (2) SMS message sent to net
31/01/2008 21:20:26 **Api SentToNet, ref 1**
31/01/2008 21:20:26 (2) GSM > OK
31/01/2008 21:20:37 (2) GSM < AT+CSQ
31/01/2008 21:20:37 (2) GSM > +CSQ: 21,99
31/01/2008 21:20:37 (2) GSM > OK
31/01/2008 21:20:37 (2) GSM < AT+CMGL=0
31/01/2008 21:20:37 (2) GSM > +CMGL: 1,0,,167
31/01/2008 21:20:38 (2) GSM >
07912374151616F6067B0A914077238474801013120200408010131202004000FFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFF
FFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFF
FFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFF
FFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFF
31/01/2008 21:20:38 **Api Notification, ref 1**
31/01/2008 21:20:38 (2) GSM > OK
31/01/2008 21:20:38 (2) GSM < AT+CMGD=1
31/01/2008 21:20:38 (2) GSM > OK
31/01/2008 21:21:22 (2) GSM < AT+CMGL=1
31/01/2008 21:21:22 (2) GSM > OK
31/01/2008 21:21:22 (2) GSM > OK
31/01/2008 21:21:22 (2) GSM < AT+CMGL=1

Receiving SMS and send to API

31/01/2008 21:21:33 (2) GSM < AT+CMGL=0
31/01/2008 21:21:33 (2) GSM > +CMGL: 1,0,,23
31/01/2008 21:21:33 (2) GSM > 07912374151616F6040B912374374248F70000801013121213400 4F4F29C0E
31/01/2008 21:21:33 **Api ReceivedSms Ref 1, From 32477324847, Data test**
31/01/2008 21:21:33 (2) GSM > OK
31/01/2008 21:21:33 **Api deleted Ref 1 from queue**
31/01/2008 21:21:34 (2) GSM < AT+CMGD=1
31/01/2008 21:21:34 (2) GSM > OK
31/01/2008 21:21:34 (2) GSM < AT+CMGL=1
31/01/2008 21:22:06 (2) GSM > OK
31/01/2008 21:22:17 (2) GSM < AT+CSQ
31/01/2008 21:22:17 (2) GSM > +CSQ: 21,99
31/01/2008 21:22:17 (2) GSM > OK
31/01/2008 21:22:17 (2) GSM < AT+CMGL=0
31/01/2008 21:22:17 (2) GSM > +CMGL: 1,0,,26
31/01/2008 21:22:17 (2) GSM > 07912374151616F6040B912374374248F70000801013122231400841781A442FCFE9
31/01/2008 21:22:17 **Api ReceivedSms Ref 2, From 32477324847, Data Api test**
31/01/2008 21:22:17 (2) GSM > OK
31/01/2008 21:22:17 **Api deleted Ref 2 from queue**
31/01/2008 21:22:18 (2) GSM < AT+CMGD=1
31/01/2008 21:22:18 (2) GSM > OK
31/01/2008 21:22:18 (2) GSM < AT+CMGL=1
31/01/2008 21:22:18 (2) GSM > OK