GSM-Control SMS software for PC

- Makes a PC as SMS gateway
- SMS sending/receiving with mobile phones and any devices with GSM/GPRS-modem
- New interface with Wonderware Application Server

GSM-Control offers a low-cost and easy alternative to create wireless control and monitoring applications. Implementation of SMS (SMS Message Service) technology secures reliable transmission even in the most error-sensitive applications.

The easy and economical way to make your application wireless:

- makes a PC as 2-way communication center with GSM-modem using standard SMS service
- interfaces devices with GSM-modems, users with phones and existing PC applications together
- configures, transfers, reports, secures and interfaces the applications
- M2M automation, info systems, field personnel guidance, customer service etc.
- open interfaces to other PC applications: DDE, OPC, SQL, MXAccess
- new extended features incl. LMX protocol
The main task of GSM-Control is to work as a gateway between GSM environment at one side (interfacing with GSM environment by sending/receiving SMS messages) and MS Windows environment (by using DDE (Dynamic Data Exchange), OPC (OLE for Process Control) or SQL (Structured Query Language) interfaces) or MXAccess (Wonderware proprietary interface to access of data in a Galaxy using native ArchestrA data types) at another side. Communication between GSM-modems is supported, i.e. remote GSM-modems can be used instead of GSM phone.

The GSM-Control software includes two MS Windows application programs: GSM-Control Configuration Program (GSMCFG) and GSM-Control Communication Program (GSMCTRL, further in the text also GSM-Control). The GSMCFG is used to prepare the source (configuration) information and GSMCTRL is used to perform the GSM SMS communications and DDE/OPC/SQL/MXAccess data exchange on the basis on information prepared by GSMCFG. These two application programs are completely independent, i.e. each can work separately and doesn’t need another program to be started. The data prepared by GSMCFG is saved in GSM-Control configuration file - XML (eXtensible Markup Language) format file used as an input file for GSMCTRL program. As many GSM-Control configuration files can be created as necessary.

GSM-Control reports all events and communication traffic as well as result of GSM-modem initialization.
Basically, the data exchange through GSM-Control can be initiated both from GSM and MS Windows environments:

1. From GSM environment - by sending SMS message to GSM-Control, where the received message is checked and processed according the GSM-Control current configuration. The received SMS message can contain some data to be transferred via DDE, OPC, SQL or MXAccess from GSM-Control to other MS Windows applications (e.g. to PC operator interface applications or field devices through appropriate communication servers) or databases. This SMS message received can have the corresponding response message configured (also possibly containing data values obtained by via DDE, OPC, SQL or MXAccess) - in this case GSM-Control will respond with SMS message to the sender.

2. From MS Windows environment - when some alarm or event occurs in MS Windows application (e.g. in PC operator interface application or directly in the field device) and the corresponding alarm or event condition is specified in GSM-Control. In this case GSM-Control will send the correspondingly configured SMS message (possibly containing also some data obtained via DDE, OPC or SQL or MXAccess) to remote GSM operator or device linked to this alarm or event condition. The receiver of such SMS message can respond to GSM-Control - for example, send some acknowledgment SMS message possibly containing some data for delivery via DDE, OPC, SQL or MXAccess.

Moreover, it is possible to send (manually or automatically through DDE, OPC or MXAccess) any pre-configured text message (“standard 1-way messages”) from GSM-Control to remote GSM operator or device. The SMS messages also can be received from any (not configured) phone number (so called “ANYUSER” feature) and correspondingly replied with information depending on contents of received message.

The GSM-Control can be used on Internet - it is possible to send SMS messages by e-mails from GSM-Control to GSM network and to receive SMS messages as e-mails from GSM network. In this case GSM-Control may run without GSM-modem connected - modem is replaced by e-mail connection.

Reference

Otis
wireless elevator maintenance

Otis uses the GSM-Control software, to deal with orders for spare parts automatically and wirelessly, directly between the service personnel’s mobile phones and the computer in Finland.

Wireless service system minimizes response times and brings the service, on the service personnel’s mobile phones.

Reference

ABB
Energy Systems made wireless

ABB Energiesysteme manufactures cogeneration energy systems 100 kW - 20 MW driven by gas engines, gas turbines and fuel cells.

To allow operators and maintenance personnel to have wireless access via their mobile phones into the energy systems, ABB is using Klinkmann’s GSM-Control text message software.
The GSM-Control may be accessed by any Microsoft Windows (9x, NT, 2000, XP) program working as a DDE or OPC Server (or DDE or OPC Client in case of direct sending/receiving of SMS Messages via GSM-Control).

The GSM-Control has extended functions and support for Wonderware InTouch (for MMI), IAS (Industrial Application Server, via MXAccess) and for I/O Servers (for field interfacing) developed with Wonderware I/O Servers Development Toolkit.

Reference
Car industry, GSM-Control and Wonderware

Reference
Wind power station, GSM-Control in energy production

Continuous running and preventive maintenance are of prime importance in energy production. The Kotka City Energy company is developing wind power applications as part of its energy production.

Klinkmann’s GSM-Control software and GSM-modems are used to automate the wind power stations.

Ordering information
GSM-Control SMS Center Software for PC, 3 phone/modem numbers, sw only PR000673
GSM-Control SMS Center Software for PC, unlimited, sw only PR00067

Hardware Kit:
Siemens MC35iT GSM/GPRS-modem, antenna, power supply, modem cable to interface PC to GSM network PC GSM SET

Other wireless software from Klinkmann
GSM-Dial conventional data connections with GSM-data

Reference
Wind power station, GSM-Control in energy production

Reference
Car industry, GSM-Control and Wonderware

The GSM-Control software developed by Klinkmann was added by Valmet Automotive to the Wonderware FactorySuite concept to allow wireless communication between Wonderware software and supervising persons’ mobile phones.

The factory may now relay system alarms and information to its maintenance staff.