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1. Installing and Configuring the SMS Gateway Server

Installing the SMS Gateway Program

If you wish to outsource SMS sending and receiving to another server or agent, or if you wish to use different Control Center numbers for different operators or countries, the SMS Gateway program allows you to setup GSM modems on different servers. You can distinguish between cell phone providers for customer convenience, or define different SMS costs for different GSM operators and areas.

You will have the option to use TCP/IP or MSN connection for communication between main server (TSSR) and SMS Gateway server. The following pages will introduce you to the SMS Gateway features and help you with the configurations between main server and SMS Gateway server.

Run the SMSGateway.exe to install the program to your PC. The Install Shield Wizard will guide you through the complete Setup process. After installation, a program item SMSGateway will be created in the Tracking System program folder.

To use the SMS Gateway you will need to connect your PC server to a GSM modem or terminal.

The SMS Gateway software can automatically detect and use GSM modems from various manufacturers:

- Siemens TC 35 T (and up)
- Telit GM 862

For installation and operation of GSM modems or terminals please refer to instructions and manuals provided by the manufacturers.

When you apply SIM cards to your GSM device please make sure that the SIM card can operate without entering PIN and has unlimited SMS Data feature enabled (ask the GSM service provider to do this) before you can use it in connection with the SMS Gateway.

Ask the GSM service provider for the SMSC number (SMS service center number). Empty the SMS storage in the GSM SIM card using operational GSM phone (please refer your GSM phone manual to do this).

Make sure that the GSM terminal with SIM card is powered on and connected to the serial port of your PC server.

Locate SMSGateway in Windows Start menu → All Programs → Tracking System or in the *Dir:\Program Files\Star Network* folder. Double click to open the program.

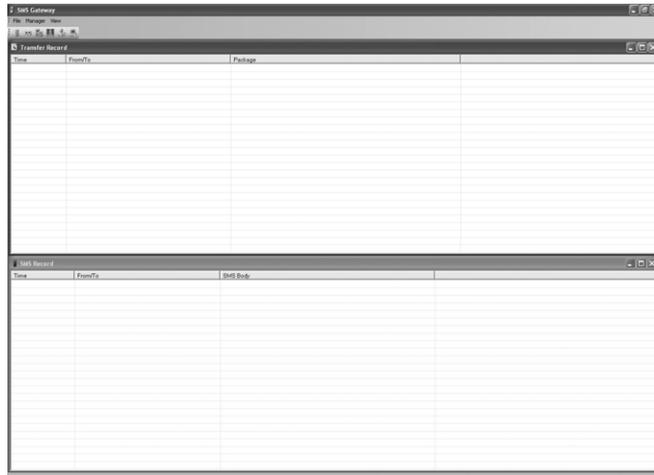


SMSGateway.exe

Configuring the SMS Gateway

After starting the application, the SMS Gateway will automatically detect and initialize

- Connected GSM devices
- Availability of SIM card
- Availability of GSM network



If no GSM device has been detected, all ports will remain closed.

To connect and initialize a GSM terminal later, you can use the *GSM Modem Settings* from the application menu or toolbar.

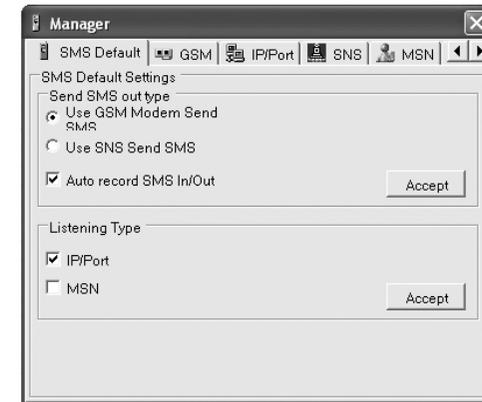
- Open the *SMS Default Settings* from the toolbar or application menu .

For all outbound communication (to GPS devices):

- Select *Use GSM Modem Send SMS* if you are using a GSM modem to send SMS.
- Select *Use SNS Send SMS* if you are using an SMS over IP service.
- Check *Auto record SMS In/Out* if you wish to keep a communication record for all inbound and outbound SMS .
- Click *Accept* to bring all changes into effect.

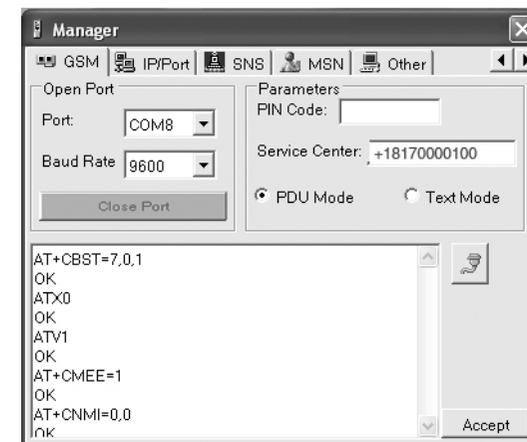
For all inbound communication (between main server and SMS Gateway server)

- Check *IP/Port* if you are connecting to a main server via Internet.
- Check *MSN* if you are using MSN messenger to receive SMS from the main server.
- Click *Accept* to bring all changes into effect.



- If you are using GSM modem to send and receive SMS with your SMS Gateway program, open the *GSM Modem Settings* from the toolbar or application menu .

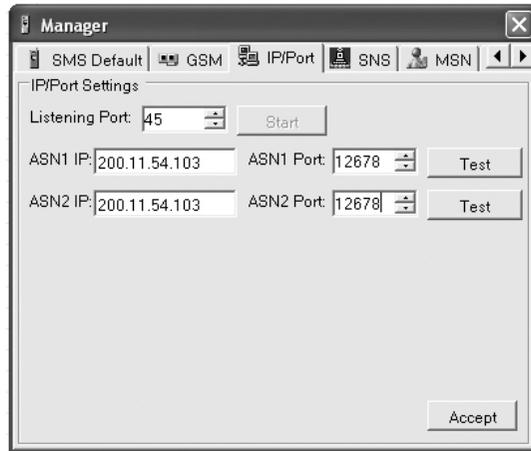
- If the port has not been automatically opened after starting the SMS Gateway, please select the COM Port where the modem is located and choose the proper Baud Rate.
- Enter the SMS Service Center number of the SIM operator into the Service Center field. Make sure to add + and country code.
- Check if the modem is able to send in *PDU mode* (Siemens TC35 and higher) or *Text mode*.
- Click *Open Port* and the *Initialize* button to start and register the modem. The program will try to establish connection to the port and initialize the modem for 10 times. If connection cannot be established, the port will close automatically. If successful, the Modem Monitoring Window will start displaying AT commands and confirm if there is a connection established. 



- To synchronize the SMS gateway server with the main server, open the *IP/Port Settings* from the toolbar or application menu.



- Enter the Listening Port for the Internet connection on your SMS Gateway server and click *Start* to open the port.
- Enter the IP address and Listening Port of the main server into the ASN IP and ASN Port fields (you have defined the Listening Port for SMS Gateways in the SMS Manager at your TSSR main server). If you are providing for 2 different main servers or if a backup server is used, you can add an ASN2 IP and port.
- To test if a connection between SMS Gateway and main server can be established successfully, click *Test*.
- Click *Accept* to bring all changes into effect.

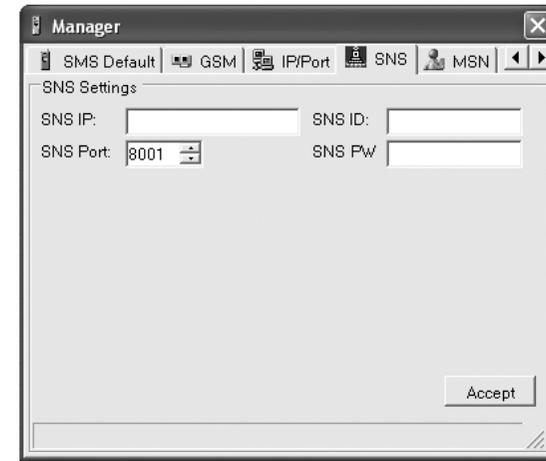


- If you are using SMS over IP services with your SMS Gateway server, open the *SNS Settings* from the toolbar or application menu.



- Enter the IP address and port of the SMS Internet Provider into the *SNS IP* and *SNS Port* fields.
- Enter ID and Password into the *SNS ID* and *SNS PW* fields .
- Click *Accept* to bring all changes into effect.

Note: Your SMS over IP provider may have different particulars and methods to access the service you have subscribed to. Please contact our customer service or hotline for support and receive customized integration of these services

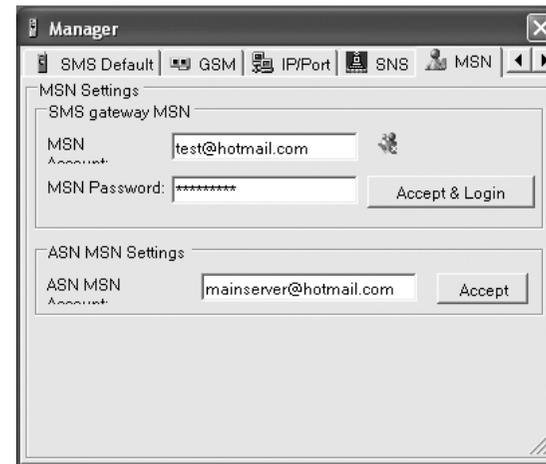


- If you are using MSN channel for communication between main server and SMS gateway server, open *MSN Channel Settings* from the toolbar or application menu.



- Enter the MSN account and password you have applied for the SMS Gateway server. Click *Accept & Login* to connect to the account.
- Enter the MSN account you have applied for at the main server into the *ASN MSN Account* field . Click *Accept* to establish communication between both accounts.

Note: Both accounts must have successfully been accepted and added as contact to MSN messenger prior to this use as SMS gateway.

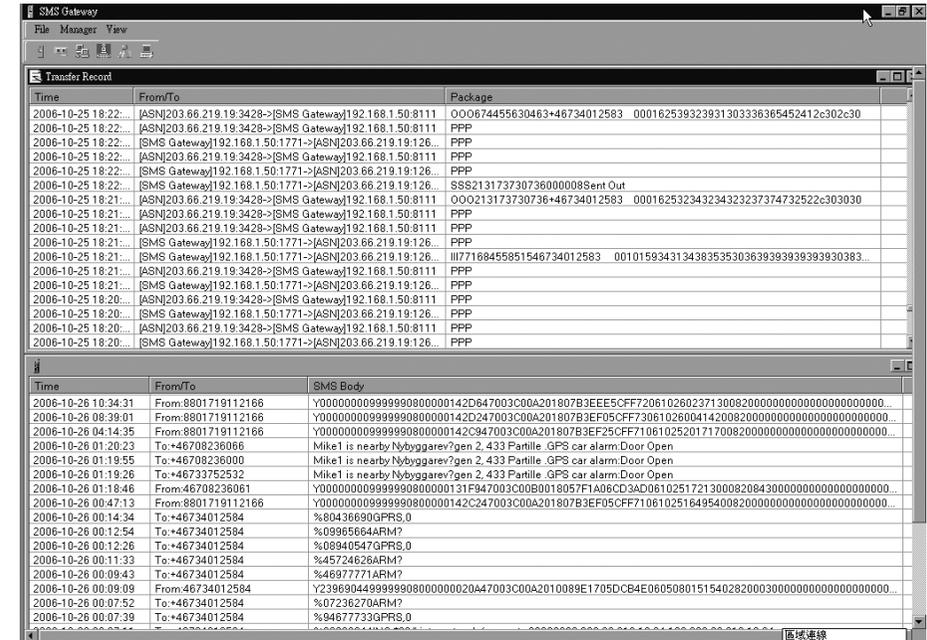


- To setup automatic save transfer and cache time, open *Other Settings* from the toolbar or application menu. Enter cache time and click *Accept* to bring changes into effect..



2. Using the SMS Gateway Server

After all SMS Gateway configurations have been made properly and synchronized with the main server, you will be able to send and receive SMS accordingly.



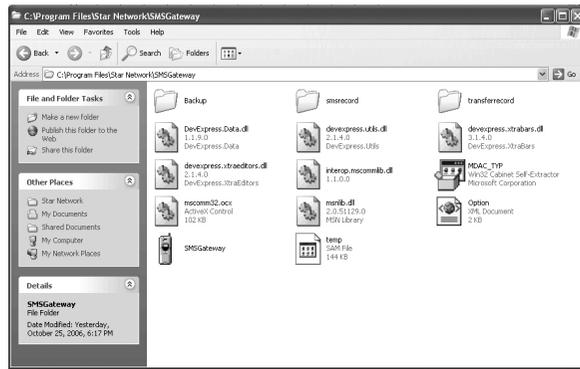
The Transfer Record table in the SMS Gateway program lets you view all communication details between main server [ASN] and SMS Gateway server [SMS Gateway], including date and time of transfer.

If connection has been established successfully, you will be able to see the SMS gateway polling the ASN every 30 seconds, followed by a “handshake” response from the main server, both indicated through PPP in the package column.

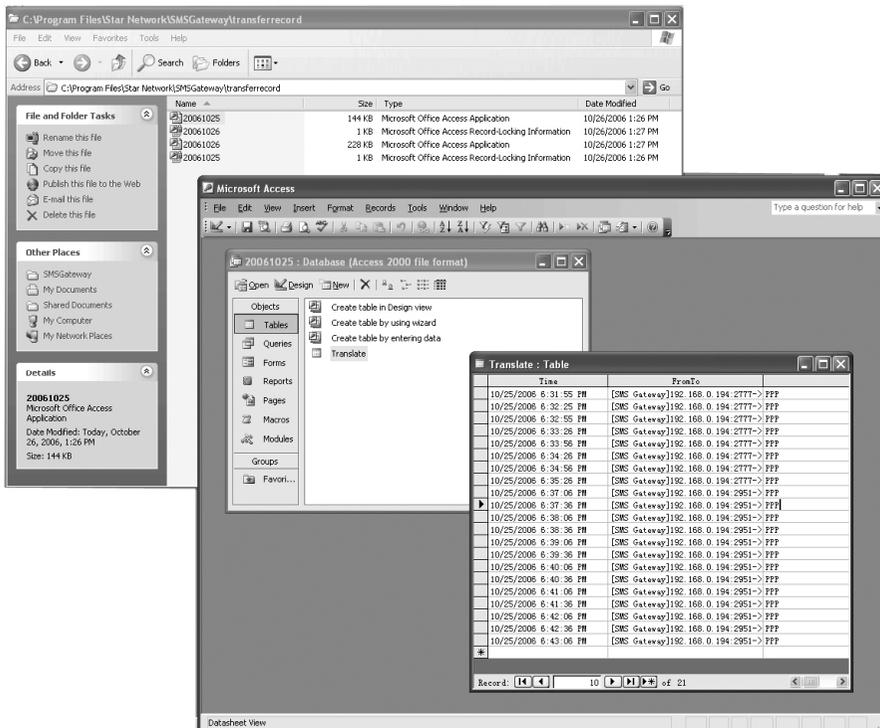
All inbound requests from the ASN will appear as coded strings.

The SMS Record Table in the SMS Gateway program lets you view all SMS traffic between SMS Gateway and devices, including date and time of communication. The SMS Body includes the complete message text, such as outbound commands, inbound (enclosed) reports and text messages sent to contact numbers of users.

If you wish to view previous record tables, locate smsrecord and transferrecord folders at the location where you have installed the SMS Gateway program (in *Dir:\Program Files\Star Network\SMSGateway*).



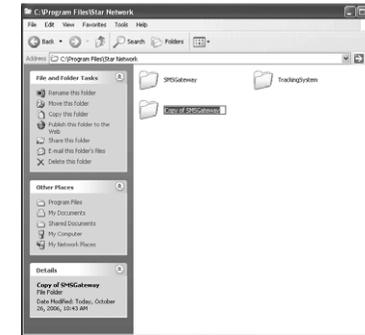
There you will find all database records as MDB files sorted by date. Use Microsoft Access to open the records.



3. Adding SMS Gateways

If you wish to run more than one SMS gateway on your server, please follow the instructions below.

Locate the SMSGateway program folder at the location where it is installed (in *Dir:\Program Files\Star Network*). Copy the complete folder to the parent directory.



Open the copied folder and rename the SMSGateway.exe file. You may also create a Shortcut icon and copy to your Desktop, in order to allow easier access.



Double click the newly created exe file to finish configurations and synchronizations of the new SMS Gateway with the main server.

