



SMS Gateway
Connection via SMPP to the M-Lat
M-Gateway Messaging System

SMPP Connection

To set up a smpp connection between a client application and M-LAT you need to use the SMPP protocol version 3.4, since earlier versions are not supported. The SMPP parameters required by M-LAT are the following:

- System_Id: Assigned to each client.
- Password: Assigned to each client.
- Host: m-lat.net
- port: 9001

The following PDUs are accepted for SMPP connections: bind_transmitter, bind_receiver, bind_transceiver, unbind, submit_sm, enquire_link.

Delivery Receipts

When setting up a bind_receiver or bind_transceiver type connection, the client application will be able to receive delivery receipts for each message sent. The parameters for the response are as follows:

- id_mensaje: Id of the message generated by the SMPP server.
- Message: message sent.
- Estado: message status. This field can include the following values:

E	Sent	A	Accepted
D	Delivered	L	Deleted
I	Invalid	J	Rejected
C	Without credits	X	Expired
P	Scheduled	U	Undeliverable
K	Unknown		

Types of Messages and Codification

There are several types of Messages that can be sent through the SMPP server of M-Lat Corporation, find the list of these messages below:

Type of SMS	Description and Example
Plain (7-bits)	(By default) Plain text as English encoded ISO-8859-1 (latin1)
Binary (8-bits)	A hexadecimal coded binary data together with a data header is used for transmitting alerts of WAP Push, Monophonic Ringtones, Vcards and other smart messaging formats.
Unicode (UCS2)	Hexadecimal UCS2 used to represent characters not included in the GSM alphabet, such as Arabic.

The M-Lat SMPP server is capable to process both Plain and Unicode text. Whenever a message with characters out of the GSM alphabet is sent, the SMPP server will automatically transform the message coding to UNICODE enabling the message submission. It is worth highlighting that the maximum character count for a UNICODE coded message is lower for coded messages in PlainText, that is, the maximum character width for a message whose characters are included in the GSM is 160,

while for a message whose characters are out of the GSM alphabet (such as Arabic), the maximum character width will be 70. However, it is possible to send messages with up to 459 characters in PlainText and 200 characters in UNICODE, this is known as concatenated messages, the SMPP server is able to process these texts, but they will be taken as more than one message, depending on the quantity of characters. The table below shows the text limits for PlainText concatenated messages.

Number of messages	Maximum size of the message
1	160
2	306
3	459

There are some characters that may be counted as 2 individual characters, this may cause the message to be longer and therefore concatenated. The table below shows a list of these characters:

Symbols	
[
\	}
]	~
^	€
{	

SMART Messages

Smart messages are those allowing for recognizing smart content, such as: Ringtones, Operator Logos, WAP PUSH, Vcards, etc. In order to send these messages, they must be built in binary format with its respective UDH (User Data Header), the M-LAT SMPP server is able to receive and process said messages. The ServiceType parameter in the message sent must be equal to "sm" and built in binary format. The submit_sm parameters to be configured are: ESMClass = (byte) 0x04, DataCoding = (byte) 0xF5.