

SMS-Bulk Gateway HTTP interface

Release 2.3.1

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1 Introduction

1.1 Summary

Only authorized users can submit SMS messages for delivery by one of the following methods:

- Internet through HTTP interface
- TCP/IP with session oriented interface
- EMI/UCP interface on TCP/IP protocol
- Via Email
- File Upload (through the Control Panel)

The following conditions must be met to enable SMS delivery:

- Existing user account with the authentication details (Username and Password)
- SMS Credit

In this technical document we illustrate as it's possible to use our SMS-Bulk gateway through HTTP/HTTPS interface.

2 Technical Specifications

2.1 SMS Gateway

In order to transmit delivery requests to our systems through HTTP interface (POST Method), the custom application needs to establish a network connection with our SMS Gateways.

Connection details:

- Main Host: **gateway.smsitaly.com** (IP address 212.131.251.60)
- Server port: **80** (HTTP)
- Protocol: **TCP**
- Url send: <http://gateway.smsitaly.com/bulk/send.asp>
- SSL: <https://gateway.smsitaly.com/bulk/send.asp>

- Backup Host: **backup.smsitaly.com** (IP address 212.131.251.50)
- Server port: **80** (HTTP)
- Protocol: **TCP**
- Url send: <http://backup.smsitaly.com/bulk/send.asp>

2.2 Transmission Parameters

Field	Type	Length	Value	Description
Account	Mandatory	Max 20	String	Username of customer account
Password	Mandatory	Max 20	String	Password of customer account
Sender	Mandatory	Max 16 digits or 11 characters alphnumeric		Originator
Recipients	Mandatory	Max 2	Integer: 1 to 99	Number of recipients to which sending
PhoneNumbers	Mandatory	Max 16384		List of one or several recipient phone number to receive the SMS (separated by commas)
SMSData	Mandatory	Max 4096	String	SMS Message
SMSType	Optional	Max 3	String	Type of message
SMSDateTime	Optional	Max 30	Date and Time	Desired deferred delivery date and time
SMSTest	Optional	Boolean (True or False)		Indicates "test" mode
UDH	Optional	Max 400	STRING	User Data Header
DCS	Optional	Max 2	Hex	Data Coding Scheme
DeliveryRequest	Optional	Max 1	Integer	Delivery request on GSM (check the networks available)
Notification	Optional	Max 98	String	Allow to send notification to email address or towards a script via Http
SmsValidity	Optional	Max 4	Numeric	Validity Period
SmsRef	Optional	Max 20	String	User Id Reference

2.2.1 Customer Information (Account and Password)

These two parameters identify the SMS user account which is to be charged for this message. ACCOUNT contains the User Name, PASSWORD contains the password of the account.

2.2.2 Recipient List Format (PhoneNumbers)

The mobile recipient list must contain at least one recipient phone number. If more than one recipients are specified, the individual numbers must be separated with commas(,).

Each recipient number must consist of 10-16 digits and must conform to the following format:

- International country dialing code without leading operator prefix (e.g. +39 for Italy, +49 for Germany, +44 for United Kingdom etc.)
- Mobile operator code (e.g. Tim: 338)
- Recipient's handset number (e.g. 3440932)

Example:

+393337589951,+3933812345,+49172123456

2.2.3 Number of recipients to which sending (Recipients)

This parameter identify the number of recipients present in PhoneNumbers. It must to be a value from 1 and 99.

2.2.4 SMS Message Format (SMSData)

A SMS Text message may consist of up to 160 characters belonging to the following set:

- **A...Z a...z 0...9**
- Blank space
- The meta characters \ (line feed)

Due to restrictions in the HTTP protocol format, the following special characters must be encoded in order not to collide with reserved HTTP characters:

Character must be encoded as

&	%26
+	%2B
%	%25
#	%23
Blank Space	%20
=	%3D

2.2.5 Originator Number (SENDER)

The SENDER ID may be alphanumeric or numeric.

- If the originator is alphanumeric, it must consist of 1-11 digits or letters.

Unicode characters are not allowed in SENDER ID

- If the originator is numeric, it must consist of 1-15 digits. It will appear on the mobile recipient's phone number as an international-format dialing number (prefixed with a "+").

Keeping in Touch!

The originator field is not supported by all recipients or networks. Depending on the particular brand and model, it also may not be recognized by the recipient's mobile phone. We cannot guarantee that any user-defined originator will indeed appear as specified on the recipient's phone.

2.2.6 Message Type (SMSType)

This optional parameter indicates the type of message to deliver. The following values are accepted:

- Empty = SMS Text
- FLH = Flash SMS Text
- UTF = SMS Text in Unicode UTF-8
- UCS = SMS Text in Unicode UCS-2
- WBK = WAP Bookmark
- WPS = WAP PUSH

2.2.7 Deferred Delivery (SMSDateTime)

If you wish to schedule SMS messages to send at a later date and time, you can use this parameter to indicate Date and Time in the following format: Day-MonthName-Year Hour:Minute:Second AM/PM (eg. 25-DEC-2009 10:15:00 PM). The time is interpreted as CET Central European time (GMT+1). Leave blank if you want to send the sms in real time.

2.2.8 TEST Parameter (SMSTest)

If the SMSTest parameter is set TRUE (or 1), the Gateway will process the message but not deliver it. A result code will be returned. This mode is useful for debugging the SMS request in your application.

2.2.9 SMSGateway

Not available anymore

2.3.0 Network Code and Operator Logo (Network Code)

Not available anymore

2.3.1 User Data Header (UDH)

This optional parameter specifies the User Data Header to send SMS in "transparent mode" (with 8-bit data)

2.3.2 Data Coding Scheme (DCS)

This optional parameter specifies the Data Coding Scheme for the SMS.

2.3.3 Delivery Confirmation (DeliveryRequest)

With this parameter it's possible to ask the "Delivery Notification". Default value is 0 (false). Check the allowed networks.

2.3.4 Delivery Notification (Notification)

It's possible to use this parameter in order to retrieve from our system the "delivered/not delivered" status through email or via http:

- Notification="mailto:xxxxxxxx@domain.com" (the notification will be sent to this email address)
- Notification="http://www.xxxxxx.com/script.asp" (the notification will be sent to the script with the following parameters: IdSMS, Status, TimeStamp, Phone & SmsRef)

2.3.5 Validity Period (SmsValidity)

For every sms sent it's possible to set the Validity Period. The value must to be between 30 minutes and 4320 minutes (72 hours). If the parameter is empty, for the value will be used the default validity present in the account.

2.3.6 Reference (SMSRef)

This parameter allow to send an ID Reference. The string will be saved inside the record of the sms sent and will be returned back through the email/http notification.

2.3.7 Result Codes

The SMS Gateway will acknowledge each request by sending back a result code. At the time being, the following codes are defined:

Result	Value	Description
+OK	Credit	SMS accepted by SMS Server. It return the credit charged and SMS numbers ready to deliver.
-ERR	100	Syntax/System Error
-ERR	99	Credit Not Available
-ERR	98	Login Failure
-ERR	97	Gateway Error
-ERR	96	Country Code Not Valid
-ERR	95	Gsm Code Not Valid
-ERR	94	Phone Number/Recipients Not Valid
-ERR	93	SMS Data Not Valid
-ERR	92	Data/Time Not Valid
-ERR	91	Country Code or/and Gsm Code Not Available
-ERR	90	Network Barred
-ERR	89	Account Blocked
-ERR	88	SMS Not Recognized
-ERR	87	IP Address Blocked By Account
-ERR	86	Recipient Blocked By Account
-ERR	85	IP Address Not Authorized
-ERR	84	Sender Not Valid
-ERR	83	Bad Request

3 Additional Topics

3.1 Sending 8-Bit Messages

The HTTP interface allows for the transmission of 8-bit data messages, such as logos and ringtones. ETSI 3.40 defines 8-bit short messages as being composed of a user data header and user data body. The combination of both may not exceed 280 bytes (in Hex Dump). The 8-bit messages are passed to the HTTP interface in the **SMSData** parameter, as standard text messages. The SMS Gateway determines the message type by SMSType parameter.

3.2 Sending Unicode Messages

HTTP interfaces fully supports Unicode messaging. It's possible to submit messages containing foreign (non-Latin) characters to our SMS Gateways using one of the following two encoding methods:

- UCS-2 (SMSType=UCS)
- UTF-8 (SMSType=UTF)

Unicode is a worldwide standard maintained by the international Unicode consortium. You can learn more about Unicode by visiting the following links:

<http://www.unicode.org>

A SMS message in Unicode format can contain at most **70** characters (280 Byte in Hex Dump) and will only displayed correctly on UCS-capable mobile phones.

3.2.1 Sending Messages in UCS-2 Format

In UCS-2 format, the entire SMS message is sent as a sequence of hex-encoded Unicode characters. Each Unicode character is represented as four hex digits (0..9, A..F in uppercase). For example, the string "ABC" consists of the following Unicode characters (in hexadecimal)

- A = 0041
- B = 0042
- C = 0043

3.2.2 Sending Messages in UTF-8 Format

Web browsers generate foreign characters in the UTF-8 format ("Unicode Transformation Format"). In UTF-8, each Unicode character has the form **&#nnnn;**

For example, a web browser will send the string " ري خ ل ا ح اب ص " to your script as follows:

صباحالخير