

text2reach
SMPP 3.4
interface

Monday 24 September 2012

v1.0

This document describes SMPP 3.4 interface between SMS service provider (SP) and text2reach SMS gateway (SMSGW).

Contents

- Contents..... 2
- Connecting to SMSGW SMPP server..... 3
- Supported SMPP commands..... 3
 - bind_receiver, bind_transmitter, bind_transceiver 3
 - submit_sm..... 4
 - deliver_sm..... 4
 - Reason code TLV 5
- Delivery receipts 5
 - Reason codes 5

Text2reach SMS gateway (SMSGW) uses SMPP protocol version 3.4 specification 1.2 however it should be backwards compatible with SMPP version 3.3. For full description of all differences from standard specification please read this documentation.

Connecting to SMSGW SMPP server

Host	gw.kingsms.com
Port	7777
Bind type	Transceiver or trasmitter and receiver.
Maximum sessions	1 transceiver or 1 transmitter/receiver.

Supported SMPP commands

Command	Hex
generic_nack	0x80000000
bind_receiver	0x00000001
bind_receiver_resp	0x80000001
bind_transmitter	0x00000002
bind_transmitter_resp	0x80000002
submit_sm	0x00000004
submit_sm_resp	0x80000004
deliver_sm	0x00000005
deliver_sm_resp	0x80000005
unbind	0x00000006
unbind_resp	0x80000006
bind_transceiver	0x00000009
bind_transceiver_resp	0x80000009
enquire_link	0x00000015
enquire_link_resp	0x80000015

bind_receiver, bind_transmitter, bind_transceiver

Multiple sessions are supported but must be enabled in SMPP server.

Note that only first active session binded as transceiver or receiver will receive delivery receipts.

Type	Field	Description
COctet	system_id	Account information.
COctet	password	Account information.

COctet	system_type	Empty or „EX”. See Reason code TLV .
Integer	interface_version	0x33 or 0x34.
Integer	addr_ton	Ignored.
Integer	addr_npi	Ignored.
COctet	address_range	Ignored.

submit_sm

Type	Field	Description
COctet	service_type	Allowed „” or „CMT”.
Integer	source_addr_ton	Allowed 0, 1, 2, 5.
Integer	source_addr_npi	Allowed 0, 1.
COctet	source_addr	Source addresses registered for the account.
Integer	dest_addr_ton	Allowed 0, 1.
Integer	dest_addr_npi	Allowed 0, 1.
COctet	destination_addr	MSISDN destinations allowed for the account.
Integer	esm_class	Allowed 0x00, 0x40.
Integer	protocol_id	Ignored.
Integer	priority_flag	According to SMPP 3.4 specification.
COctet	schedule_delivery_time	According to SMPP 3.4 specification. Max 14 days.
COctet	validity_period	According to SMPP 3.4 specification.
Integer	registered_delivery	According to SMPP 3.4 specification.
Integer	replace_if_present_flag	Unsupported.
Integer	data_coding	0x00 – GSM 03.38; 0x01, 0x03 – Latin1; 0x04 – Binary; 0x08 – UCS2; All other values are set to 0x00.
Integer	sm_default_msg_id	Ignored.
Integer	sm_length	According to SMPP 3.4 specification.
COctet	short_message	According to SMPP 3.4 specification.
TLV Integer	sar_msg_ref_num	According to SMPP 3.4 specification.
TLV Integer	sar_total_segments	According to SMPP 3.4 specification.
TLV Integer	sar_segment_seqnum	According to SMPP 3.4 specification.
TLV Coctet	message_payload	According to SMPP 3.4 specification.

deliver_sm

Type	Field	Description
COctet	service_type	Not set.

Integer	source_addr_ton	1
Integer	source_addr_npi	1
COctet	source_addr	submit_sm->dest_addr.
Integer	dest_addr_ton	submit_sm->source_addr_ton.
Integer	dest_addr_npi	submit_sm->source_addr_npi.
COctet	destination_addr	submit_sm->source_addr.
Integer	esm_class	0x04 – Delivery receipt.
Integer	protocol_id	Not set.
Integer	priority_flag	Not set.
COctet	schedule_delivery_time	Not set.
COctet	validity_period	Not set.
Integer	registered_delivery	Not set.
Integer	replace_if_present_flag	Not set.
Integer	data_coding	0x00 – GSM 03.38
Integer	sm_default_msg_id	Not set.
Integer	sm_length	According to SMPP 3.4 specification.
COctet	short_message	According to SMPP 3.4 specification.
TLV Integer	message_state	Delivery receipts .
TLV COctet	receipted_message_id	According to SMPP 3.4 specification.
TLV Integer	reason_code	Reason code TLV .

Reason code TLV

If connection is binded with „EX” as a system_type and interface_version 0x34 then following TLV is set with reason code value (See [Reason codes](#)).

Field	Size octets	Type	Description
Parameter tag	2	Integer	0x1600
Length	2	Integer	Length of Value part in octets.
Value	2	Integer	See Reason codes .

Delivery receipts

SMPP delivery receipts take the following format:

**id:IIIIIIIIII sub:001 dlvr:001 submit date:YYMMDDhhmm done date:YYMMDDhhmm
stat:DDDDDDD err:EEE Text:**

Field	Description
id	Unsigned integer.
sub	Always „001”.

dlvrd	Always „001”.
submit date	Date and time when SMS was submitted to SMSGW.
done date	Date and time when delivery receipt is generated on SMSGW.
stat	One of the following 'DELIVRD','EXPIRED','UNDELIV','UNKNOWN','REJECTD'.
err	See Reason codes .
Text	Always empty.

Reason codes

Code	Description
000	Success.
001	Retry count reached maximum.
002	Final status.
003	Number does not exist. Do not resend the message! Please, remove this number from any active database and do not make any transactions without new MO from this number.
004	Low balance. Insufficient funds in end user prepaid account.
005	Premium services are disabled for this end user.
006	End user is out of reach.
007	Wrong sender address.
008	Rejected by spam filter.
009	SMS content corrupted.
010	Temporary system error.
011	Price does not exist.
013	SMS too long.
014	Wrong UDH (User Data Header).
015	Wrong data coding.
017	Number temporarily disabled.
018	Monthly billing limit reached.
019	Billing cancelled by user.
020	Unspecified error.
021	Operator integration error.
022	Expired at SMSGW.
023	Destination operator not allowed.
024	Not enough funds in service providers account.