infobank

Messaging Service

SMPP API Specification V1.0.6

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Revision History

Version	Date	Details	Writer
1.0.0	05/26/2016	First draft	Namgung Hee Lee Jeonghae
1.0.1	10/07/2016	validity_period of submit_sm : added absolute time	Namgung Hee
1.0.2	20/11/2017	Removed Result Code 3007	Lee Junghae
1.0.3	23/07/2019	Add error code description - SMPP_ESME_RINVPASWD (0x0000000E) - SMPP_ESME_RINVSYSID (0x0000000F)	Lee Jaehee
1.0.4	22/12/2020	4.1. Phase 1 – Binding Process - Change to 'session type: transceiver, transmitter, receiver type is all supported.' 4.2. Phase 2 – Submitting a Short Message to … - Schedule_deliver_time Function Delete	Lee Jaehee
1.0.5	06/04/2022	Add FAQ Add error code description Initial caller identification code (originCID) add contents	Choi Hochul
1.0.6	22/03/2024	Add 'title' field to '5.Custom Message Field'	Choi Hochul

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1. Introduction

This document describes the interface specifications using the SMPP(Short Message Peer-to-Peer Protocol) to use the messaging service of Infobank Corp. The SMPP API is suitable for transmitting a large amount of messages by directly connecting to the messaging gateway. The Infobank gateway complies with the standard SMPP protocol (version 3.4) and messages can be sent using open SMPP software.

To use this service, the connection information should be received from Infobank.

2. Connection Server Information

2.1. SMPP API Server Connection Information

Host	Port
smpp.supersms.co	8214

3. Supported PDU (Protocol Description Units) Types

The Infobank SMPP API server supports the following PDU.

Client to Server	Server to Client
BIND_TRANSCEIVER	BIND_TRANSCEIVER_RESP
SUBMIT_SM	SUBMIT_SM_RESP
DELIVER_SM	DELIVER_SM_RESP
UNBIND	UNBIND_RESP
ENQUIRE_LINK	ENQUIRE_LINK_RESP

4. Message Transfer Procedure (Getting Started)

4.1. Phase 1 – Binding Process

- In this phase, a session is created to send a message by connecting the Infobank SMPP server, using the received connection information (IP, port, user name, and password).
- Limitation on the session type: Only the transceiver SMPP session type is supported and the transmitter and receiver type is not supported. The session will be automatically closed if not connected to the transceiver.
- session type: transceiver, transmitter, receiver type is all supported.
- Only the SMPP protocol version 3.4 is supported.

Field Name	Description	Restrictions	Example
System_id	Your Infobank SMPP API account username	Up to 15 digits See the SMPP specification document.	infobank
Password	Your Infobank SMPP API account password	Up to 8 digits See the SMPP specification document.	password
interface_version	SMPP Protocol Version	Supports only version 3.4.	0x52

4.2. Phase 2 - Submitting a Short Message to the Infobank Process

To send a message, a message transfer request should be made using submit_sm PDU after binding to the SMPP API server.

- The scope of supported charset encoding: Unicode (UTF-16), Latin
- TON and NPI: TON=1 and NPI=1 should be set before sending.
- SOURCE_ADDR: The source_addr field of submit_sm is used. The alphanumeric sender ID type is also supported.
- DESTINATION_ADDR: Use the destination_addr field of submit_sm. Only the international format is supported. If the format is not the international format, it will be processed as a failure.
  (Example: +821012345647, +82012345678, 821012345647, 82012345678)
- Concatenated message: The Infobank SMPP API supports the transfer of long messages.
  When sending a message that exceeds the maximum field length of the short message (255 bytes), the message_payload field should be used instead of the short message field, and the sm_length field should be set to 0x00.
  The message_payload field should be used, if the number of bytes exceeds 153 characters (Latin) or 67 characters (Unicode).
- Validity_period: Support a relative time format and an absolute time format.
  (Example : relative time 020610233429000R, absolute time 020610233429032+)
- Registered_delivery: Set to 0x01 to receive DLR.

- For resale customers who send to Korea (CountryCode 82), 5. Specify the originCID value of the Custom Message Field (refer to 7.3 Initial Sender Identification Code for details)
- See the SMPP protocol version 3.4 document for more information needed for SMS transfers.

4.3. Phase 3 - Delivery Receipt (DLR) Process

DLR can be received using the deliver_sm PDU after sending a message to the SMPP API server. (Optional)

- The scope of supported charset encoding: UTF-8
- The Data_Coding field of DLR uses UTF-8 and the 0x0F value is used.
- DLR uses the short_message field of the Deliver_SM PDU.
- DLR Example:

id:fb88df9c-9bc4-4372-9311-e16273aeb751 sub:001 dlvrd:000 submit date:YYMMDDhhmm done date:YYMMDDhhmm stat:REJECTD err:3015 text:TestMessage

- The submit_date and done_date of DLR uses UTC time.
- DELIVER_SM_RESP must be sent after receiving DLR, and if the SMPP API server cannot receive DELIVER_SM_RESP, the message will be resent.
- See the SMPP protocol version 3.4-Appendix B.

4.4. Phase 4 – Enquire Link

To maintain a session, Enquire_link PDU should be sent every 30 seconds.

5. Custom Message Field

Name	Field Name	Description	Restrictions	Code and Type
Sub id	client_sub_id	A separator to specify multiple message signatures and Sender ID	20byte	0x1401 C-Octet String
Payment code	payment_code	A code that separates the payment.	20byte	0x1402 C-Octet String
Client message key	client_msg_key	The message key defined by the customer	Up to 99 bytes	0x1403 C-Octet String
Report Type	report_type	Final message type 1001: SMS	4byte	0x1404 C-Octet String

		1003: Long message		
originCID	origin_cid	(Korea only) Initial sender identification code	9byte	0x1405 C-Octet String
title	title	(Korea only) Message subject when sending LMS/MMS	40byte	0x1406 C-Octet String

6. Appendix

6.1. Error Code

The following list shows the Infobank's unique error codes added to the command_status field of the SMPP protocol version 3.4. See the SMPP protocol version 3.4 document for other result codes.

SMPP Error Code	Hex Value	Description
SMPP_ESME_SYSERR	0x0000400	Authentication failed
SMPP_ESME_TOO_FAST	0x0000402	Exceeded server capacity
SMPP_ESME_SPAM	0x0000401	Spam
SMPP_ESME_NOT_ALLOW_SVC	0x0000403	No permission to deliver
SMPP_ESME_EXCEED_CRDT	0x0000405	Exceeded the maximum amount
SMPP_ESME_NOT_REG_SND_ID	0x0000406	Unregistered Sender ID -For messages sent to Korea only
SMPP_ESME_INVALID_SND_ID	0x0000407	Invalid Sender ID format - For messages sent to Korea only
SMPP_ESME_MSG_ESM_ERROR	0x0000408	Charset conversion error
SMPP_ESME_RINVPASWD	0x0000000E	Invalid password
SMPP_ESME_RINVSYSID	0x0000000F	Invalid System ID

6.2. Message Statuses

The following list shows the DLR result codes of Infobank.

Status of Message	CODE	Description

DELIVRD	1000	Success
UNDELIV	2000	Timeout
UNDELIV	2001	Failed to send
UNDELIV	2002	Failed to send
UNDELIV	2003	The handset is turned off.
UNDELIV	2004	The handset message is full.
UNDELIV	2005	Shadow area
UNDELIV	2006	The message has been deleted.
UNDELIV	2007	Temporary handset problem
REJECTD	3000	Unable to deliver
REJECTD	3001	No subscriber
REJECTD	3002	Age verification failed.
REJECTD	3003	Invalid recipients format
REJECTD	3004	Handset service suspended temporarily.
REJECTD	3005	Handset call processing state
REJECTD	3006	Declining incoming calls
REJECTD	3008	Other handset problems
REJECTD	3009	Invalid message format
REJECTD	3010	Handset that doesn’t support MMS.
REJECTD	3011	Server error
REJECTD	3012	Spam
REJECTD	3013	Service denial
REJECTD	3014	Others
REJECTD	3015	No transmission path
REJECTD	3016	Oversize attached file
INVALID	3018	Unregistered Sender ID -For messages sent to Korea only
INVALID	3019	Invalid Sender ID format -For messages sent to Korea only
INVALID	3022	Charset conversion error

INVALID	3025	Duplicated Message within 24 hour
INVALID	3029	Sent at ad blocking time
INVALID	3035	Unable to send due to carrier failure setting
INVALID	3036	Invalid originCID

7. FAQ

7.1. Initial sender identification code(origin_cid)?

It is an identification code inserted to identify the first sender when sending an Internet text message, and a special type of value-added telecommunication service provider registration number (9 digits) is used.

If the initial sender is a reseller, the registration number of the first reseller is included.

Example 1) Company → Reseller 1 → Reseller 2 → SMS relay company → Mobile operator

: Registration origin_cid of Reseller 1 is inserted

Example 2) Company → SMS relay company → Mobile operator

: SMS relay company registration origin_cid is inserted

8. Contact Us

For technical inquires about this document, please contact us using the following e-mail address.

Email: support@infobank.net