



233SMS.com

Bulk Http API Specification

(Document Version 1.0.0)

(This Document gives details on how to send messages via the Bulk HTTP API for the 233sms SMPP System)

HTTP API to submit messages on SMPP :

<http://<server>:<port>/bulksms/bulksms?>

username=XXXX&password=YYYYY&type=Y&dlr=Z&destination=QQQQQQQQQ
&source=RRRR&message=SSSSSSSS<&url=KKKK>

<server>:go.233sms.com <port>:8080 Parameters are explained below, please note that all the parameters (especially message and url) should be URL-UTF-8 encoded.

username: User name of the SMPP Account

password: Password of the SMPP Account

type: Indicates the type of message. Values for "type":

- 0: Plain Text (GSM 3.38 Character encoding)
- 1: Flash Message (GSM 3.38 Character encoding)
- 2: Unicode
- 3: Reserved
- 4: WAP Push
- 5: Plain Text (ISO-8859-1 Character encoding)
- 6: Unicode Flash
- 7: Flash Message (ISO-8859-1 Character encoding)

dlr: Indicates whether the client wants delivery report for this message Range of values for "dlr":

- 0: No Delivery report required
- 1: Delivery report required

destination: Mobile Number to which to Send message to (may or may not include a '+' sign), multiple mobile numbers can be separated by commas (note the comma (',') should be URL encoded).

source: The source address that should appear in the message Max Length of 18 if Only Numeric Max Length of 11 if Alpha numeric If you wish plus ('+') should be prefixed to the sender address when the message is displayed

on the cell phone, please prefix the plus sign to your sender address while submitting the message (note the plus sign should be URL encoded). Additional restrictions on this field may be enforced by the SMSC.

message: The message to send (Can be used for 'long' messages, that is, messages longer than 160 characters for plain text, 140 for flash and 280 for Unicode)For concatenated (long) messages we will be counting as one message for every 153 characters for plain text and 268 characters for Unicode, as the rest of the characters will be used by the system for packing extra information for re-assembling the message on the cell phone. In case of WAP Push (type = 4), this is the text that would appear in the message. Also in the latter case, to send non-English characters in the message, you only have to directly URL encode them (using UTF-8 character encoding scheme).

url: If sending a WAP Push message (type=4), this holds the link that you wish to send, for any other type of message, no value needs to be supplied for this field (if specified will be ignored) . Just like "message" field, this field should also be URL encoded with UTF-8 character encoding (even for sending non-ASCII domain names).

Error Codes: 1701:Success, Message Submitted Successfully, In this case you will receive the response 1701|<CELL_NO>|<MESSAGE ID>, The message Id can then be used later to map the delivery reports to this message. 1702:Invalid URL Error, This means that one of the parameters was not provided or left blank 1703:Invalid value in username or password field 1704:Invalid value in "type" field 1705:Invalid Message 1706:Invalid Destination 1707:Invalid Source (Sender) 1708:Invalid value for "dlr" field 1709:User validation failed

1710:Internal Error

1025:Insufficient Credit

Note:

- Along with the above errors codes, standard SMPP v3.4 error codes may also be returned where applicable.
- Apart from 1709, Please DO NOT RETRY re-sending the message for any other error code (including SMPP v3.4 Error codes).

Bulk SMS API Reply Format:

<Error_Code>|<destination>|<message_id>,<Error_Code>|<destination>|<message_id>...

Exceptional Situations:-

A request containing multiple destinations will be aborted immediately if any error other than “Invalid Destination” is found, in case an invalid destination is found we just skip that destination and proceed to the next destination. If while processing the request the SMPP Server goes down, the HTTP API will retry a fixed number (with a gap of ten milliseconds between consecutive retries) of times to reconnect to the SMPP server and submit the message. In case the SMPP server does not come up before the fixed number of attempts are exhausted, the batch will be aborted at that destination and a message will be returned in following format:-

<Error_Code>|<destination>|<message_id>,<Error_Code>|<destination>|<message_id>,17 09| <destination_at_which_batch_aborted> The third and final situation which can arise is the the credits can get exhausted in the middle of a request being serviced. In case such a situation occurs we will be aborting the batch on the destination at which we got the “Insufficient_Credit” error, and a response in the following format will be returned to the client:-

<Error_Code>|<destination>|<message_id>,<Error_Code>|<destination>|<message_id>,10 25| <destination_at_which_batch_aborted>

Example Link to Submit Plain Text Messages (GSM 03.38 character set):

[http:// <server>:<port>/bulksms/bulksms?
username=XXXX&password=YYYYY&type=0&dlr=1&destination=
%2B2332644488878&source=233sms&message=Demo%20Mes
sage!!!](http://<server>:<port>/bulksms/bulksms?username=XXXX&password=YYYYY&type=0&dlr=1&destination=%2B2332644488878&source=233sms&message=Demo%20Message!!!)

The following observations can be made in the above URL:

1. 'type=0', indicates this is a message of type plain text, this mode supports all characters falling under the GSM 03.38 character set.
2. 'dlr=1', indicates delivery report for this message is enabled.
3. 'message=Demo%20Message!!!', The message field contains the content to send in an URL encoded format, on using the appropriate username and password in the above link you will get the 'Demo Message!!!' on your mobile phone.
4. 'destination=%2B233264448887', An optional plus is included in the destination field here, Do note that the '+' sign is URL encoded.

Example Link to Submit Plain Text Messages
(ISO-8859-1 Character set):

[http:// <server>:<port>/bulksms/bulksms?
username=XXXX&password=YYYYY&type=5&dlr=0&destination=233264448887
&source=233sms&message=Demo%20Message!!!](http://<server>:<port>/bulksms/bulksms?username=XXXX&password=YYYYY&type=5&dlr=0&destination=233264448887&source=233sms&message=Demo%20Message!!!)

The following observations can be made in the above URL:

1. 'type=5', indicates message is of type plain text, this mode supports all characters falling under the ISO-8859-1 character set.
2. 'dlr=0', indicates delivery report for this message is not enabled.
3. 'message=Demo%20Message!!!', the message field contains the message to send in an URL encoded format, on using the appropriate username and password in the above link you will get the message "Demo Message!!!" on your mobile phone.
4. 'destination=233264448887' , the optional '+' has been omitted.

Example Link to Submit Flash Messages (GSM 03.38
Character set):

[http:// <server>:<port>/bulksms/bulksms?
username=XXXX&password=YYYYY&type=1&dlr=0&destination=233264448887
&source=233sms&message=Demo%20Message!!!](http://<server>:<port>/bulksms/bulksms?username=XXXX&password=YYYYY&type=1&dlr=0&destination=233264448887&source=233sms&message=Demo%20Message!!!)

On calling the above link by replacing the username and password by your account username and password, the message 'Demo Message!!!' should display on your cell phone. The characters in the message field should fall in the GSM 03.38 character set and the type parameter has to be set to 1 i. e. (type=1).

Example Link to Submit Unicode Flash Messages :

[http:// <server>:<port>/bulksms/bulksms?
username=XXXX&password=YYYYY&type=6&dlr=0&destination=233264448887&source
=233sms&message=00440065006D006F0020004D0065007300730061006700650
02100210021](http://<server>:<port>/bulksms/bulksms?username=XXXX&password=YYYYY&type=6&dlr=0&destination=233264448887&source=233sms&message=00440065006D006F0020004D006500730073006100670065002100210021)

On calling the above link by replacing the username and password by your account username and password, the sms 'Demo Message!!!' should flash on the mobile no in the destination field. The message has to be encoded in the UTF-16BE format and the type parameter has to be set to 6 i.e. (type=6).



CALL 26 444 888 7
233 911 911

**FOR
YOUR**

- ~ Bulk SMS
- ~ Group SMS
- ~ Corporate SMS
- ~ Personalised SMS

Example Link to Submit Unicode Messages :

[http:// <server>:<port>/bulksms/bulksms?
username=XXXX&password=YYYYY&type=2&dlr=0&destination=233264448887&source=233sms&message=Testing 233SMS.com bulk sms service](http://<server>:<port>/bulksms/bulksms?username=XXXX&password=YYYYY&type=2&dlr=0&destination=233264448887&source=233sms&message=Testing 233SMS.com bulk sms service)

On calling the above link by replacing the username and password by your account username and password, you should get the sms 'Demo Message!!!' on the mobile no in the destination field. The message has to be encoded on the UTF-16BE format and the type parameter has to be set to 6 i.e. (type=2).

ISO-8859-1 Character set

ISO/IEC 8859-1																
	x0	x1	x2	x3	x4	x5	x6	x7	x8	x9	xA	xB	xC	xD	xE	xF
0x	unused															
1x																
2x	SP	!	"	#	\$	%	&	'	()	*	+	,	-	.	/
3x	0	1	2	3	4	5	6	7	8	9	:	;	<	=	>	?
4x	@	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
5x	P	Q	R	S	T	U	V	W	X	Y	Z	[\]	^	_
6x	`	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o
7x	p	q	r	s	t	u	v	w	x	y	z	{		}	~	
8x	unused															
9x																
Ax	NBSP	ı	ç	£	¤	¥	¦	§	¨	©	ª	«	¬	SHY	®	¯
Bx	°	±	²	³	´	µ	¶	·	¸	¹	º	»	¼	½	¾	¿
Cx	À	Á	Â	Ã	Ä	Å	Æ	Ç	È	É	Ê	Ë	Ì	Í	Î	Ï
Dx	Ð	Ñ	Ò	Ó	Ô	Õ	Ö	×	Ø	Ù	Ú	Û	Ü	Ý	Þ	ß
Ex	à	á	â	ã	ä	å	æ	ç	è	é	ê	ë	ì	í	î	ï
Fx	ð	ñ	ò	ó	ô	õ	ö	÷	ø	ù	ú	û	ü	ý	þ	ÿ

Code values 00–1F, 7F, and 80–9F are not assigned to characters by ISO/IEC 8859-1.

Calling HTTP API Using .Net

```
Imports System.IO Imports System.Net Imports
System.Data Partial Class SendUsingSMPP Inherits
System.Web.UI.Page Protected Sub Page_Load(ByVal
sender As Object, ByVal e As System.EventArgs) Handles
Me.Load Dim WebRequest As Net.WebRequest 'object for
WebRequest Dim WebResonse As Net.WebResponse
'object for WebResponse
DEFINE PARAMETERS USED IN URL
'To what server you need
to connect to for submission 'i.e. Dim Server As String =
"xxxxx.xxxxx.xxxxx"
```

```
Dim Server As String = ""
'Port that is to be used like 8080 or 8000
Dim Port As String = ""
'Username that is to be used for
submission 'i.e. Dim UserName As
String = "tester"
Dim UserName As String = ""
' password that is to be used along with username 'i.e.
Dim Password As String = "password"
```

```
Dim Password As String = ""
'What type of the message that is to be sent. '0:means
plain text '1:means flash '2:means Unicode (Message
content should be in Hex) '6:means Unicode
Flash(Message content should be in Hex)
```

```
Dim type As Integer = 0
'Message content that is to be transmitted
Dim Message As String = "Test Message"
'Url Encode message
Message = HttpUtility.UrlEncode(Message) If
(Message = 2) Or (Message = 6) Then
Message = ConvertToUnicode(Message)
End If
'Require DLR or not
'0:means DLR is not
Required '1:means DLR is
Required
Dim DLR As Integer = 1
'Sender Id to be used for submitting the
message 'i.e. Dim SenderName As String =
"test"
Dim Source As String = ""
'Destinations to which message is to be sent For submitting
more than one 'destination at once destinations should be
comma separated Like '233264448887,233233911911
```

```
Dim Destination As String =
""""CODE COMPLETE TO DEFINE PARAMETER""""
Dim WebResponseString As String = "" Dim URL As String = "http://" & Server & ":" & Port &
"/bulksms/bulksms?username=" & UserName & "&password=" & Password & "&type=" & type &
"&dlr=" & DLR & "&destination=" & Destination & "&source=" & Source & "&message=" & Message &
"" WebRequest = Net.HttpWebRequest.Create(URL) 'Hit URL Link WebRequest.Timeout = 25000
```

```
Try
WebResonse = WebRequest.GetResponse 'Get Response Dim
reader As IO.StreamReader = New
IO.StreamReader(WebResonse.GetResponseStream)
'Read Response and store in variable
WebResponseString = reader.ReadToEnd()
WebResonse.Close()
Response.Write(WebResponseString) 'Display
Response. Catch ex As Exception
WebResponseString = "Request Timeout" 'If any
exception occur.
Response.Write(WebResponseString)
End Try End Sub
```

```
'Function To Convert String to Unicode if MessageType=2 and 6.
Public Function ConvertToUnicode(ByVal str As String)
As String Dim ArrayOFBytes() As Byte =
System.Text.Encoding.Unicode.GetBytes(str) Dim
UnicodeString As String = "" Dim v As Integer For v = 0
To ArrayOFBytes.Length -1 If v Mod 2 = 0 Then Dim t As
Integer = ArrayOFBytes(v) ArrayOFBytes(v) =
ArrayOFBytes(v + 1) ArrayOFBytes(v + 1) = t
```

```
End If Next For v = 0 To
ArrayOFBytes.Length -1 Dim c As
String = Hex$(ArrayOFBytes(v)) If
c.Length = 1 Then c = "0" & c
```

```
End If
UnicodeString = UnicodeString & c
Next Return
UnicodeString End
Function End Class
```

Calling HTTP API Using php

```
<?php class
Sender{ var
$host; var
$port; /*

• Username that is to be used for submission */ var
$strUserName; /*
• password that is to be used along with username */ var
$strPassword; /*
• Sender Id to be used for submitting the message */ var
$strSender; /*
• Message content that is to be transmitted */ var
$strMessage; /*
• Mobile No is to be transmitted. */ var $strMobile; /*
• What type of the message that is to be sent
• <ul>
• <li>0:means plain text</li>
• <li>1:means flash</li>
• <li>2:means Unicode (Message content should be in
Hex)</li>
• <li>6:means Unicode Flash (Message content should be in
Hex)</li>
• </ul> */ var $strMessageType; /*
• Require DLR or not
• <ul>
• <li>0:means DLR is not Required</li>
• <li>1:means DLR is Required</li>
• </ul> */ var $strDlr; private function
sms__unicode($message){ $hex1=""; if (function_exists('iconv')) {
$latin = @iconv('UTF-8', 'ISO-8859-1', $message); if (strcmp($latin,
$message)) { $arr = unpack('H*hex', @iconv('UTF-8', 'UCS-
```

```
2BE', $message)); $hex1 = strtoupper($arr['hex']); } if($hex1 =="){ $hex2="";  
$hex=""; for ($i=0; $i < strlen($message); $i++){ $hex =  
dechex(ord($message[$i])); $len =strlen($hex); $add = 4 -$len; if($len < 4){  
for($j=0;$j<$add;$j++){ $hex="0".$hex; } } $hex2.=$hex; } return $hex2; } else{  
return $hex1; } } else{ print 'iconv Function Not Exists !'; } } //Constructor.. public  
function Sender ($host,$port,$username,$password,$sender,  
$message,$mobile, $msgtype,$dlr){ $this->host=$host; $this->port=$port;  
$this->strUserName = $username; $this->strPassword = $password;  
$this->strSender= $sender; $this->strMessage=$message; //URL Encode The  
Message.. $this->strMobile=$mobile; $this->strMessageType=$msgtype;  
$this->strDlr=$dlr; } public function Submit(){ if($this->strMessageType=="2" ||  
$this->strMessageType=="6") { //Call The Function Of String To HEX.  
$this->strMessage = $this->sms__unicode( $this->strMessage); try{ //Smpp http  
Url to send sms.
```

```
$live_url="http://".$this->host.":".$this->port."/bulksms/bulksms?username=".$this->strUserName."&password=".$this->strPassword."&type=".$this->strMessageType."&dlr=".$this->strDir."&destination=".$this->strMobile."&source=".$this->strSender."&message=".$this->strMessage."" ; $parse_url=file($live_url); echo $parse_url[0]; }catch(Exception $e){ echo 'Message:' . $e->getMessage(); } } else $this->strMessage=urlencode($this->strMessage); try{ //Smpp http Url to send sms. $live_url="http://".$this->host.":".$this->port."/bulksms/bulksms?username=".$this->strUserName."&password=".$this->strPassword."&type=".$this->strMessageType."&dlr=".$this->strDir."&destination=".$this->strMobile."&source=".$this->strSender."&message=".$this->strMessage."" ; $parse_url=file($live_url); echo $parse_url[0]; } catch(Exception $e){ echo 'Message:' . $e->getMessage(); } } //Call The Constructor.
```

```
","2332339119115ÉíÈÑÚáÇ$obj=newSender("IP","Port","","","Tester","
```

```
","2","1"); $obj->Submit (); ?>
```

Calling HTTP API Using Java

```
import java.io.BufferedReader; import
java.io.DataOutputStream; import
java.io.InputStreamReader; import
java.net.HttpURLConnection; import java.net.URL; import
java.net.URLEncoder;
```

/**

- An Example Class to use for the submission using HTTP API You can perform
- your own validations into this Class For username, password, destination,
- source, dlr, type, message, server and port **/

```
public class Sender {
```

```
// Username that is to be used for submission
```

```
String username;
```

```
// password that is to be used along with username
```

```
String password;
```

```
// Message content that is to be transmitted
```

```
String message;
```

/**

- What type of the message that is to be sent
-
- 0:means plain text
- 1:means flash
- 2:means Unicode (Message content should be in
- Hex)
- 6:means Unicode Flash (Message content should be in
- Hex)
- */

```
String type;
```

/**

- Require DLR or not
-
- 0:means DLR is not
- Required

- 1:means DLR is
- Required

```
String dlr; </ul> */
```

/**

Destinations to which message is to be sent For submitting more than one

destination at once destinations should be comma separated Like
233264448887,233233911911 */

```
String destination;
// Sender Id to be used for submitting the message
String source;
// To what server you need to connect to for submission
String server;
// Port that is to be used like 8080 or 8000
int port;
public Sender(String server, int port, String username, String password,
String message, String dlr, String type, String destination,
String source) {
this.username = username;
this.password = password;
this.message = message;
this.dlr = dlr;
this.type = type;
this.destination = destination;
this.source = source;
this.server = server;
this.port = port;
}
private void submitMessage() {
try { // Url that will be called to submit the message URL sendUrl
= new URL("http://" + this.server + ":" + this.port

+ "/bulksms/bulksms"); HttpURLConnection httpConnection =
(HttpURLConnection) sendUrl.openConnection();

// This method sets the method type to POST so
that // will be send as a POST request
httpConnection.setRequestMethod("POST");
// This method is set as true wince we intend to
send // input to the server
httpConnection.setDoInput(true);
// This method implies that we intend to receive data from server.
httpConnection.setDoOutput(true);
// Implies do not use cached data
httpConnection.setUseCaches(false);
// Data that will be sent over the stream to the server.
DataOutputStream dataStreamToServer = new
DataOutputStream( httpConnection.getOutputStream());
dataStreamToServer.writeBytes("username="
URLEncoder.encode(this.username, "UTF-8") + "&password="
URLEncoder.encode(this.password, "UTF-8") + "&type="
URLEncoder.encode(this.type, "UTF-8") + "&dlr="
URLEncoder.encode(this.dlr, "UTF-8") + "&destination="
URLEncoder.encode(this.destination, "UTF-8") + "&source="
```



```

URLDecoder.decode(this.source, "UTF-8") + "&message="
URLDecoder.decode(this.message, "UTF-8")); dataStreamToServer.flush();
dataStreamToServer.close();

// Here take the output value of the server.
BufferedReader dataStreamFromUrl = new BufferedReader( new
InputStreamReader(httpConnection.getInputStream())); String dataFromUrl = "", dataBuffer = "";

// Writing information from the stream to the buffer
while ((dataBuffer = dataStreamFromUrl.readLine()) !=
null){ dataFromUrl += dataBuffer; }

/**
 *
 * Now dataFromUrl variable contains the Response received from the
 * server so we can parse the response and process it accordingly. */

dataStreamFromUrl.close();
System.out.println("Response: " + dataFromUrl); }
catch (Exception ex) {
ex.printStackTrace(); } } public
static void main(String[] args) { try
{

// Below exmaple is for sending Plain text
Sender s = new Sender("go.233sms.com", 8080, "tester909",
"test11", "test for unicode", "1", "0", "233264448887",
"Update"); s.submitMessage();

// Below exmaple is for sending unicode
Sender s1 = new Sender("go.233sms.com", 8080, "xxx",
"xxx", convertToUnicode("test for unicode").toString(),
"1", "2", "233264448887", "Update");
s1.submitMessage();
} catch (Exception
ex) { }}

/**
 * Below method converts the unicode to hex
 * value
 * @param regText
 * @return */
private static StringBuffer convertToUnicode(String
regText) { char[] chars = regText.toCharArray();
StringBuffer hexString = new StringBuffer();
For (int i = 0; i < chars.length; i++) { String iniHexString =
Integer.toHexString((int) chars[i]); If (iniHexString.length()
== 1)

```

```
iniHexString = "000" + iniHexString; else  
if (iniHexString.length() == 2)  
iniHexString = "00" + iniHexString; else if  
(iniHexString.length() == 3) iniHexString  
= "0" + iniHexString;  
hexString.append(iniHexString); }  
System.out.println(hexString); return  
hexString; } }
```