EBULKSMS

www.ebulksms.com

(Customized Text Messaging System)

API Specification Doc

Version	Date	Author	Description
1.0	01-Aug-2013	Dr Fox	Initial draft
1.1	14-Jul-2017	Dr Fox	Get API Key
1.2	21-Nov-2019	Dr Fox	SSL Support

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PREAMBLES

- In order to send SMS using the EbulkSMS API, you need to create an account first.
- Any curly braces shown in the URLs below **should be removed** from your final URL parameters as we included them only to show the parameters more clearly.

SEND SMS

1. JSON

Use the format below to send a POST request in JSON format.

Request

Method	URL
POST	`http://api.ebulksms.com:8080/sendsms.json` `https://api.ebulksms.com:4433/sendsms.json`

```
{

   "SMS": {
       "auth": {
           "username": "your_username_is_your_email_address",
           "apikey": "your_api_key"
       },
       "message": {
           "sender": "Sender Name",
           "messagetext": "Your message goes here",
           "flash": "0"
       },
       "recipients":
       {
           "gsm": [
               {
                   "msidn": "23480...",
                   "msgid": "uniqueid1..."
               },
               {
                   "msidn": "23480...",
                   "msgid": "uniqueid2..."
               }
           ]
       },
       "dndsender": 1
   }
```

```
}
```

Parameters

Name	Description
username	Your login username on eBulkSMS (same as your email address)
apikey	Generate your API key here.
sender	Your chosen sender name Alphanumeric sender name: Maximum of 11 characters Numeric sender name: Maximum of 14 characters
messagetext	The text message you wish to send Single page message is 160 characters Maximum of 6 pages with 918 characters
flash	0 - for normal SMS. 1 - for flash text (Only displays on the screen and will not be saved to the recipients phone)
recipients	Recipient's mobile number in full international format For messages which require delivery reports be sure include your unique message id for each GSM phone number in the JSON data: {"gsm": {"msidn": "23480...", "msgid": "unique_message_id..."}}
dndsender	1 – enable delivery to MTN DND numbers at (2 units each by default) 0 – to disable delivery to MTN DND numbers (1 unit)

IMPORTANT!!! Be sure to include the "application/json" or "text/json" Content-Type header in your request. If you do not send this header your request might be misinterpreted.

Response

The following responses will indicate if your message was received - success, or if there was an error in your request - failure.

Importantly, you must be aware that errors that have to do with recipient numbers are permanent and such messages should not be resent.

For errors relating to the message format and actual message you could modify the message and resend it.

The same applies to the sender name. As much as possible avoid using special characters in the sender name.

Format

Response Format
```{   "response": {   "status": "STATUS_STRING",   "totalsent": "<number of recipients>",   "cost": "<units charged>"   } }```

Status Description

Status	Response
INVALID_JSON	The JSON format is not valid.
MISSING_USERNAME	Username field is empty
MISSING_APIKEY	API Key field is empty
AUTH_FAILURE	The username and API key combination is not correct.
MISSING_SENDER	Sender name is empty
MISSING_MESSAGE	Empty message content
MISSING_RECIPIENT	No mobile phone number was found
INVALID_RECIPIENT	An invalid mobile phone number was found
INVALID_MESSAGE	Message is either too long or contains characters that cannot be sent.
INVALID_SENDER	The sender name entered is not valid or is missing.
INSUFFICIENT_CREDIT	Your account balance is too low to send the message.
UNKNOWN_CONTENTTYPE	Check you post method to ensure you have included a content-type header of "application/json" or "text/json".
UNKNOWN_ERROR	Rarely used - Errors in data specification / headers
SUCCESS	Your message was received successfully.

Sample Code

```php
<?php
$json_url = "http://api.ebulksms.com:8080/sendsms.json";
$username = '';
$apikey = '';

if (isset($_POST['button'])) {
    $username = $_POST['username'];
    $apikey = $_POST['apikey'];
    $sendername = substr($_POST['sender_name'], 0, 11);
    $recipients = $_POST['telephone'];
    $message = $_POST['message'];
    $flash = 0;
    if (get_magic_quotes_gpc()) {
        $message = stripslashes($_POST['message']);
    }
    $message = substr($_POST['message'], 0, 160);
    $result = useJSON($json_url, $username, $apikey, $flash, $sendername, $message, $recipients);
}



function useJSON($url, $username, $apikey, $flash, $sendername, $messagetext, $recipients) {
    $gsm = array();
    $country_code = '234';
    $arr_recipient = explode(',', $recipients);
    foreach ($arr_recipient as $recipient) {
        $mobilenumber = trim($recipient);
        if (substr($mobilenumber, 0, 1) == '0'){
            $mobilenumber = $country_code . substr($mobilenumber, 1);
        }
        elseif (substr($mobilenumber, 0, 1) == '+'){
            $mobilenumber = substr($mobilenumber, 1);
        }
        $generated_id = uniqid('int_', false);
        $generated_id = substr($generated_id, 0, 30);
        $gsm['gsm'][] = array('msidn' => $mobilenumber, 'msgid' => $generated_id);
    }
    $message = array(
        'sender' => $sendername,
        'messagetext' => $messagetext,
        'flash' => "{$flash}",
    );

    $request = array('SMS' => array(
            'auth' => array(
                'username' => $username,
                'apikey' => $apikey
            ),
            'message' => $message,
            'recipients' => $gsm
    ));
    $json_data = json_encode($request);
    if ($json_data) {
        $response = doPostRequest($url, $json_data, array('Content-Type: application/json'));
        $result = json_decode($response);
        return $result->response->status;
    } else {
        return false;
    }
}
```

```php
//Function to connect to SMS sending server using HTTP POST
function doPostRequest($url, $data, $headers = array()) {
    $php_errormsg = '';
    if (is_array($data)) {
        $data = http_build_query($data, '', '&');
    }
    $params = array('http' => array(
            'method' => 'POST',
            'content' => $data)
    );
    if ($headers !== null) {
        $params['http']['header'] = $headers;
    }
    $ctx = stream_context_create($params);
    $fp = fopen($url, 'rb', false, $ctx);
    if (!$fp) {
        return "Error: gateway is inaccessible";
    }
    //stream_set_timeout($fp, 0, 250);
    try {
        $response = stream_get_contents($fp);
        if ($response === false) {
            throw new Exception("Problem reading data from $url, $php_errormsg");
        }
        return $response;
    } catch (Exception $e) {
        $response = $e->getMessage();
        return $response;
    }
}
```

2. XML

Use the format below to send a POST request in XML format.

Request

Method	URL
POST	`http://api.ebulksms.com:8080/sendsms.xml` `https://api.ebulksms.com:4433/sendsms.xml`

```xml
<SMS>
    <auth>
        <username>your_username_is_your_email_address</username>
        <apikey>your_api_key</apikey>
    </auth>
    <message>
        <sender>Sender_Name</sender>
        <messagetext>Your_message</messagetext>
        <flash>0</flash>
    </message>
    <recipients>
        <gsm><msidn>23480...</msidn><msgid>uniqueid1...</msgid></gsm>
        <gsm><msidn>...
    </recipients>
</SMS>
```

Parameters

Name	Description
username	Your login username on eBulkSMS (same as your email address)
apikey	Generate your API key here.
sender	Your chosen sender name Alphanumeric sender name: Maximum of 11 characters Numeric sender name: Maximum of 14 characters

messagetext	The text message you wish to send Single page message is 160 characters Maximum of 6 pages with 918 characters
flash	0 - for normal SMS. 1 - for flash text (Only displays on the screen and will not be saved to the recipients phone)
recipients	Recipient's mobile number in full international format msidn - the mobile phone number msgid - a unique id if you need to request delivery reports. For messages which require delivery reports please use this format: \<gsm>\<msidn>23480...\</msidn>\<msgid>unique_msg_id\</msgid>\</gsm> … You can repeat this for multiple recipients in a single request.

IMPORTANT!!! Be sure to include the "application/xml" or "text/xml" Content-Type header in your request. If you do not send this header your request might be misinterpreted.

Response

The following responses will indicate if your message was received - success, or if there was an error in your request - failure.

Importantly, you must be aware that errors that have to do with recipient numbers are permanent and such messages should not be resent.

For errors relating to the message format and actual message you could modify the message and resend it.

The same applies to the sender name. As much as possible avoid using special characters in the sender name.

Format

Response Format
``<?xml version="1.0" encoding="UTF-8"?>
<response>
<status>STATUS_STRING</status>
<totalsent>{number of valid recipients}</totalsent>
<cost>{number of units used}</cost>
</response>```

Status Description

Status	Response
INVALID_XML	The XML format is not valid.
MISSING_USERNAME	Username field is empty
MISSING_APIKEY	API Key field is empty
AUTH_FAILURE	The username and API key combination is not correct.
MISSING_SENDER	Sender name is empty
MISSING_MESSAGE	Empty message content
MISSING_RECIPIENT	No valid mobile phone number was found
INVALID_MESSAGE	Message is either too long or contains characters that cannot be sent.
INVALID_SENDER	The sender name entered is not valid or is missing.
INSUFFICIENT_CREDIT	Your account balance is too low to send the message.
UNKNOWN_CONTENTTYPE	Check you post method to ensure there you added a content-type header of "application/xml" or "text/xml".
UNKNOWN_ERROR	Rarely used - Errors in data specification / headers
SUCCESS	Your message was received successfully.

Sample Code

```php
<?php
$xml_url = "http://api.ebulksms.com:8080/sendsms.xml";
$username = '';
$apikey = '';

if (isset($_POST['button'])) {
    $username = $_POST['username'];
    $apikey = $_POST['apikey'];
    $sendername = substr($_POST['sender_name'], 0, 11);
    $recipients = $_POST['telephone'];
    $message = $_POST['message'];
    $flash = 0;
    if (get_magic_quotes_gpc()) {
        $message = stripslashes($_POST['message']);
    }
    $message = substr($_POST['message'], 0, 160);
    $result = useXML($xml_url, $username, $apikey, $flash, $sendername, $message, $recipients);
}




function useXML($url, $username, $apikey, $flash, $sendername, $messagetext, $recipients) {
    $country_code = '234';
    $arr_recipient = explode(',', $recipients);
    $count = count($arr_recipient);
    $msg_ids = array();
    $recipients = '';

    $xml = new SimpleXMLElement('<SMS></SMS>');
    $auth = $xml->addChild('auth');
    $auth->addChild('username', $username);
    $auth->addChild('apikey', $apikey);

    $msg = $xml->addChild('message');
    $msg->addChild('sender', $sendername);
    $msg->addChild('messagetext', $messagetext);
    $msg->addChild('flash', $flash);

    $rcpt = $xml->addChild('recipients');
    for ($i = 0; $i < $count; $i++) {
        $generated_id = uniqid('int_', false);
        $generated_id = substr($generated_id, 0, 30);
        $mobilenumber = trim($arr_recipient[$i]);
        if (substr($mobilenumber, 0, 1) == '0') {
            $mobilenumber = $country_code . substr($mobilenumber, 1);
        } elseif (substr($mobilenumber, 0, 1) == '+') {
            $mobilenumber = substr($mobilenumber, 1);
        }
        $gsm = $rcpt->addChild('gsm');
        $gsm->addchild('msidn', $mobilenumber);
        $gsm->addchild('msgid', $generated_id);
    }
    $xmlrequest = $xml->asXML();

    if ($xmlrequest) {
        $result = doPostRequest($url, $xmlrequest, array('Content-Type: application/xml'));
        $xmlresponse = new SimpleXMLElement($result);
        return $xmlresponse->status;
    }
    return false;
}
```

```php
//Function to connect to SMS sending server using HTTP POST
function doPostRequest($url, $data, $headers = array()) {
    $php_errormsg = '';
    if (is_array($data)) {
        $data = http_build_query($data, '', '&');
    }
    $params = array('http' => array(
            'method' => 'POST',
            'content' => $data)
    );
    if ($headers !== null) {
        $params['http']['header'] = $headers;
    }
    $ctx = stream_context_create($params);
    $fp = fopen($url, 'rb', false, $ctx);
    if (!$fp) {
        return "Error: gateway is inaccessible";
    }
    //stream_set_timeout($fp, 0, 250);
    try {
        $response = stream_get_contents($fp);
        if ($response === false) {
            throw new Exception("Problem reading data from $url, $php_errormsg");
        }
        return $response;
    } catch (Exception $e) {
        $response = $e->getMessage();
        return $response;
    }
}
```

3. HTTP GET

With our HTTP GET API you only need to send a message using simple URL parameters. This is excellent if you want to integrate into mobile apps, games, and legacy applications.

Request

Method	URL
GET	`http://api.ebulksms.com:8080/sendsms` `https://api.ebulksms.com:4433/sendsms`

```
http://api.ebulksms.com:8080/sendsms?username={your_email_address}&apik
ey={your_api_key}&sender={your_sender_name}&messagetext={your_message_h
ere}&flash=0&recipients=23480...,23470...

OR

https://api.ebulksms.com:4433/sendsms?username={your_email_address}&api
key={your_api_key}&sender={your_sender_name}&messagetext={your_message_
here}&flash=0&recipients=23480...,23470...
```

You need to replace the parameters in the curly braces {} with your own details.

The easiest way to test this method is by copying pasting your generated URL in the address bar of your browser to see the response.

Parameters

Name	Description
Username	Your login username on eBulkSMS (same as your email address)
Apikey	You can generate your API key here.
Sender	Your chosen sender name Alphanumeric sender name: Maximum of 11 characters Numeric sender name: Maximum of 14 characters
Messagetext	The text message you wish to send Single page message is 160 characters Maximum of 6 pages with 918 characters
Flash	0 - for normal SMS. 1 - for flash text (Only displays on the screen and will not be saved to the recipients phone)
Recipients	Recipient's mobile number in full international format You can send to multiple numbers in a single request by separating them with a comma (,) only. E.g. http://api.ebul.../sendsms?...recipients=234802...,234703...,234...

Response

The following responses will indicate if your message was received - success, or if there was an error in your request - failure.

Importantly, you must be aware that errors that have to do with recipient numbers are permanent and such messages should not be resent.

For errors relating to the message format and actual message you could modify the message and resend it.

The same applies to the sender name.

Format

Response Format

//When there's an error you only get a status string.
STATUS_STRING
 	
//for successful requests you will receive:
STATUS_STRING|totalsent:{total number of valid recipients}|cost:{number of units used}

Status Description

Status	Response
INVALID_XML	The XML format is not valid.
MISSING_USERNAME	Username field is empty
MISSING_APIKEY	API Key field is empty
AUTH_FAILURE	The username and API key combination is not correct.
MISSING_SENDER	Sender name is empty
MISSING_MESSAGE	Empty message content
MISSING_RECIPIENT	No valid mobile phone number was found
INVALID_MESSAGE	Message is either too long or contains characters that cannot be sent.
INVALID_SENDER	The sender name entered is not valid or is missing.
INSUFFICIENT_CREDIT	Your account balance is too low to send the message.
UNKNOWN_ERROR	Rarely used - Errors in data specification / headers
SUCCESS	Your message was received successfully.

4. JSON DLR

Use the format below to make a GET request for delivery reports in JSON format.

Request

Method	URL

GET	`http://api.ebulksms.com:8080/getdlr.json?username={username}&apikey={apikey}` `&uniqueid={unique_id}`
	
	`https://api.ebulksms.com:4433/getdlr.json?username={username}&apikey={apikey}` `&uniqueid={unique_id}`

Parameters

Name	Description
username	Your login username on eBulkSMS (same as your email address)
apikey	Your API key which you can generate [here].
uniqueid (optional)	You can specify a message id which you included earlier with each number in sending a message. This is useful if want to get the status for that specific message.

* Important! Please ensure you save your delivery reports immediately you receive them. Once you have received a delivery report for a given set of numbers it will not be resent to you.

The delivery reports are sent in groups of a maximum of 1,000 numbers for each request you make.

Response

There are three possible results from this request – authentication error, success with delivery report, or success but no delivery report found (if you specified a unique message id).

In the event of an error, you will only receive an error status string in plain text.

For example:

```
AUTH_FAILURE
```

Here is an example of a successful DLR response in JSON.

```
{
    "dlr": [
      {
        "mobilenumber": "<number>",
        "sendtime": "<date time>",
        "id": "<unique_message_id>",
        "status": "DELIVERY_STATUS_STRING"
      },
      {
        "mobilenumber": "<number>",
        "sendtime": "<date time>",
        "id": "<unique_message_id>",
        "status": "DELIVERY_STATUS_STRING"
      },
      ...
    ]
}
```

5. XML DLR

Use the format below to make a GET request for delivery reports in XML format.

Request

Method	URL
GET	http://api.ebulksms.com:8080/getdlr.xml?username={username}&apikey={apikey} &uniqueid={unique_id} https://api.ebulksms.com:4433/getdlr.xml?username={username}&apikey={apikey} &uniqueid={unique_id}

Parameters

Name	Description
username	Your login username on eBulkSMS (same as your email address)
apikey	Your API key which you can quickly generate here.
uniqueid (optional)	You can specify a message id which you included earlier with each number in sending a message. This is useful if want to get the status for that specific message.

* Important! Please ensure you save your delivery reports immediately you receive them. Once you have received a delivery report for a given set of numbers it will not be resent to you.

The delivery reports are sent in groups of a maximum of 1,000 numbers for each request you make.

Response

There are three possible results from this request – authentication error, success with delivery report, or success but no delivery report found (if you specified a unique message id).

In the event of an error, you will only receive an error status string in plain text.

For example:

```
AUTH_FAILURE
```

Here is an example of a successful DLR response in XML.

```xml
<?xml version="1.0" encoding="UTF-8"?>
<response>
  <dlr>
    <mobilenumber>{number}</mobilenumber>
    <sendtime>{date time}</sendtime>
    <id>{unique_message_id}</id>
    <status>{DELIVERY_STATUS_STRING}</status>
  </dlr>
  <dlr>
    <mobilenumber>{number}</mobilenumber>
    <sendtime>{date time}</sendtime>
    <id>{unique_message_id}</id>
    <status>{DELIVERY_STATUS_STRING}</status>
  </dlr>
  ...
</response>
```

6. GET BALANCE

You can check your account balance at any time by making a simple GET request to the API.

Request

Method	URL
GET	http://api.ebulksms.com:8080/balance/{username}/{apikey} https://api.ebulksms.com:4433/balance/{username}/{apikey}

You need to replace the parameters in the curly braces {} with your own details.

The easiest way to test this method is by copying pasting your generated URL in the address bar of your browser to see the response.

Parameters

Name	Description
username	Your login username on eBulkSMS (same as your email address)
apikey	You can generate your API key here.

Response

A successful response would return your account balance as a number in plain text.

The only errors you may encounter with this request is either from your username and API key.

Format

Response Format

//If there's an error you only get a status string.
STATUS_STRING
 	
//for successful requests you will receive the number of units in your account
{account balance}

Format

Status	Response
MISSING_USERNAME	Username field is empty
MISSING_APIKEY	API Key field is empty
AUTH_FAILURE	The username and API key combination is not correct.

7. GET API KEY

You can make a request for your account API key at any time by making an HTTP POST request to the API.

Request

Method	URL
POST	http://api.ebulksms.com:8080/getapikey.json https://api.ebulksms.com:4433/getapikey.json

You need to add the application/json header and send the following parameters in your POST request.

Parameters

Name	Description
username	Your login username on eBulkSMS (same as your email address)
password	Your EbulkSMS password.

Request Format
| ```
{
    "auth": {
    "username": "your email address",
    "password": "your EbulkSMS account password
    }
}
``` |

Response

A successful response would return a success response with your API.

The only errors that you could run into with this request come from your username and API key.

Format

Response Format

//If there's an error you will receive a JSON sting in the format below
{
 "response": {
  "status": "AUTHORIZATION_ERROR"
 }
}

Format

Status	Response
MISSING_USERNAME	Username field is empty
MISSING_PASSWORD	Password field is empty
AUTH_FAILURE	The username and password combination is not correct
AUTHORIZATION_ERROR	Access to this method for your account has been locked for 24 hours.