

EBULKSMS

www.ebulksms.com

(Customized Text Messaging System)

API Specification Doc

| Version | Date | Author | Description |
|---------|----------------|--------|---------------|
| 1.0 | 01-August-2013 | Dr Fox | Initial draft |

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* Note that in order to send SMS using the [EbulkSMS](#) API, you need to [create an account](#) first.

1. JSON

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

Request

| Method | URL |
|--------|--------------------------------------|
| POST | http://api.ebulksms.com/sendsms.json |

```
{
  "SMS": {
    "auth": {
      "username": "your_username",
      "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..."
        }
      ]
    }
  }
}
```

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 For messages which require delivery reports be sure include your unique message id for each GSM phone number in the JSON data: <code>{"gsm": {"msidn": "23480...", "msgid": "unique_message_id..."}}</code> |

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 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 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
$json_url = "http://api.ebulksms.com/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;
    }
}
```



```

//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/sendsms.xml |

```
<SMS>

  <auth>

    <username>your_username</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 | 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 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
$json_url = "http://api.ebulksms.com/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);
    $result = useXML($json_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;
}
```

```

//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/sendsms |

```
http://api.ebulksms.com/sendsms?username={your_email_address}&apikey={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. |

DELIVERY REPORTS

1. 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/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"
    },
    ...
  ]
}
```

2. 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/getdlr.xml?username={username}&apikey={apikey}&uniqueid={unique_id} |

Parameters

| Name | Description |
|---------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| username | Your login username on eBulksSMS (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 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>
```


ACCOUNT BALANCE

1. 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/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 that you could run into with this request come from your username and API key.

Format

| Response Format |
|-----------------------------------------------------------------------------------------------------|
| //When 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. |