

API Specification Doc

(SMS System Gateway)

Version	Date	Description
1.0	01-Nov-2017	Initial draft
1.1	18-Feb-2018	Updated to include Delivery report call back options
1.2	10-Apr-2018	Appended API to include Bright Links support
1.3	31-May-2018	Appended API to include Voice Message support

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Methods

1. Overview

This document is a guide to implement SMS for your web/stand-alone applications. The document will provide the different methods that are available, the parameters to be passed and the formatting of the message details.

This document is intended for those users who wish to develop applications that make use of SMS Gateway.

The API is RESTful with JSON response format.

Link: <http://restapi.tobeprecisesms.com/>

2. API Commands

Some of the API commands that can be used for sending messages and to retrieve details are explained in this section. In all the methods, the system will require you to provide a user name and password for authentication purpose.

2.1 Check Credit Balance

This method is used to check credit balance for your account.

2.1.1 Request

Method	URL
GET	<code>api/Credits/GetBalance/?Username={Username}&Password={Password}</code>

2.1.2 Response

Status	Response
200	<p>Response will be a JSON object mentioning if the transaction was successful or not. Below is the sample response that will be received when it is success</p> <pre> { "status": "OK", "data": { "balance": "14405.080", "expiryDate": "2017-08-28T15:21:10.11", "overdraft": "0", "totalUsed": "40594.920" } } </pre>
400	<pre> { "status": "ERROR", "errorDescription": "Invalid login credentials" } </pre>
500	<pre> {"Message":"Something went wrong. Please try again later."} </pre>

2. 2 SMS Submission

This method allows you to submit any type of message English/Arabic message to the SMS gateway and to any number of mobiles. There are 3 different types of SMS submission supported.

- Single SMS
- Bulk SMS
- Custom SMS

2. 2 .1 Submit Single SMS (One to One)

Single SMS is used to submit priority messages such as OTP or transactional messages which must be processed immediately from the platform & pushed to the Operator's. It also supports up to 20 mobile numbers at a time.

It is strictly restricted to use this method for campaign submissions & large submissions. Accounts will be temporarily blocked if this method is used to submit campaign messages.

Method	URL
POST	api/SendSMS/SingleSMS/?Username={Username}&Password={Password}/

2. 2. 1 .1 Request

Request Format Body

```
{  
  "MobileNumbers": ["971501234567"],  
  "Message": "sample string 1",  
  "SenderName": "SMS Update",  
  "ReportRequired": true,  
  "CallbackQueryString": "paramX=12345&paramY=abc",  
  "ReferenceName": "sample string 5",  
  "BrightLinks": true,  
  "BrightLinksBaseURL": "http://prc.is",  
  "BrightLinksFinalURL": "http://www.example.com"  
}
```

Parameter name	Data Type	Description
Username	String	
Password	String	

MobileNumbers	String	Mobile numbers must be in the international format eg: "971501234567" within square braces. Supports up to 20 numbers.
Message	String	
SenderName	String	Maximum length is 12 characters. Only sender names that are allocated for your account can be used in this field.
ReportRequired	Boolean	If Delivery reports is required for the submission.
CallbackQueryString	String	This field is not mandatory. You can use this if you want our Gateway to pass any values back along with the call back URL which is totally relevant to your system. The Call back URL are configured on account level. For one account we can set only 1 URL as call back. To get the URL configured or to get additional details please contact your account manager.
ReferenceName	String	Used in Bright links reporting. This field is mandatory when using Bright links. Else it is Optional.
BrightLinks	Boolean	You can set this to true if you want our Gateway to track clicks & conversion from the URL within the message body. <i>Please contact your account manager if this option is not enabled for your account.</i>
BrightLinksBaseURL	String	Base URL used for shortening links from SMS message body in Bright link tracking use-case. Mandatory if parameter " BrightLinks " is true
BrightLinksFinalURL	String	The URL in the message body that will be converted to Bright Links for click &

		<p>conversion tracking</p> <p>Mandatory if parameter “BrightLinks” is true & it has to be the same as that present in the message body</p>
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2.2.1.2 Response

Status	Response
200	<p>Response will be an JSON object mentioning if the transaction was successful or not. See below for a sample response</p> <pre>{ "status": "OK", "data": [{ "msgId": 4658229, "mobileNo": "971501234567", "status": "OK", "details": "Message Sent", "creditsUsed": "0.060000" }] }</pre>
200	<pre>{ "status": "OK", "data": [{ "mobileNo": "971501234567", "status": "Error", "details": "SENDER NOT ALLOWED",</pre>

	<pre> "creditsUsed": "0", "errorCode": 9 }] } </pre>
400	<pre> { "status": "ERROR", "errorDescription": "Unable to perform the action. Please try again later." } </pre>
500	<pre> {"Message": "Something went wrong. Please try again later."} </pre>

2. 2 .2 Submit Bulk SMS (One to Many)

Method	URL
POST	api/SendSMS/BulkSMS/?Username={Username}&Password={Password}

2. 2 .2 .1 Request

Request Format Body

```

{
"MobileNumbers": [
"971501234567",
"971501245678"
],
"Message": "sample string 1",
"SenderName": "SMS Update",

```

```

"ScheduledDate": "2017-01-31T14:49:59.5746271+04:00",
"RemoveDuplicates": true,
"ReferenceName": "sample string 5",
"ReportRequired": true,
"CallbackQueryString": "paramX=12345&paramY=abc",
"ReturnIndividualResponse": false,
"AsynchronousSubmission": false,
"BrightLinks": true,
"BrightLinksBaseURL": "http://prc.is",
"BrightLinksFinalURL": "http://www.example.com"
}

```

Parameter name	Data Type	Description
MobileNumbers	Array of String	Each mobile number must be in the international format eg: 971501234567
Message	String	
SenderName	String	Maximum length is 12 characters. Only sender names that are allocated for your account can be used in this field.
ScheduledDate	DateTime	Optional field. If passed blank the submission will happen immediately.
RemoveDuplicates	Boolean	Removes duplicate mobile numbers from the list. Default value is "false"
ReferenceName	String	Optional field. Used to identify the bulk submission
ReportRequired	Boolean	If Delivery reports is required for the submission.

CallbackQueryString	String	<p>This field is not mandatory. You can use this if you want our Gateway to pass any values back along with the call back URL which is totally relevant to your system.</p> <p>The Call back URL are configured on account level. For one account we can set only 1 URL as call back. To get the URL configured or to get additional details please contact your account manager.</p>
ReturnIndividualResponse	Boolean	<p>True - Individual Response will be returned in the response</p> <p>False - Only the bulk submission reference id will be returned</p>
AsynchronousSubmission	Boolean	<p>True - Returns the BulkID immediately without doing the complete processing.</p> <p>False - Returns the response after completing full process of checking credits balance, sender name allowed & etc..</p>
BrightLinks	Boolean	<p>You can set this to true if you want our Gateway to track clicks & conversion from the URL within the message body.</p> <p><i>Please contact your account manager if this option is not enabled for your account.</i></p>
BrightLinksBaseURL	String	<p>Base URL used for shortening links from SMS message body in Bright link tracking use-case.</p> <p>Mandatory if parameter "BrightLinks" is true</p>
BrightLinksFinalURL	String	<p>The URL in the message body that will be converted to Bright Links for click & conversion tracking</p> <p>Mandatory if parameter "BrightLinks" is true & it has to be the same as that present in the message body</p>

2. 2 .2 .2 Response

Status	Response
200	<p>Response will be an JSON object mentioning if the transaction was successful or not. See below for a sample response</p> <pre data-bbox="293 380 1422 1923">{ "status": "OK", "data": { "bulkId": 1565517, "totalValidNumbers": 2, "individualResponse": [{ "countryId": 203, "creditsUsed": "0.060000", "details": "Message Sent", "messageLength": 1, "mobileNo": "971501234567", "msgId": 4658230, "status": "OK" }, { "countryId": 203, "creditsUsed": "0.060000", "details": "Message Sent", "messageLength": 1, "mobileNo": "971501245678", "msgId": 4658231, "status": "OK" }] } }</pre>

	<pre>] } } </pre>
200	<pre> { "status": "Error", "errorDescription": "No valid / routable number found" } </pre>
400	<pre> { "status": "ERROR", "errorDescription": "Unable to perform the action. Please try again later." } </pre>
500	<pre> {"Message":"Something went wrong. Please try again later."} </pre>

2. 2 .3 Submit Custom SMS (Many to Many)

Method	URL
POST	api/SendSMS/CustomSMS/?Username={Username}&Password={Password}

2. 2. 3 .1 Request

Request Format Body

```

{
  "MessageDetails": [
    {
      "To": "971501234567",
      "Message": "sample string 1"
    },
    {

```

```

    "To": "971501245789",
    "Message": "sample string 2"
  }
],
"SenderName": "SMS Update",
"ScheduledDate": "2017-01-31T14:51:05.6904323+04:00",
"RemoveDuplicates": true,
"ReferenceName": "sample string 4",
"ReportRequired": true,
"CallbackQueryString": "paramX=12345&paramY=abc",
"ReturnIndividualResponse": true,
"AsynchronousSubmission": false,
"BrightLinks": true,
"BrightLinksBaseURL": "http://prc.is",
"BrightLinksFinalURL": "http://www.example.com"
}

```

Parameter name	Data Type	Description
MessageDetails	Array	An Array of mobile + message combination
SenderName	String	Maximum length is 12 characters. Only sender names that are allocated for your account can be used in this field.
ScheduledDate	DateTime	Optional field. If passed blank the submission will happen immediately.
RemoveDuplicates	Boolean	Removes duplicate mobile numbers from the list. Default value is "false"

ReferenceName	String	Optional field. Used to identify the bulk submission
ReportRequired	Boolean	If Delivery reports is required for the submission.
CallbackQueryString	String	This field is not mandatory. You can use this if you want our Gateway to pass any values back along with the call back URL which is totally relevant to your system. The Call back URL are configured on account level. For one account we can set only 1 URL as call back. To get the URL configured or to get additional details please contact your account manager.
ReturnIndividualResponse	Boolean	True - Individual Response will be returned in the response False - Only the bulk submission reference id will be returned
AsynchronousSubmission	Boolean	True - Returns the BulkID immediately without doing the complete processing. False - Returns the response after completing full process of checking credits balance, sender name allowed & etc...
BrightLinks	Boolean	You can set this to true if you want our Gateway to track clicks & conversion from the URL within the message body. <i>Please contact your account manager if this option is not enabled for your account.</i>
BrightLinksBaseURL	String	Base URL used for shortening links from SMS message body in Bright link tracking use-case. Mandatory if parameter " BrightLinks " is true
BrightLinksFinalURL	String	The URL in the message body that will be converted to Bright Links for click &

		<p>conversion tracking</p> <p>Mandatory if parameter “BrightLinks” is true & it has to be the same as that present in the message body</p>
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2.2.3.2 Response

Status	Response
200	<p>Response will be a JSON object mentioning if the transaction was successful or not. See below for a sample response</p> <pre> { "status": "OK", "data": { "bulkId": 1565520, "totalValidNumbers": 2, "individualResponse": [{ "countryId": 203, "creditsUsed": "0.060000", "details": "Message Sent", "messageLength": 1, "mobileNo": "971501234567", "msgId": 4658235, "status": "OK" }, { "countryId": 203, "creditsUsed": "0.060000", "details": "Message Sent", </pre>

	<pre> "messageLength": 1, "mobileNo": "971501245789", "msgId": 4658236, "status": "OK" }, { "returnStatus": 9, "countryId": 168, "creditsUsed": "0", "details": "SENDER NOT ALLOWED", "errorCode": 9, "mobileNo": "966123456789", "msgId": 4658237, "status": "Error" }] } </pre>
200	<pre> { "status": "Error", "errorDescription": "No valid / routable number found" } </pre>
400	<pre> { "status": "ERROR", "errorDescription": "Unable to perform the action. Please try again later." } </pre>
500	<pre> {"Message": "Something went wrong. Please try again later."} </pre>

2. 3 Bright Link callback parameters

If Bright link service is used during SMS submission, then our gateway can have a call back the moment customer clicks on the link from the message body.

The call back base URL must be configured against the account you are using. Please contact your Account manager to get this configured.

Parameter name	Data Type	Description
qMsgRef	String	The message ID returned by the Gateway during submission
qMobile	String	
qDateClicked	String	Datetime time value in the format YYmmDDHHMM. Eg: 1802191559 – (2018-Feb-19 15:59)
qSenderName	String	
qReferenceName	String	The reference name passed during the submit request
qOS	String	OS version of the mobile
qDevice	String	Handset device
qLocation	String	The geo location from where the customer has clicked.

3. Voice Message

Method	URL
POST	api/VoiceCall/makeCall/?Username={Username}&Password={Password}/

3.1 Request

Request Format Body

```
{  
  "From": "971501234567",  
  "To": "971500000000",  
  "Message": "sample string 1",  
  "CallbackRequired": true,  
  "CallbackUrl": "http://www.example.com"  
}
```

Parameter name	Data Type	Description
Username	String	
Password	String	
From	String	Number from which voice call has to be originated. OnlyNumbers allowed and length should be between 3 and 14 characters. Depending on the region on the persons handset the from number will be displayed as passed. If the region is not supporting this feature, then it will be random numbers.

To	String	Destination number must be written in the international format (Example: 971551234567)
Message	String	Text of the message that will be sent.
CallbackRequired	Boolean	If call back is required for the submission.
CallbackUrl	String	The URL to which our server will return the status details.

3. 2 Response

Status	Response
200	<p>Response will be an JSON object mentioning if the submission was successful or not. See below for a sample response</p> <pre> { "status": "OK", "data": [{ "msgId": 4658229, "from": "971501234567", "to": "971500000000", "status": "OK", "details": "Call Fired" }] } </pre>
200	<pre> { "status": "OK", "data": [{ </pre>

	<pre> "msgId": 4658229, "from": "971501234567", "to": "971500000000", "status": "Error", "details": "INVALID MOBILE NUMBER", "errorCode": 1 }] } </pre>
400	<pre> { "status": "ERROR", "errorDescription": "Unable to perform the action. Please try again later." } </pre>
500	<pre> {"Message": "Something went wrong. Please try again later."} </pre>

3. 3 Voice delivery report callback parameters

During voice message request submission if a call back for delivery report was requested by passing the required parameters, then the Gateway will issue a GET request to the “**CallbackUrl**” URL with all the below mentioned parameters.

Parameter name	Data Type	Description
qMsgRef	String	The message ID returned by the Gateway during submission
qMobile	String	Destination number to which voice message was sent.
qSubmitDate	String	Datetime time value in the format YYmmDDHHMM. Eg: 1802191559 – (2018-Feb-19 15:59)

qDoneDate	String	The time when the call was completed
qDuration	Integer	The total call duration/ The billing duration.
qRate	Float	The Rate per second
qTotalValue	Float	The total charged amount for the call. (qDuration X qRate)
qStatus	String	The status of the call. Indicates whether the voice message has been sent successfully, not sent, delivered, not delivered or any other possible status. The various possible status is Pending, Delivered, Undeliverable, Rejected, Expired, Failed, Error.

Glossary

Conventions

- All the possible responses are listed under 'Responses' for each method. Only one of them is issued per request server.
- All response is in JSON format.
- For every request user name & password is mandatory for authorization purpose.

Status Codes

All status codes are standard HTTP status codes. The below ones are used in this API.

200 - Success of some kind

4XX - Error occurred in client's part

5XX - Error occurred in server's part

Status Code	Description
200	OK

400	Bad request
401	Authentication failure
403	Forbidden
404	Resource not found
405	Method Not Allowed
409	Conflict
412	Precondition Failed
413	Request Entity Too Large
500	Internal Server Error
501	Not Implemented
503	Service Unavailable

Delivery Statuses

There is different status a message can have once it has been received on the Gateway & submitted to the Operator's.

Status Code	Description
Sent	No Delivery reports received yet
Delivered	Message has been delivered
Undeliverable	Not able to deliver to the handset
Rejected	Rejected by the Operator
Expired	Message expired after continuous retrial

Error	Error while submitting to the Operator
Failed	System error while processing the message

Error Codes & Details

Below are the different error codes returned by the API & its corresponding description.

Error Code	Description
000	OK - Submitted to gateway
001	Invalid mobile number
002	Network not supported
003	Message length exceeded
004	Invalid sender name
005	Invalid message type
006	Not allowed to route to this network
007	Multiple credit message not enabled
008	Invalid delay minutes
009	Sender name not allowed
010	Allowed destination limit exceeded
011	Mobile number not specified
012	Message not specified

013	Empty or corrupt file
014	Count of total numbers does not match
015	Use bulk submission method to push more than 20 numbers
100	Could not connect to gateway
101	Gateway currently disabled
200	Invalid login id and/or password
201	No credit available
202	Account has been disabled
203	Account registration is not complete
204	Cannot use bulk SMS
205	SMS purchase not done so far
206	Insufficient credits
501	Unsubscribed Number
601	Message Queue Full
1000	System error - not able to connect to gateway
1001	System error - not able to connect to database
1002	Network settings not configured for the account
1003	System error
1004	System error while connecting to Operator
1005	Error with submission

2000	Voice message not enabled
2001	Message language not supported
2002	Message character limit exceeded
2003	Invalid destination
9999	Unknown error