



## **API Reference**

LAST UPDATE: FEBRUARY 2013



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# General Overview

## API VERSION 1.0

This is the reference document for version 1.0 of the SMS API provided by SMS Central.

This API, based on the HTTP protocol, is for developers who want to integrate SMS messaging with their own standalone or web applications.

## GETTING STARTED

The API is based on the HTTP protocol. This means you can use any web development language to access the API. If you're using PHP, .NET or JAVA check out our user guides and code samples to help you get on your way to integrating SMS messaging into your application.

## API URL

All HTTP POSTS sent to SMS Central's API must go to the following URL:

```
https://my.smscentral.com.au/wrapper/sms
```

## HTTP AND HTTPS

The SMS Central API is served over HTTPS to ensure secure and private messaging. Non-encrypted HTTP is not supported.



# Send An SMS

## OVERVIEW

To send an SMS, simply send a HTTP POST to the API URL with the required POST Parameters.

SMS Central will then output a string response with the response code indicating the status of your message.

You can check the delivery status of your messages by logging in to your SMS Central account and generating a report.

You may also receive Delivery Receipts to your email address or URL (more info in pg. 21), which provide the final delivery status of the SMS.

## HTTP POST Parameters

The parameters below are the POST parameters that can be provided in order to send an SMS message.

Parameter	Required	Type	Possible/ Example Value(s)
USERNAME	Yes	String	
PASSWORD	Yes	String	
ACTION	Yes	String	'send'
ORIGINATOR	No	String (Alphanumeric, max 11 chars)	Mobile Number, Sender Name, 'shared'
RECIPIENT	Yes	String	
CAMPAIGN	No	String	
REFERENCE	No	String	
SCHEDULE	No	Datetime	2011-12-25 00:00:00
MESSAGE_TEXT	Yes	String	<i>See definition for allowed chars</i>
URL	No	String	
RECIPIENTMESSAGES	No	JSON Data (array)	Allows you to send up to 100 messages with one HTTP POST.

## POST Parameter Definitions

### USERNAME

- **Type:** string
- **Description:** This is your Username for your SMS Central account

### PASSWORD

- **Type:** string
- **Description:** This is your Password for your SMS Central account

### ACTION

- **Type:** string
- **Description:** To send an SMS message, please provide the string value 'send' (without single quotes) as this POST parameter's value.

### ORIGINATOR

- **Type:** string
- **Description:** This is the name or number your SMS message is to appear to come from, it can be alphanumeric (letters and numbers only) and can be up to a maximum of 11 characters.  
\* To send from one of SMS Central's pool of shared numbers, please use the string value 'shared' (without single quotes).

### RECIPIENT

- **Type:** string
- **Description:** This is the number you wish to send your SMS message to. *SMS Central recommends that you provide the number in International format.*  
\* An example Australian recipient value: 61435800957

### CAMPAIGN

- **Type:** string
- **Description:** This string value allows you to group messages by providing a new campaign name, or provide an existing campaign name to associate these messages to that campaign. This parameter is useful in reporting.

\* If you specify a 'shared' or a dedicated number as the ORIGINATOR, responses to your message will also provide this campaign value.  
See Receive an SMS (pg. 11).

## REFERENCE

- **Type:** string
- **Description:** This string value allows you specify your own unique value to identify the message you are sending.
  - \* This value will also be returned in delivery receipts (pg. 21).
  - \* If you specify a 'shared' or a dedicated number as the ORIGINATOR, responses to your message will also provide this reference value, allowing you to match replies with the message you sent. See Receive an SMS (pg. 11) for more info.
  - \* *The 'REFERENCE' value must be a unique value for each message, an attempt to send 2 messages with the same 'REFERENCE' value will result in the message being rejected with a 513 error code.*

## SCHEDULE

- **Type:** string
- **Description:** This datetime value allows you to schedule the message to be delivered on the day and time of your SCHEDULE parameter value. The message will sit in SMS Central's queue's until the scheduled date and time, upon which the message will be sent.
  - \* An example datetime value, representing December 25<sup>th</sup>, 2011 and 3:35pm is:

2011-12-25 15:35:00

**MESSAGE\_TEXT**

- **Type:** string
- **Description:** This is the text of the SMS message to be sent and this text must be URL encoded.

Please note that only the following list of ASCII characters will be allowed, all other characters will result in a '532' error response:

a-z

A-Z

0-9

~!@#\$%^&\*()-\_+=][?<>',';/\{}

(whitespace)

\* *Please note:* A standard SMS message has a maximum of 160 characters. Longer messages are definitely possible, however please be aware that exceeding 160 characters will constitute a 'second' message. When a message is longer than 160 characters, this is referred to as a multi-part message as it contains multiple messages (or multiple-parts). The total SMS limit then becomes 153 characters per 'part' as the 7 characters are used up by invisible headers and footers which denote which part of the message is being sent (i.e. Part 1 of 2). For example:

1 message = 160 characters available

2 messages = 306 characters available (153+153)

3 messages = 459 characters available (153+153+153)

4 messages = 612 characters available (153+153+153+153)

5 messages = 766 characters available (153+153+153+153+153)

6 messages = 918 characters available (153+153+153+153+153+153)

7 messages = 1071 characters available (153+153+153+153+153+153+153)

\* *A maximum of 7 parts are possible*

**URL**

- **Type:** string



- **Description:** By providing a URL to content in this optional parameter, the message will be converted into a WAP Push message. In this case the value within the MESSAGE\_TEXT field will be the WAP message label.

## RECIPIENTMESSAGES

- **Type:** JSON data (array)
- **Description:** The value for this parameter is JSON data (array) which contains the 'RECIPIENT', 'MESSAGE\_TEXT' and 'REFERENCE' (optional) values for each of the (up to) 100 messages, where 'RECIPIENT' is the mobile number of the recipient, and 'MESSAGE\_TEXT' is the specific text of the message to be delivered to that recipient and 'REFERENCE' is the string value of a unique reference that you can apply to the message (also to be used for delivery receipt tracking).

This parameter will accept up to 100 messages in the one HTTP POST. An example value, in JSON format is:

```
[{"RECIPIENT": "61435800957", "MESSAGE_TEXT": "Message 1",  
  "REFERENCE": "unique01"},  
{"RECIPIENT": "61406040271", "MESSAGE_TEXT": "Message 2",  
  "REFERENCE": "unique02"}]
```

If a value for the 'RECIPIENTMESSAGES' parameter is provided in your HTTP POST, the 'RECIPIENT' and 'MESSAGE\_TEXT' and 'REFERENCE' POST Parameters will be ignored and the values in this JSON data will be applied. Please ensure you send via HTTP POST if you intend to utilise the RECIPIENTMESSAGES parameter

**\* Please note:** Sending (up to) 100 messages via the RECIPIENTMESSAGES parameter will still receive the same 'Response to your HTTP POST'. If any of the 100 messages is rejected due to an invalid number, all 100 messages will be rejected and the entire JSON Data batch (HTTP POST) will need to be re-sent, to deliver the messages.

## Response to your HTTP POST

Your HTTP POST will give you a response providing you with an immediate result of your SMS send.

SMS Central will always return a "HTTP/1.1 200 OK" HTTP status code in the header of the response to your HTTP POST.

The content of the response will contain the Success or Error response code and the corresponding success or error response message. Please see Success and Error Response Codes (pg. 27) for a list of all possible response codes.

A response code with the number '0' indicates that your HTTP POST was successful and the message is being processed for delivery.

A successful HTTP POST to Send an SMS will result in the following content in the HTTP Response:

```
0
```

A response to your HTTP POST indicating an error will contain the error response code and description in the same line, separated by whitespace. An example of such a response is as follows:

```
511 Username or Password incorrect
```

**Please note:** These results are not delivery receipt results; they are there to provide you with information on the success of your HTTP POST, not the message delivery itself.

Please see Receive an SMS (pg. 11) for receiving final carrier delivery confirmation status via Delivery Receipts.

# Receive an SMS

## OVERVIEW

If you have a dedicated mobile number, or if you have sent messages using a shared mobile number, you are able to receive SMS messages as replies, or run an inbound SMS campaign.

There are two ways to receive an SMS using SMS Central's API, these are 'on-demand' and 'real-time'.

The difference between the two methods is that "on-demand" allows you to view messages you have received whenever you like, while "real-time" provides you the ability to receive SMS messages in real-time, forwarded to a URL that you provide.

Of course, you can also always check the messages you have received by messages by logging in to your SMS Central account and viewing your Inbox, or by generating an 'Inbound' report.

## VIEWING RECEIVED SMS MESSAGES (ON-DEMAND)

In order to periodically poll SMS Central's server to check for received SMS messages, you require an HTTP POST to SMS Central API URL.

SMS Central will always return an "HTTP/1.1 200 OK" HTTP status code in the header of the response to your HTTP POST, together with the data requested in the content of the response to your HTTP POST.

### HTTP POST Parameters

To send an on-demand request to retrieve SMS messages that have been received, please send a HTTP POST to the API URL with the following POST Parameters.

Parameter	Required	Type	Possible/ Example Value(s)
USERNAME	Yes	String	
PASSWORD	Yes	String	
ACTION	Yes	String	'read'
DATESTART	No	Datetime	2011-12-25 00:00:00
DATEEND	No	Datetime	2011-01-24 23:59:59
STATUS	No	String (all uppercase)	"ALL", "UNREAD", "READ"

## *POST Parameter Definitions*

### **USERNAME**

- **Type:** string
- **Description:** This is your Username for your SMS Central account

### **PASSWORD**

- **Type:** string
- **Description:** This is your Password for your SMS Central account

### **ACTION**

- **Type:** string
- **Description:** To view received SMS messages, please provide the string value 'read' (without single quotes) as this POST parameter's value.

### **DATESTART**

- **Type:** datetime
- **Description:** To specify a day and time for how far back you wish to retrieve the received SMS messages, please specify this day and time in datetime format.  
\* For example, if you wish to retrieve messages newer than and including 25 December 2011, please provide a value of 2011-12-25 00:00:00

### **DATEEND**

- **Type:** datetime
- **Description:** To specify a day and time for an end period for which you wish to retrieve the received SMS messages, please specify this day and time in datetime format.  
For example, if you wish to receive messages up until and including 25 December 2011, please provide the value of 2011-12-25 23:59:59

## STATUS

- **Type:** string
- **Description:** This STATUS parameter allows you to specify which type of messages you would like to retrieve, the options, to be provided as values (all characters uppercase) are:
  - 'ALL' – this will retrieve all received SMS messages, for the dates specified in DATESTART to DATEEND (or every single message, if no values are provided for those parameters)
  - 'UNREAD' – this will retrieve all SMS messages, for the dates specified in DATESTART to DATEEND, which are marked as unread. Please note that retrieving unread messages will result in them consequently being marked as read
  - 'READ' – this will retrieve all received SMS messages, which have been marked as read (either by retrieving unread messages via the API, or marking them as read by logging in to your SMS Central account).

## Response to your HTTP POST

SMS Central will always return a "HTTP/1.1 200 OK" HTTP status code in the header of the response to your HTTP POST.

The 'content' of the response to your HTTP POST will be in XML format when messages are received, or a simple string if there was an error with your request.

The XML Response will contain a collection of <message> tags, inside a single <messages> tag.

Each <message> tag will contain the following tags wrapped within:

<timestamp> - this is the date the message was received

<direction> - this will always be 'MO' which stands for Mobile Originated and represents an inbound message

<originator> - this is the mobile number of the handset which sent in the message

<recipient> - this is the mobile number that the handset was sending the message to

<messagetext> - this is the text message content that was received

Example of a Successful Response To Your Request (type: XML)

```
<messages>
  <message>
    <timestamp>2011-10-13 21:28:44</timestamp>
    <direction>MO</direction>
    <originator>61xxxxxxxx</originator>
    <recipient>61xxxxxxxx</recipient>
    <messagetext>Lorem ipsum dolor sit
amet</messagetext>
  </message>
</messages>
```



## Possible Error Responses To Your Request

(type: string)

```
Invalid From date, Please input date in this format  
YYYY/mm/dd. Eg; 2011/12/25
```

```
Invalid End date, Please input date in this format  
YYYY/mm/dd. Eg; 2011/12/25
```

```
Unable to fetch unread messages
```

## RECEIVING SMS MESSAGES (REAL-TIME)

To receive SMS messages in real-time, please log in to your SMS Central account to set up the URL where you would like received messages to be forwarded. SMS Central recommends using a HTTPS URL.

When Receiving SMS Messages in Real-Time, SMS Central's server will send a HTTP GET to the URL you have specified, as soon as a message is received.

### IMPORTANT NOTE

SMS Central requires a response from your server to the HTTP GET. Failure to output a response will result in continued retry attempts to forward the message to your URL and may result in message duplication.

Please ensure that you respond to the HTTP GET with a "HTTP/1.1 200 OK" HTTP status code in the header of your response and please ensure that you output a "0" in the content of your response to the HTTP GET.

## HTTP GET Parameters

When forwarding received SMS messages to the URL you have specified with a HTTP GET, SMS Central will provide the following parameters:

Parameter	Type	Possible/ Example Value(s)
USER_NAME	String	
PASSWORD	String	
ORIGINATOR	String	Mobile number (in international format): eg 61435748922
RECIPIENT	String	
PROVIDER	String	"telstra", "optus", "vodafone", "virgin", "hutc3g"
CAMPAIGN	String	
REFERENCE	String	
MESSAGE_TEXT	String	
UDH	OCTET Encoded User Data Header	
BINARY	OCTET Encoded Binary Data	
VALUE	String	

## HTTP GET Parameter Definitions

### USER\_NAME

- **Type:** string
- **Description:** This is the Username you set for the URL in Rules & Triggers i.e. the username required for Basic Authentication.

### PASSWORD

- **Type:** string
- **Description:** This is the Password you set for the URL in Rules & Triggers i.e the password required for Basic Authentication.

### ORIGINATOR

- **Type:** string
- **Description:** This is the mobile number of the handset that has sent in the SMS message.  
\* In international format, an example of an Australian originator value is: [61435800957](#)

### RECIPIENT

- **Type:** string
- **Description:** This is the number that the message was being sent to. This would either be your dedicated number, or a shared virtual mobile number provided by SMS Central.  
\* An example Australian recipient value: [61435800957](#)

### CAMPAIGN

- **Type:** string
- **Description:** When the message you are receiving is found to be a reply to an SMS message you have sent, if you provided a 'CAMPAIGN' value in that SMS message you sent, this CAMPAIGN parameter will provide that value, allowing you to match received messages to the campaign.

### REFERENCE

- **Type:** string

- **Description:** When the message you are receiving is found to be a reply to an SMS message you have sent, if you provided a unique 'REFERENCE' value in that SMS message you sent, this REFERENCE parameter will provide that value, allowing you to match the received message as a reply to that specific SMS message you sent.

#### MESSAGE\_TEXT

- **Type:** string
- **Description:** If the received message is a single part message (up to 160 characters), this parameter will contain the text of the SMS message received.

#### UDH

- **Type:** OCTET Encoded User Data Header
- **Description:** If the received message is longer than 160 characters long, the UDH parameter will be provided containing an Octet-encoded user data header. In this case, the message will be split into 153 character (7-bit) parts, with each part of the message providing a User Data Header (UDH) tacked onto the beginning. This UDH value provides information about the message, including which part of the message this is.

#### BINARY

- **Type:** OCTET Encoded User Data Header
- **Description:** If the received message is longer than 160 characters long, the BINARY parameter will be provided containing an Octet-encoded binary data. In this case, the message will be split into 153 character (7-bit) parts, with each part of the message providing a User Data Header (UDH) tacked onto the beginning and the content of the message part provided in the BINARY parameter.

#### VALUE

- **Type:** string
- **Description:** If the received message is a MO-billed Premium SMS message (the user sending the message will pay a fee, charged to their

mobile phone bill, for sending the message), the VALUE parameter will contain the amount billed to the handset, in cents.

\* For example, if the charge is 55cents, the value for the VALUE parameter would be "55".

# Receiving a Delivery Receipt (DLR)

## OVERVIEW

When you send an SMS (pg. 4), once your message has been sent to the Mobile Network Operator (also known as a carrier, SMS Central shortly thereafter receives a delivery receipt from that carrier.

These delivery receipts provide a final status of the message delivery, indicating whether the message was successfully delivered, or whether the message failed.

You can also elect to receive the Delivery Receipt to a URL you specify (**HTTPS URLs are recommended**). This is done with a HTTP GET, pushing the delivery receipt values to your URL in real-time, as we receive the delivery receipt.

## HTTP GET Parameters

When forwarding delivery receipts to the URL you have specified with a HTTP GET, the following parameters will be provided:

Parameter	Type	Possible/ Example Value(s)
USER_NAME	String	
PASSWORD	String	
ORIGINATOR	String	Mobile number (in international format)
RECIPIENT	String	
PROVIDER	String	"telstra", "optus", "vodafone", "virgin", "hutc3g"
MESSAGE_TEXT	String	
ID	String	
REFERENCE	String	
RESULT	Integer	See Success & Error Response Codes (pg. 27)



## HTTP GET Parameter Definitions

### USER\_NAME

- **Type:** string
- **Description:** This is the Username you set for the URL in Rules & Triggers i.e. the username required for Basic Authentication.

### PASSWORD

- **Type:** string
- **Description:** This is the Username you set for the URL in Rules & Triggers i.e. the username required for Basic Authentication.

### ORIGINATOR

- **Type:** string
- **Description:** This is the phone number, in international format, of the originator or sender of the message. This is the number you sent the message 'from'.

### RECIPIENT

- **Type:** string
- **Description:** This is the phone number, in international format, of the recipient of the message. This is the number you send the message 'to'.  
\* An example Australian recipient value: 61435800957

### PROVIDER

- **Type:** string
- **Description:** This is a text representation identifying the Mobile Network Operator (carrier). This value will be 'default' (string, without single quotes) for standard SMS messages.

### MESSAGE\_TEXT

- **Type:** string
- **Description:** This is the text of the message you send to the recipient.

**ID**

- **Type:** string
- **Description:** This is an internal reference ID for this message, provided by SMS Central. This is used for internal SMS Central tracking and you may quote this ID in support requests.

**REFERENCE**

- **Type:** string
- **Description:** This is the (optional) unique REFERENCE value for the message that you provided when sending an SMS. This allows you to match the delivery receipt to the message you sent.

**REFERENCE**

- **Type:** string
- **Description:** This is the (optional) unique REFERENCE value for the message that you provided when sending an SMS. This allows you to match the delivery receipt to the message you sent.

**RESULT**

- **Type:** string
- **Description:** This is a numerical result of the delivery status, providing a final confirmation value of the delivery or failure of the message. Please see Success and Error Response Codes (pg. 27) for possible values.



# Check Your Account Balance

## OVERVIEW

SMS Central provides you the ability to check your account balance via the API. To do this, you would send a HTTP GET or POST to the API URL.

Of course, you can also log into your SMS Central account to check your account balance.

## HTTP POST Parameters

The parameters below are the POST parameters that can be provided, in order to retrieve your account balance.

Parameter	Required	Type	Possible/ Example Value(s)
USERNAME	Yes	String	
PASSWORD	Yes	String	
ACTION	Yes	String	'balance'

## POST Parameter Definitions

### USERNAME

- **Type:** string
- **Description:** This is your Username for your SMS Central account.

### PASSWORD

- **Type:** string
- **Description:** This is your Password for your SMS Central account

### ACTION

- **Type:** string
- **Description:** To check your account balance, please provide the string value 'balance' (without single quotes) as this POST parameter's value.

## Response To Your HTTP POST

After sending your HTTP POST with the required parameters to the API URL for checking your account balance, SMS Central will return a "HTTP/1.1 200 OK" HTTP status code in the header of the response to your HTTP POST and XML-formatted content providing your account balance.

The XML Response will contain a single <balance> tag, containing your account balance.

An example XML Response showing a remaining account balance of \$125.34 is:

```
<balance>125.34</balance>
```

# Success/ Error Response Codes

The following Success/Error response codes relate to the response you will receive by SMS Central to your HTTP POST when sending an SMS, as well as the response codes provided when Receiving a Delivery Receipt SMS (pg. 21).

## WHEN SENDING AN SMS MESSAGE

The response code and description will be provided as a **string** (separated by whitespace) in the content output to your HTTP POST. An example response is as follows:

```
1 Success; Message has been successfully delivered
```

The HTTP header response will always be 200 (OK). Please see Send an SMS (pg. 4) for details.

## WHEN RECEIVING A DELIVERY RECEIPT

The response code (numerical value) based on the list below will be provided in the 'RESULT' parameter. Please see Receiving a Delivery Receipt SMS (pg. 21) for details.

## Response Codes

Parameter	Possible/ Example Value(s)
0	Success; Message has been sent, delivery confirmation is pending
1	Success; Message has been successfully delivered
500	Failed; Internal SMS Central Server Error
503	Failed; Message has expired within the carrier
511	Rejected; Your username or password is incorrect
513	Rejected; Message rejected due to being a duplicate message
514	Rejected; No 'RECIPIENT' value was provided
519	Rejected; The number you tried sending to is blacklisted
531	Rejected; Your message contains no content
532	Rejected; Your message content has invalid characters. Please check your message text
536	Notice; Your message has been temporarily delayed
534	Rejected; Credit limit exceeded. You have run out of SMS credit
535	Rejected: Your 'ORIGINATOR' value is not valid



# API Support

## EMAIL

If you have any questions or want to learn more, get in touch with our Tech Team. You can address your email to Igor or Kenneth at [support@smscentral.com.au](mailto:support@smscentral.com.au).

Make sure you add API to the Subject of your email!

## OTHER SHENANIGANS

We are working really hard to improve SMS Central API. As part of this project, we will be adding new support tools shortly.

Thanks for your patience!