



C E N T R A L

Sending and receiving SMS messages via
SMS Central's HTTP Interface

API Documentation

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1. Introduction

This document outlines the interfaces by which SMS and Premium SMS (PSMS) Messages can be delivered and received over standard HTTP (web) protocol.

Two interfaces are defined for sending Mobile Phone Terminated (MT) messages and for receiving Mobile Phone Originated (MO) messages (see figure A and B). [SMS messages can be delivered and received via standard HTTP or Binary.](#)

Please note: MMS Messages cannot be delivered via this HTTP interface. They need to be sent via XML. For more information on sending and receiving MMS messages, please refer to the document entitled '*Sending and receiving MMS messages*'.

Sending SMS and PSMS Messages (MT)

The SMS Central web-service and interface allows you to send messages from your website to any mobile phone. This is known as a Mobile Terminated (MT) message.

MT messages are sent by sending an HTTP request directly to the SMS Central web service address:

[http\(s\):// extranet.smscentral.com.au/wrapper/sms](http(s)://extranet.smscentral.com.au/wrapper/sms)

All messages sent via the HTTP API will also show up in the Customer Portal where reports can be generated or replies can be viewed.

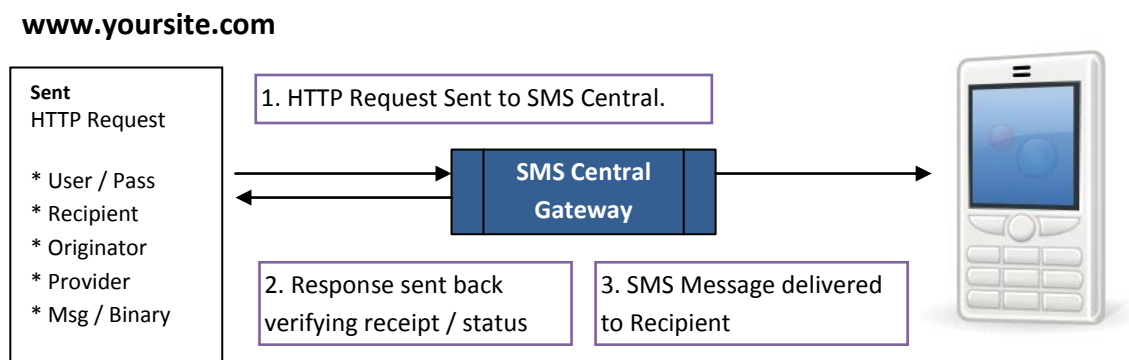


Figure A : Sending SMS (via HTTP)

Receiving SMS and PSMS Messages (MO)

You can also receive messages from any mobile phone. This is known as a Mobile Originated (MO) message. A correctly configured page on your web site must be set up to receive messages of this type. You should provide SMS Central with this URL and it should respond with 0 (zero) for all successfully accepted messages. It should respond and release the connection as quickly as possible.

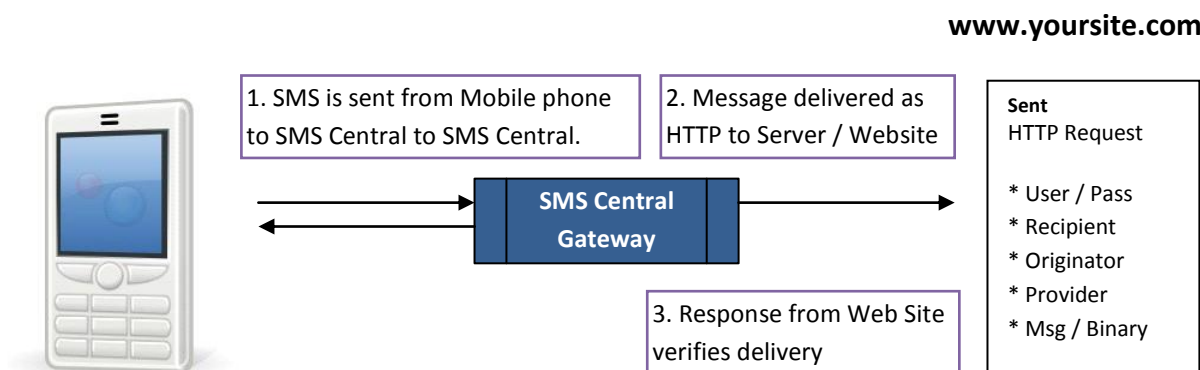


Figure B : Receiving SMS (via HTTP)

2. Sending and Receiving Standard SMS text messages

The parameters below are the standard parameters for sending and receiving standard SMS messages. The required field identifies if the parameter is mandatory or not.

Parameters	Reqd?	Description
USERNAME	Yes	Username for your SMS Central account, the same Username used for logging in to the Customer Portal
PASSWORD	Yes	Password for your SMS Central account, the same Password used for logging in to the Customer Portal
ORIGINATOR	Yes	Phone Number of the Originator or sender of the message.
RECIPIENT	Yes	Phone number of the recipient. This can be a comma searated list. <ul style="list-style-type: none"> • MT - If the SMS is from a Service Provider to a Mobile Phone (Mobile Phone Terminated) then this will contain the number of the Mobile Phone. • MO - If the request is from a Mobile Phone to a Service (Mobile Phone Originated) then this will contain the number of the Service provider (also known as a Virtual Mobile number or longcode) that the SMS was sent to.
PROVIDER	No	Text field identifying the Telco provider (Telstra, Optus etc) for PSMS messages only. This field may be left blank for normal SMS Messages. Please refer to Appendix A for a list of the available Providers.
CAMPAIGN	No	If a value is provided, a campaign will be created in the Customer Portal, or if the campaign value is identical to an existing campaign name, the message(s) sent will be tagged to that campaign. If this field is blank, message(s) wil be sent out without a campaign reference in the Customer Portal
REFERENCE	No	A unique reference that you can use for your own records. This is the same reference that appears in your delivery receipt. Therefore, it must be a unique reference, or it will be rejected. Must be no more than 64 Characters, alphanumeric.
SCHEDULE	No	You may provide a datetime value (i.e. 2011-01-25 15:27:59) which is used to send messages on the provide schedule date. With this parameter you are able to send messages via HTTP Requests and have them sit on SMS Central's queue's until the schedule date & time arrives, upon which the message(s) will be sent.
MESSAGE_TEXT	No	The SMS Text message being sent. The total length of the SMS Message should be less than 160 characters. The text needs to be URL encoded - Please refer to Appendix B for more information about URL encoding.

CONCATENATE	No	<p>If your Text message is longer than 160 characters, it needs to be concatenated, whereby the message will be split into chunks of 160 characters.</p> <p>Please set this to 1 if you need to concatenate your SMS message.</p> <p>Please note: If your message needs to be concatenated, you will be charged for each separate message part.</p>
PORT	No	<p>If an SMS needs to be addressed to a specific port, this parameter will need to be set to a 16-bit Hex string (eg 378F). This is commonly used to address Java applications.</p>
URL	No	<p>If a URL is specified, the message will be converted into a WAP Push message with the MESSAGE_TEXT field being the label</p>

Table 1.1

Receiving SMS text message

Receiving a SMS text message utilises the same parameters to sending an SMS text message. Please refer to table 1.1 for receiving a standard SMS text message.

3. Sending and Receiving Binary SMS messages

The parameters below are the standard parameters for sending and receiving binary SMS messages. The required field identifies if the parameter is mandatory or not.

Parameters	Reqd?	Description
USERNAME	Yes	Username for your SMS Central account, the same Username used for logging in to the Customer Portal
PASSWORD	Yes	Password for your SMS Central account, the same Password used for logging in to the Customer Portal
ORIGINATOR	Yes	Phone Number of the Originator or sender of the message.
RECIPIENT	Yes	Phone number of the recipient. This can be a comma searated list. <ul style="list-style-type: none"> • MT - If the SMS is from a Service Provider to a Mobile Phone (Mobile Phone Terminated) then this will contain the number of the Mobile Phone. • MO - If the request is from a Mobile Phone to a Service (Mobile Phone Originated) then this will contain the number of the Service provider (also known as a Virtual Mobile number or longcode) that the SMS was sent to.
PROVIDER	No	Text field identifying the Telco provider (Telstra, Optus etc) for PSMS messages only. This field may be left blank for normal SMS Messages. Please refer to Appendix A for a list of the available Providers.
CAMPAIGN	No	If a value is provided, a campaign will be created in the Customer Portal, or if the campaign value is identical to an existing campaign name, the message(s) sent will be tagged to that campaign. If this field is blank, message(s) will be sent out without a campaign reference in the Customer Portal
REFERENCE	No	A unique reference that you can use for your own records. This is the same reference that appears in your delivery receipt. Therefore, it must be a unique reference, or it will be rejected. Must be no more than 64 Characters, alphanumeric.
SCHEDULE	No	You may provide a datetime value (i.e. 2011-01-25 15:27:59) which is used to send messages on the provide schedule date. With this parameter you are able to send messages via HTTP Requests and have them sit on SMS Central's queue's until the schedule date & time arrives, upon which the message(s) will be sent.
MESSAGE_TEXT	No	The SMS Text message being sent. The total length of the SMS Message should be less than 160 characters. The text needs to be URL encoded - Please refer to Appendix B for more information about URL encoding.

CONCATENATE	No	If your Text message is longer than 160 characters, it needs to be concatenated, whereby the message will be split into chunks of 160 characters. Please set this to 1 if you need to concatenate your SMS message. Please note: If your message needs to be concatenated, you will be charged for each separate message part.
PORT	No	If an SMS needs to be addressed to a specific port, this parameter will need to be set to a 16-bit Hex string (eg 378F). This is commonly used to address Java applications.
URL	No	If a URL is specified, the message will be converted into a WAP Push message with the MESSAGE_TEXT field being the label

UDH	No	OCTET Encoded User Data Header
BINARY	No	OCTET Encoded binary data such as phone configuration information, ring-tones or wallpapers.
PROTOCOL ID	No	ProtocolID for Binary messages
DCS	No	Data Coding Scheme for Binary messages: <ul style="list-style-type: none"> • Text = 0 • Ringtones, etc = 4 • Unicode = 8
VALUE	No (Yes for PSMS)	The cost for Premium messages, where applicable. Value is the cent equivalent in the local currency. For example, in Europe would be "30" if the value was 30 Euro cents. SMS Central will provide you with this value.

Table 1.2

Receiving SMS text message

Receiving a binary SMS text message utilises similar parameters to sending a binary SMS text message. Please refer to table 1.2 for receiving a binary SMS text message.

There are two options for receiving SMS text messages, the first option is to have them forwarded in real-time to a URL that you provide, the second is to send HTTP Requests to download unread inbound messages (see *8. Downloading Unread Inbound Messages*)

4. Response from SMS Central to your Send Message request

Once a message has been sent, you will receive a response, to inform you whether the message has been successfully sent.

After submitting the HTTP request to the SMS Central Gateway, you should expect to get back a HTTP response. The response code you receive will indicate indicating the success or failure of the SMS message being sent.

A response with the number 0 (zero) indicates a successful send of the SMS Message, while any other response indicates that the message failed to be sent and will be resent.

Successful HTTP Response Sample

```
0
```

A failed response has the error code on the first line and a description of the error condition on the following line.

```
511 Username or Password incorrect
```

There are a number of failure codes that can be returned, depending on the reason for the message failure. See Appendix B for a list of valid expected response codes and descriptions.

5. Receiving delivery receipts (DLR)

Once a message has been delivered (or failed to be delivered) the status of the message can be supplied as a Delivery Receipt. This is pushed as a HTTP GET request to a URL you should provide. Similar to SMS MO messages you should reply with 0 (zero) and nothing else.

The fields that will be sent to this URL on delivery receipt are:

Parameters	Description
USERNAME	Username set up by SMS Central for use of the HTTP Interface
PASSWORD	Password set up by SMS Central for use of the HTTP Interface
ORIGINATOR	Phone Number of the Originator or sender of the message.
RECIPIENT	Phone number of the recipient of the message
PROVIDER	Text field identifying the Telco provider (Telstra, Optus etc) for PSMS messages only. This field may be "default" for standard SMS Messages. Please See Appendix C for a list of Providers.
MESSAGE_TEXT	The message sent to the subscriber
ID	The internal reference ID for this message.
REFERENCE	The REFERENCE value provided by the user in the original request
RESULT	The numerical result of the delivery status – see Appendix A for possible values.

6. Sample HTTP MT SMS Sends

The following illustrates a sample of Text Message and a Binary Message.

Sample for Sending a SMS text Message

```
https:// extranet.smscentral.com.au/wrapper/sms?  
USER_NAME=UserName&PASSWORD=Password&ORIGINATOR=19912345&RECIPIENT=6  
1412345678&PROVIDER=telstra&MESSAGE_TEXT=Hello_There!
```

Sample for Sending a SMS Binary Data Message

```
https:// extranet.smscentral.com.au/wrapper/sms?  
USER_NAME=UserName&PASSWORD=Password&RECIPIENT=61412345678&  
UDH=0605040B84C002&BINARY=0605040B84C002010603BEAF848C82983530304531  
424539363434333433343838303234344545423941394237423746008D90890F8062  
7573696E65534D532E636F6D008A828E02086D88058103093A8083687474703A2F2F  
7777772E74616C6C756C616862656C6C652E636F6D2F6D322E6173703F69643D4D31  
36313632363431000
```

Sample HTTP Delivery Receipt Receipt

HTTP String Sent from SMS Central to Your Site – SMS Message

```
http://www.yoursite.com.au/SMSfromMobiles.asp?  
ORIGINATOR=61412345678&RECIPIENT=1987654&PROVIDER=telstra&MESSAGE_TEXT=Hell  
o%20There!
```

7. HTTP Request to get your account balance

You may login to <http://extranet.smscentral.com.au> with your SMS Central Username & Password at any time to check your account history, balance and generate reports.

However, you are also able to check your account balance via the API by a HTTP Request to the following URL:

[http\(s\):// extranet.smscentral.com.au/wrapper/sms](http(s)://extranet.smscentral.com.au/wrapper/sms)

The following parameters must be provided in order to retrieve account balance:

Parameters	Reqd?	Description
ACTION	Yes	Value should always be 'balance' for checking your account balance
USERNAME	Yes	Password for your SMS Central account, the same Password used for logging in to the Customer Portal
PASSWORD	Yes	Username for your SMS Central account, the same Username used for logging in to the Customer Portal

Response to the Account Balance Request

After submitting the HTTP Request to SMS Central to check your account balance, you should expect to get a response in XML format as follows:

```
<balance>0</balance>
```

8. Downloading Unread Inbound Messages (polling)

You may login to <http://extranet.smscentral.com.au> with your SMS Central Username & Password at any time to view your inbox showing all read and unread inbound messages, as well as the campaigns which they apply to (if any).

However, if required you may also elect to be able to periodically poll the SMS Central server for any inbound messages via the API by a HTTP Request to the following URL:

[http\(s\):// extranet.smscentral.com.au/wrapper/sms](http(s)://extranet.smscentral.com.au/wrapper/sms)

The following parameters must be provided in order to retrieve inbound messages:

Parameters	Reqd?	Description
ACTION	Yes	Value should always be 'read' for retrieving inbound messages
USERNAME	Yes	Password for your SMS Central account, the same Password used for logging in to the Customer Portal
PASSWORD	Yes	Username for your SMS Central account, the same Username used for logging in to the Customer Portal
DATESTART	No	This allows you to specify a starting date, in 'datetime' format, of the period for which you wish to retrieve inbound messages
DATEEND	No	This allows you to specify an end date, in 'datetime' format, of the period for which you wish to retrieve inbound messages

Please note that once a message has been retrieved, it will subsequently be marked as 'read'.

Response to the Read Inbound Messages Request

After submitting the HTTP Request to SMS Central to retrieve inbound messages, you should expect to get a response in XML format as follows:

```
<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>
```

Error responses for unread messages may be as follows:

Invalid From date, Please input date in this format YYYY/mm/dd. Eg; 2011/09/15

Invalid End date, Please input date in this format YYYY/mm/dd. Eg; 2011/09/15

Unable to fetch unread messages

9. Reporting and History

You may login to <http://extranet.smscentral.com.au> with your SMS Central Username & Password at any time in order view your SMS history (inbound and outbound), check your balance, generate reports, or send SMS Campaigns via an easy to use web-based interface

Appendix A: Response Codes

Error Code	Error Message
0	Message is Ok (so far)
1	Message has been acknowledged by the receiving handset
500	Generic failure
501	Failed to deliver to the network
502	Failed to find a route internally to the system
503	The message has expired past its timeout within the carrier
504	The message has expired past its timeout within the gateway
506	The gateway misunderstood what you wanted. Check your XML.
511	Your username or password is incorrect
512	Your username or password is incorrect in a reply message
513	It appears that this message has been seen before. Check references.
514	We don't seem to have anybody to send the message to
515	Generic failure to send the message out of the queues
516	The queue was stopped and the message was killed
517	We tried and tried but couldn't get the message out to the networks
518	Its never a good idea to send message to the sender
519	The destination number has been blacklisted from this service
520	The filter attached to that destination rejected the message
521	Searching for your reference found no matching message
522	We got no positive or negative response from the carriers so cannot resend
523	The recipient had insufficient credit in their prepaid SIM
524	Failed to connect to the upstream gateway
526	No longer used
527	This message has been manually resent
528	No more trying, we give up.
529	The gateway server rejected the message permanently
530	The MMS message you are sending is too large
531	You have to deliver something. You cannot send an empty message.
533	Oops, something went wrong internally to the SRS.
550	Message accepted but not delivered to the handset.
536	Message has been temporarily delayed.
534	Credit limited exceeded. Message delivery failed.
535	Source address (ORIGINATOR) is not valid.

Appendix B: Provider Values

Country	Carrier	MCC	MNC	Provider
Australia	Telstra (GSM)	505	1	telstra
Australia	Virgin Mobile	505	2	virgin
Australia	Vodafone	505	3	vodafone
Australia	Telstra (CDMA)	505	0	telstra
Australia	3 (Hutchinson)	505	6	hutc3g
Australia	Optus	505	2	optus
Ireland	Tesco	0	0	tescoie
Ireland	Three	0	0	threeie
Ireland	Meteor	272	3	meteorie
Ireland	O2 (former Esat Digifone)	272	2	o2ie
Ireland	Vodafone (former Eircell)	272	1	vodafoneie
United Kingdom	Virgin Mobile	234	30	virginuk
United Kingdom	Vodafone	234	15	vodafoneuk
United Kingdom	Hutchison 3G	234	20	threeuk
United Kingdom	O2	234	10	o2uk
United Kingdom	T-Mobile	234	30	tmobileuk
United Kingdom	Orange	234	33	orangeuk
New Zealand	Telecom NZ			telecom
New Zealand	Vodafone NZ			vodafone
New Zealand	2 Degrees			twodegnz