textvertising™
smart messaging

User Guide to Inbound and Outbound
SMS & PSMS API Gateways

10th Edition. May 2015
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Introduction.

Textvertising offer 3 gateways to integrate your product with our SMS and PSMS services.

1) Inbound SMS from shortcode and/or virtual mobile number posted to your application.
2) Outbound SMS to send either single or multiple messages (SMS).
3) Outbound SMS to send Premium Rate single messages (PSMS).

Integration may require some knowledge of basic programming but example working Perl scripts can be obtained if required.

What has changed since the 9th Edition

- Changes and Additional IP address ranges we may HTTP post from.
- Addition of enhanced XML reporting indicating failed numbers in a post to help developers identify problem numbers in theirs or their clients data.

API Integration.

An account with Textvertising is a requirement. Once created, you can take advantage of both inbound and outbound SMS via our easy to implement API.

Inbound SMS is only available on our virtual mobile number 07716 711 744 unless you upgrade your account to use the shortcode. The system works the same way in either case, except you will not be notified of the network. Outbound premium rate SMS (PSMS) alongside Standard SMS is optional and depends on your account settings.

Virtual Mobile Number Hosting.

If we are hosting a virtual mobile number on your behalf, the system will work in exactly the same way.

The following pages show how to integrate your platform with our SMS system via API.

Incoming and Outgoing SMS Authentication.

Users are advised although it is not mandatory to lock their incoming scripts to traffic from these specific Textvertising Server IP addresses for additional security.

Depending on our traffic at any given time or the services used, any one of these servers can post inbound requests or PSMS delivery notifications to you:

134.213.156.173 and 217.137.239.3 … 217.137.239.13

Clients are reminded that when posting to our servers, repeated login failure will result in our gateway blocking your IP. Please ensure that your scripts are posting the correct details before starting testing with our API.

Sending SMS via the API

Users should call a HTTP GET or use HTTP POST request to call the following script. Note the underscore for "_admin":

http://www.textvertising.co.uk/_admin/api/send_sms.asp

This API can accept both single and bulk messages. We recommend sending large numbers across as a bulk message rather than many single posts. HTTP GET has a limit on characters that can be submitted in the URL, and the URL is visible across the network. **We advise HTTP POST as a preferred method of submission for added security.**

The parameters required are shown below. The parameters must be sent in LOWERCASE only:

numbers	The number(s) that you wish to send an SMS to. Must start in UK "44" or "0" format, for example: 4471234567890 or 071234567890 are acceptable. If submitting multiple numbers to send the same message to, the numbers should be separated with an underscore "_" for example: 447777111177_447777111188
smsid	The sender ID (the ORIGINATOR of the message) that should show on the handset. This can be Alphanumerical or Numerical. If using Numerical and showing a valid mobile number, replies can be made to that mobile number, otherwise the end user will be unable to reply.
apikey	Your account API KEY. This is available under the Developer section of your admin panel. For security we no longer use username and passwords.
client_id	OPTIONAL. Your unique identifier for the message.
reportx	OPTIONAL. Set this parameter to either XML or STD reports. If omitted STD will be used.
message	The body of the message up to 612 characters in length. Messages beyond 160 characters will be sent as multipart messages. Due to additional header information for multipart messages, each multipart message is 153 characters in length. The first 7 characters tell the handset how to re-assemble the message on delivery. Each part is treated and charged as one message.
schedule	The time and date to deliver the message in the form YYYY-MM-DD HR:MIN:SEC
data	No longer used
notify	OPTIONAL. Send a report for the submission by email. If omitted or blank it is treated as NO. If submitted as YES, a report will be sent to you by email. If you send lots of messages, this may fill your email inbox quickly so use with care or on important messages.

Example GET request to send the same message to two phones:

http://web.textvertising.co.uk/_admin/api/send_sms.asp?numbers=44777777771_44777777772&apikey=A1B2C3D4E5F6&message=test message&reportx=xml&smsid=TestMe&&report=no

This will simply send "test message" to both phone numbers.

To make the API faster using the POST method, you can include many phone numbers for the **numbers** parameter. In fact you can include up to 6000 numbers per post. This means you can submit on average 8000 SMS/Sec via the platform.

We recommend upto 1000 per post as a good average. If using GET you are limited by the URL length, but 200 numbers should be fine.

Reports:

If accepted, and ID will be given in the format below (space delimited):
ACCEPTED [space] UNIQUE_MESSAGE_SUBMISSION_ID [space] CREDITS_REMAINING

Eg ACCEPTED 1234-567890 10336

XML response

If you set **reportx** parameter to XML, you will receive a response like this:

```
<?xml version="1.0" encoding="ISO-8859-1" ?>
 <SubmissionResult>
  <Result>ACCEPTED</Result>
  <SubmissionID>
   <RefNo>77587-1425386500</RefNo>
   <Submitted>9</Submitted>
   <ValidNo>7</ValidNo>
   <InvalidNo>2</InvalidNo>
   <InvalidNo_1>08452782055</InvalidNo_1>
   <InvalidNo_2>01234567890</InvalidNo_1>
   <TextvID>77587-1425386500</TextvID>
  </SubmissionID>
  <Credits>999999</Credits>
</SubmissionResult>
```

Understanding the response given in XML

If at least one number in the submission was received correctly, **Result** will indicate ACCEPTED. The **RefNo** and **TextvID** will always be unique and individual for every message you submit and Credits will indicate how many SMS credits you have remaining.

If all numbers submitted were valid, the **ValidNo** tag will match how many were **Submitted**. Otherwise it will decrement by each invalid number found and the tag **InvalidNo** will increment by the amount of each invalid number found. If invalid numbers are found, new tags will be introduced, **InavlidNo_x** where x is incremented for each invalid number until it reaches the value of the total of the **InvalidNo** tag.

Handling Errors on submission

It is important that you DO NOT assume that because you have submitted a message that it has been accepted and queued for delivery! You must read and handle the response accordingly to decide whether you should retry the message. This is especially important where your post contains more than one number as specific numbers may fail and not be accepted by the gateway.

If an **absolute error** exists on submission, an alternative response will be given. For specific errors, please see the section SUBMISSION ERROR CODES.

We recommend, at the very least and basic level, if you submit one number and message per post, filtering the response for the word ACCEPTED as this means the submission was ultimately successful.

Submission Error Codes.

Receiving errors can be annoying and we can help you trace errors that may occur. Below is a list of the errors that you may receive and the reasons they usually occur. Some errors may be more specific.

Example in **XML** style where a message was too long

```
<?xml version="1.0" encoding="ISO-8859-1" ?>
 <SubmissionResult>
  <Result>MESSAGE TOO LONG</Result>
  <TextvID></TextvID>
  <Credits></Credits>
</SubmissionResult>
```

Example in **standard** style where a message was too long

MESSAGE TOO LONG

Remember, if using the standard reply, these errors will be the only response.
If using the XML style response, these errors will be provided under the tag **Result** instead.

FAILED LOGIN, NO ID or NO USERNAME	The username or password supplied is incorrect or blank
ACCOUNT PROBLEM: xxxxx	Your account is barred or another problem exists. xxxxx will be replaced by a specific error.
MESSAGE TOO LONG	The submitted message is longer than 160 characters
ONE OR MORE MOBILE NUMBERS IS INVALID	One or more of the numbers submitted is either too long, too short, is not a valid mobile number or does not start with 447... If the response style is XML it means that there were no valid numbers found at all.
MESSAGE CONTAINS INVALID CHARACTERS AT POSITION xx	The message contains an invalid character that cannot be accepted by the network. Where applicable xx will be replace by the position of character(s).
SMSID TOO LONG	The sender ID is longer than 11 characters if Alphanumeric or 13 numbers if Numeric.
EXPIRY WRONG FORMAT	No longer supported
NO NUMBERS	Your submission contains no valid mobile numbers or the wrong delimiter was used to seperate them.
ACCOUNT NOT PSMS ENABLED	Only available on the Mobile Billing platform
NETWORK INVALID	Only available on the Mobile Billing platform
BILLING AMOUNT OUT OF RANGE	Only available on the Mobile Billing platform
NUMBER BARRED	The number you are submitting to has text stop or has been barred by the platform/network from receiving messages.
MMS CREDIT IS ZERO	No longer supported
MMS FAILED: xxxxx	No longer supported
NOT ENOUGH FREE MESSAGES	You have run out of SMS credits messages and should top up your account.

INBOUND SMS

Users should develop their own application to accept a HTTP POST request from our servers under the DEVELOPER section.

The parameters that will be submitted to you will be as follows:

number	The number that made a request.
message	The message that was submitted. If using the virtual mobile number, inbound requests can be a maximum of 160 characters. If using a shortcode multiple message parts can be submitted and our system will re-assemble and submit the entire message to your system. This is provided that all parts are received or the message is locally discarded.

network	Will be VODAFONEUK, TMOBILEUK, ORANGEUK, VIRGINUK, BTCELLNETUK, THREEUK, MANXUK, GUERNSEYUK or JERSEYUK

A network will only be included if using a shortcode number, not a virtual mobile number |
| keyword | The keyword that was used to trigger the request. If you have multiple keywords it will identify the request to you.

If we have set up keyword pointing then your message body will be shifted right and the keyword used will be inserted. |
| time | The time of the received request in GMT (SQL/MySQL format YYYY-MM-DD HH:MM:SS) |

Points to take note of:

Your server/script should respond in a timely fashion (sub 500ms). If it does not, or is unavailable, the request will not be retried.

Your server/script should also respond with a 200 response sending a basic text response like "OK" or "ACCEPTED" or you may experience problems setting up HTTP POST.

Sending SMS via SMPP

We also offer an SMPP connection for sending SMS.

Each account is setup and configured individually and your account does not have an SMPP connection automatically set up by default.

Therefore, if you wish to use SMPP, please contact us and we can activate your connection and provide connection criteria.

Troubleshooting.

Commonly asked questions:

Q: "Inbound API does not work on the shortcode, only the virtual mobile number"
A: This is account specific. If your account is not setup to use the shortcode, it will not work. All accounts can be upgraded to use the shortcode. Please call us to talk about this.

Q: "I keep receiving errors when submitting data via HTTP POST"
A: Usually this is caused by a spelling mistake in the parameter name(s) or using uppercase instead of all lowercase letters. Passwords and usernames are case sensitive.

Q: "I cannot send PSMS request (Premium Rate SMS)
A: Your account must be activated to use reverse billing, it is not automatically available to all accounts.

Q: "I do not know how to write the necessary software to connect via your API what can I do?"
A: We can provide a range of basic software written in PERL, PHP and ASP. However, if you are unfamiliar with either setting up a server, or writing or running software on it, we advise you seek the help of a professional or use our web interface instead.

Q: "I am texting my keyword to test but not seeing a response at my server"
A: Double check the posting address and ensure you can call it from an EXTERNAL site. Sometimes you may be able to see it internally but from another location, this may not work. This is normally when your firewall blocks our requests. We can add a trace to test your connection and what is returned. If you are experiencing problems you cannot resolve, please call or chat with one of the Technical Support Team online.

Should you experience any problems, please call our technical team who will be pleased to assist in the set up of our API.

Telephone us on 033 33 444 959