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Vooloo Overview

Vooloo is an SMS communications solution provided by Message Technologies, Inc.® It allows clients to send one or more short-code or long-code SMS messages by dropping a file in an FTP directory or by calling a web API.

Vooloo automatically posts inbound SMS message details (including opt-ins and opt-outs for short-codes) to a client's "receives" URL and can automatically post outbound SMS message results to a client's "callback" URL. These posts will be done in real-time as the SMS message details become available. This functionality also includes Post retry logic. Vooloo will do a set number of retries, one every X minutes, until the SMS details transmission either succeeds or is deemed a complete failure and Vooloo stops trying to post the data. As they relate to this functionality, two web API calls are available: one for setting the clients receives and callback URLs, and the other to allow clients to retry posting SMS message details for which previous posts had errored out the maximum number of times. Regardless of retries, for any functionality that the client performs based on the SMS data that is posted to their receives or callback URL's, it is the client's responsibility to check the SMS message timestamps prior to performing any time-sensitive tasks to make sure that those tasks should still be performed.

Vooloo also supports sending auto response SMS messages to incoming SMS message senders based on the SMS phone number that was contacted and the keyword sent by the inbound SMS message sender. For example, MTI can automatically respond to all incoming occurrences of the word HELP with "To get help, please visit www.yourcompany.com". Currently, this auto-response functionality is setup by MTI on a customer request basis and will incur professional service fees. If you're interested in using this feature, please contact your MTI Account Manager.

Vooloo Web API

API Description

The Vooloo Web API consists of three API calls:

1. **Send SMS** – This API call sends one or more SMS messages.
2. **Set Detail URLs** – This API call allows clients to set the URLs to which their SMS details will be sent. Vooloo will post inbound SMS message details (including incoming messages sent to a telephone number or short code) to a client’s “receives” URL and will post outbound SMS message results to a client’s “callback” URL. These SMS results will be transmitted as JSON-formatted text using an HTTP POST.
3. **Reset Detail POST Failures** – This API call instructs Vooloo to try re-posting SMS message details that were not previously successfully posted to the client’s “receives” URL and “callback” URL. As an example, this API call would be used if your receive URL’s were down or unavailable for a period of time.

The **Send SMS** API call and the **Set Detail URLs** API call need to be made using an HTTPS POST, and the **Reset Detail POST Failures** API call needs to be made using an HTTPS GET. The **Send SMS** API call and the **Set Detail URLs** API call expect a request content type of JSON, and all three API calls respond back with JSON. Sample request and response JSON examples are included later in this document.

The Vooloo web API version number will be present in the API URL to allow different versions of the API to exist and be used side-by-side by different Vooloo clients. The base production URL for all requests to version 1 of the web API will be “https://api.vooloo.io/v1/”.

Here are the API URLs for version 1:

- https://api.vooloo.io/v1/send_sms
- https://api.vooloo.io/v1/set_detail_urls
- https://api.vooloo.io/v1/reset_detail_post_failures

Send SMS - Web API Flow Example

1. Client performs an HTTPS POST to URL “https://api.vooloo.io/v1/set_detail_urls” and sends well-formed JSON containing the URL’s for Vooloo to use when posting inbound and outbound SMS details back to the client. Unless your URL’s change, this step only needs to be performed once.
2. Vooloo responds back with an HTTP 200 and the expected JSON response. The client checks the status code in the response JSON to confirm that the web API request was successful.

3. Client performs one or more HTTP POST requests to URL “https://api.vooloo.io/v1/send_sms” and sends well-formed JSON containing all the required web API arguments for sending a set of SMS messages.
4. Vooloo responds back with an HTTP 200 and the expected JSON response. The client checks the status code in the response JSON to confirm that the web API request was successful.
5. Vooloo sends the SMS messages associated with this web API request, and later the Vooloo data is updated with status updates for the messages that were sent.
6. The client’s callback URL for outbound SMS details receives multiple HTTP POST requests containing JSON that describes the current status of each SMS message sent, indicating that each message has been sent. The client processes each HTTP Request, which updates their data, and returns an HTTP 200 back to Vooloo for each request.
7. One of the short-code SMS message recipients replies with “STOP” from phone number 770-240-8000.
8. The clients receive URL for inbound SMS details receives an HTTP POST request containing JSON that indicates that the SMS message recipient at phone number 770-240-8000 opted out by sending the word STOP. The client updates their data to add this phone number to a Do Not Contact list and returns an HTTP 200 back to Vooloo.
9. Another of the SMS message recipients replies with the text “Cool” from phone number 770-240-8001. This doesn’t trigger an auto-response from the SMS vendor, and isn’t setup in the Vooloo data for an auto-response message to be sent back.
10. The clients receive URL for inbound SMS details receives an HTTP POST request containing JSON with the inbound SMS message “Cool” from phone number 770-240-8001. The client recognizes the message “Cool” as part of a marketing campaign and schedules an Air Conditioner specialist to call this contact back (within their system data), and then returns an HTTP 200 back to Vooloo.

API Request / Response Details:

Send SMS - Request Arguments

Field Name	Field Description	Required
x-user-key	User key assigned to client	YES. This value must be sent as an HTTP Request Header.
service_key	Vooloo service group assigned to set of client's SMS numbers	YES
phone_numbers	<p>Telephone number of the recipients, separated by a " " character.</p> <ul style="list-style-type: none"> For example, 17702408000 17702408001 International telephone numbers require the country code. 	YES
delivery_datetime	<p>Allows clients to schedule message delivery.</p> <ul style="list-style-type: none"> GMT format with minute granularity Format, YYYY-MM-DD HH:MM If the delivery_datetime is empty, assume immediate delivery. 	NO
text	<p>Body of the text message to be sent.</p> <ul style="list-style-type: none"> -Messages exceeding 160 characters will be "chunked" and sent as multiple SMS messages -ISO compatible in order to support multiple languages 	NO
type	KEYWORD or ALERT for sending short-code SMS messages.	NO
keyword	If you are using short code keywords, populate this field with	NO

	the appropriate keyword. For example, "Text2Win". Keyword campaigns must be preconfigured by MTI.	
alert_template	If you are using short code alerts, populate this field with the appropriate template number. Alerts must be preconfigured by MTI.	NO
template_variables	<p>Pipe delimited list of variables used for an alert template.</p> <ul style="list-style-type: none"> • Example of an alert template with two variables. "Hello from ACME. Reminder – a payment in the amount of <amount> is due on <date>" <p>Would be formatted as follows: amount=\$25.00 date=05-15-2015</p>	NO
client_ref_id	This client identifier is passed in with the web API request and echo'ed back in the web API response.	NO

Send SMS - Request – Sample JSON + cURL Command

```
{
  "send_sms_request": {
    "service_key": "a1b2c3d4-a1b2c3d4-a1b2c3d5",
    "phone_numbers": "17702408000|17702408001",
    "delivery_datetime": "2016-07-27 17:01",
    "text": "This is the SMS message to send",
    "type": "",
    "keyword": "",
    "alert_template": "",
    "template_variables": "",
    "client_ref_id": "123ABCDEFGF"
  }
}
```

```
curl --header "x-user-key: [USER KEY GOES HERE]" --header "Content-Type: application/json" --data
"{\"send_sms_request\":{\"service_key\": \"[SERVICE KEY GOES
HERE]\", \"phone_numbers\": \"4045551234^|16785554321\", \"text\": \"Test SMS
Message\", \"client_ref_id\": \"123ABCDEFGF\", \"delivery_datetime\": \"2017-03-24 17:01\"}}" -k
https://api.vooloo.io/v1/send_sms
```

- ❖ Note: The Web API client's user_key value must be included as an HTTP Request Header named **x-user-key** when sending the API request.
- ❖ Note 2: Since the double-quote and pipe character are special characters in a cURL command, they must be escaped as `\` and `^` within the JSON text in the command.

Send SMS - Response Values

Field Name	Field Description	Required
status_code	Alpha-numeric value describing the result of calling the Vooloo API	YES
status_message	Text describing the result of calling the Vooloo API	YES
transaction_id	Unique non-sequential value that identifies the web API request in Vooloo data.	YES
client_ref_id	This client identifier is passed in with the web API request and echoed back in the web API response.	NO

Send SMS - Response – Sample JSON + Status Codes

```
{
  "send_sms_response": {
    "status_code": "S-00",
    "status_message": "Request Succeeded",
    "transaction_id": "a1b2c3d4-a1b2c3d4-a1b2c3d5",
    "client_ref_id": "123ABCDEFGG"
  }
}
```

Status Code	Status Message
S-00	Request Succeeded
W-00	Request Succeeded
E-00	Request Succeeded
V-01	Invalid User Key Supplied
V-02	Web API Usage Not Authorized For User
V-03	Invalid Client Ref ID Included
V-04	Request JSON Not Formatted Properly
V-05	International SMS Not Authorized For User
V-06	Service Key Missing
V-07	Invalid Service Key Supplied
V-08	Phone Numbers Missing
V-09	Invalid Phone Numbers Supplied
V-10	Invalid Delivery DateTime Supplied
V-11	Invalid SMS Text Included
V-12	Invalid Type Included
V-13	Invalid Alert Template Included
V-14	Invalid Template Variable Included
V-15	Invalid Keyword Included
V-16	Service Key Supplied Refers To Multiple SMS Numbers And Additional Details Are Required
V-17	SMS Text Missing
V-18	Keyword Missing
V-19	Alert Template Missing
V-98	Details Necessary For Sending SMS Messages Are Missing
V-99	Request Validation Failure
E-98	SMS Setup Failure
E-99	Unknown error

Set Detail URLs - Request Arguments

Field Name	Field Description	Required
x-user-key	User key assigned to client	YES. This value must be sent as an HTTP Request Header.
callback_url	If passed in, this URL will be used to post outbound SMS result details back to the client.	CONDITIONAL – Value can only be left blank if client supplies an inbound SMS receives URL (ie, at least one of the two URLs must be supplied).
receives_url	If passed in, this URL will be used to post inbound SMS result details back to the client.	CONDITIONAL – Value can only be left blank if client supplies an outbound SMS callback URL (i.e., at least one of the two URLs must be supplied).
client_ref_id	This client identifier is passed in with the web API request and echo'ed back in the web API response.	NO

Set Detail URLs - Request – Sample JSON

```
{
  "set_detail_urls_request": {
    "callback_url": "https://mydomain.com/outboundcallbackurl.php",
    "receives_url": "https://mydomain.com/inboundreceivesurl.php",
    "client_ref_id": "123ABCDEFGF"
  }
}
```

```
curl --header "x-user-key: [USER KEY GOES HERE]" --header "Content-Type: application/json" --data
"{\"set_detail_urls_request\":{\"client_ref_id\": \"123ABCDEFGF\", \"callback_url\": \"https://mydomain.c
om/outboundcallbackurl.php\", \"receives_url\": \"https://mydomain.com/inboundreceivesurl.php\"}}" -
k https://api.vooloo.io/v1/set_detail_urls
```

- ❖ Note: The Web API client's user_key value must be included as an HTTP Request Header named *x-user-key* when sending the API request.
- ❖ Note 2: Since the double-quote and pipe character are special characters in a cURL command, they must be escaped as `\` and `^|` within the JSON text in the command.

Set Detail URLs - Response Values

Field Name	Field Description	Required
status_code	Alpha-numeric value describing the result of calling the Vooloo API	YES
status_message	Text describing the result of calling the Vooloo API	YES
transaction_id	Unique non-sequential value that identifies the web API request in Vooloo data.	YES
client_ref_id	This client identifier is passed in with the web API request and echoed back in the web API response.	NO

Set Detail URLs - Response – Sample JSON + Status Codes

```
{
  "set_detail_urls_response": {
    "status_code": "S-00",
    "status_message": "Request Succeeded",
    "transaction_id": "a1b2c3d4-a1b2c3d4-a1b2c3d5",
    "client_ref_id": "123ABCDEFGH"
  }
}
```

Status Code	Status Message
S-00	Request Succeeded
V-01	Invalid User Key Supplied
V-02	Web API Usage Not Authorized For User
V-03	Invalid Client Ref ID Included
V-04	Request JSON Not Formatted Properly
V-05	Callback URL and Receives URL Are Both Missing
V-06	Callback URL Given Not Formatted Properly
V-07	Receives URL Given Not Formatted Properly
V-99	Request Validation Failure
E-97	Account Setup Issue. Check with your Account Manager.
E-98	URL Update Failure
E-99	Unknown error

Reset Detail POST Failures - Request Arguments

Field Name	Field Description	Required
x-user-key	User key assigned to client	YES. This value must be sent as an HTTP Request Header.
client_ref_id	This client identifier is passed in with the web API request and echo'ed back in the web API response.	NO

Reset Detail POST Failures - Request – Sample cURL Command

```
curl --header "x-user-key: [USER KEY GOES HERE]" -k  

https://api.vooloo.io/v1/reset_detail_post_failures?client_ref_id=123ABCDEF
```

- ❖ Note: The Web API client's user_key value must be included as an HTTP Request Header named **x-user-key** when sending the API request.
- ❖ Note 2: Since this API call is setup to use an HTTP GET, the optional **client_ref_id** value should be included in the request URL querystring when included with the API call.
- ❖ Note 3: Since the double-quote and pipe character are special characters in a cURL command, they must be escaped as \" and ^| within the JSON text in the command.

Reset Detail POST Failures - Response Values

Field Name	Field Description	Required
status_code	Alpha-numeric value describing the result of calling the Vooloo API	YES
status_message	Text describing the result of calling the Vooloo API	YES
transaction_id	Unique non-sequential value that identifies the web API request in Vooloo data.	YES
client_ref_id	This client identifier is passed in with the web API request and echoed back in the web API response.	NO

Reset Detail POST Failures - Response – Sample JSON + Status Codes

```
{
  "reset_detail_post_failures_response": {
    "status_code": "S-00",
    "status_message": "Request Succeeded",
    "transaction_id": "a1b2c3d4-a1b2c3d4-a1b2c3d5",
    "client_ref_id": "123ABCDEFGG"
  }
}
```

Status Code	Status Message
S-00	Request Succeeded
V-01	Invalid User Key Supplied
V-02	Web API Usage Not Authorized For User
V-03	Invalid Client Ref ID Included
V-99	Request Validation Failure
E-97	Account Setup Issue. Check with your Account Manager.
E-98	One or more SMS detail POSTs could not be reset. Please try again later.
E-99	Unknown error

Outbound SMS Details for Callback URL – Values sent

Field Name	Field Description	Required
message_id	Unique identifier for outbound SMS message.	YES
status_code	Alpha-numeric value that indicates the current status of the SMS message.	YES
status_description	Description of the current status of the SMS message.	YES
timestamp	The W3C formatted timestamp associated with the SMS message status update.	YES
to	The phone number of the SMS message recipient.	YES
from	The SMS number that the message was sent from.	YES

client_ref_id	The supplied_id value used by the client when dropping a file, or the client_ref_id value used when calling the web API to send SMS messages.	YES – if value is present.
----------------------	---	----------------------------

Outbound SMS Details for Callback URL – Sample JSON + Status Codes

```
{
  "outbound_sms": {
    "message_id": "12abcfg9bc84d9c1f0",
    "status_code": "S-00",
    "status_description": "Message(s) Sent",
    "timestamp": "2017-03-02T20:50:13+00:00",
    "to": "14045551234",
    "from": "17705551234",
    "client_ref_id": "GLTest123ABC"
  }
}
```

Status Code	Status Message
S-00	Message(s) Sent
S-01	Message(s) Queued for Delivery
F-00	Delivery Failure
F-01	Delivery Expiration
F-02	SMS Recipient Opted Out
F-03	SMS Request Missing Required Parameters
F-04	Other Failure

Inbound SMS Details for Receives URL – Values sent

Field Name	Field Description	Required
timestamp	W3C formatted Date/time of inbound SMS message or opt-in / opt-out.	YES
from	Phone number belonging to inbound SMS message sender or person that opted in or out.	YES
to	SMS number that was contacted for inbound SMS message. This SMS number is associated with a Vooloo service.	NO. This value is not sent for opt-ins and opt-outs. It is only sent for other inbound SMS messages.
type	KEYWORD or ALERT for sending short-code SMS messages.	NO. This value is only sent for opt-ins and opt-outs.
keyword	If you are using short code keywords, populate this field with the appropriate keyword. For example, "Text2Win". Keyword campaigns must be preconfigured by MTI.	NO. This value may only be sent for opt-ins and opt-outs.
message_id	Unique identifier for inbound SMS message.	No. This value is not sent for opt-ins and opt-outs.
text	Text from inbound SMS message.	No. This value is not sent for opt-ins and opt-outs.

Inbound SMS Details for Receives URL – Sample JSON for Inbound SMS Message

```
{
  "inbound_sms": {
    "timestamp": "2017-03-02T20:50:13+00:00",
    "from": "17705551234",
    "to": "14045551234",
    "message_id": "12abcfg9bc84d9c1f0",
    "text": "This is a test message."
  }
}
```

Inbound SMS Details for Callback URL – Sample JSON for Opt-In

```
{  
  "opt_in": {  
    "timestamp": "2017-03-02T20:50:13+00:00",  
    "from": "17705551234",  
    "type": "KEYWORD",  
    "keyword": "TEXT2WIN"  
  }  
}
```

Inbound SMS Details for Callback URL – Sample JSON for Opt-Out

```
{  
  "opt_out": {  
    "timestamp": "2017-03-02T20:50:13+00:00",  
    "from": "17705551234",  
    "type": "ALERT"  
  }  
}
```

```
{  
  "opt_out": {  
    "timestamp": "2017-03-02T20:50:13+00:00",  
    "from": "17705551234",  
    "type": "KEYWORD",  
    "keyword": "TEXT2WIN"  
  }  
}
```