Developer API

This page will help you get started with API.

This document will provide instructions on how to quickly integrate SMS messaging services into various solutions by using HTTP application programming interface (HTTP API). The HTTP API can be used for sending SMS messages, making Number Context (number validation) requests and receiving inbound SMS messages sent from mobile phones.

API is based on REST standards, enabling you to use your browser for accessing URLs. In order to interact with our API, any HTTP client in any programming language can be used.

Base URL

Submit all requests to the base URL. All the requests are submitted thorough HTTP POST method.

```
Plain Text

https://messaging-service.co.tz
```

Content-Type & Accept header

API supports JSON and XML Content-Types and Accept criteria that should be specified in the header. If the Content-Type is not specified you will receive a General error. Depending which Accept type is chosen in the deader for the request, the same one will be applied in the response.

- Content-Type: `application/json`
- Accept header: `application/json`

Authorization

We support basic authorization using a username and password with Base64 encoding variation RFC2045-MIME.

1. Username and password are combined into a string **username:password**.
2. The resulting string is encoded using the RFC2045-MIME variant of Base64.
3. The authorization method and a space, like this: `"Basic "`, are put before the encoded string.

EXAMPLE

Username: Aladdin

Password: open sesame

Base64 encoded string: `QWxhZGRpbjpvcGVuIHNlc2FtZQ==`

Authorization header: `Basic QWxhZGRpbjpvcGVuIHNlc2FtZQ==`

Response status and error codes

While using our API you may encounter certain status and error codes that you need to understand or troubleshoot. This page contains a list of all codes with thorough descriptions and action steps you need to take in case you are looking for a resolution of the problem.

HTTP status codes

Every HTTP transaction has a status code sent back by the server to define how the server handled the transaction. Most common statuses you may have encountered are `200 OK` and `404 Not Found`

API Status codes

Besides standard HTTP status code, status object may be returned as part of the API response message, delivery report or message log.

Status json object example:

```
Plain Text

{
    "groupId":3,
    "groupName":"DELIVERED",
    "id":5,
    "name":"DELIVERED_TO_HANDSET",
    "description":"Message delivered to handset"
}
```

General status codes

PENDING (group id: 18) - general status codes

Message has been processed and sent to the next instance i.e. mobile operator.

Id	Status
50	**PENDING_WAITING_DELIVERY** - Message has been processed and sent to the next instance i.e. mobile operator with request acknowledgment from their platform. Delivery report has not yet been received, and is awaited thus the status is still pending.
51	**ENROUTE (SENT)** - Message has been processed and sent to the next instance i.e. mobile operator.
52	**PENDING_ACCEPTED** - Message has been accepted and processed, and is ready to be sent to the next instance i.e. operator.

DELIVERY (group id: 20) - general status codes

Delivery report received from mobile operators.

Id	Status
73	**DELIVERED** - The message was successfully delivered.
74	**EXPIRED** - The SMSC was unable to deliver the message in a specified amount of time.For instance when the phone was turned off.
75	**DELETED** - The message was deleted.
76	**UNDELIVERABLE** - The SMS was unable to deliver the message.For instance, when the number does not exist. This status is also returned when SMSC does not send accurate status.
77	**ACCEPTED** - The SMS was accepted and will be send.
78	**UNKNOWN** - Unknown error occured.
79	**REJECTED** - The message was rejected.The provider could have blocked phonenumbers in this range.
80	**SKIPPED** - The message was skipped.

REJECTED (group id: 19) - general status codes

Message has been received, but has either been rejected by our system, or the operator has reverted Rejected as final status.

Id	Status
53	**REJECTED_NETWORK** - Message has been received, but the network is either out of our coverage or not setup on your account. Your account manager can inform you on the coverage status or setup the network in question.
54	**REJECTED_PREFIX_MISSING** - Message has been received, but has been rejected as the number is not recognized due to either incorrect number prefix or number length. This information is different for each network and is regularly updated.
55	**REJECTED_DND** - Message has been received, and rejected due to the user being subscribed to DND (Do Not Disturb) services, disabling any service traffic to their number.
56	**REJECTED_SOURCE** - Your account is set to accept only registered sender ID-s while the sender ID defined in the request has not been registered on your account.

Test Mode

You can make a request just to test our API for your development environment, and get responses and understanding them. This feature will send you only dummy data generate from your request. No charges are involved in testing mode, it is free and your current sms balance will not be reducted for the requests you send to the test APIs.

TEST APIs url

For single message text request:

POST https://messaging-service.co.tz/api/sms/v1/test/text/single

For multiple messages text request:

POST https://messaging-service.co.tz/api/sms/v1/test/text/multi

Further instructions are on Send SMS Section

Send Sms

In a few simple steps, we will explain how to send an SMS using Nextbyte HTTPS API.

Firstly, you'll need a valid Nextbyte account. When you sign up for the account, you will set a username and password. Next, your username and password has to be encoded in base64 like described in the Authorization Section:

The message will be sent only to a valid phone number (numbers), written in international format e.g.255738234345. We strongly recommend using the E.164 number formatting. E.164 numbers are internationally standardized to a fifteen digit maximum length. Phone numbers are usually prefixed with + (plus sign), followed by a country code, network code and the subscriber number. Phone numbers that are not E.164 formatted may work, depending on the handset or network.

When sending a message you can specify **reference** value which associates the API request payload with your data. This is very useful when fetching delivery reports and logs. This is also useful when at any circumstance the requester does not receive a response from the API endpoint and wants to synchronise information at some point later.

POST   Single destination

https://messaging-service.co.tz/api/sms/v1/text/single

Now, you are ready to send your first SMS message using:

POST https://messaging-service.co.tz/api/sms/v1/text/single

For testing your request use the url below:

POST https://messaging-service.co.tz/api/sms/v1/test/text/single

Request body contains the message you wish to send with from, to and message parameters.

HEADERS

Authorization	Basic dGVzdDE6MTIzNDU2
Content-Type	application/json
Accept	application/json

Body raw

```
{"from": "N-SMS", "to": "255716718040", "text": "Your message", "reference":"xaefcgt"}
```

POST   Multiple destinations

https://messaging-service.co.tz/api/sms/v1/text/single

For sending the single messages to multiple phone numbers, you need to perform:

POST https://messaging-service.co.tz/api/sms/v1/text/single

For testing your request use the url below:

POST https://messaging-service.co.tz/api/sms/v1/test/text/single

Request body contains the message you wish to send with from, to and message parameters.

HEADERS

Authorization	Basic dGVzdDE6MTIzNDU2
Content-Type	application/json
Accept	application/json

Body raw

```
{"from":"N-SMS", "to":["255655912841", "255716718040"],  "text": "Your message", "reference":
```

POST   Multiple messages to Multiple destinations (Example 1)

https://messaging-service.co.tz/api/sms/v1/text/multi

For sending the multiple messages to multiple phone numbers, you need to perform:

POST https://messaging-service.co.tz/api/sms/v1/text/multi

For testing your request use the url below:

POST https://messaging-service.co.tz/api/sms/v1/test/text/multi

HEADERS

Authorization	Basic dGVzdDE6MTIzNDU2
Content-Type	application/json
Accept	application/json

Body raw

```
{"messages": [{"from":"N-SMS", "to":"255716718040",  "text": "Your message"},  { "from":"N-SMS
```

POST Multiple messages to Multiple destinations (Example 2)

https://messaging-service.co.tz/api/sms/v1/text/multi

For sending the multiple messages to multiple phone numbers, you need to perform:

POST https://messaging-service.co.tz/api/sms/v1/text/multi

For testing your request use the url below:

POST https://messaging-service.co.tz/api/sms/v1/test/text/multi

HEADERS

Authorization	Basic dGVzdDE6MTIzNDU2
Content-Type	application/json
Accept	application/json

Body raw (json)

```
json

{"messages": [{"from": "N-SMS","to": ["255716718040","255758483019"],"text": "Your message"},{
```

POST Schedule SMS

https://messaging-service.co.tz/api/sms/v1/text/single

To send schedule sms you required to have the following parameters:

from - your Sender ID

to - recipient phone number with the format begin with 255

text - your text message

date - date of the day to which you want to send your sms, format of Year-month-date exapmle:2020-10-01

time - time of the day to which you want to send your sms, 24 hours format exapmle:12:00

Optional parameters to the schedule sms

repeat - you can add this parameter when you want your sms to be repeated. This must be with these values in order to work: **hourly**, **daily**, **weekly** or **monthly**

start_date - this parameter defines the date from this your sms can start sending, format of Year-month-date exapmle:2020-10-01.

end_date - this parameter defines the date from this your sms can end sending, format of Year-month-date exapmle:2021-01-01.

HEADERS

Authorization	Basic dGVzdDE6MTIzNDU2
Content-Type	application/json
Accept	application/json

Body raw

```
{"from": "N-SMS", "to": "255716718040", "text": "Your message", "date": "2020-10-01" , "time":
```

GET Send Sms Via Link

https://messaging-service.co.tz/link/sms/v1/text/single?username=myuser&password=mypass&from=N-SMS&to=255655000000&text=TestMessage

PARAMS

username	myuser
password	mypass
from	N-SMS
to	255655000000

Sms Delivery Reports

`GET` `https://messaging-service.co.tz/api/sms/v1/reports`

Delivery report per recipient can only be retrieved/queried once, hence make sure to store them for your reference once retrieved. Available query parameters are:

size:

Specify the number of reports to be retrieved per request. The default and maximum size is 500.

`https://messaging-service.co.tz/api/sms/v1/reports?size=200`

sender:
Get delivery reports for a specific sender.

`https://messaging-service.co.tz/api/sms/v1/reports?sender=N-SMS`

messageId:
The ID uniquely identifies the message sent. You will receive a messageId in the response after sending a message.

`https://messaging-service.co.tz/api/sms/v1/reports?messageId=348833233`

The following additional parameters are still used but will be deprecated in the next minor upgrade.

sentSince and sentUntil:
These are dates within the delivery reports you request to see. These are required both in order to get your requested reports.

reference:

This is the special value which was used during sending a message to associate the sent message with specific API request values.

Using these parameters is optional you can just use the provided API url to get all of the delivery reports status which you have never retrieved before.

Examples on how requests can be made is shown as follows in API url:

`https://messaging-service.co.tz/api/sms/v1/reports?sentFrom=2020-01-01&sentUntil=2020-12-31`

if no data is found the results will be returned as follows:

Plain Text

```
{
    "results":[]
}
```

GET   Get all delivery reports

https://messaging-service.co.tz/api/sms/v1/reports

HEADERS

Authorization	Basic aW0yM246MTIzN44DU2
Content-Type	application/json
Accept	application/json

GET   Get delivery reports with messageId

https://messaging-service.co.tz/api/sms/v1/reports?messageId=28089492984101631440

HEADERS

Authorization	Basic aW0yM246MTIzNDU2
Accept	application/json

PARAMS

messageId	28089492984101631440

GET   Get delivery reports with specific date range (To be deprecated)

https://messaging-service.co.tz/api/sms/v1/reports?sentSince=2020-02-01&sentUntil=2020-02-20

HEADERS

Authorization	Basic aW0yM246MTIzNDU2
Accept	application/json

PARAMS

sentSince	2020-02-01
sentUntil	2020-02-20

Sent Sms Logs

Logs with sent SMS message history can be requested for all messages by using a single request:

```
GET https://messaging-service.co.tz/api/sms/v1/logs
```

GET   Get all sent SMS logs

http://messaging-service.co.tz/api/sms/v1/logs?from=NEXTSMS&limit=5&offset=20

Let's see what happens when you request all of your logs, without any query parameter:

HEADERS

Authorization	Basic aW0yM246MTIzNDU2
Content-Type	application/json
Accept	application/json

PARAMS

from	NEXTSMS
limit	5
offset	20

GET   Get all sent SMS logs with optional parameter

https://messaging-service.co.tz/api/sms/v1/logs?from=SENDER&to=255716718040&sentSince=2020-02-01&sentUntil=2020-02-20

you might need some filters to search through them. The filters you can use are:

from:
Sender ID name.

to:
Destination (Phone number starting with 255).

sentSince: Date.
Lower limit on date and time of sending SMS.

sentUntil: Date.
Upper limit on date and time of sending SMS.

offset: To skip a given number of results in the report. This must be an integer.

limit: To limit the number of results returned use limit, this must be an integer (Maximum allowed is 500).

Using parameters is optional you can just use the provided API url to get all of your sent sms logs.

reference:

This is the special value which was used during sending a message to associate the sent message with specific API request values.

HEADERS

Authorization	Basic aW0yM246MTIzNDU2
Content-Type	application/json
Accept	application/json

PARAMS

from	SENDER
to	255716718040
sentSince	2020-02-01
sentUntil	2020-02-20

Sub Customer

POST Register Sub Customer

https://messaging-service.co.tz/api/reseller/v1/sub_customer/create

This api is enabled for customers in reseller program where they can register their customers.

Complete all the fields required :

first_name

last_name

username

email

phone_number

account_type: Sub Customer or Sub Customer (Reseller)

sms_price

HEADERS

Authorization	Basic bmV3MjNuOjEyMzQ1Ng
Accept	application/json
Content-Type	application/json

Body raw

```
{
  "first_name": "Api",
  "last_name": "Customer",
  "username": "apicust",
  "email": "apicust@customer.com",
  "phone_number" : "0738234339",
  "account_type" : "Sub Customer (Reseller)",
  "sms_price": 20
}
```

POST   Recharge customer

https://messaging-service.co.tz/api/reseller/v1/sub_customer/recharge

To recharge your customer you are required to specify

your customer **email** account which has been registered with the customer

and **smscount** number of sms you want to recharge a customer.

HEADERS

Authorization	Basic aW0yM246MTIzNDU2
Accept	application/json
Content-Type	application/json

Body raw

```
{"email": "example@email.com", "smscount":5000}
```

POST   Deduct customer

https://messaging-service.co.tz/api/reseller/v1/sub_customer/deduct

To deduct your customer you are required to specify

your customer **email** account which has been registered with the customer

and **smscount** number of sms you want to deduct from a customer account.

HEADERS

Authorization	Basic aW0yM246MTIzNDU2
Accept	application/json
Content-Type	application/json

Body raw

```
{"email": "example@email.com", "smscount":2000}
```

GET   Get sms balance

https://messaging-service.co.tz/api/sms/v1/balance

HEADERS

Authorization	Basic c3ViY3VzdG9tZXI6MTIzNDU2
Content-Type	application/json
Accept	application/json