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SMTP API Specification

V2.4.7

Contents

1. Overview.....	3
2. Introduction.....	3
3. Getting started.....	4
4. Basic email structure	4
4.1 Authentication	5
4.2. Send a message.....	5
4.3 Text parameter versus the data parameter	6
5. Getting started.....	7
5.1 Table of parameters.....	7
5.2 Message parameters in detail	11
6. Batch messaging	21
7. 8-bit messaging.....	23
8. Messaging examples.....	23
8.1 Simple examples	23
8.2 Batch messaging examples	24
8.3 8-bit SMS examples.....	25
9. Appendix A: Error codes	26
10. Appendix B: Message Statuses	28
11. Terminology	28
12. Contact details	29

1. Overview

This technical document is intended for developers who wish to use the Clickatell SMTP API for sending messages and describes the various programming methods and commands used by developers when using this API.

The SMTP API allows you to send SMS messages via email. Your application can then send SMSs by specifying your username, password and API ID in the body of the email, together with the message you want to send and the list of recipients.

To use this API, you need to register at (<http://www.clickatell.com/register/?product=1>). When you sign up for an SMTP account you will be given a username, password and api_id: keep these at hand. Once you have registered and been activated you will receive 10 free credits with which to test our service. Messages sent with these credits contain a pre-populated message. You can test the API using these credits, and purchase credits to start sending your own, customized messages.

It is recommended that you understand routing profiles before reading this document. Information is available at at <https://www.clickatell.com/resources/product-help/developers-central/routing-profile-guide/>.

There are several different ways of gaining access to the gateway:

- SMTP - enabling a server or client generated email to be delivered as an SMS
- HTTP / HTTPS - submitting either a POST or GET to the API server
- FTP – uploading a text file to our FTP Server
- XML – posting to our gateway using XML over HTTP/S
- COM Object – for Windows based development
- SOAP – submit SOAP packets over HTTP/S
- SMPP – customers requiring a high throughput binary socket connection

In order to reduce testing costs, Clickatell offers a test number range. Messages sent to any number on this prefix will only be charged 1/3 of a credit. Use the number 279991xxxxx (for South Africa) or 1999xxxxxxx (for the U.S.) where “xxxxx” represents any numeric string. Message statuses will be returned.

We will cover the SMTP method in this document. Additional documentation is available for the other methods.

2. Introduction

Quite often, the only way of getting a server to send SMS messages via Clickatell’s gateway is via a server-generated email. This API connection facilitates that operation. It supports most of the functionality of the HTTP API version 2.3.0 including 8-bit messaging and templating.

The recommended batch size is 10 000 messages with a maximum of 50 000 messages per email allowed.

Note: It is important that the ENTIRE document is read before contacting support.

3. Getting started

In order to use the Clickatell gateway you need a Clickatell account and at least one registered connection (API sub-product instance) between your application and our gateway. Each connection method is known as a sub-product (of our API product). You can follow these steps to get started:

Step 1 - register for a Clickatell account

If you do not already have a Developers' Central account, you need to register for one. If you already have a Clickatell Central account, proceed to Step 2 for instructions on how to edit an API connection on your account.

- Go to <https://www.clickatell.com/clickatell-products/online-products/sms-gateway-developers-central/> and click on the 'Try Developers' Central Now' button.
- Select the Developers' Central and the Account type you would like to use.
- Enter your personal information to complete the registration form
- Accept Terms & Conditions
- Click the 'Create my Account' button - an email containing your login details will be sent to the email address you have provided.

Step 2 – Login to your account

When you have logged in you will be on the Clickatell Central landing page. You will receive 10 free credits which you can use to test the Clickatell Gateway. Please note that for security reasons these 10 credits contain pre-set Clickatell content.

An HTTP API will be added to your account for you. This will allow you to start testing the Clickatell Gateway immediately. You can purchase credits when you are ready to start sending personalized messages.

Step 3 – Adding an SMTP API to your account

To add a SMTP API to your account, select **APIs** from the main menu and then select **Setup a new API** from the submenu. Click the Add FTP API button on the Setup API page that opens. You can then complete all the required details to configure your API.

Note: For more information on managing your API connections within your Clickatell account see our API guide at <http://www.clickatell.com/help-support/developer-apis/clickatell-api/>

4. Basic email structure

To send a message with the Clickatell SMTP API, the system interprets variables that you pass in the body of the email. Each line represents a variable in the form of:

variablename:value
variablename:value
variablename:value

We endeavor to strip any superfluous white space that may occur either side of the colon. However, to avoid any erroneous characters from creeping into the email by mail clients, we suggest that you keep to the format shown above.

Note: We only accept plain-text emails. We do not process HTML-formatted emails. The “Content-Transfer-Encoding” header may only be set to 7-bit which is the default.

The emails themselves should be sent to:

sms@messaging.clickatell.com

The subject field of the message is ignored. All the following examples are of the body only, unless otherwise indicated. Please check to determine after how many characters your email client forces word-wrapping (inserts a line-break). Make sure the length of each line is less than this value. We read a maximum of 8192 bytes from each line, so avoid having too many comma-delimited destination addresses. If uncertain, please test before sending large volumes.

4.1 Authentication

In order to deliver a message, the system needs to authenticate the request as coming from a valid source. We use a number of parameters to achieve this:

- **api_id:** This is issued to you when you register for the API product.
- **user:** This is the username of your account.
- **password:** The current password you have set on your account.

You can send multiple emails on the same API account simultaneously.

Example

api_id:1234
user:xxxxxxxx
password:xxxxxxxxxx

Note: To receive a response from the API, use the ‘reply:your email address’ parameter, and you will receive an API response in the form of an email. See the **reply** parameter for more information.

4.2. Send a message

Once you have set up the three authentication variables listed above, there are only another two parameters that are required before you can send an SMS via SMTP.

to:xxxxxxxxxxxxxxxxxx

This parameter sets the destination address. You may send the same SMS to one or more recipients in a single mail. There are two ways to achieve this: either using comma-delimited destination addresses (ensure that there are no spaces before or after the comma), for example:

```
to:xxxxxxxxxxxxxxxxx,xxxxxxxxxxxxxxxxx,xxxxxxxxxxxxxxxxx,xxxxxxxxxxxxxxxxx
```

or multiple lines, e.g.:

```
to:xxxxxxxxxxxxxxxxx
```

```
to:xxxxxxxxxxxxxxxxx
```

```
to:xxxxxxxxxxxxxxxxx
```

```
to:xxxxxxxxxxxxxxxxx
```

The last variable is the text parameter. The text parameter can run over multiple lines. This enables you to insert new lines in your SMS. It also ensures that when your mail client is line wrapping, that the text delivered to the handset is not cut at the line wrap of your email, for example:

Email	Resultant SMS
text:Line 1	Line 1
text:Line 2	Line 2
text:Line 3	Line 3

Simple Example:

```
api_id:1234
```

```
user:xxxxxxxx
```

```
password:xxxxxxxx
```

```
to:1234567890,1234567890
```

```
text:This is my first test SMS
```

Note: It is suggested that the maximum length of each text line be less than 40 characters. However, the maximum length is determined by the email client that you use. As such, this could be more or less than 40 characters.

4.3 Text parameter versus the data parameter

An alternative to the **text** parameter is the **data** parameter.

This parameter is used to avoid mal-formatting of an SMS, such as when a mail client inserts an unwanted line break in a text string, due to automatic line wrapping. If this parameter is used, any line break automatically inserted by the mail client will be removed when delivering the SMS.

We will also strip out any white space before and after the message text lines, resulting in an unbroken text line in the resultant SMS. Therefore, use the data parameter when sending binary or Unicode messages.

Example 1:

Email sent	SMS received
api_id:1234 user:xxxxxxxxx password:xxxxxxxxxxx to:1234567890,1234567890 text:Test SMS with the email client inserting a line break here in this sentence text: . This is a new sentence	Test SMS with the email client inserting a line break . This is a new sentence.

In the above example the email client automatically inserts a line break before the word “here”. When the SMS is received, all text after this line break (for the first instance of the text parameter) is lost. A line break is then inserted at the end and the contents of the second text parameter added.

Example 2:

Email sent	SMS received
api_id:1234 user:xxxxxxxxx password:xxxxxxxxxxx to:1234567890,1234567890 data:Test SMS with the email client inserting a line break here in this sentence data: . This is a new sentence	Test SMS with the email client inserting a line break. This is a new sentence.

In the above example the email client automatically inserts a line break before the word “here”. When the SMS is received, all text after the line break for the first data line is lost. The second data line is then appended to the remaining portion of the first data line.

Note: Another alternative to the **text** parameter is the **urldata** parameter. This allows you to use a URL encoded string which is useful when sending special characters such as “new line” or Greek text.

5. Getting started

5.1 Table of parameters

There are a variety of messaging and SMS features supported by the gateway, which can be activated by including a number of additional parameters. These parameters include those in the table below.

Name	Parameter name	Short description	Default value	Restricted values
API ID	api_id	The value for this mandatory parameter can be found logging in online and going to APIs -> Manage APIs		
Username	user	The username you specified.		
Password	password	Your Developers' Central account password.		
Destination address	to	The number of the handset to which the message must be delivered. The number should be in international number format.		No '00' prefix or leading "+" symbol should be used.
Text	text	The text content of the message. Note that some characters take up two characters because of GSM encoding standards		Go to http://forums.clickatell.com/clickatell search for 'Why do some characters take two spaces?'
Source address	from	The source/sender address that the message will appear to come from also known as "Sender ID". These must be registered within your online account and approved by us before they may be used. MO numbers rented from us do not require approval.	gateway assigned number	A valid international format number between 1 and 16 characters long, or an 11-character alphanumeric string.
Enable callback	callback	Enables you to receive message delivery statuses via an HTTP, SOAP or XML callback which is posted to a URL of yours using the GET or POST method. This is done every time a message status is updated.	0	0,1,2,3,4,5,6,7 Read detailed description of parameter.
Delivery time	deliv_time	Delays delivery of SMS to mobile device in minutes relative to the time at which the SMS was received by our gateway. This should be greater than 10 minutes for best effect. Smaller time frames may be delivered too soon.		The upper limit is 7 days, or 10080 minutes.

Concatenation	concat	Specifies the maximum number of message parts available for the message.	1	1, 2, 3
Maximum credits	max_credits	Overrides the maximum charge specified online in "profiles". It works within the bounds of the profiles. In other words, a profile must exist for the maximum credit that you set.	As per profiles	0.8,1,1.5,2,2.5,3
Required features	req_feat	Allows you to set the features which must be included when a message is sent. If the route does not support the features which you set as 'required' the message will fail. Note: The use of this parameter could increase the cost per message if a more expensive gateway is used.		Read detailed description of parameter.
Delivery queue	queue	Delivers the message through one of three queues assigned to each client account. Messages in the highest priority queue will be delivered first.	3	1, 2,3 1 is highest priority.
Gateway escalation	escalate	Prompts an escalation to an alternative route, if messages are queued on the least-cost route.	0	0 - off 1 - Escalate immediately to an alternative route if messages are queued on the least-cost route.
Mobile originated	mo	This is only applicable to clients that have subscribed to a two-way messaging service. We route via a pre-defined carrier to enable the ability for a reply to be received back.	0	0 – Off. We use our normal routing rules. 1 – Enable Reply.
Client message ID	cliMsgId	Client message ID defined by user for message tracking.		Up to 32 alphanumeric characters. No spaces.
Unicode message	unicode	Two-digit language code. Convert your text to Unicode [UCS-2 encoding]. See http://www.Unicode.org/ .	0	0 – No Unicode 1 – Send as Unicode.

Message type	msg_type	Message types are associated with a structure that defines the fields of the message, e.g., logos and ringtones. See Message Types for more information.	SMS_TEXT	
User data header	udh	Informs the mobile handset of the type of data and data length of the user data part of an SMS message. The UDH header is used in conjunction with Binary content to define message types. See 8-bit messaging for more information.		Set UDH data manually.
Data	data	The data content of a message, if the UDH component is set manually.		
Validity period	validity	The validity period in minutes relative to the time at which the SMS was received by our gateway. The message will not be delivered if it is still queued on our gateway after this time.	1440 minutes (24 hours)	Set value in X minutes from 1 – 1440 minutes.

The following additional parameters are also available to the SMTP API

Name	Parameter name	Short description	Default value	Restricted values
Reply	reply	One or more email addresses which will be sent either a unique identifier for each message or an error code		
CSV Line	csv	Used in conjunction with text parameter to handle personalized batch messaging		The mobile number must be the first value in the CSV field.
Delimiter	delimiter	The mobile number must be the first value in the CSV field.		
CSV Template	csvtemplate	Used in conjunction with text parameter to handle personalized batch messaging where additional message parameters need to		

		be set on a message-by-message basis		
URL encoded text	urldata	Useful for special Greek characters, etc.		

5.2 Message parameters in detail

5.2.1 Destination address (to)

SMS messages need to be sent in the standard international format, with country code followed by number. No leading zero to the number and no special characters such as "+" or spaces must be used. For example, a number in the UK being 07901231234 should be changed to 447901231234.

If the optional API setting titled 'Replace the leading zero with correct country code' is enabled for the API in your Developers' Central account, any mobile numbers starting with zero will have the zero stripped and replaced with the international dialing code.

Parameter:

`to:xxxxxxxxxx`

Text

This is the default parameter that is used to add message content. A single text message can contain up to 160 characters or 140 bytes.

5.2.2 Source address (from)

The source address (**from**), also known as the sender ID, can be either a valid international format number between 1 and 16 characters long, or an 11-character alphanumeric string. These must be registered within your online account and approved by us before they may be used. MO numbers rented from us do not require approval.

Note that characters such as spaces, punctuation, Unicode and other special characters may not always be supported to all destinations and could interfere with your delivery. We suggest that you refrain from **using such characters on the source address**. The use of an alphanumeric source address with 8-bit messaging may cause message failure. This service is not guaranteed across all mobile networks and may interfere with delivery to certain handsets.

Note: To ensure that this feature is supported when delivering your message, the required features (**req_feat**) parameter for this feature must be set.

Parameter:

`from:xxxxxxxxxx`

Note: To ensure that this feature is supported when delivering your message, the required features (**req_feat**) parameter for this feature must be set.

5.2.3 Delivery acknowledgement (deliv_ack)

In order to determine whether an SMS has been received by a handset or not, we request delivery acknowledgement for every message we send. The ability to receive reliable delivery acknowledgements varies between mobile networks. Please test to a specific mobile network first, before assuming that you will receive handset acknowledgments for messages that are delivered.

If a GSM handset is 'absent', e.g., switched off or out of coverage, the SMS will be delivered according to a retry cycle once the handset is back in coverage. A delivery receipt will only be returned if and when the retry is delivered. If the validity period or retry cycle (typically 24 hours) is exceeded, the SMS will fail and show 'Error Delivering Message' or status 8.

Delivery acknowledgements can be monitored via the callback system or online reports.

5.2.4 Callback System (callback)

Final or intermediary statuses are passed back by the API depending on the callback value set in the original post. This is done by means of:

- HTTP GET
- HTTP POST
- XML GET
- XML POST
- SOAP GET
- SOAP POST

The variables returned are **apiMsgId**, **cliMsgId**, **timestamp**, **from**, **status** and **charge**.

Validation of Callback URL

The URL entered in your Clickatell central account to receive 'SMS Status notifications' is validated to check if a callback can be completed. The URL must begin with either `http://` (non-encrypted) or `https://` (encrypted). If the callback URL is invalid, a message is displayed indicating an Invalid URL.

Callback retry interval

The MT callback system will make 8 attempts to deliver a callback to your specified callback URL.

For Example:

1. 2 minutes after the original attempt
2. 4 minutes after last retry
3. 8 minutes after last retry
4. 16 minutes after last retry
5. 32 minutes after last retry
6. 64 minutes after last retry
7. 128 minutes after last retry
8. 3 days after last retry (max retries reached)

Optional Callback username and password

An optional “username” and “password” can be set in the preferences section of your API product. This username and passwords are not the same as your Clickatell username and password but is a setting of your choice to add additional security.

Callback value	Message status types returned	Message status code returned
0	No message status returned.	
1	Returns only intermediate statuses.	002, 003, 011
2	Returns only final statuses of a message.	004, 005, 006, 007, 008, 010, 012
3	Returns both intermediate and final statuses of a message.	All except 001
4	Returns only error statuses of a message.	005, 007, 009, 010, and 012
5	Returns both intermediate and error statuses of a message.	003, 005, 007, 009, 010, 012
6	Returns both final and error statuses of a message	004, 005, 007, 009, 010, 012
7	Returns both intermediate, final and error statuses of a message	003, 004, 005, 007, 009, 010, 012

Examples

- HTTP

Sample callback to your callback URL using an HTTP get:

https://www.yoururl.com/script.asp?api_id=12345&apiMsgId=996f364775e24b8432f45d77da8eca47&cliMsgId=abc123×tamp=1218007814&to=279995631564&from=27833001171&status=003&charge=0.300000

- XML

The following data is sent in XML MT callbacks in a parameter called ‘data’:

```
<?xml version="1.0"?>
<callback>
  <apiMsgId>996411ad91fa211e7d17bc873aa4a41d</apiMsgId>
  <cliMsgId></cliMsgId>
  <timestamp>1218008129</timestamp>
  <to>279995631564</to>
  <from>27833001171</from>
  <charge>0.300000</charge>
  <status>004</status>
</callback>
```

Sample callback to your callback URL using an **XML GET**:

<https://www.yoururl.com/script.php?data=996411ad91fa211e7d17bc873aa4a41d1218008129279995631564278330011710.300000004>

- SOAP

With the SOAP callback method, a SOAP packet will be sent with a parameter called 'data'. Below is an example packet that will be sent to you via GET or POST.

Example of a SOAP packet that will be sent to you via **GET** or **POST**:

```
<?xml version="1.0" encoding="ISO-8859-1"?>
<SOAP-ENV:Envelope SOAP-ENV:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:xsd="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-
instance" xmlns:SOAP-ENC="http://schemas.xmlsoap.org/soap/encoding/" xmlns:tns="mt_callback">
<SOAP-ENV:Body>
<tns:mt_callback xmlns:tns="mt_callback">
<api_id xsi:type="xsd:int">1234</api_id>
```

```
<apimsgid xsi:type="xsd:string">2e838df2ee3ea418272ae05aaf84ce5d</apimsgid>
<climsgid xsi:type="xsd:string">abc123</climsgid>
<to xsi:type="xsd:string">27999123456</to>
<from xsi:type="xsd:string">27999000224</from>
<timestamp xsi:type="xsd:int">1213690834</timestamp>
<status xsi:type="xsd:int">003</status>
<charge xsi:type="xsd:float">0.300000</charge>
</tns:mt_callback>
</SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

This is an example callback URL that will be sent to your application:

```
http://www.yoursite.com/your_url.php?data="<?xml version="1.0" encoding="ISO-8859-1"?><SOAP-
ENV:Envelope SOAP-ENV:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/" xmlns:SOAP-
ENV="http://schemas.xmlsoap.org/soap/envelope/" xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:SOAP-
ENC="http://schemas.xmlsoap.org/soap/encoding/" xmlns:tns="mt_callback"><SOAP-ENV:Body>
<tns:mt_callback xmlns:tns="mt_callback"><api_id xsi:type="xsd:int">1234</api_id>
<apimsgid xsi:type="xsd:string">2e838df2ee3ea418272ae05aaf84ce5d</apimsgid><climsgid
xsi:type="xsd:string">abc123</climsgid><to xsi:type="xsd:string">27999123456</to>
<from xsi:type="xsd:string">27999000224</from><timestamp
xsi:type="xsd:int">1213690834</timestamp><status xsi:type="xsd:int">003</status>
<charge xsi:type="xsd:float">0.300000</charge></tns:mt_callback></SOAP-ENV:Body></SOAP-
ENV:Envelope>"
```

5.2.5 Delivery time (deliv_time)

The delivery of an SMS message may be delayed by setting an amount of time in **minutes** relative to the time at which it was received by our gateway. We will store the message until the required time frame has elapsed. The maximum delay time is 10080 minutes or 7 days.

Parameter:

deliv_time:120

5.2.6 Concatenation (CONCAT)

If this value is set to 1, 2 or 3 the message will span across 1, 2 or 3 SMS messages where applicable. One text SMS will be sent for every 160 characters or 140 bytes. If a message is concatenated, it reduces the number of characters contained in each message by 3. With 8-bit concatenated messages, each SMS can support up to 140 bytes including the UDH headers.

Please also see http://support.clickatell.com/faq.php?mode=view_entry&kbid=121&kbcac=26 for information on characters that require two-character places.

Please be aware that a single Unicode SMS can only contain a maximum of 70 characters. You can send 3 Unicode characters less per part when sending a concatenated Unicode message

Values set are:

Value	Status
1	Default - No concatenation: only 1 message
2	Concatenate a maximum of 2 messages.
3	Concatenate a maximum of 3 messages.
N	Concatenate a maximum of N messages. (Delivery is dependent on mobile and gateway. A maximum of 3 is recommended. The maximum number of messages that can be concatenated is 35).

Parameter:

concat:x

5.2.7 Maximum credits (max_credits)

This parameter overrides the maximum charge associated with message delivery, as set by the profiles selected within your client account after logging in online. This parameter can be used to limit the cost of a message to a particular value and is bound by the maximum credit value specified in your profiles.

A valid API message ID can still be returned for messages that are not delivered as a result of the maximum credits value set. These messages will have a status of routing error (009).

The credit value in this parameter can be set to any amount of credits. To set your delivery profile, go to **Manage account -> Account overview** and click the link **Control the routing of messages** located in the section titled **Account Type**.

Parameter:

max_credits:3

5.2.8 Required features (req_feat)

This parameter specifies the features that must be present in order for message delivery to occur. If all features are not present, the message will not be delivered. This prevents SMS messages arriving at a destination via the least-cost gateway, without certain features. This would, for instance, prevent the dropping of a sender ID.

This means that we will not route messages through a gateway that cannot support the required features you have set. For certain message types, we always set the required feature bitmask where relevant. These are FEAT_8BIT, FEAT_UDH, FEAT_UCS2 and FEAT_CONCAT.

This parameter is set using a combined decimal number to refer to the additional required features.

E.g.: $32 + 512 = 544$ – Numeric sender ID and Flash SMS both required.

The value you would set to ensure that Flash and numeric sender ID are both supported, would therefore be **544**.

To ensure that delivery acknowledgment and alphanumeric IDs are supported you would use the value **8240** ($16 + 32 + 8192$).

Hex value	Decimal	Feature	Description
0x0001	1	FEAT_TEXT	Text – set by default.
0x0002	2	FEAT_8BIT	8-bit messaging – set by default.
0x0004	4	FEAT_UDH	UDH (Binary) - set by default.
0x0008	8	FEAT_UCS2	UCS2 / Unicode – set by default.
0x0010	16	FEAT_ALPHA	Alpha source address (from parameter).
0x0020	32	FEAT_NUMER	Numeric source address (from parameter).
0x0200	512	FEAT_FLASH	Flash messaging.
0x2000	8192	FEAT_DELIVACK	Delivery acknowledgments.
0x4000	16384	FEAT_CONCAT	Concatenation – set by default.

Parameter:

req_feat:####

5.2.9 Delivery queue

Setting this parameter will assign the message to one of three queues assigned to each user account. This sets the priority of a message sent to us, relative to other messages sent from the same user account. Messages in queue number 1, will always be delivered before messages in queue number 2 and 3, while messages in the 3rd queue, will have the lowest priority (relative to queues 1 and 2).

This is useful when delivering, for example, a single high priority message while you have a large batch going through that same account. The large batch will be queued through queue number 3 (default), and urgent alerts (sent through queue 1), will be delivered ahead of those messages in the batch (queue 3), regardless of when they are actually sent to us.

Values set are:

Value	Status
1	Use first / primary user queue (highest priority).
2	Use second user queue.
3	Use third user queue (lowest priority) - Default status.

Parameter:

queue:2

5.2.10 Gateway escalation (escalate)

By default, the message router will select the lowest cost route (matching features and reliability) that is available for a given destination.

This parameter ensures that, should a message be delayed due to gateway congestion or some other reason on the initial gateway selected by our router, then alternative routes that match the required features will be sought. This is done by moving through the available gateways in order of increasing cost, up to the maximum charge set by the user either using the parameter that defines the maximum credits or based on the profiles selected.

When urgent and high priority messages are sent, they should be posted with escalate set to 1 (on), combined with a high maximum credit value to ensure that the greatest number of gateways are available.

Values set are:

Value	Status
0	Off – Default value
1	On – Escalate immediately to an alternative route if the messages are queued on the least-cost route

Parameter:

escalate:1

5.2.11 Mobile originated (MO)

This parameter is only used when a message is sent to a handset and a reply is expected.

PLEASE NOTE: This parameter is only valid for clients that have signed up and paid for our twoway messaging service. An alternative to our least-cost gateway may be used, which could result in a higher cost per message. Please email Clickatell support for pricing or view online.

When sending a normal MT message to a handset and you expect a reply to your registered MO number, please set the **mo** parameter to "1".

Values to set are:

Value	Status
0	Off – Default status. We use the normal routing feature.
1	Enables reply ability. We route via a predefined carrier to enable the ability to reply.

It is important that the user specifies the correct from parameter together with this parameter. If no from parameter is specified, we will use a default originator number as set by Clickatell. You will NOT receive these replies.

If you specify the originator (the purchased mo number), then we will route the message such that it can be replied to by the recipient. This reply will be sent to you.

Parameter:

mo:1

5.2.12 Client message ID (climsgid)

This parameter is set by the user to enable internal message tracking. It allows the user to set their own tracking ID for each message. Once set for a given message, this may be used in place of the Clickatell issued API message ID (apimsgid) for querying message.

A client message ID (**climsgid**) may be any combination of alphanumeric characters excluding spaces. A maximum of 32 characters may be used.

Parameter:

climsgid:xxxx

5.2.13 Unicode (unicode)

If this value is set to 1, the text field must contain two-byte Unicode. Each SMS can handle a maximum of 70 characters. Each Unicode character must be hex-encoded. More information is available at <http://www.Unicode.org/>.

Note: When using the batch send facility for delivering Unicode messages, it is not possible to substitute variables into the message content. This is only possible with Germanic characters.

Values set are:

Value	Status
0	Off – default status
1	On – delivers the text as two-byte Unicode

We provide a converter to convert text to Unicode within your client account online. Go to “Converters” from within your account online.

Parameter:

unicode:1

E.g. “ΩΨΘ” becomes

data:03A903A80398

unicode:1

5.2.14 Message types (msg_type)

A wide variety of messages can be sent through our gateway. We have pre-defined a number of SMS message-types in the API, so that you do not have to set the UDH (user data header) manually. You may optionally set the UDH rather than using one of the message types set below.

For non-Nokia message types (EMS, etc.), please generate your own UDH and data according to the manufacturer’s specifications of the message type you wish to send.

This parameter need not be included if the SMS is a standard text message.

Values set are:

Value	Description
SMS_TEXT	This is the default message type. It is optional to specify this parameter.
SMS_FLASH	To send an SMS that displays immediately upon arrival at the phone.
SMS_NOKIA_OLOGO	Send an operator logo to a Nokia handset.
SMS_NOKIA_GLOGO	Send a group logo to a Nokia handset
SMS_NOKIA_PICTURE	Send a picture message to certain Nokia handsets.
SMS_NOKIA_RINGTONE	Send a ringtone to a Nokia handset
SMS_NOKIA_RTTL	Send an RTTTL format ringtone to Nokia handsets.

SMS_NOKIA_CLEAN	Remove operator logo from a Nokia handset.
SMS_NOKIA_VCARD	Send a business card to a Nokia handset.
SMS_NOKIA_VCAL	Send an event calendar to a Nokia handset.

Parameter:

Please see the [messaging examples at the end of this document](#).

5.2.15 Validity period (validity)

A message may be given a time frame for which it is valid. After this period the message will expire. This parameter takes an amount of time in minutes relative to the time at which the message was received by our gateway. If the message is queued on our gateway for a period exceeding the validity period set, then a routing error of 115 will be returned. The default validity period is 1440 minutes (24 hours).

Note: The validity period is not passed on to the upstream gateway.

Parameter:

validity:120

5.2.16 Reply (reply)

Unique message identifiers (API message IDs) are issued for each message submitted to Clickatell. In order to have API message IDs for each message returned to an email address, set this email address using the reply parameter. Multiple addresses may be comma delimited.

Each message returns a unique identifier in the form of an API Message ID. This can be used to track and monitor any given message. The **apimsgid** is returned after each post. Alternatively, an error code will be returned if the message is not accepted for delivery.

Note: A message status is not returned but may viewed using the online reports or via the HTTP callback.

Parameter:

reply:email@yourdomain.com

Response:

ID: xxxx To: xxxx

or

ERR: Error number

5.2.17 URL encoded text (urltext)

Used instead of the **data** or **text** parameter, the **urltext** parameter can be used to send URL encoded text, which will be decoded back to normal text before the message is delivered to the phone.

It is possible that text could consist of characters that will confuse email-clients. To prevent possible errors, the URL encoding scheme translates all "special" characters to their corresponding hexadecimal codes. These special characters include control characters (carriage returns, line feeds, etc.), certain alphanumeric symbols (% , ' , " , # , & , ? , = , / , :), and other characters (Greek Bulgarian and Cyrillic characters, etc.).

For example, the string "Your URL encoded text!" could be sent as below.

Parameter:

`urltext:Your%20URL%20encoded%20text%21`

6. Batch messaging

This facility enables one to do high volume delivery and server-side message merging. It offers the end-user the ability to define all elements common to a batch, and then send only the parameters that change on a message-by-message basis. The following parameters are used for batch messaging.

Name	Parameter name	Short description	Default value	Restricted values
CSV line	csv	Each csv line has a mobile number followed by a list of field values that are used to customize a text message. The text parameter value acts as a template with placeholders inserted into the text which are replaced by these field values when the message is sent.		The mobile number must be the first value in the CSV field.
CSV template	csvtemplate	Used in conjunction with the text and csv parameters to handle personalized batch messaging where additional message parameters (such as delivery time) need to be set on a message by message basis. These parameter values are added after the mobile number in the CSV Line.		
Delimiter	delimiter	Specifies a specific character to be used to delimit values in the CSV parameter field values. Useful if certain values contain a comma.	(comma)	If you use the default delimiter you will not be able to use a comma in your field values. If you are using a TAB character, there must be no white space either before or after the TAB.

6.1.1 CSV line parameter (csv)

csv:mobile_number[delimiter]field-value[delimiter]field-value[delimiter]field-value etc.

Where [field-value](#) is the data to be inserted into the template, and [\[delimiter\]](#) is the value as determined by the delimiter parameter.

Placeholders may be inserted within the message body itself. These will take the form of *#field1#* through to *#fieldn#*. See example below. If you wish to customize the whole message on each **csv** line, you would then use:

text:#field1#

Example:

api_id:1234

user:xxxxxxxx

password:xxxxxxxx

text:Hi #field1#, your balance is #field2#, please come to the office on #field3#

delimiter:|

csv:1234567890|Fred|€15.50|Mondays,Wednesdays,Fridays

csv:1234567890|Jane|€299.45|Tuesdays,Thursdays,Saturdays

Note: If a ',' (comma) was used as the default delimiter, then it would only have passed through 'Mondays' as the value of field3 for Fred and 'Tuesdays' for Jane.

6.1.2 CSV template parameter (csvtemplate)

csvtemplate:[parameter-1],[parameter-2],[parameter-n]

Example: csvtemplate:deliv_time,cliMsgId,validity etc.

These values would then appear on the **csv** line immediately after the mobile number. The [field-values](#) for each of the placeholders that you have inserted in your **text** (text parameter) are then appended to the csv line.

Format: csv:mobile_number [optional csvtemplate parameters] template_placeholder_parameters

Example:

api_id:1234

user:xxxxxxxx

password:xxxxxxxx

text:Hi #field1#, your balance is #field2#, please come to the office on #field3#

delimiter:|

```
csvtemplate:deliv_time|cliMsgId|validity
csv:1234567890|10|id_1|60|Fred|€15.50|Mondays,Wednesdays,Fridays
csv:1234567890|40|id_2|60|Jane|€299.45|Tuesdays,Thursdays,Saturdays
```

7. 8-bit messaging

Through the SMTP interface, one is also able to send 8-bit messages. These are most often used for ringtones and logos, but one can also send vCards, vCalendar appointments and EMS messages. When sending 8-bit messages, you need to set the user data header (UDH) of the SMS as well as sending the data. If you are comfortable with the creation of your own UDH, we also enable you to set it directly using the **udh** parameter. To simplify the process, we have provided a number of pre-defined message types (see the **msg_type** parameter).

With the standard **text** parameter, line breaks are automatically inserted. The parameter **data** is thus used for 8-bit messaging.

Example

```
api_id:1234
user:xxxxxxxx
password:xxxxxxxx
to:xxxxxxxxxxxxxxxx
msg_type:SMS_NOKIA_RINGTONE
data:024A3A5585E195B198040042D9049741A69761781B6176156174288
data:B525D85E0A26C24C49A617628930BB125E055856049865885D200
```

8. Messaging examples

8.1 Simple examples

8.1.1 Standard email

```
api_id:xxxxx
user:xxxxx
password:xxxxx
to:1234567890
text:This is my first email to SMS message
```

8.1.2 Flash SMS with sender ID

```
api_id:xxxxx
user:xxxxx
password:xxxxx
```

to:1234567890
text:Sending a flash message with sender id.
msg_type:SMS_FLASH
from:ME

8.1.3 Email with HTTP delivery ack and callback request set

api_id:xxxxx
user:xxxxx
password:xxxxx
to: 1234567890
text:Sending a message with delivery acknowledgment.
deliv_ack:1
callback:3

8.2 Batch messaging examples

8.2.1 Sending the same message to multiple recipients

api_id:xxxxx
user:xxxxx
password:xxxxx
to:1234567890,9397433991,4387347839
text:This is my first email to SMS message

8.2.2 Sending a personalized message to multiple recipients

api_id:xxxxx
user:xxxxx
password:xxxxx
text:Hi #field1#, your voucher number is #field2#.
Delimiter:|
csv:447901234567|John|agh1234te
csv:447902345678|John|hfe8423ss
csv:447904567890|John|njg6983ju
csv:447903456789|John|cds2267wq
or
text:#field1#
Delimiter:;
csv:447901234567,Mary - your appointment is at 9:15 on Saturday 14th May
csv:447902345678,Craig - your appointment is at 14:30 on Wednesday 18th May

8.2.3 Configuring individual messages in a batch

```
api_id:1234  
user:xxxxxxxx  
password:xxxxxxxx  
text:Hi #field1#, your balance is #field2#, please come to the office on #field3#  
delimiter:|  
csvtemplate:deliv_time|cliMsgId|validity  
csv:1234567890|10|id_1|60|Fred|€15.50|Mondays,Wednesdays,Fridays  
csv:1234567890|40|id_2|60|Jane|€299.45|Tuesdays,Thursdays,Saturdays
```

8.3 8-bit SMS examples

Note: You cannot set an alphanumeric Sender ID (**from** parameter) when sending 8-bit messages.

8.3.1 Sending a ringtone

```
api_id:xxxxx  
user:xxxxx  
password:xxxxx  
to:1234567890  
msg_type:SMS_NOKIA_RINGTONE  
data:024A3A5585E195B198040042D9049741A69761781B61761561728  
data:8B525D85E0A26C24C49A617628930BB125E055856049865885D200
```

8.3.2 Sending an operator logo

```
api_id:xxxxx  
user:xxxxx  
password:xxxxx  
to:1234567890  
msg_type:SMS_NOKIA_OLOGO  
data:00480e01ffffffffffff800000000000000001800000  
data:00000000000018f1b30f1b30f1b30f9f9f9f9f9f9f9f9f9981999  
data:8199981999819f1999f1999f1999f18f9998f9998f9998f9819  
data:9981999819998199f9999f9999f9999f98f1998f1998f1998f18  
data:0000000000000000000000000000000001ffffffffffff
```

8.3.3 Removing an operator logo

```
api_id:xxxxx  
user:xxxxx  
password:xxxxx
```

to:1234567890
msg_type:SMS_NOKIA_CLEAN
data:00

8.3.4 Sending a VCARD

api_id:xxxxx
user:xxxxx
password:xxxxx
to:1234567890
msg_type:SMS_NOKIA_VCARD
urltext:BEGIN%3AVCARD%0D%0AVERSION%3A2.1%0D%0AN%3ABloggs%3BJoe
urltext:%0D%0ATEL%3BPREF%3A%2B1234567890%0D%0AEND%3AVCARD%0D%0A

8.3.5 Sending a VCAL

api_id:xxxxx
user:xxxxx
password:xxxxx
to:1234567890
msg_type:SMS_NOKIA_VCAL
urltext:BEGIN%3AVCALENDAR%0D%0AVERSION%3A1.0%0D%0ABEGIN
urltext:%3AVTODO%0D%0ACATEGORIES%3AMISCELLANEOUS%0D%0A
urltext:SUMMARY%3AMeet+buyers+at+Mario's%0D%0ADTSTART
urltext:%3A20030301T133000%0D%0AEND%3AVTODO%0D%0AEND%3A
urltext :VCALENDAR%0D%0A

9. Appendix A: Error codes

The following list of error messages are generated by the Clickatell gateway during a validation phase before we accept the message. These error messages are sent back to your application. There will be no message charge if these errors are generated when sending a message. Data regarding messages that do not pass initial validation will not be included in your Clickatell Central reports.

Number	Description	Detail
001	Authentication failed	Authentication details are incorrect.
002	Unknown username or password	Authorization error, unknown username or incorrect password
003	Session ID expired	The session ID has expired after a pre-set time of inactivity.
004	Account frozen	

005	Missing session ID	Missing session ID attribute in request.
007	IP Lockdown violation	You have locked down the API instance to a specific IP address and then sent from an IP address different to the one you set.
101	Invalid or missing parameters	One or more required parameters are missing or invalid
102	Invalid user data header	The format of the user data header is incorrect.
103	Unknown API message ID	The API message ID is unknown. Log in to your API account to check the ID or create a new one.
104	Unknown client message ID	The client ID message that you are querying does not exist.
105	Invalid destination address	The destination address you are attempting to send to is invalid.
106	Invalid source address	The sender address that is specified is incorrect.
107	Empty message	The message has no content.
108	Invalid or missing API ID	The API message ID is either incorrect or has not been included in the API call.
109	Missing message ID	This can be either a client message ID or API message ID. For example, when using the stop message command.
110	Error with email message	
111	Invalid protocol	
112	Invalid message type	
113	Maximum message parts exceeded	The text message component of the message is greater than the permitted 160 characters (70 Unicode characters). Select concat equal to 1,2,3-N to overcome this by splitting the message across multiple messages.
114	Cannot route message	This implies that the gateway is not currently routing messages to this network prefix. Please email support@clickatell.com with the mobile number in question.
115	Message expired	Message has expired before we were able to deliver it to the upstream gateway. No charge applies.
116	Invalid Unicode data	The format of the Unicode data entered is incorrect.
120	Invalid delivery time	The format of the delivery time entered is incorrect.
121	Destination mobile number blocked	This number is not allowed to receive messages from us and has been put on our block list.
122	Destination mobile opted out	The user has opted out and is no longer subscribed to your service.
123	Invalid Sender ID	A sender ID needs to be registered and approved before it can be successfully used in message sending.
128	Number delisted	This error may be returned when a number has been delisted.
130	Maximum MT limit exceeded until <UNIX TIME STAMP>	This error is returned when an account has exceeded the maximum number of MT messages which can be sent daily or monthly. You can send messages again on the date indicated by the UNIX TIMESTAMP.

201	Invalid batch ID	The batch ID that you have entered for batch messaging is not valid.
202	No batch template	The batch template has not been defined for the batch command.
301	No credit left	Insufficient credits
302	Max allowed credit	
901	Internal error	Please retry

10. Appendix B: Message Statuses

These are message statuses that are generated after the Clickatell gateway has accepted the message for delivery. Data regarding messages passing initial validation and accepted for delivery will be included in your Clickatell Central reports.

Number	Hex	Description	Detail
001	0x001	Message unknown	The message ID is incorrect, or reporting is delayed.
002	0x002	Message queued	The message could not be delivered and has been queued for attempted redelivery.
003	0x003	Delivered to gateway	Delivered to the upstream gateway or network (delivered to the recipient).
004	0x004	Received by recipient	Confirmation of receipt on the handset of the recipient.
005	0x005	Error with message	There was an error with the message, probably caused by the content of the message itself.
006	0x006	User cancelled message delivery	The message was terminated by a user (stop message command) or by our staff.
007	0x007	Error delivering message	An error occurred delivering the message to the handset
008	0x008	OK	Message received by gateway.
009	0x009	Routing error	An error occurred while attempting to route the message.
010	0x00A	Message expired	Message has expired before we were able to deliver it to the upstream gateway. No charge applies.
011	0x00B	Message queue for later delivery	Message has been queued at the gateway for delivery at a later time (delayed delivery).
012	0x00C	Out of credit	The message cannot be delivered due to a lack of funds in your account. Please re-purchase credits.
014	0x00E	Maximum MT limit exceeded	The allowable amount for MT messaging has been exceeded.

11. Terminology

- **Receiving Messages:** A message sent (originating) from a mobile handset to an application via Clickatell.

- **Sending Messages:** A message sent from an application to (terminating on) a mobile handset via Clickatell.
- **Premium rated message:** A mobile user is charged a premium for the message that they send to a particular short or long code. This service is not available in all regions; please contact an Account Manager for more information.
- **Revenue share:** This refers to the portion of the premium charge associated with a premium rated message, which is passed on to the content provider.
- **Content provider:** This is the Clickatell customer who is offering one or more services that are usually premium rated SMS system.
- **Customer:** A registered Clickatell customer utilizing the Clickatell API for message delivery and receipt.
- **Sender ID:** The “from” address that appears on the user’s handset. This is also known as the message originator or source address. A Sender ID must be registered within your account and approved by us before it may be used.
- **Destination address:** The mobile number/MSISDN of the handset to which the message must be delivered. The number should be in international number format, e.g., country code + local mobile number, excluding the leading zero (0).
- **Source address:** See ‘Sender ID’ above.
- **Short code:** A short number which is common across all the operators for a specific region.
- **Subscriber:** The mobile network subscriber who owns the mobile number (MSISDN) which will send or receive SMSs or be billed for premium rated services.
- **Upstream gateway:** A network operator, third party or our own short message service center (SMSC).

12. Contact details

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