



SMS HTTP API v3.0.8
SPECIFICATIONS
January 2008

UltraCrest SMS HTTP API v3.0.8

© Copyright 2008. All rights reserved.

Distribution of this work or derivative of this work is prohibited unless prior written permission is obtained from the copyright holder. All trademarks and copyrights of products discussed in this document are the property of their respective owners.

Intellectual Property. You agree that UltraCrest Technologies and its parent and affiliate companies own all proprietary rights, including but not limited to copyrights, patents and trade secrets, trademarks, and service marks, in and to the API and that this Agreement does not transfer ownership of any of these rights. expressly reserves its rights in and to all such content and materials. shall own all proprietary rights in any modifications to the API, whether created by , users, or a third party. You hereby assign to all proprietary rights, including copyright, patent and trade secret rights, to any modifications created by You. No license or right under any copyright, patent, trademark, service mark or other proprietary right or license is granted to You or conferred upon You by this Agreement or otherwise. You will use all computer programs, documentation and information consisting of or containing proprietary information related to the API solely for the purpose of performing under this Agreement. You will not decompile, disassemble or otherwise reverse engineer the API or cause others to do so. You will not modify or cause others to modify the API, without the prior written consent of . Except as otherwise explicitly agreed in writing, -owned content described in this document may be downloaded, displayed, reformatted and printed for Your personal, non-commercial use only. You agree to prevent any unauthorized copying of the API. Content owned by advertisers, suppliers or licensors may be subject to additional restrictions. You agree to use the API and this document only within the scope of their intended business purposes.

Limit on UltraCrest's Obligation. Provision of any API under this Agreement shall not create any obligation for to continue to develop, support, repair, offer for sale or in any other way continue to provide or develop the API. Furthermore, the API may contain defects. By using this Software, you agree that you are aware that it may contain defects. You are advised to safeguard Your important data, to use caution and to not rely in any way on the correct functioning or performance of the API.

Warranties. provides the API "as is" and without warranty or guarantee of any kind, either express or implied, including but not limited to, the implied warranties or conditions of merchantability or fitness for a particular purpose. In no event shall be liable for any loss of profits, loss of business, loss of data, unsecured transactions, interruption of business, or for indirect, special, or consequential damages of any kind, even if has been advised of the possibility of such damages arising from any defect or error in the API. In no way event shall UltraCrest's liability exceed the initial license fee for the API paid by You.

Indemnification. You shall indemnify, defend by counsel reasonably acceptable to , protect and hold harmless from and against any and all claims, liabilities, losses, costs, damages, expense, including consultants' and attorneys' fees and court costs, demands, causes of action, or judgments directly or indirectly arising out of or related to Your use of the API.

OVERVIEW

This document is intended for those users who wish to develop applications that make use of our SMS Gateway. It is recommended that you have an understanding of sub-accounts before reading this document. Information about sub-accounts is available from the UltraCrest SMS website.

There are a number of different ways of gaining access to the Gateway:

- HTTP - submitting either a POST or GET to the API server.
- ~~· SMPP - Customers requiring a high throughput binary socket connection~~
- ~~· SMTP - enabling a server or client generated e-mail to be delivered as an SMS.~~

We will cover the HTTP method in this document. Additional documentation is available for the other methods. Sample code is provided on the site.

INTRODUCTION

This is one of the simpler server-based forms of communication to with our Gateway. It can be used either in the form of a HTTP POST, or as an URL (GET). We recommend POST for larger data transfer, due to the size limitations of GET. Communication to our API can be done either via HTTP on port 80. All calls to the API must be URL-encoded.

One can send to multiple destination addresses by delimiting the addresses with commas. A maximum of 100 comma separated destination addresses per **sendmsg** or **sendquickMsg** command are possible, if you are calling the command via a GET, or alternatively, 300 destination addresses if you are submitting via a POST.

1. GETTING STARTED

In order to use the UltraCrest SMS gateway you need a **sms.ultracrest.com** account and password.

2. API COMMANDS

In order to send a message, the system will firstly need to authenticate you as a valid user. The preferred method of authentication is using the **Login** command. Whilst it involves an additional step, it is far more secure in that you only have to pass login details once, to obtain a **sessionID**. If you do not use **Login** to obtain a **sessionID**, you will have to pass your account details with every command.

All other commands are then made up of three segments: authentication, the basic message components (message content and recipients) and the additional message parameters. In the examples below, we will include the authentication and basic message components. The additional message parameters will be included only where they are relevant.

The following API commands are supported.

Login

SendMsg

SendQuickMsg

QueryBalance

QueryMsgCharge

QueryMsgStatus

QueryCoverage

Recharge

StopMsg

2.01 LOGIN COMMAND

Description

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:

- **username:** This is the login email of your account.
- **password:** This is the login password of your account.

This **sessionID** must be used with all future commands to the API, except the **SendQuickMsg** command.

Syntax

`http://sms.ultracrest.com/http/index.aspx?cmd=login&username=xxx&password=xxx`

Parameters Required

cmd

Command to perform. In this case **cmd=login**.

Username

This is same as your login email address.

Password

This is same as your login password.

Return Values

OK: [SESSIONID]

-or-

ERR: [ERROR NUMBER]: [ERROR DESCRIPTION]

2.02 SENDMSG COMMAND (Send a Message)

Description

This is the preferred method for sending messages. Use the Login command to retrieve a valid **sessionID**, and then use that **SessionID** in a call to **SendMsg**.

One can send to multiple destination addresses by delimiting the addresses with commas. The basic parameters required are **sendto** (the handset number to which the message is being sent) and **message** (the content of the message). A maximum of 100 comma separated destination addresses per **SendMsg**, or **SendQuickMsg** command, are possible, if you are calling the command via a GET, or alternatively, 300 destination addresses if you are submitting via a POST.

Each message returns a unique identifier in the form of a **messageID**. This can be used to track and monitor any given message. The **messageID** is returned after each post.

Syntax

**http://sms.ultracrest.com/http/index.aspx?cmd=sendmsg&sessionid=xxx&message=xxx
&sender=xxx&sendto=xxx&msgtype=0**

Parameters Required

cmd

Command to perform. In this case **cmd=sendmsg**.

SessionID

The **SessionID** returned by the **Login** command.

Message

The SMS Message you wish to send. 160 chars maximum.

Sender

The FROM part of the SMS can be alphanumeric or just numbers.

SendTo

The destination phone numbers coma separated for multiple numbers.

MsgType

The type of the message either TEXT = 0 or FLASH = 1.

SendTime

The **UTC/GMT** Date and Time when the message should be sent. A valid format is "2 Jan 2008 6:30 PM" or "22 Dec 2009 22:31". If you ignore this parameter or put in a date that is in the past, the message would be sent immediately.

Return Values

OK: [MESSAGEID]

-or-

ERR: [ERROR NUMBER]: [ERROR DESCRIPTION]

2.03 SENDQUICKMSG COMMAND (Send a Message without previous login)

Description

To facilitate sending an SMS with a single command, we have included the ability to post **email**, **subacct** and **subacctpwd** variables in **SendQuickMsg**. This is only required if you do not authenticate yourself using the **Login** command. Using a **sessionID** is preferred to authenticating each time.

One can send to multiple destination addresses by delimiting the addresses with commas. A maximum of 100 comma separated destination addresses per **SendMsg**, or **SendQuickMsg** command, are possible, if you are calling the command via a GET, or alternatively, 300 destination addresses if you are submitting via a POST.

Each message returns a unique identifier in the form of a **messageID**. This can be used to track and monitor any given message. The **messageID** is returned after each post.

Syntax

[http://sms.ultracrest.com/http/index.aspx?](http://sms.ultracrest.com/http/index.aspx?cmd=sendquickmsg&username=xxx&password=xxx&message=xxx&sender=xxx&sendto=xxx&msgtype=0)

[cmd=sendquickmsg&username=xxx&password=xxx&message=xxx&sender=xxx&sendto=xxx&msgtype=0](http://sms.ultracrest.com/http/index.aspx?cmd=sendquickmsg&username=xxx&password=xxx&message=xxx&sender=xxx&sendto=xxx&msgtype=0)

Parameters Required

cmd

Command to perform. In this case **cmd=sendquickmsg**.

Username

This is same as your login email address.

Password

This is same as your login password.

Message

The SMS Message you wish to send. 160 chars maximum.

Sender

The FROM part of the SMS, this can be alphanumeric or just numbers.

SendTo

The destination phone numbers coma separated for multiple numbers.

MsgType

The type of the message either TEXT = 0 or FLASH = 1. Default is TEXT.

SendTime

The UTC/GMT Date and Time when the message should be sent. A valid format is "2 Jan 2008 6:30 PM" or "22 Dec 2009 22:31". If you ignore this parameter or put in a date that is in the past, the message would be sent immediately.

Return Values

OK: [MESSAGEID]

-or-

ERR: [ERROR NUMBER]: [ERROR DESCRIPTION]

2.04 QUERYBALANCE COMMAND (Get Account Balance)

Description

This will return the number of credits available on this particular account. The account balance is returned as an integer value. Authentication is required for this API call.

Syntax

`http://sms.ultracrest.com/http/index.aspx?cmd=querybalance&sessionid=xxx`

Parameters Required

cmd

Command to perform. In this case **cmd=querybalance**.

SessionID

The **SessionID** returned by the **Login** command.

Return Values

OK: [CREDIT BALANCE]

-or-

ERR: [ERROR NUMBER]: [ERROR DESCRIPTION]

2.05 QUERYMSGCHARGE COMMAND (Query a Message)

Description

This command enables the user to query total credits charged for a delivered message. Authentication is required for this API call.

Syntax

`http://sms.ultracrest.com/http/index.aspx?cmd=querymsgcharge&sessionid=xxx
&messageid=xxx`

Parameters Required

cmd

Command to perform. In this case **cmd=querymsgcharge**.

SessionID

The **SessionID** returned by the **Login** command.

MessageID

The **MessageID** returned by the **SendMsg** or **SendQuickMsg** methods when the message was sent.

Return Values

OK: [CHARGE]

-or-

ERR: [ERROR NUMBER]: [ERROR DESCRIPTION]

2.06 QUERYMSGSTATUS COMMAND (Query a Message)

Description

This command is used to return the status of a message. You should query the status using the **MessageID**. The **MessageID** is the message ID returned by the Gateway when a message has been successfully submitted. Authentication is required for this API call.

Syntax

http://sms.ultracrest.com/http/index.aspx?cmd=querymsgstaus&sessionid=xxx
&messageid=xxx

Parameters Required

cmd

Command to perform. In this case **cmd=querymsgstatus**.

SessionID

The **SessionID** returned by the **Login** command.

MessageID

The **MessageID** returned by the **SendMsg** or **SendQuickMsg** methods when the message was sent.

Return Values

OK: [MESSAGE STATUS]

-or-

ERR: [ERROR NUMBER]: [ERROR DESCRIPTION]

2.07 QUERYCOVERAGE COMMAND (Check if Network is supported)

Description

This command enables users to check our coverage of a network or mobile number, without sending a message to that number. Authentication is required for this API call. This call should NOT be used before sending each message.

Syntax

http://sms.ultracrest.com/http/index.aspx?
cmd=querycoverage&sessionid=xxx&msisdn=xxx

Parameters Required

- cmd*
Command to perform. In this case **cmd=querycoverage**.
- SessionID*
The **SessionID** returned by the **Login** command.
- MSISDN*
The Mobile number who's Network you want to check.

Return Values

OK: [TRUE/FALSE]
-or-
ERR: [ERROR NUMBER]: [ERROR DESCRIPTION]

2.08 RECHARGE COMMAND (Top-up sub-account)

Description

Top-up the sms.ultracrest.com sub-account using a purchased recharge voucher, and returns the new balance. The recharge voucher code is currently a 16 digit number.

Syntax

`http://sms.ultracrest.com/http/index.aspx?cmd=recharge&sessionid=xxx&rCode=xxx`

Parameters Required

<i>cmd</i>	Command to perform. In this case cmd=recharge .
<i>SessionID</i>	The SessionID returned by the Login command.
<i>rCode</i>	The 16 Digit recharge code.

Return Values

OK: [NEW BALANCE]
-or-
ERR: [ERROR NUMBER]: [ERROR DESCRIPTION]

2.09 STOPMSG COMMAND (Stop a Message)

Description

This enables you to stop the delivery of a scheduled message. This command can only stop messages which maybe queued within our router, and not messages which have already been delivered to a SMSC. This command is therefore only really useful for messages with deferred delivery times. Authentication is required for this API call.

Syntax

`http://sms.ultracrest.com/http/index.aspx?cmd=stopmsg&sessionid=xxx&messageid=xxx`

Parameters Required

cmd

Command to perform. In this case **cmd=stopmsg**.

SessionID

The **SessionID** returned by the **Login** command.

MessageID

The **MessageID** returned by the **SendMsg** or **SendQuickMsg** commands when the message was sent.

Return Values

OK: [TRUE/FALSE]

-or-

ERR: [ERROR NUMBER]: [ERROR DESCRIPTION]

3. MESSAGE PARAMETERS IN DETAIL

3.1 Destination address (sendto)

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 have you set the preferred dial prefix preference within your client account after logging in online, any mobile numbers starting with zero will have the zero stripped and replaced with your default prefix. If the mobile number does not have a zero, the default prefix will not be changed.

3.2 Source address (sender)

The source address (**sender**), 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. 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. If this is set, then delivery acknowledgements may be unavailable. 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.

3.3 Message Type (msgtype)

The UltraCrest SMS gateway supports two types of messages, TEXT and FLASH. TEXT messages are the normal SMS messages that deliver into the inbox of the mobile device. A FLASH message on the other hand, deliver directly to the mobile device screen and is shown immediately. The user may now choose to save it into the inbox if his mobile handset supports that option.

4. MESSAGE EXAMPLES

Here are some example URLs that demonstrate how to use the API. All values in these examples should be replaced by your own values.

4.1 SIMPLE EXAMPLES

SendQuickMsg command including authentication and Sender ID:

```
http://sms.ultracrest.com/http/index.aspx?  
cmd=sendquickmsg&username=you@demo.com&password=secret&message=my+first+message&se  
nder=ME&sendto=08057071234&msgtype=0
```

Initial authentication:

```
http://sms.ultracrest.com/http/index.aspx?  
cmd=login&username=me@demo.com&password=secret
```

All further commands will use a sessionID generated using auth command above:

SendMsg command:

```
http://sms.ultracrest.com/http/index.aspx?  
cmd=sendmsg&sessionid=e74deelbbbed22ee3a39f9aeab606ccf9&message=my+first+message&se  
nder=ME&sendto=08020222222&msgtype=0
```

Flash SMS:

```
http://sms.ultracrest.com/http/index.aspx?  
cmd=sendmsg&sessionid=e74deelbbbed22ee3a39f9aeab606ccf9&message=my+first+message&se  
nder=ME&sendto=08020222222&msgtype=1
```

Account balance:

```
http://sms.ultracrest.com/http/index.aspx?  
cmd=querybalance&sessionid=e74deelbbbed22ee3a39f9aeab606ccf9
```

Query message status:

```
http://sms.ultracrest.com/http/index.aspx?  
cmd=querymsgstatus&sessionid=e74deelbbbed22ee3a39f9aeab606ccf9
```

5. APPENDIX A: ERROR CODES

The following list of error messages are generated by our gateway. There will be no message charge if these errors are generated when sending a message.

NUMBER	DESCRIPTION	DETAIL
0	No Error	
100	General Error	Errors occurred trying to perform the requested action
401	Invalid Session ID	
402	Invalid Sub-Account or Password	
403	Invalid Recharge Voucher code	
404	Insufficient Credit	Insufficient credit to complete request.
405	Recharge Voucher is disabled	
406	Recharge Voucher is already used	
407	Forbidden/Access Denied	
408	Invalid Range	Data supplied is not in expected format.
409	Gateway Error	
410	Account is disabled	

CONTACT DETAILS:

Phone: +234 1 951 1100 -1, 820 2620, 702 528 5300

Mobile: +234 803 393 7556

SMS Portal: <http://sms.ultracrest.com>

Web site: <http://www.ultracrest.com>

E-Mail: sms@ultracrest.com