



## **Advanced API**

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## Description

The advanced aql API is an extension to the publicly available messaging API. The existing API is concerned with delivering SMS messages from an external source into the aql systems. The extended API is concerned with address book and distribution list manipulation as well as sending messages to distribution lists (bulk SMS). This documentation will concentrate on the extended API.

## Extended aql API

All the aql API's are accessed via HTTP/HTTPS POST. The existing documentation and example source code for the standard API can be found at <http://www.aql.com/site/developerinfo2.php>

The extended API is divided into 2 sections:

- Address book management
- Bulk SMS sending and distribution List management

Please note:

The error responses shown for each of the gateway commands are ones that are specific to that command. There are other error response codes that can be generated that apply to **all** commands. These codes are outlined in the 'Error codes' section at the end of the document.

All parameters to the gateways are mandatory unless otherwise stated.



## Address book management

The Address book API is command driven. Every time you call the API, you issue a command. The Gateway then responds either with success or failure. On success, the result you get depends on the context of call. On failure, you will always receive an error code, which are explained at the end of the documentation.

All Address book commands are issues via the following gateway:

<http://gw1.aql.com/sms/postcontacts.php>

The address book API allows full control over an account holders address book. This includes:

- Adding a new contact
- Updating an existing contact
- Deleting an existing contact
- Downloading the address book

### ***Adding a new contact***

To add a new contact to the address book of a particular account holder, the following CGI variables would need to be issued to the Address book gateway.

Variable name	Value	Description
username	Account username	Username of particular account
password	Account password	Password of particular account
cmd	<a href="#">ADDCONTACT</a>	The Command to add a new contact
name	New contact name	The name of the contact
number	Contact number	The number of the contact. MUST be in international format (e.g. 447967123456)

Gateway response:

Response	Value (without HTTP headers)	Description
Success	AQSMS-CONTACTIDOK <code>xx</code> ,= <code>yy</code>	<code>yy</code> is the unique ID of the associated contact number. <code>xx</code> is the length of the string after the comma
Failure	AQSMS-NONAMESUPPLIED AQSMS-NONUMBERSUPPLIED AQSMS-ADDRESSBOOKERROR	See section 'Error Codes'



## Updating an existing contact

To update the details of an existing contact of a particular account holder, the following CGI variables would need to be issued to the Address book gateway.

Variable name	Value	Description
username	Account username	Username of particular account
password	Account password	Password of particular account
cmd	<b>UPDATECONTACT</b>	The Command to update the details of an existing contact
id	Contact unique ID	This is the unique ID of the contact retrieved from adding a new contact or from downloading the address book
name	Updated contact name	The updated name of the contact. If the name is not to be updated, you <b>MUST</b> resend the original name
number	Updated Contact number	The number of the contact. <b>MUST</b> be in international format (e.g. 447967123456). If the number is not to be changed, you must resend the original number

Gateway response:

Response	Value (without HTTP headers)	Description
Success	AQSMS-OK	Standard success response. Contact successfully update
Failure	AQSMS-CONTACTIDERROR AQSMS-NONAMESUPPLIED AQSMS-NONUMBERSUPPLIED AQSMS-CONTACTUPDATEERROR	See section 'Error Codes'

## Deleting an existing contact

To delete an existing contact of a particular account holder, the following CGI variables would need to be issued to the Address book gateway.

Variable name	Value	Description
username	Account username	Username of particular account
password	Account password	Password of particular account
cmd	<b>DELETECONTACT</b>	The Command to delete an existing contact
id	Contact unique ID	This is the unique ID of the contact retrieved from adding a new contact or from downloading the address book



Gateway response:

Response	Value (without HTTP headers)	Description
Success	AQSMS-OK	Standard success response. Contact successfully removed
Failure	AQSMS-CONTACTIDERROR	See section 'Error Codes'

## Downloading the address book

To download the entire address book of a particular account holder, the following CGI variables would need to be issued to the Address book gateway.

Variable name	Value	Description
username	Account username	Username of particular account
password	Account password	Password of particular account
cmd	GETADDRESSBOOK	The Command to download the account holders address book

Gateway response:

Response	Value (without HTTP headers)	Description
Success	AQSMS-ADDRESSBOOKOKxxxxxxx	See notes below.
Failure		See section 'Error Codes'

When the address book has successfully retrieved, the contents will be a long string needing to be parsed and split to form meaningful data. The format of the returned data has been broken-down in the following table: (there are no spaces between the fields unless otherwise stated)

Section	Item	Description
1	AQSMS-ADDRESSBOOKOK	String confirming success of address book retrieval. These 19 characters can be disregarded
2	xx	An integer containing the length of the rest of the string excluding the following comma. Variable number of digits.
3	,	A single comma (field separator)
4	"ID"	Unique ID of this contact in double quotes
	,	A single comma (field separator)
	"name"	Name of this contact in double quotes
	,	A single comma (field separator)
	"number"	Number of this contact in double quotes
	\n	A single newline character (record separator)

The integer in section 2 dictates the length of the rest of the string AFTER the following comma. The records in section 4 are delimited by a comma and every record is terminated with a newline character (\n). An example of the data you would get is:

```
AQSMS-ADDRESSBOOKOK67,"9912","A N Other","447771111111"\n"9173","H M
Self","447772222222"\n
```

Please note that the length '67' does not include the comma that directly follows the number 67.



## **Bulk SMS sending and distribution List management**

The Distribution List API is command driven. Every time you call the API, you issue a command. The Gateway then responds either with success or failure. On success, the result you get depends on the context of call. On failure, you will always receive an error code, which are explained at the end of the documentation.

All Distribution List commands are issued via the following gateway:

<http://gw1.aqi.com/sms/postdistribution.php>

The Distribution List API allows full control over account holders Distribution Lists. This includes:

- Adding a new list
- Deleting an existing list
- Updating an existing list
- Sending an SMS message to a list
- Download an individual list

### ***Adding a new list***

To add a new list to the account of a user, the following CGI variables would need to be issued to the Distribution list gateway.

Variable name	Value	Description
username	Account username	Username of particular account
password	Account password	Password of particular account
cmd	<b>ADDDISTLIST</b>	The Command to add a new distribution list to the users account
name	Name of list	An arbitrary name given to the list
numlist	List of number	A comma separated list of numbers in international format.

Gateway response:

Response	Value (without HTTP headers)	Description
Success	AQSMS-DISTITEMIDxx,=yy	See notes below
Failure	AQSMS-NONAMESUPPLIED AQSMS-NONUMBERLISTSUPPLIED AQSMS-DISTLISTADDERROR	See section 'Error Codes'

Upon successfully adding a new list to the users account, the following response will be sent back from the aqi server:

AQSMS-DISTITEMIDxx,=yy



The AQSMS-DISTITEMID string indicates success. It can be striped away and discarded. The **xx** is an integer indicating the length of the string **after** the comma. The comma and the following '=' sign can be removed and discarded. Finally, the **yy** is the unique ID of the created list.

An example of a successful response is shown below:

AQSMS-DISTITEMID7,=882394

Notice how the length of the ID and '=' is 7. This does **not** include the comma.

### ***Deleting an existing list***

To delete an existing list from the account of a user, the following CGI variables would need to be issued to the Distribution list gateway.

Variable name	Value	Description
username	Account username	Username of particular account
password	Account password	Password of particular account
cmd	<b>DELETEDISTLIST</b>	The Command to delete an existing distribution list from the user's account
distid	ID of list	ID of the list to be deleted

Gateway response:

Response	Value (without HTTP headers)	Description
Success	AQSMS-OK	Standard success response
Failure	AQSMS-DISTIDERROR	See section 'Error Codes'

### ***Updating an existing list***

When updating a distribution list there are 2 options available.

- Update the name of the list only
- Update the name and the actual list of numbers

#### ***Updating a list name only***

In order to update the name of the list only, the following CGI variables would need to be issued to the Distribution list gateway.

Variable name	Value	Description
username	Account username	Username of particular account
password	Account password	Password of particular account
cmd	<b>UPDATELISTNAME</b>	The Command to update an existing distribution list on the users account
distid	ID of list	ID of the list to be modified
name	New name of list	The new name of the list



Gateway response:

Response	Value (without HTTP headers)	Description
Success	AQSMS-OK	Standard success response
Failure	AQSMS-DISTIDERROR AQSMS-NONAMESUPPLIED AQSMS-DISTLISTUPDATEERROR	See section 'Error Codes'

### **Updating a list name and number list**

To update the whole of the list, the following CGI variables would need to be issued to the Distribution list gateway.

Variable name	Value	Description
username	Account username	Username of particular account
password	Account password	Password of particular account
cmd	<b>UPDATELISTNAMENUMBERS</b>	The Command to update an existing distribution list from the users account
distid	ID of list	ID of the list to be modified
name	New name of list	The new name of the list. If you do not wish the name to be changed, you <b>MUST</b> supply the original.
numlist	List of numbers	A comma separated list of numbers in international format

Gateway response:

Response	Value (without HTTP headers)	Description
Success	AQSMS-OK	Standard success response
Failure	AQSMS-DISTIDERROR AQSMS-NONAMESUPPLIED AQSMS-NONUMBERLISTSUPPLIED AQSMS-DISTLISTUPDATEERROR	See section 'Error Codes'

### **Downloading the collection of distribution lists**

A Distribution list is composed of 3 items. These are:

- Unique ID of distribution list
- Arbitrary name of list
- Actual list of numbers

There are 2 steps involved in downloading distribution lists. Because of the potential for an individual distribution list to be very large, the actual list of numbers is not sent in the standard call to download the distribution list collection. Only the names and unique ID of the distribution lists are sent.

If the actual numbers are required, there is a second API call that can be made to download them. These methods will now be described.



## Downloading the distribution list names and unique ID's

This method will download the entire distribution list ID's and names for a particular account holder. It will not download the list of numbers for each distribution list. To download the list, the following CGI variables would need to be issued to the Distribution list gateway.

Variable name	Value	Description
username	Account username	Username of particular account
password	Account password	Password of particular account
cmd	<b>GETCOMPACTLIST</b>	The Command to download the account holders collection of distribution lists

Gateway response:

Response	Value (without HTTP headers)	Description
Success	AQSMS-DISTRIBUTIONLISTxxxxxxx	See notes below
Failure		See section 'Error Codes'

When the distribution list collection has been successfully retrieved, the contents will be a long string needing to be parsed and split to form meaningful data. The format of the returned data has been broken-down in the following table: (there are no spaces between the fields unless otherwise stated)

Section	Item	Description
1	AQSMS-DISTRIBUTIONLIST	String confirming success of distribution list collection retrieval. These 22 characters can be disregarded
2	xx	An integer containing the length of the rest of the data in bytes excluding the following comma. Variable number of digits.
3	,	A single comma (field separator)
4	"ID"	Unique ID of this distribution list in double quotes
	,	A single comma (field separator)
	"name"	Name of this distribution list in double quotes
	,	A single comma (field separator)
	"count"	Integer containing the number of numbers in this particular list in double quotes
	\n	A single newline character (record separator)

The integer in section 2 dictates the length of the rest of the string AFTER the following comma. The records in section 4 are delimited by a comma and every record is terminated with a newline character (\n). An example of the data you would get is:

AQSMS-DISTRIBUTIONLIST45,"8159","Managers","2"\n"1937","Customers","5"\n

Please note that the length '45' does not include the comma that directly follows the number 45.



## Downloading an individual distribution list

This is the API call that should be made to download the actual list of numbers for a distribution list. The following CGI variables would need to be issued to the Distribution list gateway.

Variable name	Value	Description
username	Account username	Username of particular account
password	Account password	Password of particular account
cmd	GETNUMBERSWITHID	The Command to retrieve a complete distribution list from the users account
distid	ID of list	ID of the list to be retrieved

Gateway response:

Response	Value (without HTTP headers)	Description
Success	AQSMS-DISTRIBUTIONLISTxxxxxxx	See notes below
Failure	AQSMS-DISTIDERROR	See section 'Error Codes'

When the distribution list data has successfully retrieved, the contents will be a long string needing to be parsed and split to form meaningful data. The format of the returned data has been broken-down in the following table: (there are no spaces between the fields unless otherwise stated)

Section	Item	Description
1	AQSMS-DISTRIBUTIONLIST	String confirming success of distribution list retrieval. These 22 characters can be disregarded
2	xx	An integer containing the length of the rest of the data in bytes excluding the following comma. Variable number of digits.
3	,	Single comma (field separator)
4	"count"	Number of numbers in the returned list
5	"numberlist"	List of numbers. Comma separated
6	\n	Single newline character

The integer in section 2 dictates the length of the rest of the string AFTER the following comma.

AQSMS-DISTRIBUTIONLIST31,"2","44711111111,44722222222"\n

Please note that the length '31' does not include the comma that directly follows the number 31. The list itself is simply a comma-separated list of numbers.



## **Sending messages to a distribution list**

Please note: *When sending messages through this gateway, the message will be sent, very quickly, to all the numbers in the particular list. We therefore advise that you thoroughly check the message for mistakes before you send it. To avoid costly mistakes, we also advise that you send yourself the message beforehand to make sure the message appears as it should on the destination phones.*

The following CGI variables would need to be issued to the Distribution list gateway in order to send a message to a list(s).

Variable name	Value	Inclusion	Description
username	Account username	Mandatory	Username of particular account
password	Account password	Mandatory	Password of particular account
cmd	<a href="#">SENDDISTMESSAGE</a>	Mandatory	The Command to retrieve a complete distribution list from the users account
distlists	ID,ID,ID,.....	Mandatory	Comma separated list of distribution list ID's
message	Message to be sent	Mandatory	The message that needs to be sent. This MUST be URL encoded
orig	Originator	Optional	Message originator. See notes
flash	1	Optional	Flash Message. See following notes
sendtime	<a href="#">yyyy-mm-dd hh:mm:ss</a> or <a href="#">now</a>	Optional	Time to send message the message. See following notes

### **Restrictions and guidelines on sending messages.**

- It is possible to send the message to more than 1 distribution list. All that needs to be done is to make a comma-separated list of the distribution list ID's and place that in the 'distlists' field.
- The message to be sent must be 160 characters or less before URL encoding. If not, the gateway will use the first 160 characters and discard the rest.
- The message **must** be URL encoded before it is sent to our gateway.
- The optional 'orig' field can either be a phone number (16 characters max in international format) or a collection of alphanumeric characters (11 characters max). This field sets 'who' the message appears to come from.
- A flash message is a special text message that is displayed on the screen straight away. It does **not** get saved in the inbox of the phone. To make the message that you send a flash message, you would insert the parameter flash=1 into your HTTP POST.
- The optional 'sendtime' parameter allows scheduling of messages. There are two possible values for this parameter:
  - The word [now](#) would send the messages now.
  - Alternatively, you can specify the exact date and time the messages should be sent with respect to the following format: [yyyy-mm-dd hh:mm:ss](#). To send a message on the 24<sup>th</sup> August 2004 at 7.31pm you would set the sendtime parameter as follows: [2004-08-24 19:31:00](#) **Please note the single space between the date and time. This parameter must be URL encoded.**



The gateway responses are:

Response	Value (without HTTP headers)	Description
Success	AQSMS-OK	The message has been successfully queued.
Failure	AQSMS-NODISTLISTSUPPLIED AQSMS-NOMSG AQSMS-DISTIDERROR AQSMS-INSUFFICIENTCREDITS	See section 'Error Codes'



## Error Codes

The following tables give a list of possible error codes along with their meaning.

The first table contains error codes that can be generated by every API call listed in this documentation.

Error Code	Meaning
AQSMS-NOAUTHDETAILS	The username and/or password were not sent with the request. Resent with the correct username and password
AQSMS-AUTHERROR	The username and/or password were incorrect. Check them and try again
AQSMS-CMDERROR	The command was not specified or was spelt incorrectly

The following table outlines error codes that are specific to certain commands.

Error Code	Meaning
AQSMS-NONAMESUPPLIED	The 'name' variable was expected but not supplied. If it was supplied, it should not be left blank.
AQSMS-NONUMBERSUPPLIED	The 'number' variable was expected but not supplied. If it was supplied, it should not be left blank.
AQSMS-ADDRESSBOOKERROR	There was an error performing the specified Address book function. Please try again later
AQSMS-CONTACTIDERROR	The contact ID number was not specified, left blank or was not found in the database. Please make sure it hasn't been deleted and the ID number is correct
AQSMS-CONTACTUPDATEERROR	There was an error updating the contact details. Please try again later
AQSMS-DISTIDERROR	The distribution list ID was either – not specified, left blank or not found in the database
AQSMS-NODISTLISTSUPPLIED	When sending messages to distribution lists, the actual list to send messages to were not supplied or left blank.
AQSMS-NOMSG	When sending messages to distribution lists, the message to send was not supplied or left blank
AQSMS-INSUFFICIENTCREDITS	There are insufficient credits to send the specified message to the list(s)
AQSMS-NONUMBERLISTSUPPLIED	When updating a distribution list, the new list of numbers was not supplied or left blank.
AQSMS-DISTLISTUPDATEERROR	There was an error updating the distribution list. Please try again later