



THE BULKSMS INTEGRATION GUIDE

for 
Marketo®



— GET YOUR MESSAGE ACROSS —



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ABOUT THE BULKSMS GATEWAY FOR MARKETO

The BulkSMS Gateway for Marketo was designed for advanced SMS integration between Marketo and BulkSMS. This guide covers the basic integration steps, and should be sufficient for most common SMS messaging needs.

ADVANCED GROUP MESSAGING – KEY FEATURES:

The BulkSMS Marketo Gateway can very efficiently send bulk messages to large numbers of leads.

Key Features

- Quick and Easy. Basic setup (STEP 1 & 2) can be completed in minutes.
- Send up to 30,000 messages in a single submission
- Long messages up to 1536 characters in length
- Send messages that contain Unicode and special characters
- Two-way messaging – mobile originated messages posted to Marketo in real-time
- Status report updates sent periodically using minimal Marketo API calls

Plus!

- Send to any mobile network internationally
- Local replies
- Competitive pricing

Additional Features

Can be discussed with your account manager or someone in our support team.

- Schedule message for later delivery (up to 1 year in advance)
- Customizable sender ID – like your brand or company name or alternate reply number.

- Incoming long numbers – for mobile originated messaging.

Contact support@bulksms.com if you need more information, and please mention your specific requirements so that the request can be allocated to the correct person / team.

Additional Products

Use any or all of our other products and tools from the same BulkSMS account.

You can use any or all of our products from the same BulkSMS account, or you can create multiple accounts for different use cases or internal departments. You can also easily transfer credits between accounts or have a primary (parent) account that sponsors multiple sub accounts. See the Appendix at the end of this document.



STEP 1 – Register a new BulkSMS.com account.

1. Go to www.bulksms.com and click the **Sign Up** button to register a new account.

2. Get SMS test credits and your unique **<user_key>**.

After successful sign-up, you will have a few test credits in your BulkSMS account. .

Please send an e-mail to: support@bulksms.com with the following information:

SUBJECT LINE: Marketo Integration Request

And then include the following in the body of the mail

- The name of your Company
- Your BulkSMS username (this is case sensitive)

We will then load some additional free test credits to your account and reply to your mail with a **unique <user_key>** (to be used later).

STEP 2 – Create a webhook for a trigger campaign.

New Webhook

Webhook Name: * Welcome Message

Description: Welcome Message

URL: * [INSERT TOKEN](#)

`https://gateway.bulksmsmessenger.com/webhook/v1/message/<user_key>?password=<bulksms_password>&leadid={{lead.ID}}`

Request Type: * POST

Template: [INSERT TOKEN](#)

`{ "to": "{{lead.Mobile Phone Number:default=edit me}}", "body": "Hello {{lead.First Name:default=edit me}}. Your {{experience}} experience has been booked! We'll contact you shortly with the detail. Please reply to this SMS if you have any queries." }`

Request Token Encoding: None

Response type: JSON

1. From within Marketo, go to **>> Admin, >> Integration, >> Webhooks**, and **create a New Webhook**.

2. Enter the Webhook details as shown.

CUSTOM HEADER:

Header: Content-type / Value: application/json

URL: (you can copy and paste this URL)

`https://gateway.bulksmsmessenger.com/webhook/v1/message/<user_key>?password=<bulksms_password>&leadid={{lead.ID}}`

Replace the **<user_key>** token with the User Key that was e-mailed to you as part of your BulkSMS Registration and support@bulksms.com request. This user key is typically 36 character in length and is in the format xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx. Replace the **<bulksms_password>** token with the password that you selected when you registered your BulkSMS account in STEP 1.

NB: Do not include the < angle brackets >

TEMPLATE: (You can copy and paste this. Modify and change your message as you feel necessary)

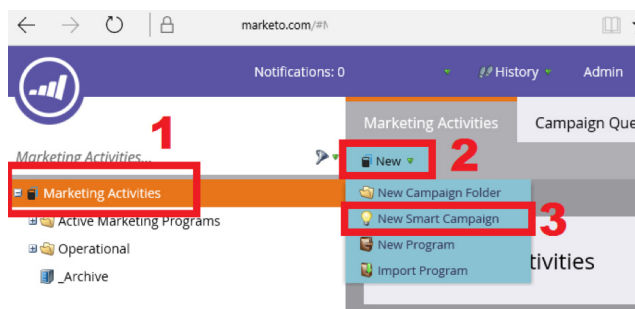
`{ "to": "{{lead.Mobile Phone Number:default=edit me}}", "body": "Hello {{lead.First Name:default=edit me}}. Your experience has been booked! We'll contact you shortly with the detail. Please reply to this SMS if you have any queries." }`

Set Custom Header

Header	Value
Content-type	application/json

STEP 3 – Create a trigger to send an SMS.

Step 1



There are many ways to create a trigger to send an SMS. The following is just one example. You should implement what works best in your business.

1. From the main Marketo options menu, click Marketing Activities, New, New Smart Campaign.

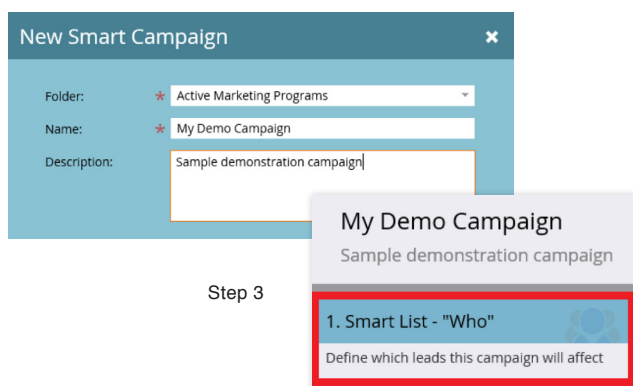
- Just enter some basic descriptive information. The Folder is selected from a drop-down list of available folders. Click the Create button to continue.

2. Select the Smart List option.

3. Create the Smart List

- Drag the 'Data Value Changes' item from the list on the right and drop it into the main work area. That should create a 'Data Value Changes' process box. Select the 'Mobile Phone Number' item from the 'Attribute' list.
- When done, **click the 'Flow' tab to continue.**

Step 2

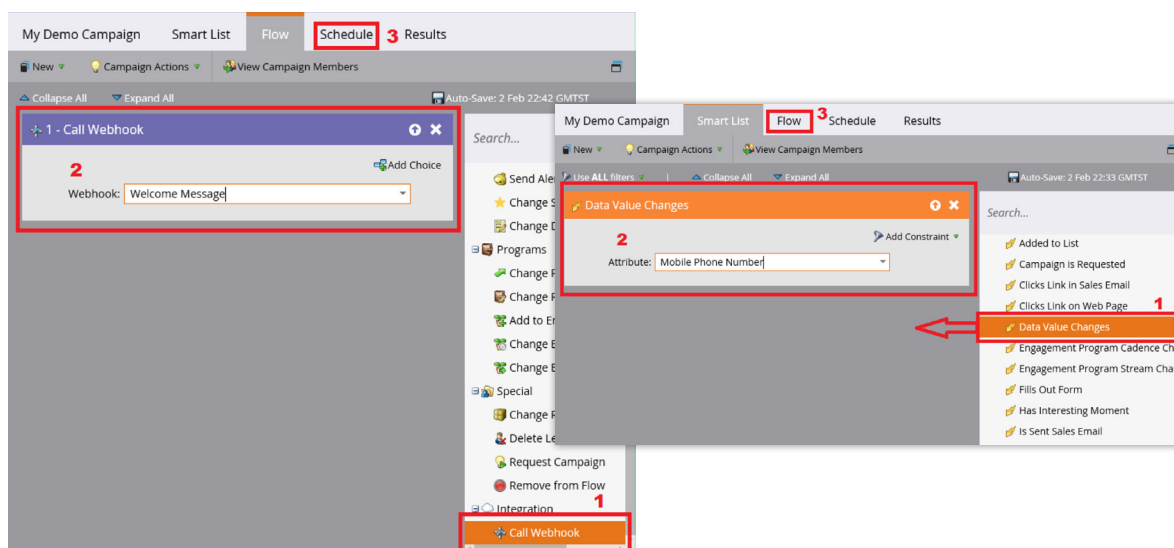


Step 3

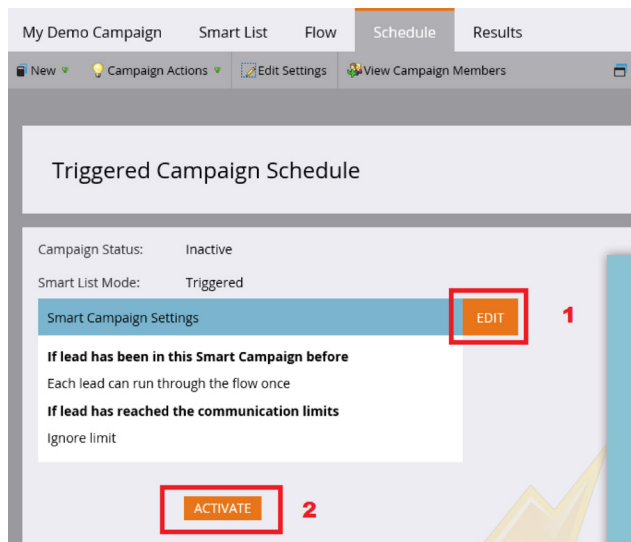
4. Configure the Flow

- Drag the 'Call Webhook' item from the list on the right, and drop it into the main work area.
- Next, click the 'Webhook' drop-down list, and select the Webhook you created in STEP 2.
- When ready, click Schedule tab to continue.

Step 4



Step 5



5. Schedule the trigger

- This is an optional setting. By default, the Lead will only be included once in the campaign, so because we're testing and likely to want to send multiple messages, you can optionally change the trigger option from 'only once' to 'every time'.
- The campaign will not work until activated. Click the 'Activate' button to activate the campaign.

When option 1 selected

Qualification Rules determine how many times each lead can run through the Smart Campaign flow

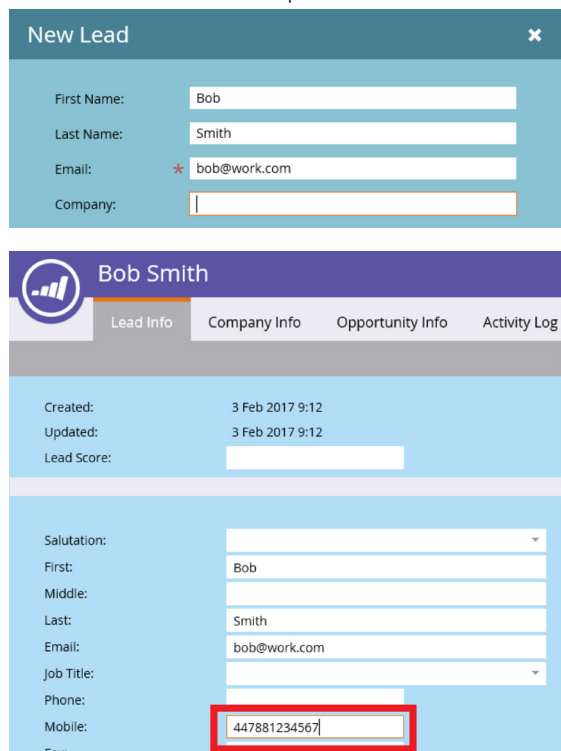
Run each lead through the campaign flow:

- ☐ only once
- ☐ once every Days
- ☒ every time

If lead is over communication limits

- ☐ Block non-operational emails

Step 6



Hello Bob. Your experience has been booked! We'll contact you shortly with the detail. Please reply to this SMS if you have any queries.

6. Basic Testing

Now that you've done the configuration, it's easy to run a test or two. Follow these steps;

- Create a new Lead
- Edit the Lead and add a mobile to the Mobile: field
- The Lead should be auto-saved after you move to the next field or another part of the screen. This should trigger the webhook to be called, which in turn should result in message being sent to the designated mobile phone.

7. Diagnostics and additional Reporting

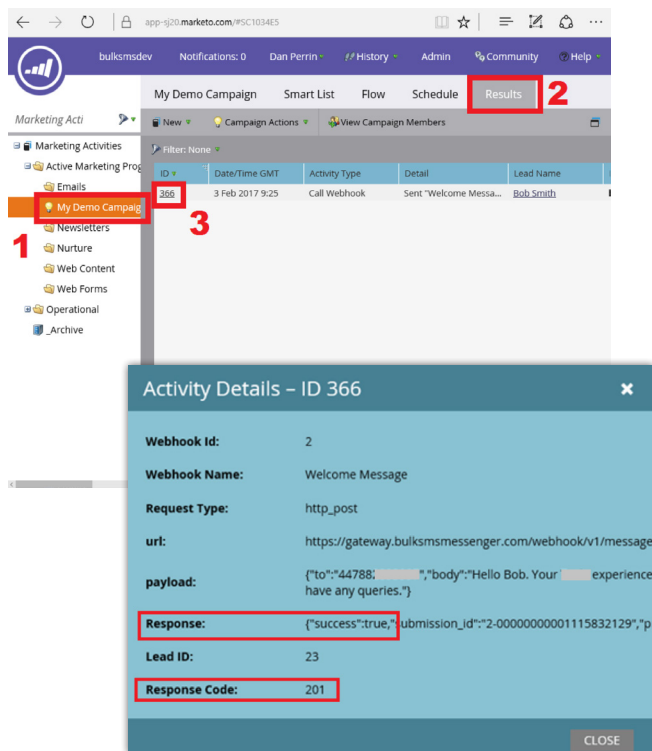
If you followed the steps on the previous pages, then the SMS's should be delivered to the designated mobile phones when the associated Webhooks are triggered. If the SMS's are not being delivered, then there's a few things to check.

8. Check the basics

The obvious first steps are to ensure that;

- you have a valid BulkSMS account with credits
- you've correctly entered the <user_key> in the Webhook configuration screen, and entered the correct case sensitive password.
- The mobile number is valid and begins with a country code. Eg 4412345678 (for the UK), or 112345678 (for the US) etc.
- The campaign has been Activated
- Qualification Rules set to 'Every time' – see page 17

Step 9



Activity Details - ID 366

Webhook Id: 2

Webhook Name: Welcome Message

Request Type: http_post

url: https://gateway.bulksmsmessenger.com/webhook/v1/message

payload: {"to":"44788:", "body":"Hello Bob. Your experience have any queries."}

Response: {"success":true, "ubmission_id":"2-0000000000115832129", "p

Lead ID: 23

Response Code: 201

9. Check the Marketo configuration

If those items checkout, then you can look at the Marketo campaign Results screen. The Results screen will provide you with activity history. If no activity, then it means the Webhook is not being triggered. If there is activity, the view the detail to determine if the message was sent. See the following screen shots.

The Activity Details screen will show if the message was sent, as well as any success or error messages / codes. For assistance, please contact support@bulksms.com.

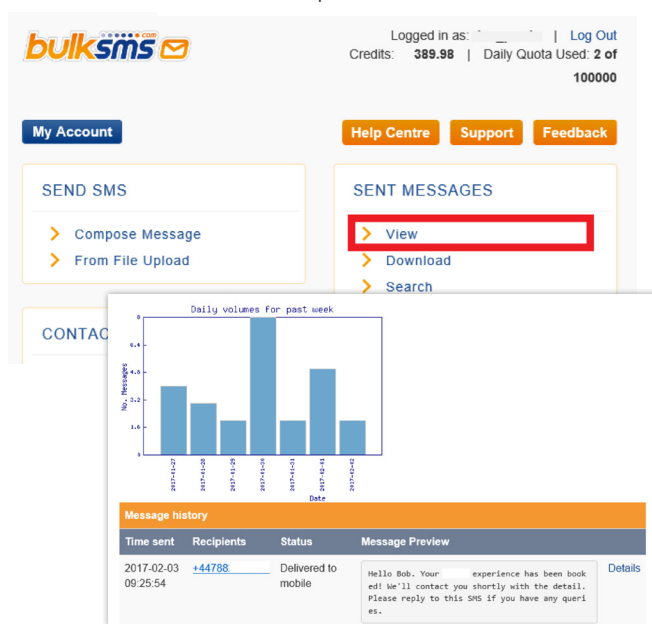
TYPICAL RESPONSE CODE

The only valid response is 201 (meaning CREATED). Any other code will typically be an error. See the table below for guidance. Contact support@bulksms.com if you need assistance.

CODE	MEANING	REASON
400	Bad Request	Something in the request is invalid..
403	Forbidden	The request indicated an action that is not allowed.
422	Unprocessable Entity	The request entity is invalid
429	Throttled	http://tools.ietf.org/search/rfc6585
500	Internal Server Error	Something unrelated to the request is broken
503	Service Unavailable	The server is refusing to handle your request. You would normally only see this status as part of a throttled response, but it may appear in other cases.

Table 1

Step 10



SEND SMS

Compose Message

From File Upload

SENT MESSAGES

View

Download

Search

Daily volumes for past week

Message history

Time sent	Recipients	Status	Message Preview
2017-02-03 09:25:54	+44788	Delivered to mobile	Hello Bob. Your experience has been book ed! We'll contact you shortly with the detail. Please reply to this SMS if you have any queri es.

10. Check the BulkSMS configuration

If the response code in the activity detail screen is 201, then it means that the message was sent to and accepted by BulkSMS. So, to investigate further, log in to your BulkSMS account and click on the 'View' item in the 'SENT MESSAGES' area.

Any sent messages will be displayed in the Message history page, along with delivery a delivery status. The delivery status is descriptive and should help diagnose any delivery issues.



FURTHER DEVELOPMENT

Extend the sample

The steps in this guide were created to get you started with a basic messaging sample. This sample can be extended for much more sophisticated use cases.

Messages are 2-way. Recipients can reply to SMS messages and these replies will be accessible from your BulkSMS Inbox. You can view your Inbox messages using any of our

products, like the Web Site, via our API, or using the Desktop Messengers for Windows or Apple Mac, or the iOS App.

Visit www.bulksms.com/products to for more information.

Reply messages and status reports can be sent back to Marketo in real time

If you are interested in having reply messages and delivery status updates sent back to Marketo, then you can continue with the optional configuration in a later section.

STEP 4 – Create a Webhook for a Bulk Campaign *(optional)*

ABOUT BULK CAMPAIGNS

This step is optional. Bulk Campaigns allow you to send personalized messages to up to 30,000 leads in a single submission. Bulk campaigns are useful for when you want to send to large numbers of contacts at one time, especially if your message is time critical and you are receiving delivery reports and you have restrictions or limitations on your daily REST API quota.

Please contact support@bulksms.com if you're unsure or need more information.

Sending to a large list of leads is as easy as sending to a single lead, but instead of specifying the ID of the lead you want to send to, you specify the ID of the list or program. The BulkSMS system will do all the hard work, and status report and replies will be pushed back to your Marketo instance automatically.

Tip. If you're reading this document in electronic format, then you can copy the URL and Template text on the next page for easy pasting when you create your Webhook.

From within Marketo, go to >> Admin, >> Integration, >> Webhooks, and **create a New Webhook**.

Enter the Webhook details as shown.

CUSTOM HEADER:

Header: Content-type / Value: application/json

URL: (you can copy and paste this URL)

```
https://gateway.bulksmsmessenger.com/webhook/v1/batch/<user_key>?password=<bulksms_password>&listid={{list.ID}}
```

Replace the **<user_key>** token with the User Key that was e-mailed to you as part of your BulkSMS Registration and support@bulksms.com request. This user key is typically 36 character in length and is in the format xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx. Replace the **<bulksms_password>** token with the password that you selected when you registered your BulkSMS account in STEP 1.

NB: Do not include the < angle brackets >

TEMPLATE: (You can copy and paste this. Modify and change your message as you feel necessary)

```
{"body":{"Hello {{lead.First Name:default=edit me}}. This is a test message to a list of your choice"}}
```




STEP 5 – Update Marketo Leads using callbacks (*optional**)

* NOTE: optional for STEP 2 (trigger campaign), but required for STEP 4 (bulk campaign)

ABOUT CALLBACKS

This step is optional*. Callbacks are used to push BulkSMS reply messages and status updates to Marketo, thereby updating the Lead record that was originally associated with the outgoing SMS.

Delivery Status Updates

So for example, if an SMS is successfully sent to a Lead, then the delivery status of that SMS can be written back to a custom field on the Lead as proof that the message was delivered, or a failure message if unsuccessful.

Reply or Mobile Originated (MO) Messages

Similarly, if the recipient of the SMS sends a reply SMS, then that reply can also be written to a custom field on the Lead record.

You can then of course create other triggers to perform another action in the workflow in response to such updates.

MARKETO CONFIGURATION

To configure these callbacks, you need to obtain Marketo API credentials so that BulkSMS can make authenticated calls to your instance.

The steps for this can be found here: <http://developers.marketo.com/rest-api/>

At the end of the configuration process, you should have the following information to hand.

1. Marketo client ID
2. Marketo client secret
3. REST endpoint
4. REST identity endpoint

Please send this information to support@bulksms.com with the subject line **Marketo / BulkSMS callback**. Please also remember to mention your username.

Create Custom Fields on Lead object

The next step is to create two custom fields on the Lead object. These will be used to store the delivery status and reply message. The field must be named as follows and are case sensitive.

Field Name	API Name
SMS Delivery Status	sms_delivery_status
SMS Reply	sms_reply

Table 2

For instructions on how to create custom fields, simply follow these detailed steps in the Marketo Blog. Steps 1 to 5 are relevant to this integration. The steps have been copied and included below for your convenience.

<http://developers.marketo.com/blog/create-a-custom-field-in-marketo-and-update-this-field-via-api/>

1. Under **Admin**, click on **Field Management**.
2. Click the **New Custom Field** button.
3. Choose the field Type. This will change how it is rendered in Smart Lists and Forms in Marketo.
4. Enter the Name as you want it to appear in Marketo.
5. In this case, you should be naming the field as 'SMS Delivery Status' as described in Table 2 above. Repeat these steps for the 'SMS Reply' field.

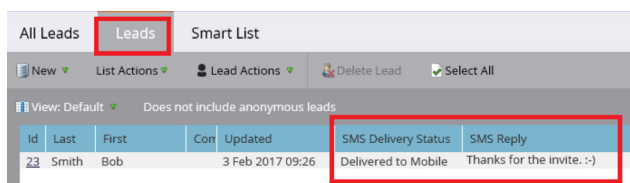
New Custom Field

Type: * String

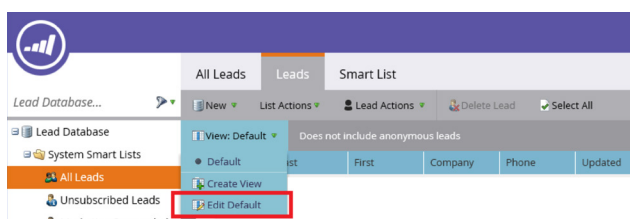
Name: * My Custom Field

API Name: * myCustomField

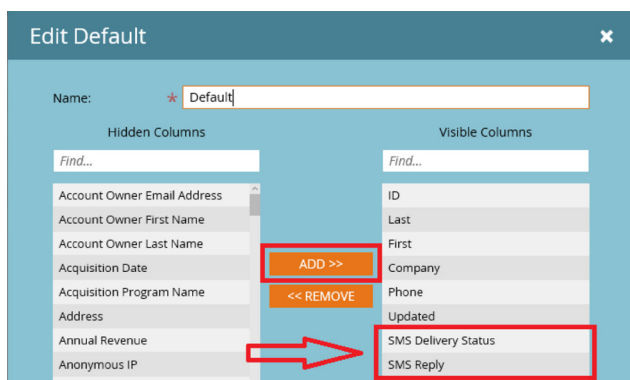
CANCEL CREATE



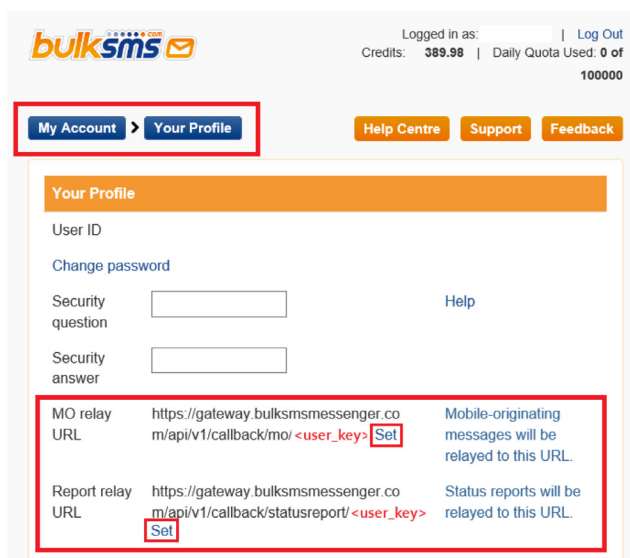
Step 1



Step 2



Step 3



Customize the Lead view to show the new custom Fields

Once the new fields have been created, it would be useful to add them to the Leads view. That way, it's easy to see the delivery status and any reply message at a glance.

To add the custom fields, follow these next easy steps.

1. You can either Edit the Default view or optionally create a new View.
2. Select the fields you want by adding moving columns from the Hidden Columns table to the Visible Columns table.

Configure BulkSMS Callback URI's (Step 3)

The final step is to activate callbacks on the BulkSMS system. The BulkSMS support team would most likely already have completed this step for you, but the procedures are listed in any event in case you need to make changes at a later stage.

Log in to your BulkSMS account as www.bulksms.com, then select 'Your Profile'.

Set the relay URL fields. You can copy and paste the template values below.

Field	Value
MO Relay	<a href="https://gateway.bulksmsmessenger.com/api/v1/callback/mo/<user_key>">https://gateway.bulksmsmessenger.com/api/v1/callback/mo/<user_key>
Report Relay	<a href="https://gateway.bulksmsmessenger.com/api/v1/callback/statusreport/<user_key>">https://gateway.bulksmsmessenger.com/api/v1/callback/statusreport/<user_key>

SUMMARY

This concludes basic the integration steps. These procedures are all very quick and effortless and you can be up and sending messages within an hour.

If you need assistance or have question, please send an e-mail to support@bulksms.com.

We will general respond within the hour, but may take longer during busy periods or after hours. Alternatively, please visit the Contact page on our website for additional contact details.



APPENDIX A – BulkSMS Marketo Gateway API Reference

MARKETO WEBHOOK REST URI'S:

The general webhook URL has the following structure:
`https://<endpoint> /<api_function>/<user_key>?<parameters>`

THERE ARE TWO FUNCTIONAL <ENDPOINT>S;

For testing: Note: this endpoint might not always be available. It is not intended for you to test your software. You are encouraged to test your software on the production URL. This test URL exists so that you can test your software against pending release of the BulkSMS Marketo Gateway.

We will generally notify you before we release updates which might affect you and will thus require testing against this URL:
gatewayqa.bulksmsmessenger.com

For production: **gateway.bulksmsmessenger.com**

Example: **https://gateway.bulksmsmessenger.com/webhook/v1/message/AA11E1C9-8804-47BD-A61A-4CDEE0E2651E?password=****&lead_id=123**

FUNCTION: /WEBHOOK/V1/MESSAGE/

Purpose:

Sends an individual (triggered) SMS message from Marketo

Usage:

POST **`https://gateway.bulksmsmessenger.com/webhook/v1/message/<user_key>?password=****&leadid={{lead.ID}}`**

Note: Ensure that you replace <user_key> with your unique user key (issued by BulkSMS at registration)

Query Parameters:

Parameter	Required	Comments
password	Yes	BulkSMS account password
lead_id	Yes	ID of the lead the message is being sent to

Body:

`{"to": "{{lead.Mobile Phone Number }}", "body": "Hello there {{lead.First Name }}"}`

Limits:

No limits on outgoing messages, but status report updates and mobile originated messages are restricted in quantity by

the daily Marketo REST API quota. There might also be time restrictions / considerations. Messages might be delayed for large batches because Marketo might need to share limited resources between many competing requests.

Comments:

The lead_id is required so that status reports and replies can update the same lead that was specified in the outgoing message. Status reports and MO messages are pushed back to Marketo in real-time.

While the outgoing message doesn't use any Marketo REST API calls (a limited resource), the status report updates and replies do consume REST API calls.

This function is easy to implement but has limited bulk capacity, mainly because Marketo will post messages individually.

These messages are referred to as trigger campaign messages from within Marketo.



FUNCTION: /WEBHOOK/V1/BATCH/

Purpose:

Used to send bulk SMS message from Marketo.

Usage:

POST https://gateway.bulksmsmessenger.com/webhook/v1/batch/<user_key>?password=****&list_id=<int>|program_id=<int>&deduplication_id=<int32>&predicted_lead_count=<int>

Query Parameters:

Parameter	Required	Comments
password	Yes	BulkSMS account password
lead_id	One of *	ID of the list this message must be sent to
program_id	One of *	ID of the program this message must be sent to
deduplication_id	Yes	Prevents duplicates from being sent
predicted_lead_count	Optional	Prevents accidental wrong group messages

Body:

```
{ "body": "Hello there [[lead.First Name]]" }
```

Note: the body structure { } does not require the "to" parameter.

Limits:

30,000 messages in a single submission.

Comments:

This function is used to send bulk personalized messages to the leads contained in the specified List or Program. It is advised to make use of the predicted_lead_count feature to prevent accidentally sending the message to the wrong group. Duplicate mobile numbers are eliminated by accepting the first, then skipping subsequent leads with the same mobile number. The order for extraction is undetermined.

Use of tokens for mail merge / personalization

- Skips contact if null merge field
- But, will allow null first and last name fields
- Accepts default values [[lead. First Name: default=customer]]
- Accepts friendly labels or API names as tokens. E.g. [[lead. First Name]] and [[firstName]]

Restrictions and other info

- Only supports tokens from the Lead object
- Custom (non-standard) tokens must be specified as api names. i.e: Use [[sms_reply]] and not [[SMS Reply]]
- Tokens must be enclosed in [[double square braces]]

Replies are pushed back to Marketo in real-time. Status reports are accumulated and pushed back to Marketo periodically.

Multipart replies are viewable in the Marketo lead Activity Log.

Resubmissions will require a new deduplication_id if any of the body details or some other parameters are changed.

BULKSMS HTTP PUSH CONFIGURATION

These configuration details need to be set in the BulkSMS User Profile page, one for each account.

Relay URL's	Value
MO	<a href="https://gateway.bulksmsmessenger.com/api/v1/callback/mo/<user key>">https://gateway.bulksmsmessenger.com/api/v1/callback/mo/<user key>
Status Reports	<a href="https://gateway.bulksmsmessenger.com/api/v1/callback/statusreport/<user key>">https://gateway.bulksmsmessenger.com/api/v1/callback/statusreport/<user key>

Sample Configuration

<https://gateway.bulksmsmessenger.com/api/v1/callback/mo/AA11E1C9-8804-47BD-A61A-4CDEE0E2651E>

Marketo Lead Updates

Status report and MO messages (replies) currently update custom fields of the originating lead. This is for demonstration and testing purposes. More advanced updating can be achieved during full integration.

To enable the above to work, please create the following custom fields on the Lead object. API Names are case sensitive.

Field Name	API Name
SMS Delivery Status	sms_delivery_status
SMS Reply	sms_reply
SMS Program Id	sms_program_id



APPENDIX B – Other BulkSMS Products

- Desktop Messenger for Windows, Apple Mac
- Salesforce Messenger
- JSON REST API
- Web Interface
- iOS App
- E-mail to SMS

Many of our clients use multiple products to cover all their SMS messaging needs.

The Desktop Messengers are very user friendly and they are particularly useful for ad-hoc messaging. The Desktop Messenger for Windows is the ideal tool for sending to large or huge groups, and can link to or reference external ODBC data-

sources, such as SQL Server, Excel, MS Access, My Sql and many proprietary products that share data via ODBC.

The iOS App runs on most modern iPhone and iPads. It allows you to send to online groups that can contain as much as 10,000 contacts per group.

Please visit www.bulksms.com/products for more information.