



M-Changa

M-Changa API Developer Integration Manual

Overview

M-Changa offers the following application programming interfaces (APIs) for incorporating M-Changa related functionality into your web sites and applications. The API uses HTTP verbs and a RESTful endpoint structure.

API CALL

The core principle behind the M-Changa Tagged Fundraisers Widget is providing an API that listens to API calls with queries to the M-Changa system to check for the transactions, contributor numbers, amount raised and other related fundraiser statistics. An API call made to M-Changa is may accompanied by a fundraiser key (the account number) which defines a fundraiser distinctively and this in-turn retrieves the requested variables in three formats JSON, XML or HTML.

Different Methods to Interact with M-Changa RESTful

API

The different ways to make API calls depend on which format is used on the client side. At the end of the URL is the "format" parameter. This is a reserved parameter that will modify the output format of the requested data like so:

XML	JSON	HTML					
data/format/xml	data/format/json	data/format/html					
<pre><xml> <amount>21423</amount> <target>30000</target> </xml></pre>	<pre>{ "amount": 21423, "target": 30000 }</pre>	<table><tr><td>amount</td><td>target</td></tr><tr><td>21423</td><td>30000</td></tr></table>		amount	target	21423	30000
amount	target						
21423	30000						

API calls are made to base URI: **<https://secure.changa.co.ke/api/tagged/>**

The different API calls to be made include:

1. Check Server Status

Operation: `GET /status/format/json`

Use this call to check on the status of the server.

Request:

URI: `https://secure.changa.co.ke/api/tagged/status/format/json`

Param: not required

Response

Property	Type	Description
Status	<i>string</i>	Live while server is up

Response sample

```
{  
  "status": "live"  
}
```

2. Detailed fundraiser list

Operation: GET [/all_fundrasiers/format/json](#)

Use this call to retrieve a detailed list of variables from all the tagged fundraisers

Request:

URI: https://secure.changa.co.ke/api/tagged/all_fundrasiers/format/json

Param: not required

Response

Property	Type	Description
historical_amt	<i>string</i>	Amount collected in the lifetime of the fundraiser
current_balance	<i>string</i>	The current balance (could be the derived from [historical_amt - total cashouts])
date_created	<i>datetime</i>	Date the fundraiser was created
payments_count	<i>int</i>	Total Number of payments made into this fundraiser
status	<i>int</i>	Active (1) or Inactive (0) state of the fundraiser
fundraiser_name	<i>string</i>	The name of the fundraiser
fundraiser_originator	<i>string</i>	The name of the fundraiser originator (owner)
fundraiser_statement_link	<i>string</i>	weblink of the fundraiser online statement

Response sample

```
{  
  "historical_amt":774,  
  "current_balance":194,  
  "date_created":"2013-06-05 05:14:47",  
  "payments_count":48,  
  "status":"1",  
  "fundraiser_name":"Arts For Life",  
  "fundraiser_originator":"jekton",  
  "fundraiser_statement_link":"http://tinyurl.com/ovdublg"  
}
```

3. Detailed fundraiser list (individual fundraiser)

Operation: GET /indiv_fundraisers/key/<int>/format/json

Use this call to retrieve a detailed list of variables from an individual tagged fundraiser

Request:

URI: https://secure.changa.co.ke/api/tagged/indiv_fundraisers/key/<*int>/format/json

Param: pass the fundraiser key <*int> which is the fundraiser account number on the M-Changa platform. Also accepts a string <*string> in the case the fundraiser uses a synonym

Response

Property	Type	Description
historical_amt	string	Amount collected in the lifetime of the fundraiser
current_balance	string	The current balance (could be the derived from [historical_amt - total cashouts])
date_created	datetime	Date the fundraiser was created
payments_count	int	Total Number of payments made into this fundraiser
status	int	Active (1) or Inactive (0) state of the fundraiser
fundraiser_name	string	The name of the fundraiser
fundraiser_originator	string	The name of the fundraiser originator (owner)
fundraiser_statement_link	string	weblink of the fundraiser online statement

Response sample

```
{  
  "historical_amt":774,  
  "current_balance":194,  
  "date_created":"2013-06-05 05:14:47",  
  "payments_count":48,  
  "status":"1",  
  "fundraiser_name":"Arts For Life",  
  "fundraiser_originator":"jekton",  
  "fundraiser_statement_link":"http://tinyurl.com/ovdublg"
```

```
}
```

4. Payment Parameters (individual fundraiser)

Operation: GET /pay_params/key/<int>/format/json

Use this call to retrieve payment instruction of a tagged fundraiser

Request:

URI: https://secure.changa.co.ke/api/tagged/pay_params/key/<*int>/format/json

Param: pass the fundraiser key <*int> which is the fundraiser account number on the M-Changa platform. Also accepts a string <*string> in the case the fundraiser uses a synonym

Response

Property	Type	Description
fundraiser_name	string	name of the fundraiser
fundraiser_acno	string	account number of the fundraiser
m-changa_paybill	string	M-changa PAYBILL number
instruction	string	sentence instruction

Response sample

```
{  
  "fundraiser_name": "Arts For Life",  
  "fundraiser_acno": "MUTALE",  
  "m-changa_paybill": "891300",  
  "instruction": "To donate on Safaricom: Go to MPESA Paybill 891300 Account MUTALE"  
}
```

5. List Of All Payments

Operation: GET [/all_payments/format/json](#)

Use this call to retrieve a detailed list of payments from all the tagged fundraisers

Request:

URI: https://secure.changa.co.ke/api/tagged/all_payments/format/json

Param: not required

Response

Property	Type	Description
fundraiser_name	<i>string</i>	The name of the fundraiser
m-changa_acno	<i>int</i>	Fundraiser acno on the M-Changa platform
amount	<i>float</i>	Transaction Amount
contributor_mobno	<i>string</i>	Contributor MSISDN
contributor_name	<i>string</i>	Contributor Name
payment_date	<i>datetime</i>	Date the transaction was made

Response sample

```
{  
  "fundraiser_name": "Arts For Life",  
  "m-changa_acno": "1489",  
  "m-pesa_tr_id": "FP75H0069",  
  "amount": "10",  
  "contributor_mobno": "254720978838",  
  "contributor_name": "JEFKINE KAFUNAH",  
  "payment_date": "2014-09-06 12:44:00"  
}
```

6. List Of All Payments (given Date Range)

Operation: GET /all_payments_in_range/start/<*datetime>/end/<*datetime>/format/json

Use this call to retrieve a detailed list of payments from all the tagged fundraisers for a given set of date range (start, end)

Request:

URI:

https://secure.changa.co.ke/api/tagged/all_payments_in_range/start/<*datetime>/end/<*datetime>/format/json

Param: pass the start and end <*datetime> params for the required date ranges

Response

Property	Type	Description
fundraiser_name	<i>string</i>	The name of the fundraiser
m-changa_acno	<i>int</i>	Fundraiser acno on the M-Changa platform
amount	<i>float</i>	Transaction Amount
contributor_mobno	<i>string</i>	Contributor MSISDN
contributor_name	<i>string</i>	Contributor Name
payment_date	<i>datetime</i>	Date the transaction was made

Response sample

```
{
  "fundraiser_name": "Arts For Life",
  "m-changa_acno": "1489",
  "m-pesa_tr_id": "FP75H0069",
  "amount": "10",
  "contributor_mobno": "254720978838",
  "contributor_name": "JEFKINE KAFUNAH",
  "payment_date": "2014-09-06 12:44:00"
}
```