

HOMEPESA-MC Beta User API

1.

Introduction

The HOMEPESA-MC Beta User API v1 exposes all of the end user functionality currently available in the Beta version of the HOMEPESA-MC API.

By providing an API, developers who want to create their own front-end user interface for HOMEPESA-MC will have significant flexibility to implement it in whatever way they choose. This means developers can present HOMEPESA-MC in any language, setup their own signup flow, optimize it for whatever devices their users prefer, develop a mobile app, integrate other services such as chat, etc.

Importantly, an API enables developers to integrate HOMEPESA-MC functionality directly into their own apps (e.g., import transfer data into an accounting application, instruct mutual credit transfers from an e-wallet application, interact with HOMEPESA-MC data via a chat bot, etc.).

Background

To understand how the HOMEPESA-MC Beta API works, please read the following design documents:

HOMEPESA-MC Beta Data Model

HOMEPESA-MC Beta Functionality

Test Server

These API docs assume you are running the API server on your local machine using Docker & Docker Compose. See the How to Start instructions in the project's GitHub repo for more details.

License

MIT License

Servers

<http://localhost:8080/api/v1>

Manage Account

Create and manage a user and its linked entity

POST

[/signup](#)

Create a new account - a user resource and associated entity resource

Individual users can create an account in HOMEPESA-MC by providing an email address, creating a password and adding some other details about themselves and their "business". A "business" need not be a formally established business; it could simply be a list of their skills that they are willing to offer to other participants in the network, or another type of entity such as an association, not-for-profit, NGO, etc.

We use the term entity to generically identify businesses, non-profits, NGOs, sole proprietorships, limited companies, etc.

The POST [/signup](#) API call creates a user resource and an entity (e.g., a business) resource and links the two together. The user resource references its associated entity, and the entity resource references its associated user. These two related resources make up what is referred to as an account.

An account can be created with only a unique email address and a password, enabling a new user to get started quickly. The userID and entityID are returned in the response body, along with a JSON Web Token to authorize the user of the account for further API calls related to the user and entity resources just created.

All other details (entity name, user first/last names, goods/services offered or wanted, etc.) are optional and can be added later. The decision about customer data requirements for signup can be determined by developers implementing a front end to the API, since they will be working with the organizations implementing HOMEPESA-MC. If other information is collected during the initial registration process, these extra details can be passed immediately in this POST [/signup](#) API endpoint or later using the PATCH [/user](#) and/or PATCH [/user/entities/{entityID}](#) API endpoints.

The current (v1) implementation of the API has a one-to-one relationship between the user and the entity. This will be changed to a many-to-many relationship in a future implementation.

Request body

application/json

Signup request body

Examples:

requiredFields

Example Value

Schema

```
{  
  "userEmail": "dennis-kip@dev.null",  
  "password": "1TrulySecurePassword!!"  
}
```

Responses

Code Description

200

OK

Media type

application/json

Controls Accept header.

Example Value

Schema

```
{
  "data": {
    "userID": "5eec78f4a880b7c235f66e80",
    "entityID": "5eec78f4a880b7c235f66e7c",
    "token":
"eyJhbGciOiJSUzI1NiIsInR5cCI6IkpXVCJ9.eyJleHAiOjE1OTI2NDIxNjQsInVzZXJJRCI6IjVlZWZWM3OGY0YTg4MGI3YzIzNWY2NmU4MCIslmFkbWluljpmYWxzZX0.WhPMfV9S-xgOHcuMT_K-fBhR_K6MpXiJ15GYn4Jz7im1dvhwnV2bEnwuWeFUockl45StxguvIOA5qJ-_3xA14CuP0wJbZa3hVH4jnYXonHlCyHDB8w67RLN9IMFGnSEshhh4D3RjQVpEpBm7jLhQcHKOSQlqUU_RfPkiNxpUkDI6t1RW_-rhY4UsTTuxnC5SOeajzOgiDFM4NwJfjebys8xDGTqYoi4dpCJZEtD_U_X9BuEOovRRJo0TY6m76XxUB9J5U_Hfjm7k_A3aLv3WgDScRv_k-LSsOvviGk1A2ctOnQ2RaVY1udA-76rv1xbvSd26Xds2XtrPb_SzUL-J8A"
  }
}
```

400

The request is missing a required parameter.

Media type

application/json

Example Value

Schema

```
{  
  "errors": [  
    {  
      "message": "<named> parameter is missing."  
    }  
  ]  
}
```

429

The request limit for this resource has been reached for the current rate limit window.

Media type

application/json

Example Value

Schema

```
{  
  "errors": [  
    {  
      "message": "Rate limit exceeded."  
    }  
  ]  
}
```

500

An unknown internal error occurred.

Media type

application/json

Example Value

Schema

```
{  
  "errors": [  
    {  
      "message": "Internal server error triggered."  
    }  
  ]  
}
```

POST

/login

Login and receive an authorization token

A user will need to authenticate with an email/password combination which, if successful, will result in a JSON Web Token (JWT) being passed to the user to use with each API request that requires authorization.

The JWT will expire after 24 hours, or as soon as the user calls the /logout API.

Request body

application/json

A JSON object containing an email address and a password

Example Value

Schema

```
{  
  "email": "dennis-kip@dev.null",  
  "password": "1TrulySecurePassword!!"  
}
```

<<<----->>>

Responses

Code Description

200

OK

Media type

application/json

Controls Accept header.

Example Value

Schema

```
{  
  "data": {  
    "token":  
    "eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJleHAiOjE1OTI5ODU0MzcsInVzZXJJRCI6IjVlZjFINWQ5NTA2ODQ3ZWE5MTRkYjA2NiIsImFkbWluljpmYWxzZX0.E3YJWpUN0h2LS3IfE2niYclTnhKUGXDay7SR_VeVzaq4a_IzPs2w4yxFUWbbeAcPeMgtcd3bEoX6PtDhW3hj8XVbqmkJQRmh3uw5ULfgzklzrQw3twaG8TO6ARM4UvKJWz2Wqb6czd5SesJmM2htluY3DBJ_u4r9x3hshM5_0kHalfEZtQvae0KrJ2_eBjPmFOdON62QungzStkjTKTfqsvystwFSdfOwAltgONri1Z6q-E9AZMTnAxzKNqjp4Ja3hX1loZXPiV8F0-yl1PhrKI_YzP57pOt84T72_WK3z1_hofHAOWby5-2qvtoKWSmxqzKsIYUYeG89W7h4TvBQ"  
  }  
}
```

400

The request is missing a required parameter.

Media type

application/json

Example Value

Schema

```
{  
  "errors": [  
    ]
```



```
{
  "message": "<named> parameter is missing."
}
]
```

429

The request limit for this resource has been reached for the current rate limit window.

Media type

application/json

Example Value

Schema

```
{
  "errors": [
    {
      "message": "Rate limit exceeded."
    }
  ]
}
```

500

An unknown internal error occurred.

Media type

application/json

Example Value

Schema

```
{  
  "errors": [  
    {  
      "message": "Internal server error triggered."  
    }  
  ]  
}
```

POST

/logout

Logout and expire the authorization token

Logging out will immediately expire the JWT currently associated to the user's account.

Responses

Code Description

200

OK

401

There was an issue with the authentication data for the request.

Media type

application/json

Example Value

Schema

```
{  
  "errors": [  
    {  
      "message": "Could not authenticate you."  
    }  
  ]  
}
```

429

The request limit for this resource has been reached for the current rate limit window.

Media type

application/json

Example Value

Schema

```
{  
  "errors": [  
    {  
      "message": "Rate limit exceeded."  
    }  
  ]  
}
```

500

An unknown internal error occurred.

Media type

application/json

Example Value

Schema

```
{  
  "errors": [  
    {  
      "message": "Internal server error triggered."  
    }  
  ]  
}
```

```
]
}
```

POST

/password-reset

Request a password reset token

When a password is lost by the user, a new one can be requested by providing the email address associated with the user's account. A password reset token will then be sent to that email address.

Request body

application/json

A JSON object containing an email address

Example Value

Schema

```
{
  "email": "dennis-kip@dev.null"
}
```

Responses

Code	Description
------	-------------

200	
-----	--

OK

400

The request is missing a required parameter.

Media type

application/json

Example Value

Schema

```
{
  "errors": [
    {
      "message": "<named> parameter is missing."
    }
  ]
}
```

429

The request limit for this resource has been reached for the current rate limit window.

Media type

application/json

Example Value

Schema

```
{  
  "errors": [  
    {  
      "message": "Rate limit exceeded."  
    }  
  ]  
}
```

500

An unknown internal error occurred.

Media type

application/json

Example Value

Schema

```
{  
  "errors": [  
    {  
      "message": "Internal server error triggered."  
    }  
  ]  
}
```

```
]
}
```

POST

/password-reset/{token}

Reset a password

The new password can be set by providing it along with the password reset token that was received at the user's email address.

Parameters

Name	Description
------	-------------

token *	
---------	--

string

(path)

The password reset token.

token

Request body

application/json

A JSON object containing a password

Example Value

Schema


```
{  
  "password": "1EvenM00rTrulySecurePassword!@?!"  
}
```

Responses

Code	Description
------	-------------

200	
-----	--

OK	
----	--

400	
-----	--

The request is missing a required parameter.	
--	--

Media type

application/json

Example Value

Schema

```
{  
  "errors": [  
    {  
      "message": "<named> parameter is missing."  
    }  
  ]  
}
```

429

The request limit for this resource has been reached for the current rate limit window.

Media type

application/json

Example Value

Schema

```
{
  "errors": [
    {
      "message": "Rate limit exceeded."
    }
  ]
}
```

500

An unknown internal error occurred.

Media type

application/json

Example Value

Schema

```
{  
  "errors": [  
    {  
      "message": "Internal server error triggered."  
    }  
  ]  
}
```

POST

/password-change

Change the password

A logged-in user can change the password by sending the new password along with the JWT.

Request body

application/json

A JSON object containing a password

Example Value

Schema

```
{  
  "password": "1EvenM00rTrulySecurePassword!@?!"  
}
```

Responses

Code	Description
------	-------------

200	
-----	--

OK	
----	--

400	
-----	--

The request is missing a required parameter.	
--	--

Media type

application/json

Example Value

Schema

```
{  
  "errors": [  
    {  
      "message": "<named> parameter is missing."  
    }  
  ]  
}
```

401

There was an issue with the authentication data for the request.

Media type

application/json

Example Value

Schema

```
{  
  "errors": [  
    {  
      "message": "Could not authenticate you."  
    }  
  ]  
}
```

429

The request limit for this resource has been reached for the current rate limit window.

Media type

application/json

Example Value

Schema

```
{  
  "errors": [  
    {  
      "message": "Rate limit exceeded."  
    }  
  ]  
}
```

500

An unknown internal error occurred.

Media type

application/json

Example Value

Schema

```
{  
  "errors": [  
    {  
      "message": "Internal server error triggered."  
    }  
  ]  
}
```

GET

/user

View a user's own details

PATCH

/user

Modify a user's own details

GET

/user/entities

View an entity's details

Users can request the details of their linked entity as recorded in the HOMEPESA-MC database.

Responses

Code	Description
------	-------------

200	
-----	--

OK	
----	--

application/json

Controls Accept header.

Example Value

Schema

```
{
  "data": [
    {
      "id": "5eec78f4a880b7c235f66e7c",
      "accountNumber": "6838115832533278",
      "name": "New World Consulting Limited",
      "email": "nwcLtd@dev.null",
      "telephone": "+2542090807060",
      "incType": "Ltd",
      "companyNumber": "A12345",
      "website": "https://neworco.null",
      "declaredTurnover": 20000,
      "description": "We show you how good things can be and what you need to do to make them happen.",
      "address": "123 Yellow Brick Road",
      "city": "Nairobi",
      "region": "LOWER-Nairobi",
      "postalCode": "00508",
      "country": "Nairobi-kenya",
      "status": "pending",
      "showTagsMatchedSinceLastLogin": true,
      "receiveDailyMatchNotificationEmail": true,
      "offers": [
        "consulting",
```



```
"system-design"
],
"wants": [
  "it-services",
  "accounting"
],
"categories": [
  "consulting"
],
"balance": 0,
"maxPositiveBalance": 500,
"maxNegativeBalance": 0,
"pendingTransfers": [
  {
    "id": "1dimEdDxOJYjDeaP6HEy4clhLdD",
    "transfer": "in",
    "isInitiator": false,
    "accountNumber": "5211115451222517",
    "entityName": "Hipster Brews",
    "amount": 157.8,
    "description": "Payment of inv. 1234",
    "status": "transferInitiated",
    "dateProposed": "2023-07-23T12:42:57.786628Z"
  }
]
}
```

```
}
```

401

There was an issue with the authentication data for the request.

Media type

application/json

Example Value

Schema

```
{  
  "errors": [  
    {  
      "message": "Could not authenticate you."  
    }  
  ]  
}
```

429

The request limit for this resource has been reached for the current rate limit window.

Media type

application/json

Example Value

Schema

```
{  
  "errors": [  
    {  
      "message": "Rate limit exceeded."  
    }  
  ]  
}
```

500

An unknown internal error occurred.

Media type

application/json

Example Value

Schema

```
{  
  "errors": [  
    {  
      "message": "Internal server error triggered."  
    }  
  ]  
}
```

```
}
```

PATCH

/user/entities/{entityID}

Modify an entity's details

Users can change their entity's details in the HOMEPESA-MC database, except for the status field which can only be changed by an administrator. The id and accountNumber fields are system-generated and therefore are not changeable by either users or administrators.

Changes to the offers and wants array fields must include all relevant tags because they will overwrite the arrays already stored in the database.

The email for an entity is separate from the linked user's email, although the user email address is set for the entity's email as well when the account is first created, but only if an entity email is not specified when creating an account at the POST /signup endpoint. The entity email, which receives notifications, can be changed by the user.

Parameters

Name	Description
------	-------------

entityID *	
------------	--

string

(path)

The unique entity ID

5eec78f4a880b7c235f66e7c

Request body

application/json

The entity fields a user wants to update

Example Value

Schema

```
{  
  "name": "New World Pizza PLC",  
  "email": "nwpplc@dev.null",  
  "telephone": "+2542098765432",  
  "incType": "plc",  
  "companyNumber": "B67890",  
  "website": "https://nwpizza.null",  
  "declaredTurnover": 10000,  
  "description": "We show you how good things can taste and where you need to go to eat them!",  
  "address": "456 Yellow Brick Road",  
  "city": "Nairobi",  
  "region": "LOWER-Nairobi",  
  "postalCode": "00508",  
  "country": "Nairobi-kenya",  
  "showTagsMatchedSinceLastLogin": false,  
  "receiveDailyMatchNotificationEmail": false,  
  "offers": [  
    "pizza",  
    "wine"  
  ],  
}
```

```
"wants": [  
  "flour",  
  "mozzarella",  
  "tomato"  
]  
}
```

Responses

Code	Description
------	-------------

200	
-----	--

OK	
----	--

Media type

application/json

Controls Accept header.

Example Value

Schema

```
{  
  "data": {  
    "id": "5eec78f4a880b7c235f66e7c",  
    "accountNumber": "6838115832533278",  
    "name": "New World Pizza PLC",  
    "email": "nwpplc@dev.null",  
    "telephone": "+2542098765432",  
    "incType": "plc",
```

```
"companyNumber": "B67890",
"website": "https://nwpizza.null",
"declaredTurnover": 10000,
"description": "We show you how good things can taste and where you need to go to eat them!",
"address": "456 Yellow Brick Road",
"city": "Nairobi",
"region": "LOWER-Nairobi",
"postalCode": "00508",
"country": "Nairobi-kenya",
"status": "pending",
"showTagsMatchedSinceLastLogin": false,
"receiveDailyMatchNotificationEmail": false,
"offers": [
  "pizza",
  "wine"
],
"wants": [
  "flour",
  "mozzarella",
  "tomato"
],
"categories": [
  "consulting"
],
"balance": 0,
"maxPositiveBalance": 500,
"maxNegativeBalance": 0,
```

```
"pendingTransfers": [  
  {  
    "id": "1dimEdDxOJYjDeaP6HEy4clhLdD",  
    "transfer": "in",  
    "isInitiator": false,  
    "accountNumber": "5211115451222517",  
    "entityName": "Hipster Brews",  
    "amount": 157.8,  
    "description": "Payment of inv. 1234",  
    "status": "transferInitiated",  
    "dateProposed": "2023-07-23T12:42:57.786628Z"  
  }  
]  
}
```

400

The request is missing a required parameter.

Media type

application/json

Example Value

Schema

```
{
```



```
"errors": [  
  {  
    "message": "<named> parameter is missing."  
  }  
]  
}
```

401

There was an issue with the authentication data for the request.

Media type

application/json

Example Value

Schema

```
{  
  "errors": [  
    {  
      "message": "Could not authenticate you."  
    }  
  ]  
}
```

403

User does not have permission to access the resource.

Media type

application/json

Example Value

Schema

```
{  
  "errors": [  
    {  
      "message": "Permission denied."  
    }  
  ]  
}
```

429

The request limit for this resource has been reached for the current rate limit window.

Media type

application/json

Example Value

Schema

```
{
```

```
"errors": [  
  {  
    "message": "Rate limit exceeded."  
  }  
]
```

500

An unknown internal error occurred.

Media type

application/json

Example Value

Schema

```
{  
  "errors": [  
    {  
      "message": "Internal server error triggered."  
    }  
  ]  
}
```

Find Entities

Search and filter entities

GET

/categories

Get a full or partial list of entity categories

The directory of entities is split up into categories that are manually assigned to each entity by an administrator. The entire list or just a subset of it by first letter(s) (prefix) and/or partial match (fragment) can be requested.

Searching for prefix "t" or "tr" returns all categories that begin with "t" or "tr" (e.g., "Teas" & "Transport" for "t", or only "Transport" for "tr").

Searching for fragment "tr" returns all categories that have "tr" anywhere in their name, including the beginning (e.g., "Transport" & "Carpentry").

Parameters

Name	Description
------	-------------

prefix	
--------	--

string	
--------	--

(query)	
---------	--

first letter of a category	
----------------------------	--

Example : c

c

fragment

string

(query)

partial match of word/characters

Example : sport

sport

page

integer

(query)

The page number

Default value : 1

1

page_size

integer

(query)

minimum: 1

maximum: 100

The number of results per page

Default value : 10

10

Responses

Code Description

200

OK

Media type

application/json

Controls Accept header.

Examples

fullList

Example Value

Schema

```
{
  "data": [
    {
      "id": "5ef1b5ccd35791b2dc384425",
      "name": "agriculture"
    },
    {
      "id": "5ef1b5ccd35791b2dc384426",
      "name": "cafes"
    },
    {
      "id": "5ef1b5ccd35791b2dc384427",
      "name": "cleaning-services"
    },
  ],
}
```

```
{
  "id": "5ef1b5ccd35791b2dc384428",
  "name": "professional-services"
},
{
  "id": "5ef1b5ccd35791b2dc384429",
  "name": "restaurant"
},
{
  "id": "5ef1b5ccd35791b2dc384430",
  "name": "restaurant-supplies"
},
{
  "id": "5ef1b5ccd35791b2dc384431",
  "name": "sports-equipment"
},
{
  "id": "5ef1b5ccd35791b2dc384432",
  "name": "transport"
}
],
"meta": {
  "numberOfResults": 8,
  "totalPages": 1
}
}
```

429

The request limit for this resource has been reached for the current rate limit window.

Media type

application/json

Example Value

Schema

```
{
  "errors": [
    {
      "message": "Rate limit exceeded."
    }
  ]
}
```

500

An unknown internal error occurred.

Media type

application/json

Example Value

Schema

```
{
  "errors": [
    {
      "message": "Internal server error triggered."
    }
  ]
}
```

GET

/tags

Get a full or partial list of tags used for offers and wants

Tags are words or short phrases that describe the goods or services an entity can provide (offers) to other entities or needs (wants) from other entities, in order to facilitate trades with them. For example, a Chinese restaurant might use offer tags such as "restaurant", "chinese", "take-out", "dim-sum", "delivery" to describe its service.

Up to 10 offer tags and 10 want tags can be specified per entity. A list of tags that are fuzzy, partial or exact matches to the input (fragment) provided can be requested. If no fragment is provided all tags are returned.

Parameters

Name	Description
------	-------------

fragment	
----------	--

string	
--------	--

(query)	
---------	--

partial match of word/characters	
----------------------------------	--

Example : be

be

page

integer

(query)

The page number

Default value : 1

1

page_size

integer

(query)

minimum: 1

maximum: 100

The number of results per page

Default value : 10

10

Responses

Code Description

200

OK

Media type

application/json

Controls Accept header.

Examples

fullList

Example Value

Schema

```
{
  "data": [
    {
      "id": "5ef1b5ccd35791b2dc384410",
      "name": "art-supplies"
    },
    {
      "id": "5ef1b5ccd35791b2dc384411",
      "name": "catering"
    },
    {
      "id": "5ef1b5ccd35791b2dc384412",
      "name": "computer-repair"
    },
    {
      "id": "5ef1b5ccd35791b2dc384413",
      "name": "dog-sitting"
    }
  ]
}
```

```
},
{
  "id": "5ef1b5ccd35791b2dc384414",
  "name": "micro-brewed-beer"
},
{
  "id": "5ef1b5ccd35791b2dc384415",
  "name": "organic-vegetables"
},
{
  "id": "5ef1b5ccd35791b2dc384416",
  "name": "piano-tuning"
},
{
  "id": "5ef1b5ccd35791b2dc384417",
  "name": "pizza"
},
{
  "id": "5ef1b5ccd35791b2dc384418",
  "name": "van-rental"
},
{
  "id": "5ef1b5ccd35791b2dc384419",
  "name": "well-being"
}
],
"meta": {
```

```
"numberOfResults": 10,  
"totalPages": 1  
}  
}
```

429

The request limit for this resource has been reached for the current rate limit window.

Media type

application/json

Example Value

Schema

```
{  
  "errors": [  
    {  
      "message": "Rate limit exceeded."  
    }  
  ]  
}
```

500

An unknown internal error occurred.

Media type

application/json

Example Value

Schema

```
{
  "errors": [
    {
      "message": "Internal server error triggered."
    }
  ]
}
```

GET

/entities

Get a list of entities

Entities can be searched based on (1) their offers and wants tags, (2) the category they are listed under, (3) the date the offers and wants tags were added to their profile, (4) their entity name, and/or (5) an entity's selection of favorites.

If the request does not contain a JWT along with a `querying_entity_id` specified, the search for favorites functionality will not work (e.g., all results will show the `isFavorite` flag as false).

If a `querying_entity_id` is specified and both the requesting entity and the entity returned in the search are `tradingAccepted` status, the email address of the searched entity will also be included.

Parameters

Name Description

offers

string

(query)

A list of goods/services offered by an entity

Example : pizza,pasta

pizza,pasta

wants

string

(query)

A list of good/services wanted by an entity

Example : vegetables

vegetables

category

string

(query)

A list of entities by category can be retrieved in the search functionality

restaurant

tagged_since

string

(query)

Get a list of entities that have had specified offers or wants tags added since a specific date and time

2019-12-25T12:12:12.001Z

name

string

(query)

A full or partial name of an entity can be searched

Alice's Restau

favorites_only

boolean

(query)

Show Favorites Only

Default value : false

false

querying_entity_id

string

(query)

The entity ID to which the filter is applied (requires user to be logged in)

5e561916ca06e1c8596eee9e

page

integer

(query)

The page number

Default value : 1

1

page_size

integer

(query)

minimum: 1

maximum: 100

The number of results per page

Default value : 10

10

Responses

Code Description

200

OK

Media type

application/json

Controls Accept header.

Examples

withoutAuth

Example Value

Schema

```
{
  "data": [
    {
      "id": "5eec78f4a880b7c235f66e7c",
      "accountNumber": "6838115832533278",
      "name": "New World Pizza PLC",
      "telephone": "+2542098765432",
      "incType": "plc",
      "companyNumber": "B67890",
      "website": "https://nwpizza.null",
      "declaredTurnover": 10000,
      "description": "We show you how good things can taste and where you need to go to eat them!",
      "address": "456 Yellow Brick Road",
      "city": "Nairobi",
      "region": "LOWER-Nairobi",
      "postalCode": "00508",
      "country": "Nairobi-kenya",
      "status": "pending",
      "showTagsMatchedSinceLastLogin": false,
      "receiveDailyMatchNotificationEmail": false,
      "offers": [
        "pizza",
```

```
    "wine"
  ],
  "wants": [
    "flour",
    "mozarella",
    "tomato"
  ],
  "categories": [
    "restaurant"
  ],
  "isFavorite": false
}
],
"meta": {
  "numberOfResults": 1,
  "totalPages": 1
}
}
```

401

There was an issue with the authentication data for the request.

Media type

application/json

Example Value

Schema

```
{  
  "errors": [  
    {  
      "message": "Could not authenticate you."  
    }  
  ]  
}
```

403

User does not have permission to access the resource.

Media type

application/json

Example Value

Schema

```
{  
  "errors": [  
    {  
      "message": "Permission denied."  
    }  
  ]  
}
```

429

The request limit for this resource has been reached for the current rate limit window.

Media type

application/json

Example Value

Schema

```
{
  "errors": [
    {
      "message": "Rate limit exceeded."
    }
  ]
}
```

500

An unknown internal error occurred.

Media type

application/json

Example Value

Schema

```
{  
  "errors": [  
    {  
      "message": "Internal server error triggered."  
    }  
  ]  
}
```

GET

/entities/{entityID}

Get a single entity

Returns a single entity's details using its ID. Requests can be made without a JWT from an authenticated user (see GET /entities above for more information).

Parameters

Name	Description
------	-------------

entityID *	
------------	--

string

(path)

The unique entity ID

5eec78f4a880b7c235f66e7c

querying_entity_id

string

(query)

The entity ID to which the filter is applied (requires user to be logged in)

5e561916ca06e1c8596eee9e

Responses

Code	Description
------	-------------

200	
-----	--

OK	
----	--

Media type

application/json

Controls Accept header.

Examples

withoutAuth

Example Value

Schema

```
{
  "data": {
    "id": "5eec78f4a880b7c235f66e7c",
    "accountNumber": "6838115832533278",
    "name": "New World Pizza PLC",
    "telephone": "+2542098765432",
```

```
"incType": "plc",
"companyNumber": "B67890",
"website": "https://nwpizza.null",
"declaredTurnover": 10000,
"description": "We show you how good things can taste and where you need to go to eat them!",
"address": "456 Yellow Brick Road",
"city": "Nairobi",
"region": "LOWER-Nairobi",
"postalCode": "00508",
"country": "Nairobi-kenya",
"status": "pending",
"showTagsMatchedSinceLastLogin": false,
"receiveDailyMatchNotificationEmail": false,
"offers": [
  "pizza",
  "wine"
],
"wants": [
  "flour",
  "mozzarella",
  "tomato"
],
"categories": [
  "restaurant"
],
"isFavorite": false
}
```



```
}
```

400

The request is missing a required parameter.

Media type

application/json

Example Value

Schema

```
{  
  "errors": [  
    {  
      "message": "<named> parameter is missing."  
    }  
  ]  
}
```

429

The request limit for this resource has been reached for the current rate limit window.

Media type

application/json

Example Value

Schema

```
{  
  "errors": [  
    {  
      "message": "Rate limit exceeded."  
    }  
  ]  
}
```

500

An unknown internal error occurred.

Media type

application/json

Example Value

Schema

```
{  
  "errors": [  
    {  
      "message": "Internal server error triggered."  
    }  
  ]  
}
```

```
}
```

POST

/favorites

Create and manage a list of favorite entities

A user can toggle any entity as a favorite, which makes it easy to retrieve using the favorites_only search parameter described above (see GET /entities).

Request body

application/json

Set or unset a favorite entity

Example Value

Schema

```
{  
  "addToEntityID": "5de8dea0bdb7911205c0a6d7",  
  "favoriteEntityID": "5e53e2e34b7e2bd4030e72ce",  
  "isFavorite": true  
}
```

Responses

Code Description

200

OK

400

The request is missing a required parameter.

Media type

application/json

Example Value

Schema

```
{
  "errors": [
    {
      "message": "<named> parameter is missing."
    }
  ]
}
```

401

There was an issue with the authentication data for the request.

Media type

application/json

Example Value

Schema

```
{  
  "errors": [  
    {  
      "message": "Could not authenticate you."  
    }  
  ]  
}
```

403

User does not have permission to access the resource.

Media type

application/json

Example Value

Schema

```
{  
  "errors": [  
    {  

```

```
    "message": "Permission denied."
  }
]
}
```

429

The request limit for this resource has been reached for the current rate limit window.

Media type

application/json

Example Value

Schema

```
{
  "errors": [
    {
      "message": "Rate limit exceeded."
    }
  ]
}
```

500

An unknown internal error occurred.

Media type

application/json

Example Value

Schema

```
{
  "errors": [
    {
      "message": "Internal server error triggered."
    }
  ]
}
```

POST

/send-email

Send a message to an entity

A user can send a message by email to an entity without seeing the email address of the receiving entity. This enables the receiving entity to keep its email private until the entity operator decides to reply to the sender and continue the conversation by email.

Entities with status accepted, tradingPending, tradingAccepted and tradingRejected can send an email to other entities with these same 4 statuses.

Entities with status pending or rejected cannot send an email to any other entity. They also cannot receive emails because there is no way to find their ID since they do not show up in search results because of their pending/rejected status.

Request body

application/json

Send an email to an entity

Example Value

Schema

```
{  
  "senderEntityID": "5de8dea0bdb7911205c0a6d7",  
  "receiverEntityID": "5de8dea0bdb7911205c48d42",  
  "body": "This is the email message body."  
}
```

Responses

Code	Description
------	-------------

200	
-----	--

OK	
----	--

400	
-----	--

The request is missing a required parameter.	
--	--

Media type

application/json

Example Value

Schema

```
{  
  "errors": [  
    {  
      "message": "<named> parameter is missing."  
    }  
  ]  
}
```

401

There was an issue with the authentication data for the request.

Media type

application/json

Example Value

Schema

```
{  
  "errors": [  
    {  

```

```
    "message": "Could not authenticate you."
  }
]
}
```

403

User does not have permission to access the resource.

Media type

application/json

Example Value

Schema

```
{
  "errors": [
    {
      "message": "Permission denied."
    }
  ]
}
```

429

The request limit for this resource has been reached for the current rate limit window.

Media type

application/json

Example Value

Schema

```
{  
  "errors": [  
    {  
      "message": "Rate limit exceeded."  
    }  
  ]  
}
```

500

An unknown internal error occurred.

Media type

application/json

Example Value

Schema

```
{  
  "errors": [  
    {  

```

```
"message": "Internal server error triggered."
}
]
}
```

Transfer Credits

Initiate and authorize mutual credit transfers

POST

/transfers

Initiate a transfer

A user can initiate a transfer out of or into the account of its entity, which must then be approved or rejected by the user operating the receiving entity, whose account will be credited or debited accordingly. Both entities must have tradingAccepted status in order to set up a transfer between them.

If the transfer parameter is set to out, the initiator will create a transfer that will debit funds from the initiator's entity's account. If transfer is in, the initiator will create a transfer that results in funds being credited to the initiator's entity's account. Either way, the transfer must be approved by the receiver (see PATCH /transfers/{transferID}) in order for the inbound or outbound transfer to move to or from the receiver's entity's account.

Request body

application/json

Initiate a transfer to/from entity's account from/to another entity

Example Value

Schema

```
{  
  "transfer": "out",  
  "initiator": "7132460355005184",  
  "receiver": "1234567887654321",  
  "amount": 1.1,  
  "description": "Here is the payment"  
}
```

Responses

Schema

```
{  
  "id": "1ZceiVuQyGqeUYlC6UIKgEnaBkD",  
  "from": "7132460355005184",  
  "to": "0382855564717143",  
  "amount": 177.5,  
  "description": "Payment of your invoice number 12345",  
  "status": "transferInitiated",  
  "dateProposed": "2023-07-05T14:09:17.446965528Z"  
}
```

400

The request is missing a required parameter.

Media type

application/json

Example Value

Schema

```
{
  "errors": [
    {
      "message": "<named> parameter is missing."
    }
  ]
}
```

401

There was an issue with the authentication data for the request.

Media type

application/json

Example Value

Schema

```
{  
  "errors": [  
    {  
      "message": "Could not authenticate you."  
    }  
  ]  
}
```

403

User does not have permission to access the resource.

Media type

application/json

Example Value

Schema

```
{  
  "errors": [  
    {  
      "message": "Permission denied."  
    }  
  ]  
}
```

429

The request limit for this resource has been reached for the current rate limit window.

Media type

application/json

Example Value

Schema

```
{
  "errors": [
    {
      "message": "Rate limit exceeded."
    }
  ]
}
```

500

An unknown internal error occurred.

Media type

application/json

Example Value

Schema

```
{  
  "errors": [  
    {  
      "message": "Internal server error triggered."  
    }  
  ]  
}
```

PATCH

/transfers/{transferID}

Confirm or cancel a transfer

The receiver can either accept or reject the transfer by specifying it in the action parameter.

The initiator of the transfer can cancel the transfer before the receiver has accepted or rejected it.

If a transfer is rejected or cancelled, a cancellationReason can be provided so that the other party understands why the initiator or receiver cancelled or rejected the transfer.

Parameters

Name	Description
------	-------------

transferID *	
--------------	--

string

(path)

The unique transfer ID

1UZ7G7qJrIlwpVK9iSPXgx0A2xN

Request body

application/json

Examples:

accept

Example Value

Schema

```
{  
  "action": "accept"  
}
```

Responses

Code Description

200

OK

Media type

application/json

Controls Accept header.

Examples

acceptResponse

Example Value

Schema

```
{  
  "id": "1UZ7G7qJrllwpVK9iSPXgx0A2xN",  
  "transfer": "out",  
  "isInitiator": true,  
  "accountNumber": "1234567887654321",  
  "entityName": "Rhynyx",  
  "amount": "1.1",  
  "description": "Payment of invoice number 12345",  
  "status": "transferCompleted",  
  "dateProposed": "2019-12-25T12:12:12.123Z",  
  "dateCompleted": "2019-12-26T13:13:13.456Z"  
}
```

400

The request is missing a required parameter.

Media type

application/json

Example Value

Schema

```
{
```

```
"errors": [  
  {  
    "message": "<named> parameter is missing."  
  }  
]
```

401

There was an issue with the authentication data for the request.

Media type

application/json

Example Value

Schema

```
{  
  "errors": [  
    {  
      "message": "Could not authenticate you."  
    }  
  ]  
}
```

429

The request limit for this resource has been reached for the current rate limit window.

Media type

application/json

Example Value

Schema

```
{  
  "errors": [  
    {  
      "message": "Rate limit exceeded."  
    }  
  ]  
}
```

500

An unknown internal error occurred.

Media type

application/json

Example Value

Schema

```
{
```

```
"errors": [  
  {  
    "message": "Internal server error triggered."  
  }  
]  
}
```

Review Transfer Activity

View pending and completed mutual credit transfers

GET

/transfers

Get a list of transfers

A user can request a list of mutual credit transfers for the account of the entity. Transfers can be filtered by status (all, initiated, completed or cancelled).

The `querying_entity_id` is the ID of the entity whose account the information is being requested for. The user requesting must be associated with that entity or no information will be returned.

Parameters

Name	Description
------	-------------

status *	
----------	--

string	
--------	--

(query)	
---------	--

The status of the transfer	
----------------------------	--

Available values : all, initiated, completed, cancelled

all

querying_entity_id *

string

(query)

The entity ID to which the account is linked

5e561916ca06e1c8596eee9e

page

integer

(query)

The page number

Default value : 1

1

page_size

integer

(query)

minimum: 1

maximum: 100

The number of results per page

Default value : 10

10

Responses

Code Description

200

OK

Media type

application/json

Controls Accept header.

Examples

completed

Example Value

Schema

```
{
  "data": [
    {
      "id": "1UZ7G7qJrIlWpVK9iSPXgx0A2xN",
      "transfer": "out",
      "isInitiator": true,
      "accountNumber": "1234567887654321",
      "entityName": "Rhynyx",
      "amount": "1.1",
```



```
"description": "Payment of invoice number 12345",
"status": "transferCompleted",
"dateProposed": "2019-12-25T12:12:12.123Z",
"dateCompleted": "2019-12-26T13:13:13.456Z"
}
],
"meta": {
  "numberOfResults": 1,
  "totalPages": 1
}
}
```

400

The request is missing a required parameter.

Media type

application/json

Example Value

Schema

```
{
  "errors": [
    {
      "message": "<named> parameter is missing."
    }
  ]
}
```

```
]
}
```

401

There was an issue with the authentication data for the request.

Media type

application/json

Example Value

Schema

```
{
  "errors": [
    {
      "message": "Could not authenticate you."
    }
  ]
}
```

429

The request limit for this resource has been reached for the current rate limit window.

Media type

application/json

Example Value

Schema

```
{  
  "errors": [  
    {  
      "message": "Rate limit exceeded."  
    }  
  ]  
}
```

500

An unknown internal error occurred.

Media type

application/json

Example Value

Schema

```
{  
  "errors": [  
    {  
      "message": "Internal server error triggered."  
    }  
  ]  
}
```

```
]
}
```

GET

/balance

Get the account balance

The current balance for the account of the entity is returned from this request. Currently there is only one credit unit ("currency") implemented in HOMEPESA-MC, but multiple units may be supported in the future.

Parameters

Name	Description
------	-------------

querying_entity_id *	
----------------------	--

string

(query)

The entity ID to which the account is linked

5e561916ca06e1c8596eee9e

Responses

Code	Description
------	-------------

200	
-----	--

OK

Media type

application/json

Controls Accept header.

Example Value

Schema

```
{  
  "data": [  
    {  
      "unit": "ocn-uk",  
      "balance": -1.23  
    }  
  ]  
}
```

401

There was an issue with the authentication data for the request.

Media type

application/json

Example Value

Schema

```
{  
  "errors": [  
    {  

```

```
    "message": "Could not authenticate you."
  }
]
}
```

403

User does not have permission to access the resource.

Media type

application/json

Example Value

Schema

```
{
  "errors": [
    {
      "message": "Permission denied."
    }
  ]
}
```

429

The request limit for this resource has been reached for the current rate limit window.

Media type

application/json

Example Value

Schema

```
{  
  "errors": [  
    {  
      "message": "Rate limit exceeded."  
    }  
  ]  
}
```

500

An unknown internal error occurred.

Media type

application/json

Example Value

Schema

```
{  
  "errors": [  

```

```
{  
  "message": "Internal server error triggered."  
}  
]  
}
```

Schemas

SignupRequiredFields

SignupAllFields

User

Entity

Category

Tag

TransferInitiated

TransferView

Balance

Error

Meta