
python-hologram-api Documentation

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Victor Yap

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Contents:

Python client for <https://dashboard.hologram.io/api>.

Installation

```
pip install python-hologram-api
```

Documentation

- Python API: <https://python-hologram-api.readthedocs.io>.
- HTTP API: <https://hologram.io/docs/reference/cloud/http/>

Usage

`HologramClient` is the main class you should use. Most of its methods are sub-categorized based on the endpoint that the method interfaces with. For example, user account management is under *client.user*.

To use `python-hologram-api` in a project:

```
import os
from python_hologram_api.client import HologramClient

HOLOGRAM_API_KEY = os.environ.get('HOLOGRAM_API_KEY')
client = HologramClient(HOLOGRAM_API_KEY)
```

Example Usages:

```
# List Devices
resp = client.devices.list()
if resp.get('success'):
    devices = resp.get('data')

# Get a Device
device_id = 1234
resp = client.devices.get(device_id)
if resp.get('success'):
    device = resp.get('data')

# Activate SIMs
sims = ['99990000000012345678']
plan = 73
tier = 1
resp = client.cell.activate_sims(sims, plan, tier)
assert resp.get('success') is not None
```

The following submodules are available:

- Device Management
 - client.devices
 - client.cell
 - client.tags
 - client.data_plans
- Hologram Cloud
 - client.csr
 - client.sms
 - client.cloud
 - client.spacebridge
- Account Management
 - client.user
 - client.org

License

- Free software: MIT license

Submodules

python_hologram_api.cellular module

Cellular Links module.

class `python_hologram_api.cellular.CellularLinks` (*client*)

Bases: `object`

CellularLinks class.

A Cellular Link is the association between a Device and a cellular data plan and SIM. Typically, a device has exactly one Cellular Link.

activate_sims (*sims, plan, tier*)

Activate SIMs.

Parameters

- **sims** (*List[str]*) – array of SIM numbers to activate.
- **plan** (*int*) – Device data plan. Look up plan IDs with List Data Plans.
- **tier** (*int*) – Geographic zone. Currently the valid tiers are 1 and 2. Higher tiers incur higher costs. See pricing for details.

Returns the json response as a dictionary.

Return type dict

change_overage_limit (*link_id, limit*)

Change Overage Limit.

Parameters

- **link_id** (*int*) – Integer ID of the link to modify.

- **limit** (*int*) – Number of bytes over the plan limit to allow. Set -1 for no data limit.

Returns the json response as a dictionary.

Return type dict

change_plan (*link_id, plan, tier*)

Change Plan.

Parameters

- **link_id** (*int*) – Integer ID of the link to change.
- **plan** (*int*) – Device data plan. Look up plan IDs with List Data Plans.
- **tier** (*int*) – Geographic zone. Currently the valid tiers are 1 and 2. Higher tiers incur higher costs. See pricing for details.

Returns the json response as a dictionary.

Return type dict

get_link (*link_id*)

Get Cellular Link.

Parameters **link_id** (*int*) – Integer ID of the link to retrieve.

Returns the json response as a dictionary.

Return type dict

list_links (*org_id=None*)

List Cellular Links.

Parameters **org_id** (*int, optional*) – Only return results for the given organization ID.

Returns the json response as a dictionary.

Return type dict

pause_link (*link_id*)

Pause Data.

Parameters **link_id** (*int*) – Integer ID of the link to modify.

Returns the json response as a dictionary.

Return type dict

unpause_link (*link_id*)

Unpause Data.

Parameters **link_id** (*int*) – Integer ID of the link to modify.

Returns the json response as a dictionary.

Return type dict

python_hologram_api.client module

Main module.

class `python_hologram_api.client.HologramClient` (*api_key, base_url='https://dashboard.hologram.io/api/1/'*)

Bases: `object`

Hologram API Client class.

api_key
Return api_key.

base_url
Return base_url.

python_hologram_api.cloud_messaging module

Cloud Messaging module.

class `python_hologram_api.cloud_messaging.CSRMessaging(client)`
Bases: `object`

Cloud Services Router (CSR) class.

list_messages (*device_id=None, limit=None, org_id=None, topic_name=None, time_stamp_start=None, time_stamp_end=None*)
List CSR Messages.

Parameters

- **device_id** (*int, optional*) – Filter for messages originating from one device.
- **limit** (*int, optional*) – Return a maximum of this many messages. Default is 25.
- **org_id** (*int, optional*) – Filter for messages from devices belonging to this organization.
- **topic_name** (*str, optional*) – Filter for messages with a given topic.
- **time_stamp_start** (*int, optional*) – Only return messages received after this time (Unix timestamp).
- **time_stamp_end** (*int, optional*) – Only return messages received before this time (Unix timestamp).

Returns the json response as a dictionary.

Return type dict

send_message (*device_id, data, tags=None*)
Send a CSR Message.

Parameters

- **device_id** (*int*) – Device ID to associate the message to.
- **data** (*str*) – Data payload of the message.
- **tags** (*List[str], optional*) – Additional topics to associate with the message.

Returns the json response as a dictionary.

Return type dict

class `python_hologram_api.cloud_messaging.CloudToDeviceMessaging(client)`
Bases: `object`

Cloud To Device Messaging.

Send a TCP or UDP message to one or more devices on the Hologram network.

send_message (*device_ids, protocol, port, data=None, base64_data=None*)

Send a Message to a List of Devices.

Must send either data or base64data.

Parameters

- **device_ids** (*List[int]*) – IDs of devices to send message.
- **protocol** (*str*) – The protocol to use: ‘TCP’ or ‘UDP’.
- **port** (*int*) – The port to use.
- **data** (*str*) – The data to send. Max length of 10k bytes.
- **base64_data** (*str*) – The data to send, encoded in base64. Max length of 10k bytes.

Returns the json response as a dictionary.

Return type dict

trigger_webhook (*device_id, webhook_guid, data=None, base64_data=None*)

Send Message to a Device via Webhook.

This endpoint does not require authentication with your API key, as the webhook GUID serves as an authentication token. In order to generate a webhook URL, please visit the cloud configuration page for your device.

Must send either data or base64data.

Parameters

- **device_id** (*int*) – ID of the device to send to.
- **webhook_guid** (*str*) – generated UUID for the webhook URL.
- **data** (*str, optional*) – The data to send. Max length of 10k bytes.
- **base64_data** (*str, optional*) – The data to send, encoded in base64. Max length of 10k bytes.

Returns Integer Code of responded HTTP Status, e.g. 404 or 200.

Return type int

class python_hologram_api.cloud_messaging.**SMSMessaging** (*client*)

Bases: object

SMS Messaging class.

send_message (*device_id, body, from_number=None*)

Send SMS Message.

There is no cost to send SMS messages to Hologram devices via API.

Parameters

- **device_id** (*int*) – ID of the device to send to.
- **body** (*str*) – ASCII Text representation of the SMS body.
- **from_number** (*str, optional*) – Phone number to display as the sender.

Returns the json response as a dictionary.

Return type dict

python_hologram_api.constants module

Constants module.

python_hologram_api.data_plans module

Data Plans module.

```
class python_hologram_api.data_plans.DataPlans (client)
    Bases: object
```

DataPlans class.

The Data Plans endpoints return pricing and descriptions for the different data plans that Hologram offers. When changing the data plan for a cellular link via API, you must refer to the plan by its ID, which you can determine from these endpoints.

```
get (plan_id)
    Get a Data Plan.
```

Parameters `plan_id (int)` – The ID of the plan to get.

Returns the json response as a dictionary.

Return type dict

```
list ()
    List Data Plans.
```

Returns the json response as a dictionary.

Return type dict

python_hologram_api.device_tags module

Device Tags module.

```
class python_hologram_api.device_tags.DeviceTags (client)
    Bases: object
```

DeviceTags class.

Device tags are user-configurable categories that you can use to classify your devices. A device may be linked to more than one tag.

```
create (name)
    Create a Device Tag.
```

Parameters `name (str)` – Name for the new tag.

Returns the json response as a dictionary.

Return type dict

```
delete (tag_id)
    Delete a Device Tag.
```

Parameters `tag_id (int)` – The ID of the tag to delete.

Returns the json response as a dictionary.

Return type dict

link_devices (*tag_id, device_ids*)

Link a List of Devices to a Tag.

Parameters

- **tag_id** (*int*) – The ID of the tag.
- **device_ids** (*List [int]*) – List of device IDs to link to this tag.

Returns the json response as a dictionary.

Return type dict

list ()

List Device Tags.

Returns the json response as a dictionary.

Return type dict

unlink_devices (*tag_id, device_ids*)

Unlink a List of Devices to a Tag.

Parameters

- **tag_id** (*int*) – The ID of the tag.
- **device_ids** (*List [int]*) – List of device IDs to unlink to this tag.

Returns the json response as a dictionary.

Return type dict

python_hologram_api.devices module

Devices module.

class python_hologram_api.devices.Devices (*client*)

Bases: object

Devices class.

get (*device_id*)

Get a Device.

Parameters **device_id** (*int*) – The device id to get.

Returns the json response as a dictionary.

Return type dict

list (*org_id=None*)

List Devices.

Parameters **org_id** (*int, optional*) – Only return results for the given organization ID.

Returns the json response as a dictionary.

Return type dict

python_hologram_api.organization module

Organization Account Management module.

class `python_hologram_api.organization.Organization(client)`

Bases: `object`

Organization class.

Organizations allow multiple users to share access to the same devices and billing account. See the guide for more information.

add_balance (*org_id*, *amount*)

Add Balance.

Charge the organization's configured billing source and add that amount to the account balance

Parameters

- **org_id** (*int*) – The organization's unique identifier.
- **amount** (*float*) – Amount to add to current user balance.

Returns the json response as a dictionary.

Return type `dict`

balance_history (*org_id*)

Get Balance History.

Retreive a history of transactions (credits and charges).

Parameters **org_id** (*int*) – The organization's unique identifier.

Returns the json response as a dictionary.

Return type `dict`

get (*org_id*)

Get an Organization.

Parameters **org_id** (*int*) – The organization's unique identifier.

Returns the json response as a dictionary.

Return type `dict`

get_balance (*org_id*)

Get Current Balance.

Parameters **org_id** (*int*) – The organization's unique identifier.

Returns the json response as a dictionary.

Return type `dict`

list ()

List Organizations.

List all organizations that you are a member of. This includes the special "personal" organization tied to your user.

Returns the json response as a dictionary.

Return type `dict`

python_hologram_api.spacebridge module

Spacebridge module.

class `python_hologram_api.spacebridge.Spacebridge` (*client*)
Bases: `object`

Spacebridge class.

See the Spacebridge guide for details. <https://hologram.io/docs/guide/cloud/spacebridge-tunnel/>

add_public_key (*public_key*)
Add Public Key.

Associate an SSH key with your user. This key can then be used to tunnel to devices that you control.

Parameters `public_key` (*str*) – SSH public key.

Returns the json response as a dictionary.

Return type `dict`

disable_key (*tunnel_key_id*)
Disable a Key.

Parameters `tunnel_key_id` (*int*) – ID of the tunnel key to disable.

Returns the json response as a dictionary.

Return type `dict`

enable_key (*tunnel_key_id*)
Enable a Key.

Parameters `tunnel_key_id` (*int*) – ID of the tunnel key to enable.

Returns the json response as a dictionary.

Return type `dict`

list_public_keys (*with_disabled=False*)
List Public Keys.

Parameters `withdisabled` (*bool*, *optional*) – Set to True to include disabled keys.

Returns the json response as a dictionary.

Return type `dict`

python_hologram_api.user module

User Account Management module.

class `python_hologram_api.user.User` (*client*)
Bases: `object`

User class.

Requests to the user account balance endpoints are equivalent to calling the organization account balance endpoints with the personal organization.

add_balance (*amount*)

Add Balance.

Charge the user's configured billing source and add that amount to your account balance.

Parameters **amount** (*float*) – Amount to add to current user balance.

Returns the json response as a dictionary.

Return type dict

balance_history ()

Get Balance History.

Retrieve a history of transactions (credits and charges).

Returns the json response as a dictionary.

Return type dict

get_balance ()

Get Current Balance.

Returns the json response as a dictionary.

Return type dict

get_info ()

Get Current User.

Returns the json response as a dictionary.

Return type dict

Module contents

Top-level package for python-hologram-api.

Contributions are welcome, and they are greatly appreciated! Every little bit helps, and credit will always be given. You can contribute in many ways:

Types of Contributions

Report Bugs

Report bugs at https://github.com/vicyap/python_hologram_api/issues.

If you are reporting a bug, please include:

- Your operating system name and version.
- Any details about your local setup that might be helpful in troubleshooting.
- Detailed steps to reproduce the bug.

Fix Bugs

Look through the GitHub issues for bugs. Anything tagged with “bug” and “help wanted” is open to whoever wants to implement it.

Implement Features

Look through the GitHub issues for features. Anything tagged with “enhancement” and “help wanted” is open to whoever wants to implement it.

Write Documentation

python-hologram-api could always use more documentation, whether as part of the official python-hologram-api docs, in docstrings, or even on the web in blog posts, articles, and such.

Submit Feedback

The best way to send feedback is to file an issue at https://github.com/vicyap/python_hologram_api/issues.

If you are proposing a feature:

- Explain in detail how it would work.
- Keep the scope as narrow as possible, to make it easier to implement.
- Remember that this is a volunteer-driven project, and that contributions are welcome :)

Getting Started

Clone the repo and run:

```
make setup
```

If that does not work for you, you can also install the requirements with pip:

```
pip install -r requirements_dev.txt
```

Running Tests

Tests are run with `tox`.

<https://tox.readthedocs.io/en/latest/>

0.1.6 (2017-10-27)

- Add coverage to travis
- Add coveralls to travis and README

0.1.5 (2017-10-27)

- Update README formatting/highlighting

0.1.4 (2017-10-23)

- Add `python_hologram_api.rst` to documentation

0.1.3 (2017-10-23)

- Update documentation

0.1.2 (2017-10-23)

- First release on PyPI.
- Implemented a Python wrapper for <https://hologram.io/docs/reference/cloud/http/>

0.1.1 (2017-10-23)

- Travis Errors

0.1.0 (2017-10-20)

- Mistakes were made.

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