
StrongsteamQuickStart Guide

Release 0.0.1

Ian Ozsvald, Kyran Dale, Balthazar Rouberol

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Welcome to the [Strongsteam](#) documentation !

[Strongsteam](#) is a is an AppStore of artificial intelligence and data mining APIs to let you pull interesting information out of images, video and audio.

[Strongsteam](#) is a cross-platform toolbox for developpers who want to “give a pair of eyes” to computers, or mobile devices, to recognize images, words, semantic context, etc.

All results sent from Strongsteam are [JSON](#)-based. They thus can be interfaced with any programming language with [JSON](#) support:

- C
- C++
- C#
- D
- Java
- Javascript
- Matlab
- Objective-C
- Perl
- PHP
- Python
- R
- Ruby
- and many more...

PREREQUISITES AND INSTALLATION

[Strongsteam](#) is a cloud-based API, which means you do not need to install a whole bunch of packages or softwares. Everything you need is hosted on our server, you just have to send us the data and we'll take care of the rest !

All you have to do is install the `strongsteam` python library.

We strongly suggest to set up a virtual environment using [virtualenv](#), in which only `strongsteam` and its dependencies will be installed. You can install `virtualenv` using the command

```
pip install virtualenv
```

Note: `virtualenv` is a tool allowing you to create isolated python environments. Read the [documentation](#) to learn more about it.

Now, you need to create a virtual environment named for the project you are working on and tell it not to use the system site-packages but keep it's own copy:

```
$ virtualenv --no-site-packages yourproject
$ source yourproject/bin/activate
```

You can install the `strongsteam` library in your virtual environment with [pip](#), with the command

```
pip install http://dl.dropbox.com/u/6113789/Strongsteam-client/strongsteam-0.0.1.tar.gz
```

Note: For now, the module is privately hosted, but will be soon stored on PyPI.

Important: Do not install the modules using `sudo`: this will install them in your system python path and not in the virtual environment.

FIRST TEST

To validate that the installation went well and that our server is running, you can run the `demo_hello_world.py` test script.

You should see something like this in your shell :

```
$ python demo_hello_world.py
Processing job on uri /user/kyran/processes/hello_world...
{
  u'status': u'succeeded',
  u'time_stamps':
  {
    u'ts_job_ps_end': 1333542151.78501,
    u'ts_job_ws_receive': 1333542025.628467,
    u'ts_job_js_receive': 1333542151.619243,
    u'ts_job_ps_start': 1333542151.783706,
    u'ts_job_post': u'1333542150.91'
  },
  u'input_uri': None,
  u'process_name': u'hello_world',
  u'results':
  {
    u'hello_world_string': u'/user/kyran/vnd_ss_results/4f7c3d0711b3f4031f000000'
  },
  u'uri': u'/user/kyran/vnd_ss_results/4f7c3d0711b3f4031f000000',
  u'job_uri': u'/user/kyran/jobs/4f7c3c89fa1d115c3500004b',
  u'msg': u'Your job succeeded. Find the result-uris in results'
}
Job succeeded in 1.5700 seconds for /user/kyran/processes/hello_world
Hello world ian!
```

Note: Running this script can take more time (~30s) in the case where our server is asleep. Once awoken, everything will be blazing fast!

SEND A JOB TO STRONGSTEAM

You can send us a job with just a few lines of code!

To understand how to do that, we'll go through the `demo_hello_world.py` test script:

```
from strongsteam.clients import ss_client as ssc
from strongsteam.clients.ss_client import log

# set log to INFO if you want lots of progress information or
# use WARNING just to see the main client messages
log.setLevel(ssc.logging.WARNING)

BASE_URL = 'https://api-strongsteam.dyndns-ip.com'

if __name__ == "__main__":
    cli = ssc.StrongSteam(BASE_URL)

    hello = cli.add_job(None, 'hello_world', data={'name': 'oh, mighty Strongsteam user'})
    print hello.get_data()
```


IMPORT, LOGGING AND API URL

You first need to import the `ss_client` class from the `strongsteam.clients` submodule, and setup a console logger.

```
from strongsteam.clients import ss_client as ssc
from strongsteam.clients.ss_client import log

# set log to INFO if you want lots of progress information or
# use WARNING just to see the main client messages
log.setLevel(ssc.logging.WARNING)
```

The `BASE_URL` constant defines the URI with which the Strongsteam API can be used. You do not want to change that.

```
BASE_URL = 'https://api-strongsteam.dyndns-ip.com' # The Strongsteam API URL
```

You then need to setup a `StrongSteam` client, using the `BASE_URL` constant:

```
cli = ssc.StrongSteam(BASE_URL) # Set up a Strongsteam client
```


SEND A JOB

Whenever you want to send us a job, just use the `ss_client.StrongSteam.add_job()` method:

```
hello = cli.add_job(None, 'hello_world', data={'name': 'oh, mighty Strongsteam user'}) # Add job of t
```

Note: Do not invoke the `cli.add_job(*args)` without storing the result into a variable. You use `hello` which is returned by `add_job` to query the status of the job and to extract results when the computation is finished.

THE JOBS WE SUPPORT

Strongsteam being in alpha release, more jobs will be gradually added, as we mature.

6.1 OCR (Optical Character Recognition)

If you want to extract text information from images, you can send us to Strongsteam using the following API call:

BlahBlah

YOU'RE STUCK? GET HELP.

If you have any questions regarding [Strongsteam](#), do not hesitate to send us an email at help@strongsteam.com.