
machinehub Documentation

Release beta

machinehub

September 07, 2015

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Contents:

machinehub

Todo
TODO

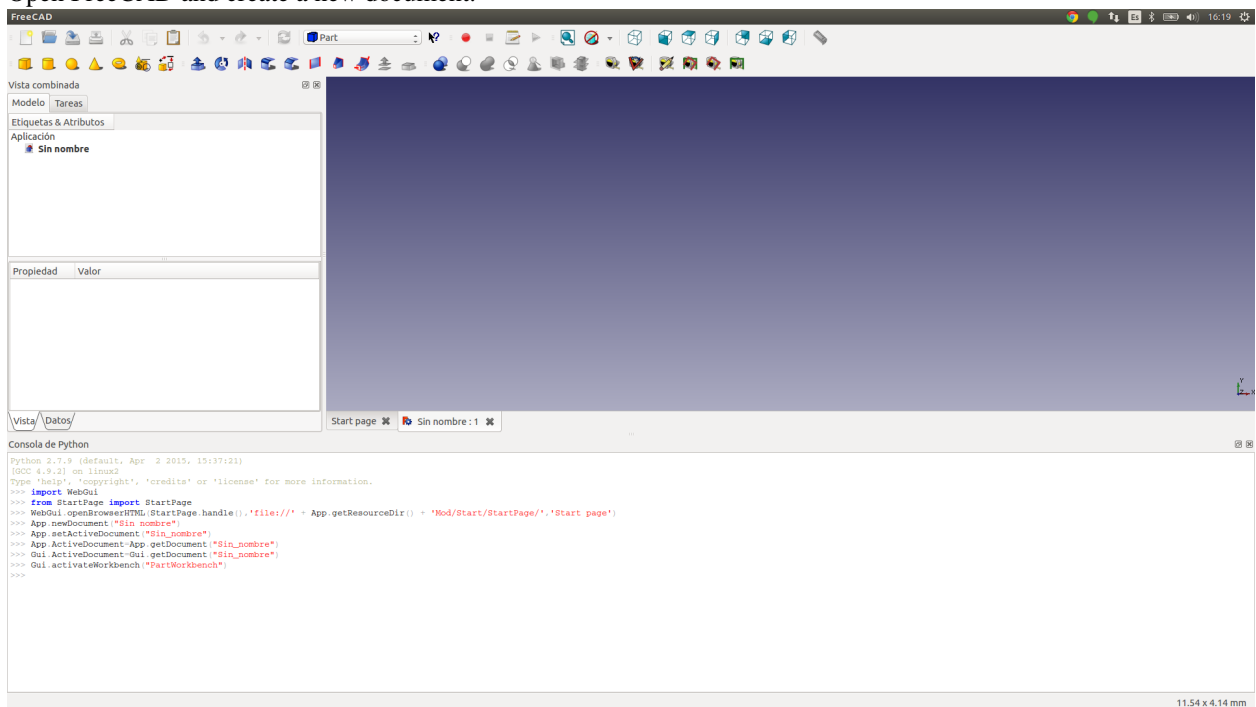
Getting started

Todo

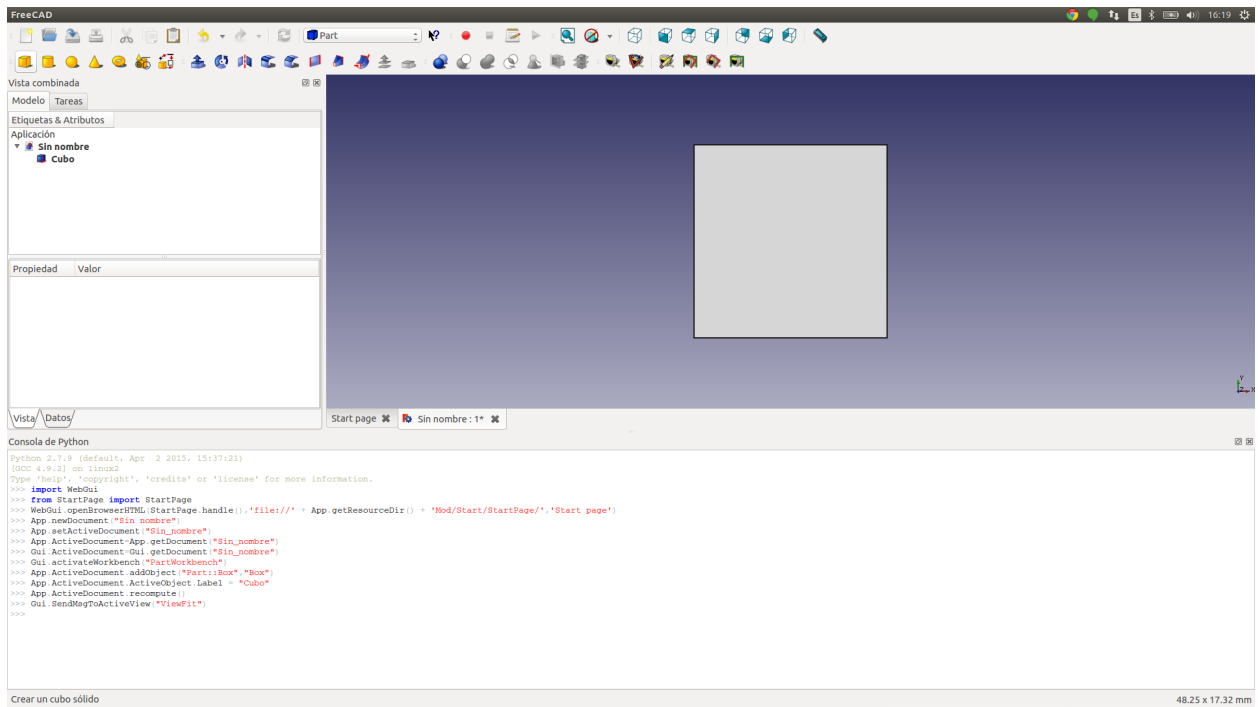
TODO

Create a folder with the name *hello_world* and save all the following files inside.

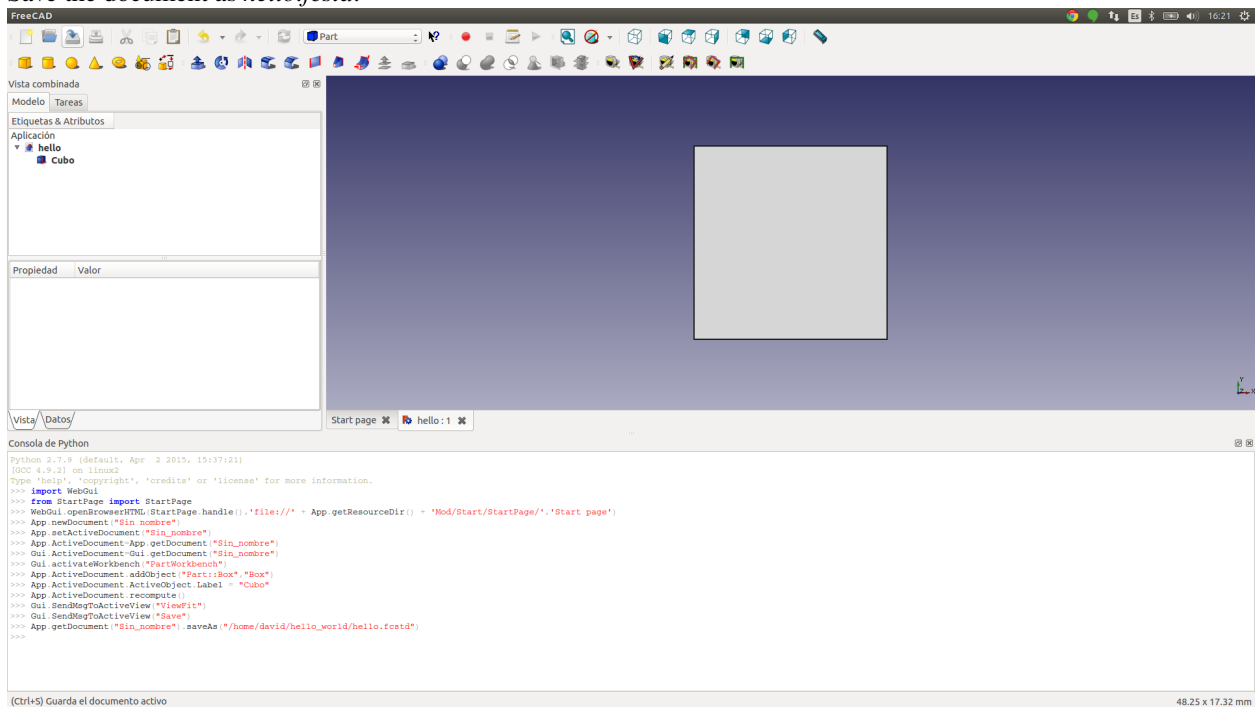
Open FreeCAD and create a new document.



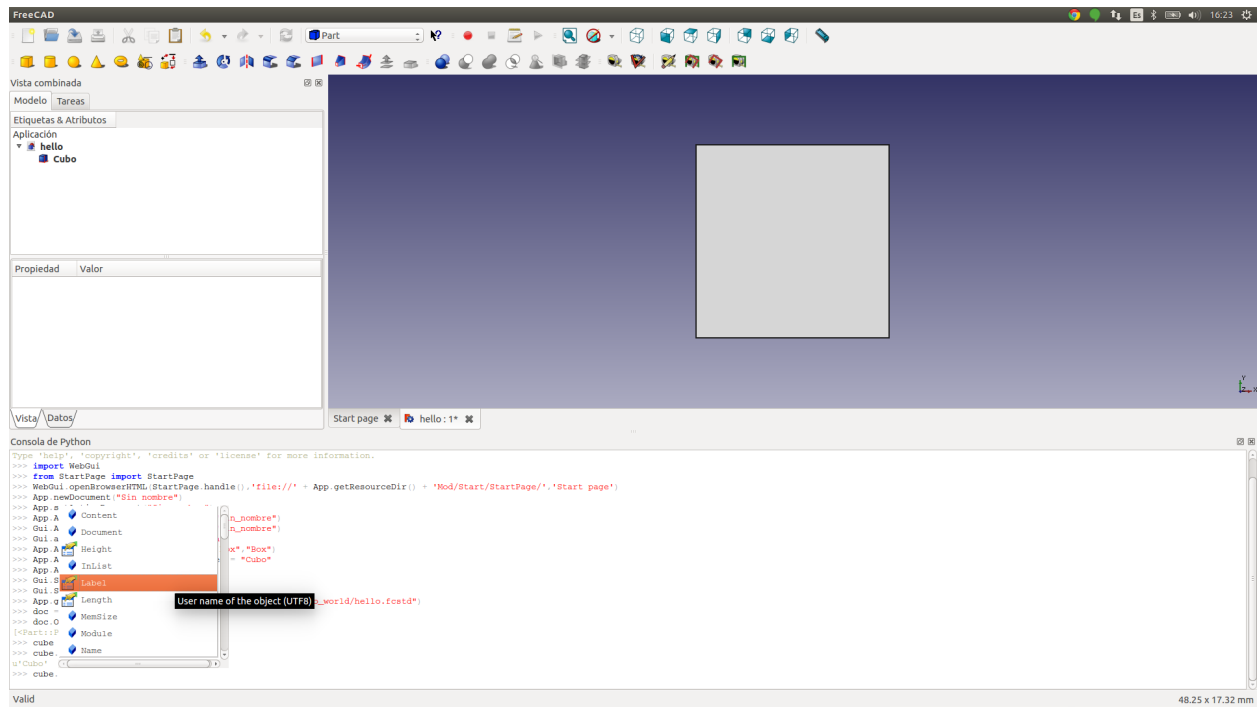
Create a cube.



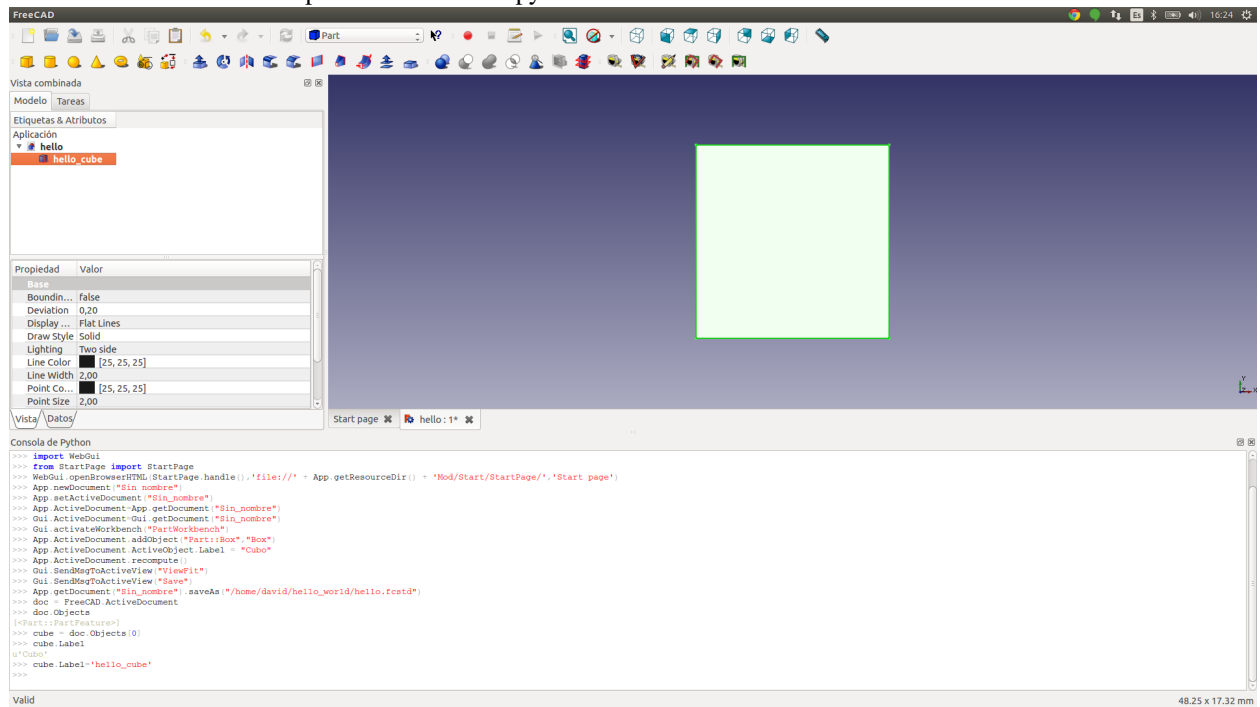
Save the document as *hello.fcstd*.



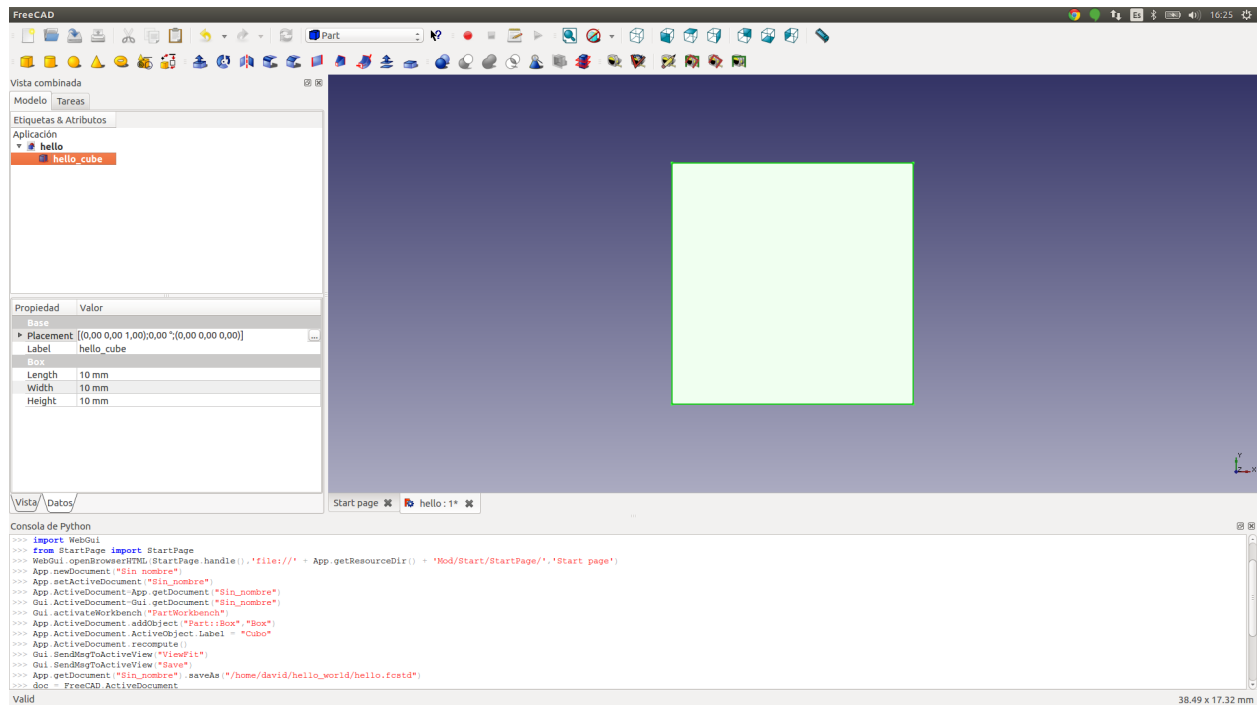
You can navigate the Cube info, for example, change the Cube Label to *“hello_cube”*.



You can see all the editable parameters in the python terminal.



Save the project.



Create a machine script `hello_world.py`.

```
import sys
FREECADPATH = '/usr/lib/freecad/lib/'
sys.path.append(FREECADPATH)
import FreeCAD
import Mesh
import os

def machinebuilder(length, width, height, file_path):

    document = os.path.abspath("hello.fcstd")
    ## Open document
    doc = FreeCAD.openDocument(document)

    ## Edit parameters
    cube = None
    for figure in doc.Objects:
        if figure.Label == 'hello_cube':
            cube = figure
    if cube:
        cube.Length = length
        cube.Height = height
        cube.Width = width
        doc.recompute()

    ## Export the file
    Mesh.export([cube], file_path)
```

and a machinefile.txt

```
[doc]
-title-
```

```
Hello World Cube
-description-
A simple CUbe
-images_url-
http://d33y93cfm0wb4z.cloudfront.net/coloringimages/3D_shapes/444x271/cube_447x271.jpg
[inputs]
int(length=50)
float(width=50)
int(height=50)
```

Now, you should have a folder tree like the following.

```
hello_world/
-- hello.fcstd
-- hello_world.py
-- machinefile.txt
```

Create a `hello_world.zip` file with all the files and *Upload* the machine.

2.1 How to use a machine

Todo

TODO

2.2 Create you first machine

Todo

TODO

2.3 How to update a machine

Todo

TODO

2.4 Getting started

Todo

TODO

Release notes

Todo
TODO

Developer Zone

4.1 Installation

4.1.1 System dependencies

Install FreeCAD.

```
# Install FreeCAD
sudo add-apt-repository ppa:freecad-maintainers/freecad-stable
sudo apt-get update
sudo apt-get upgrade
sudo apt-get install freecad freecad-doc
```

Install Docker.

```
# Install Docker
sudo apt-get install wget
wget -qO- https://get.docker.com/ | sh
```

Create a Docker group.

Warning: Warning: The docker group is equivalent to the root user.

```
# Create a Docker group
sudo usermod -aG docker YOUR_USER_NAME
```

Python requirements

```
cd machinehub
sudo -H pip install -r requirements.txt
```

4.1.2 Execute machinehub

Build the machinehub docker image to use as base to the machine images.

```
cd machinehub/machinehub/docker/  
docker build -t machinehub .
```

Launch the webapp.

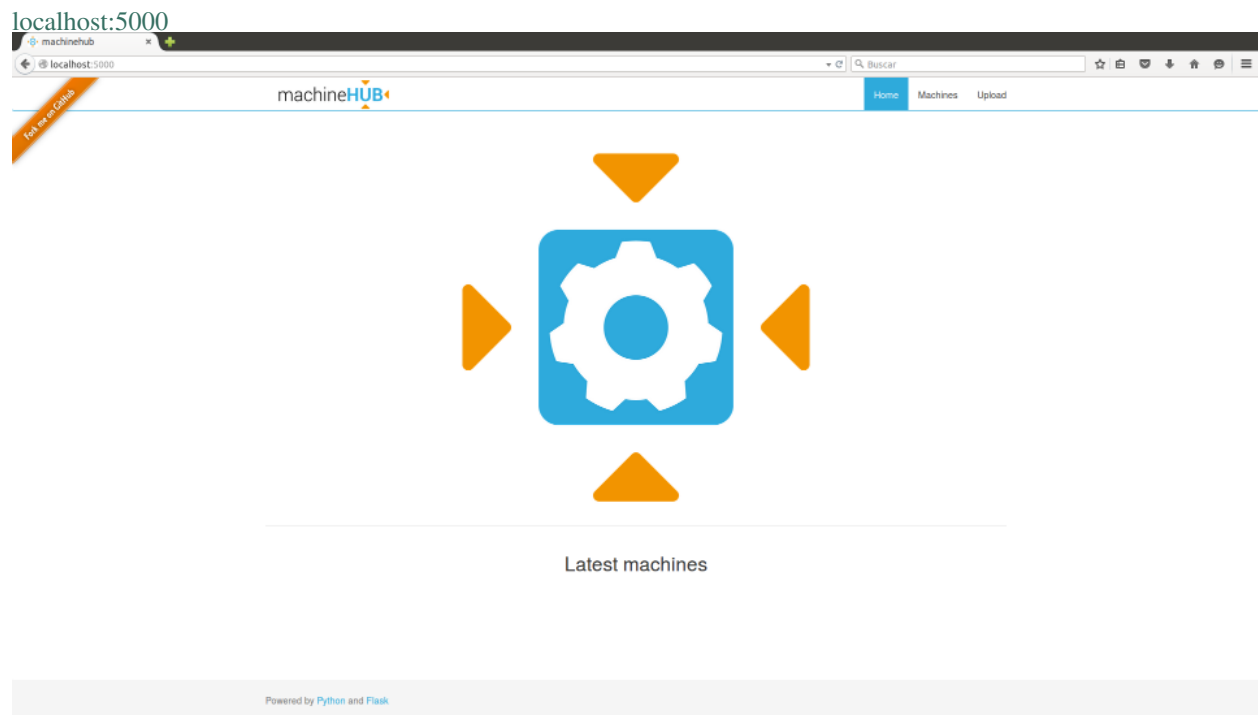
```
cd machinehub  
python launcher.py
```

4.1.3 Configure machinehub

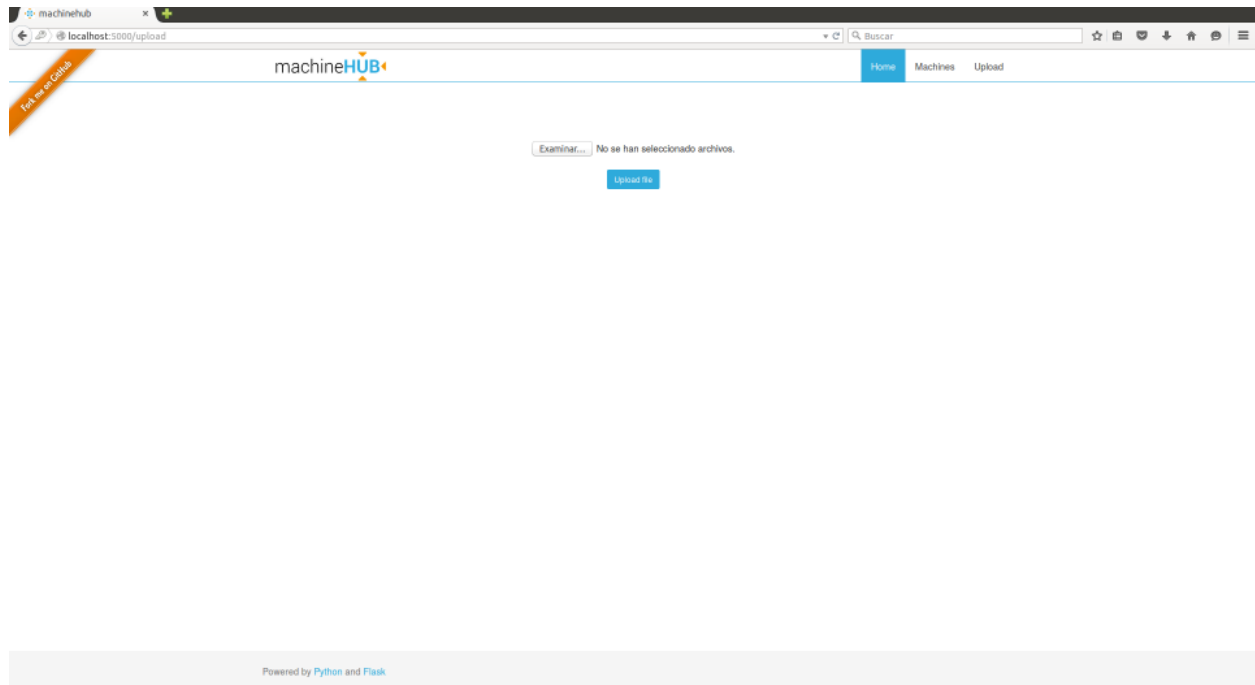
If you want to change the address or the admin info, edit `~/.machinehub/machinehub.conf` yo chage the address, port, or the admin info.

```
[server]  
host: 127.0.0.1  
port: 5000  
[users]  
admin: admin #user: password
```

4.2 Try Machinehub



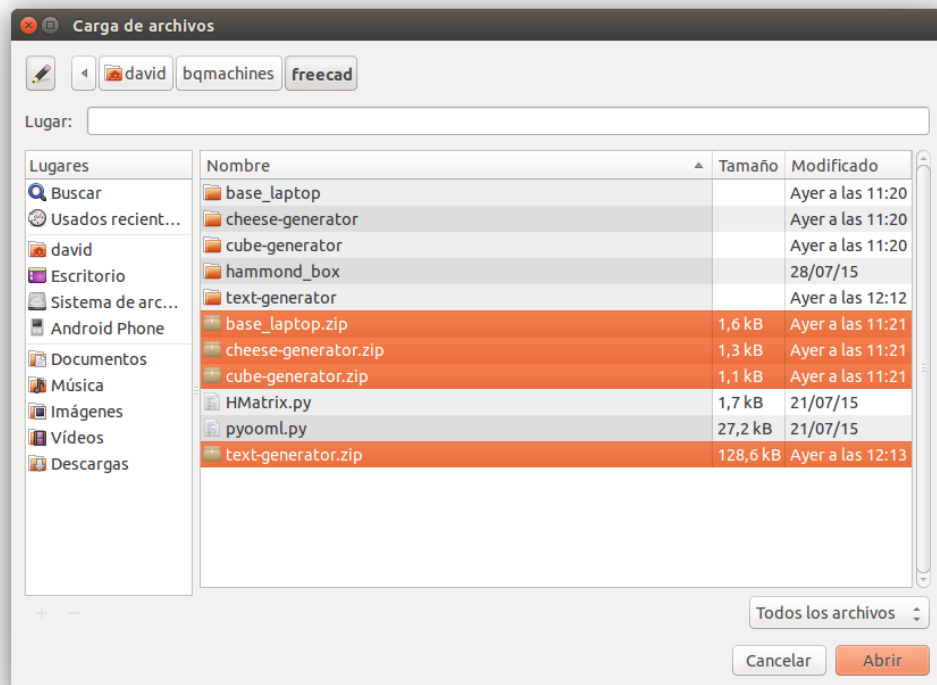
`localhost:5000/upload`



Select all the machine .zip files.

Examinar... No se han seleccionado archivos.

Upload file



Clic in the blue upload button and machinehub will redirect your browser to the home page with the machines. loaded

