

Helios

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Installation

This document concerns only the latest Helios v3.1 code, last updated on June 8th, 2011.

As of v3 beta (due in July 2010), Helios is no longer based on Google App Engine, but instead on a standard Django/Python + PostgreSQL stack. This document explains how to install Helios on a standard Linux machine, preferably Ubuntu 10.04.

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Components

- Ubuntu Linux 10.04 (for these instructions, should be adaptable to other Linux distributions.)
- PostgreSQL 8.3+ (may work with other databases, uses Django modeling, but not tested yet.)
- Python 2.5+, Python 2.6 preferred
- Django 1.2 (1.1 is no longer supported, 1.3 has not yet been tested)

Steps

These steps assume a modern Ubuntu Linux installation.

- install PostgreSQL

```
apt-get install postgresql
```

- install Python packages to connect to PostgreSQL

```
apt-get install python-psycopg2
```

- install Django 1.2

```
apt-get install python-django
```

- set up PostgreSQL database
 - for simplicity, these instructions assume that you keep PostgreSQL in "ident" authentication mode, where Unix users are automatically Postgres users. This is not a great idea for production, but

we'll document that later.

- create a PostgreSQL user where <USERNAME> is your Linux username:

```
su - postgres
createuser --superuser <USERNAME>
```

- get the Helios code from source, switch to the pure-django branch, and check out submodules:

If you have a recent version of git, you can use a single command:

```
git clone --recursive git://github.com/ben
```

If not, you need to do a little bit more work:

```
git clone git://github.com/benadida/helios
cd helios-server
git submodule init
git submodule update

cd heliosbooth
git submodule init
git submodule update

cd ../heliosverifier
git submodule init
git submodule update
```

- Install Python OpenID support (for Google and Yahoo logins):

```
git clone http://github.com/openid/python-
cd python-openid
sudo python setup.py install
```

- Install a few more Python packages:

```
apt-get install python-setuptools
easy_install south
```

- copy settings.py.sample to settings.py
- update the following parameters in settings.py:

```
DATABASE_NAME = 'helios'
```

```
DATABASE_USER = ''
DATABASE_PASSWORD = ''

DEFAULT_FROM_EMAIL = 'Ben Adida for Helios' <
# these three hosts should all be the same
# e.g. http://localhost:8000
URL_HOST = "http://..."
SECURE_URL_HOST = "https://..."
SOCIALBUTTONS_URL_HOST = "http://..."

# FOOTER links
FOOTER_LINKS = [{'url': 'http://usg.princetor

WELCOME_MESSAGE = "welcome"
```

- load the data model, which will create a user "benadida" with password "test" (You may need to edit reset.sh with your db passwords.)

```
sh ./reset.sh
```

- run the development server on port 8000:

```
python manage.py runserver 8000
```

- if you'd like this running on all IP addresses (not just 127.0.0.1), use the following command:

```
python manage.py runserver 0.0.0.0:8000
```

Jobs to Run Regularly

Some jobs need to be run regularly, and for this Helios uses RabbitMQ, Celery, and Django Celery. RabbitMQ is the queue, while Celery and Django-Celery are the Python components that provide simple programming constructs for queuing and dequeuing jobs.

RabbitMQ 1.8 - follow instructions given at <http://www.rabbitmq.com/debian.html>

- After updating the deb source, as per the instructions,

```
apt-get install rabbitmq-server
```

- Install celery and django celery. More info at <http://celeryq.org>

Celery and Django Celery both v2.0.2

```
easy_install celery  
easy_install django-celery
```

Then you'll need to make sure that:

- RabbitMQ Server s running (it should happen automatically if you followed the above install instructions)
- The Django Celery Daemon server is running:

```
python manage.py celeryd
```

Comments

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