Search

Dear reader. Please note that as of 1 July 2014 Linfiniti.com has teamed up with Afrispatial.com to form Kartoza PTY (Ltd.). I will continue blogging about Open Source and FOSSGIS on our new web site: http://kartoza.com - we look forward to seeing you there!

Installing python GDAL into a python virtualenv in OSX

Posted February 16, 2013 by Tim Sutton & filed under gdal, GeoDjango.

Yes I know its a bit wierd to see the word 'OSX' in an article by me…I recently bought a Mac for testing InaSAFE and fooling around with FOSSGIS software on OSX. Besides the 2 or three days it took to get it set up as a development machine for FOSSGIS stuff (as compared to a few hours – limited mainly by internet speed – on Linux) it hasnt been too bad an experience.

I used William Kyngesburye's excellent packages for installing all the FOSSGIS dependencies (barring QGIS which of course I wanted to build myself). I've been trying to see if I can use OSX as a usable platform for doing GeoDjango work and ran into a few problems:

- GDAL python package needs compilation when used in a python virtualenv (which of course I use)
- William's packages provide PostGIS 2.0 whereas GeoDjango really only works out of the box with 1.5 still

In this post I am outlining how I got GDAL to build in my venv. Note that I assume you have Williams frameworks and xcode / compilation toolchain in place.

```
source venv/bin/activate
pip install --no-install GDAL
cd venv/build/GDAL
python setup.py build_ext \
  --gdal-config=/usr/local/gdal/1.9/bin/gdal-config \
  --library-dirs=/Library/Frameworks/GDAL.framework/Versions/1.9/unix/lib/ \
  --include-dirs=/Library/Frameworks/GDAL.framework/Versions/1.9/Headers/
```

```
pip install --no-download GDAL
```

Now verify it is installed:
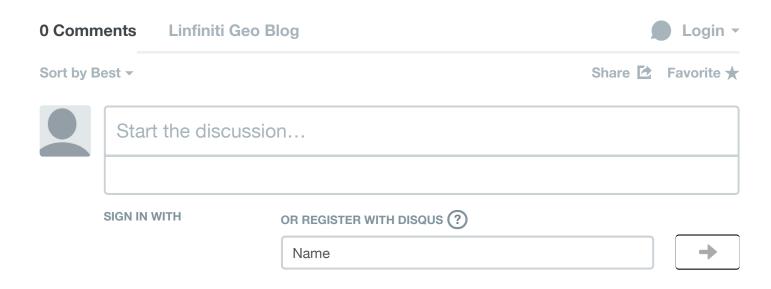
```
pip freeze
```

You should see GDAL listed. Another check:

```
>>> from osgeo import gdal
>>> gdal.__version__
```

```
'1.9.2'
```

Confirm it is really using your module in your venv:

```
>>> gdal.__file__
'/Users/timlinux/dev/python/catalogue/venv/lib/python2.7/site-packages/osgeo/gdal.pyc'
```

Linfiniti.com

We are mad about Free and Open Source Software and are here to help others who want to use Open Source GIS software but don't know where to start! Contact us at tim@linfiniti.com if you wish to know more about the services we offer.

Recent Posts

- There has never been a better time to sponsor QGIS
- How to do some quasi 3d cartographic effects in QGIS
- New forms related features coming in QGIS 2.0
- QGIS 2 Annotations
- Dynamically updating layers in QGIS with PostGIS views

Archives

Select Month ▾