

Use Apache Kylin With Caravel

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Intro

[Caravel](#) is a UI for data exploration:

- Developed by [Airbnb](#)
- Originally intended for [Druid](#), to support other databases uses [SQLAlchemy](#)
- Some Picture examples: [1](#) [2](#)

Forked by [Rocky Qi](#) ([rocky101/caravel](#)) to support Kylin

[pykylin](#): [Wu Xiang](#) makes an interface (python → Kylin), using [SQLAlchemy](#)

[PyHive](#): Dropbox makes an interface (python → Hive), using [SQLAlchemy](#)

Also there is connectors for: Teradata, SQL Server, MySQL, Google SQL, PostgreSQL, Sybase, Firebird, Oracle, ...

References:

- [Open source data visualization tools \(For Apache Kylin\) Description](#)
- [OLAP + open source data visualization tools -For Apache Kylin](#)

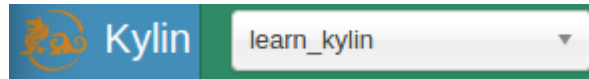
Used Software

- [Kylin: 1.5.2](#)
- [Caravel Kylin 0.9.0](#)
- [pykylin](#)
- [python 3](#)

Pre-requisites

- We need an instance of Kylin, with a cube: [Quick Start with Sample Cube](#), will be enough

You can check:



- Also need Python 3.x

```
arp@GT70:~$ python -V
Python 3.5.2_
```

NOTE For Ubuntu systems:

which python

ls -la /usr/bin/python

sudo rm /usr/bin/python

sudo ln -s /usr/bin/python3 /usr/bin/python

Before: `/usr/bin/python -> python2.7`

After: `/usr/bin/python -> /usr/bin/python3`

- Check [pre-requisites](#) of Caravel for your S.O

Debian / Ubuntu:

```
sudo apt-get install build-essential libssl-dev libffi-dev python-dev python-pip
```

Fedora / RedHat

```
sudo yum upgrade python-setuptools
sudo yum install gcc libffi-devel python-devel python-pip python-wheel
openssl-devel
```

Install Caravel

1. Download & install Caravel

```
mkdir caravel
```

```
cd caravel
```

wget <https://github.com/rocky1001/caravel/archive/master.zip>

unzip master.zip

cd caravel-master

pip install . #installing Kilin Caravel (Note the dot at the end)

```
Building wheels for collected packages: caravel
  Running setup.py bdist_wheel for caravel ... done
  Stored in directory: /home/arp/.cache/pip/wheels/4
ecc63e9a9
Successfully built caravel
```

2. Initialize Caravel:

Execute this commands:

fabmanager create-admin --app caravel	# Create admin user
caravel db upgrade	# Initialize the metadata database
caravel init	# Create default roles and permissions
caravel load_examples	# Load some data to play with
caravel runserver -p 8088	# Start the web server on port 8088

My Config: ADMIN / KYLIN

```
Username [admin]: ADMIN
User first name [admin]: fn_Admin
User last name [user]: l_User
Email [admin@fab.org]: a.ramonportoles@gmail.com
Password:
Repeat for confirmation:
```

3. Start Caravel

caravel runserver -d -p 8088

Connecto to: localhost:8088

```
016-09-01 19:12:59,229:INFO:flask_appbuilder.base:Registering class
016-09-01 19:12:59,264:WARNING:werkzeug: * Debugger is active!
016-09-01 19:12:59,293:INFO:werkzeug: * Debugger pin code: 294-878-
```

Issue1: Error PIP: No module named 'pip'

```
arp@GT70:~/Descargas/caravel/caravel-master$ pip install.  
Traceback (most recent call last):  
  File "/usr/bin/pip", line 9, in <module>  
    from pip import main  
ImportError: No module named 'pip'
```

If you are in Ubuntu you need install pip3:

```
sudo apt-get -y install python3-pip
```

```
pip3          #check install
```

```
pip3 install . # remember the dot at the end
```

Issue2: Segment Violation

```
3 sqlalchemy-utils-0.32.7 sqlparse-0.1.19 werkzeug-0.11.10  
You are using pip version 8.1.1, however version 8.1.2 is available.  
You should consider upgrading via the 'pip install --upgrade pip' command.  
Violación de segmento ('core' generado)
```

In my Ubuntu 16.04 I solved upgrade pip package:

```
pip install --upgrade pip
```

```
pip -V          #pip 8.1.3
```

Issue3: Can't find fabmanager

In my Ubuntu: pip install all dependencies of Carabel, but didn't do in my actual path

To solve:

```
sudo find / -name fabmanager*          #To find the actual path of file
```

```
#In my case: /home/arp/.local/bin/fabmanager
```

```
export PATH=$PATH:/home/arp/.local/bin/ #You can put in you .bashrc
```

```
fabmanager --help          # To check the command
```

Issue4: Port is used

If you see this:

```
[INFO] Starting gunicorn 19.6.0  
[ERROR] Connection in use: ('0.0.0.0', 8088)  
[ERROR] Retrying in 1 second.  
[ERROR] Connection in use: ('0.0.0.0', 8088)  
[ERROR] Retrying in 1 second.
```

```
lsof -i:8088
```

kill xxx


Test of Caravel:

Connect to <http://localhost:8088/login/> (KYLIN /ADMIN)

Sign In


Enter your login and password below:

Username:






ADMIN

Password:




.....

Sign In

Sources ▾		> Tables				
<input type="checkbox"/>	  	multiformat_time_series	main	SQL		

Issue1: The load of Web page show this:



Caravel

- Security
 - List Users
 - List Roles
 - User's Statistics
 -

Welcome!

Dashboards



Create Connection