
IPython-Dashboard Documentation

Release 0.1.2

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A stand alone, light-weight web server for building, sharing graphs created in ipython. Build for data science, data analysis guys. Building an interactive visualization, collaborated dashboard, and real-time streaming graph.

CHAPTER 1

Requirements

- [redis 2.6+](#), [install guide](#)
- `pip install -r requirements.txt`

CHAPTER 2

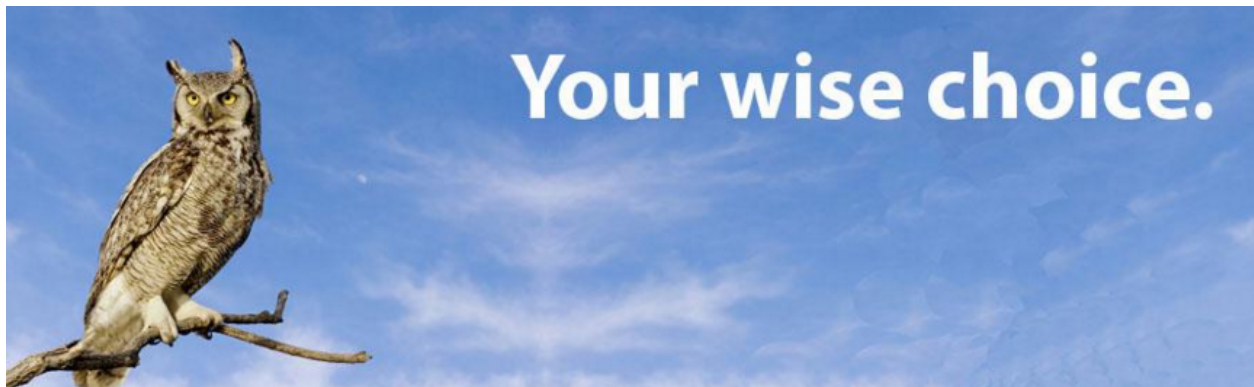
Goal

- support raw html visualization
- support python object visualization
- Editable
- Real-time fresh when rendering a variable python object
- Can be shared, both public and private [need password]
- In the notebook, can share an object to a dashboard [that's visualize that object in that dashboard]

CHAPTER 3

Use Case

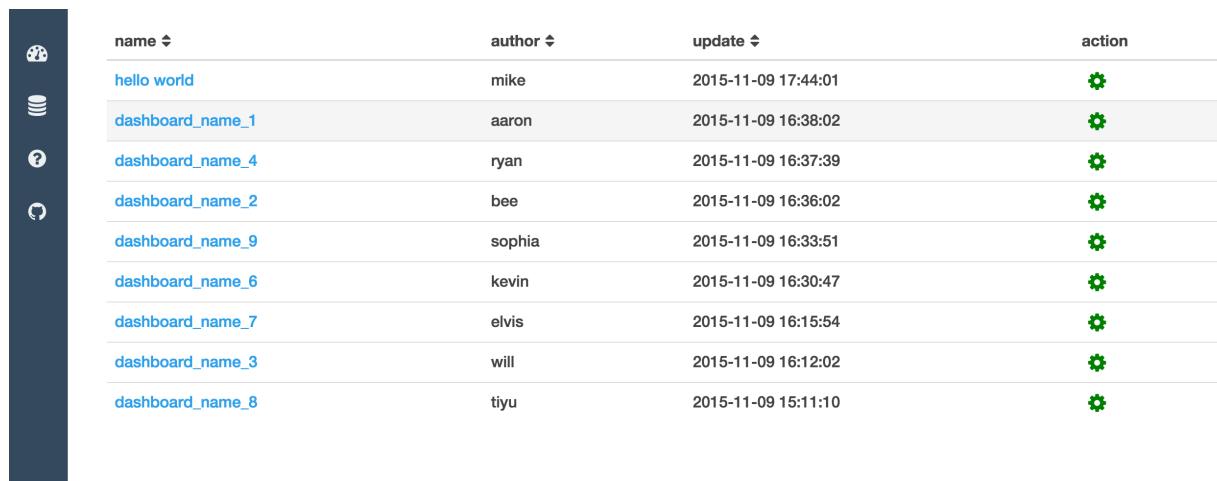
- if you do exploring in notebook, but just want to share/send the result/summary to people, leave out the details.
- if you have a private notebook, but also need share something in that notebook with people, extract and put into another new notebook is ugly.
- if you are totally disappointed with the complicated code when drawing a graceful/staic graph using matplotlib/seaborn/mpld3 etc.
- if you want an interactive graph, allow people to zoom in/out, resize, get hover tips, change graph type easily.
- if you want a real-time graph.
- if you want an collaborated graph/dashboard.



Screenshot and Demo

Demo on Youtube

Demo on Youku












name ↕	author ↕	update ↕	action
hello world	mike	2015-11-09 17:44:01	
dashboard_name_1	aaron	2015-11-09 16:38:02	
dashboard_name_4	ryan	2015-11-09 16:37:39	
dashboard_name_2	bee	2015-11-09 16:36:02	
dashboard_name_9	sophia	2015-11-09 16:33:51	
dashboard_name_6	kevin	2015-11-09 16:30:47	
dashboard_name_7	elvis	2015-11-09 16:15:54	
dashboard_name_3	will	2015-11-09 16:12:02	
dashboard_name_8	tiyu	2015-11-09 15:11:10	

Fig. 4.1: screenshot

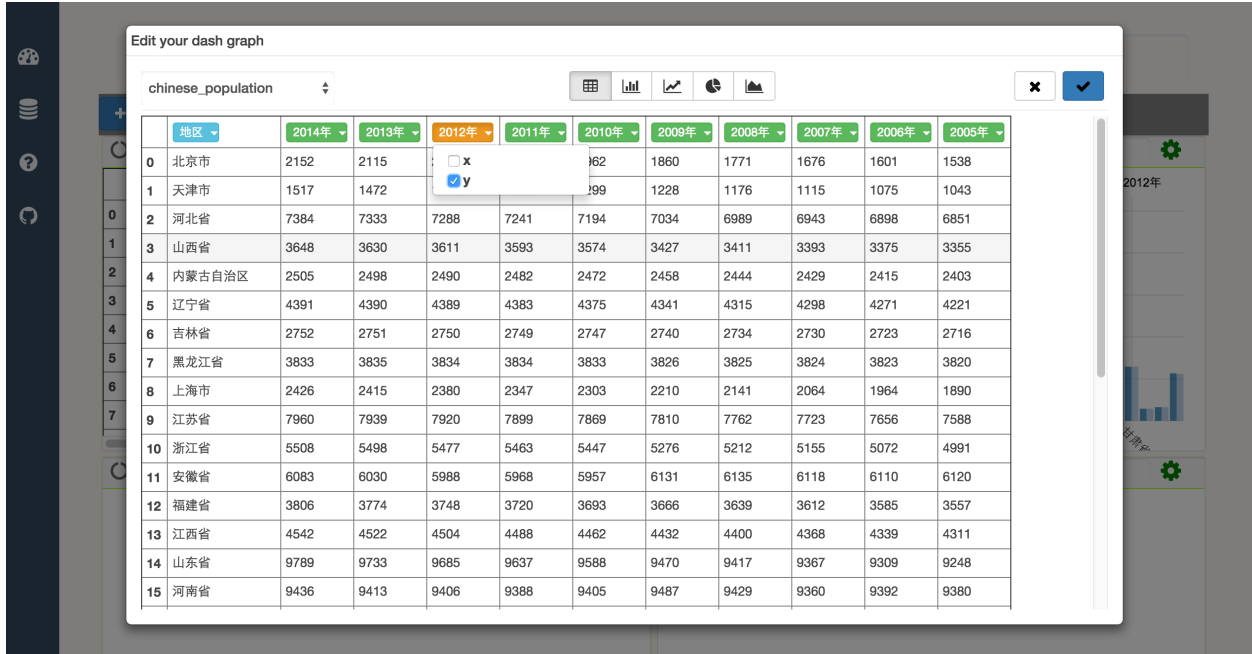


Fig. 4.2: screenshot

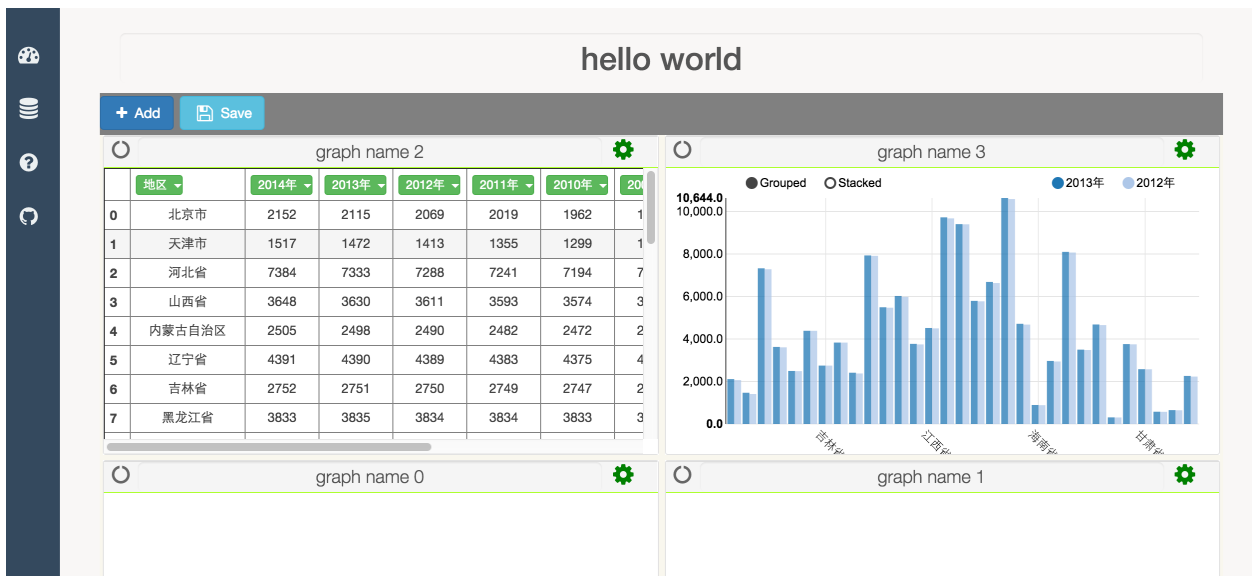


Fig. 4.3: screenshot

CHAPTER 5

Usage

IPython-Dashboard-Tutorial.ipynb: [On nbviewer](#) or [On github](#)

CHAPTER 6

Run tests

just run `sudo nosetests --with-coverage --cover-package=dashboard` under this repo

```
aaron@aarons-MacBook-Pro:~/Desktop/github/IPython-Dashboard$ sudo nosetests --with-coverage --cover-package=dashboard
...
Name                               Stmts  Miss  Cover   Missing
-----
dashboard.py                        9      0  100%
dashboard/client.py                 1      0  100%
dashboard/client/sender.py          11      9   18%   22-34
dashboard/config.py                 12      0  100%
dashboard/server.py                 1      0  100%
dashboard/server/resources.py        0      0  100%
dashboard/server/resources/dash.py   41     25   39%   25-30, 39, 48-49, 55-71,
↪ 76-87
dashboard/server/resources/home.py    8      1   88%   20
dashboard/server/resources/storage.py 15      7   53%   20-22, 30-34
dashboard/server/utils.py           31      6   81%   18-22, 29, 43
dashboard/server/views.py           12      0  100%
-----
TOTAL                               141     48   66%
-----
Ran 3 tests in 0.345s

OK
```


- future
 - import dashboard to ipython notebook, one click [though I don't think it's necessary]
 - front side, databricks style
 - pep 8, code clean up & restructure
 - hover tips
 - edit modal can be resized
 - Share one graph
 - Share one dashboard
 - Presentation mode
 - slogan
 - footer
 - readthedoc
 - unified message display center
 - SQL Editor
 - login management
 - unified logger and exception report
- ***V 0.1.3 : basic-curd-docs : [current develop version]***
 - Dashboard
 - * restructure code for future develop
 - * more docs and tutorial
 - * basic curd operations
 - * gh-pages done

- * publish on readthedoc
 - * hover tips
- SQL Editor
 - * start try using ace to build an online sql editor, but will develop it in the next stage after this version
- ***V 0.1.2 : visualiza-table : [current stable release]***
 - slogan: ***Inspired by IPython, built with love***
 - Dashboard
 - * document and doc string
 - * usage
 - * simple visualize table data
 - SQL Editor
 - * research & preparation
- V 0.1.1 : dashboard-server : [current stable release]
 - Dashboard
 - * dashboard home page
 - sort by dashboard name / creator / last update time
 - * dashboard page
 - add graph in a dashboard
 - re-arrange graph
 - resize graph
 - get table view in a graph
 - SQL Editor
- V 0.1 : dashboard-template
 - Add dashboard client template
 - Template consists of box, each box is an independent front-side object
 - Template hierarchy:
 - * box page [add, delete, share one or all]
 - * box graph [add, delete, share one or all]
 - * rename

Related Projects & Products

- [mpld3](#)
- [lighting](#)
- [bokeh](#)
- [matplotlib](#)
- [zeppelin](#)
- [yhat](#)
- [hue](#)
- [plotly](#)
- [datadog](#)
- [databricks](#)
- [nvd3](#)
- [c3js](#)
- [periscope](#)
- [folium](#)
- [metabase](#)
- [gridstack](#)
- [gridster](#)
- [dashboards](#)
- [js, css, html code style](#)