BI Tools and Apache Kylin

Intro: Kylin Project

<u>Apache Kylin</u> is a powerful software which enables Extrem OLAP cubes on Hadoop system, with lineal scalability and sub-second response time over TB of data

Mainly developed by <u>eBay</u> and Kyligence.io teams

Unfortunately is little known, perhaps some causes can be:

- Few documentation: some nice features are undocumented, only know how to use the team developers
- It is developed / used by big companies with hich technical and human resources
- The access to data, is using a integrate UI Kylin or ODBC / API Rest, too complex for most of users or PoCs

Intro: Integration Study with BI

During two months (July & August 2016) I tried to connect kylin with most popular BI Tools, sometimes has been successful others no

Officially the Kylin ODBC Driver only has been tested with Tableau Software

We evaluate two aspect:

- connectivity to import data
- Integration of this data, with different features of this BI Tool



Resume Table

Soft	Data Import	Data Integration	Detailed Manual	Version	License
Tableau Desktop	***	***	<u>GitGub</u>	v9.3.3	Free

Apache HUE	***	***	GitGub	v3.10	GPL
Qlik Desktop	***	★★ ☆	<u>GitGub</u>	v3.0.2.0	Free
Kylin Carabel	***		Internal*	v0.91	GPL
<u>Sisense</u>	***		Internal*	v6.4.1	Demo
Microsoft PowerBI	***		N.A	V2.38.4491	Free

Internal*: Despite efforts, any remarkable result , But if you are interested I can share with you

License:

• GPL: Full features are free , code free

• Free: With out code, but you can use it free.

• Demo: Use restricted to a time period

Tableau

View full Report

Resume:

- Some Warning with import metadata, once already no more problems
- The data integration is 100% full

Apache Hue

View full Report

Resume:

- Some issues and need some change in code before compile (see steps in manual)
- View / Import meta-data is not available, need more changes in code (exits GIRA)
- Only can Import 1000 rows (exits GIRA)

- Isn't compatible with Dashboards (In Road-map for v4)
- It's a dynamic and important open source project, in next versions > 3.11 some bugs will be fixed

Qlik Desktop

View full Report

Resume:

- Because there isn't official connector, you must write "load script", it's easy and works fine (see instructions)
- This type of data have some limits:
 - You can see the data preview
 - The associations (between tables are automatically made), you can't change. This means if this aren't correct, your results will be worng

Kylin Carabel

<u>Caravel</u> is a UI for data exploration, developed by <u>Airbnb</u>, that uses <u>Druid</u>, as database <u>@Rocky Qi</u> creates a <u>fork Kylin – Caravel</u>, to support Kylin as database

After 2 weeks of tests to run, try with master (there is a bug in internal metadata database) and previous branch, on Ubuntu (there is some problems with this SO) and Centos... I desisted (sorry)

I hope retrying in the future / next version. Its a good candidate to docker (and make life easier for others) (I like docker ;;)

Sisense

The answer of technical support of Sisense was that is compatible with Kylin

But, after contact with technical support, and some emails: not working nor manual how to configure

You can see this video

Microsoft PowerBI Desktop

I tried to import data in automatic mode, and writing select queries by me. In the best case, I can see pre-view data before import. But import never work
In logs, I saw some data convert errors / overflows

You can see this video