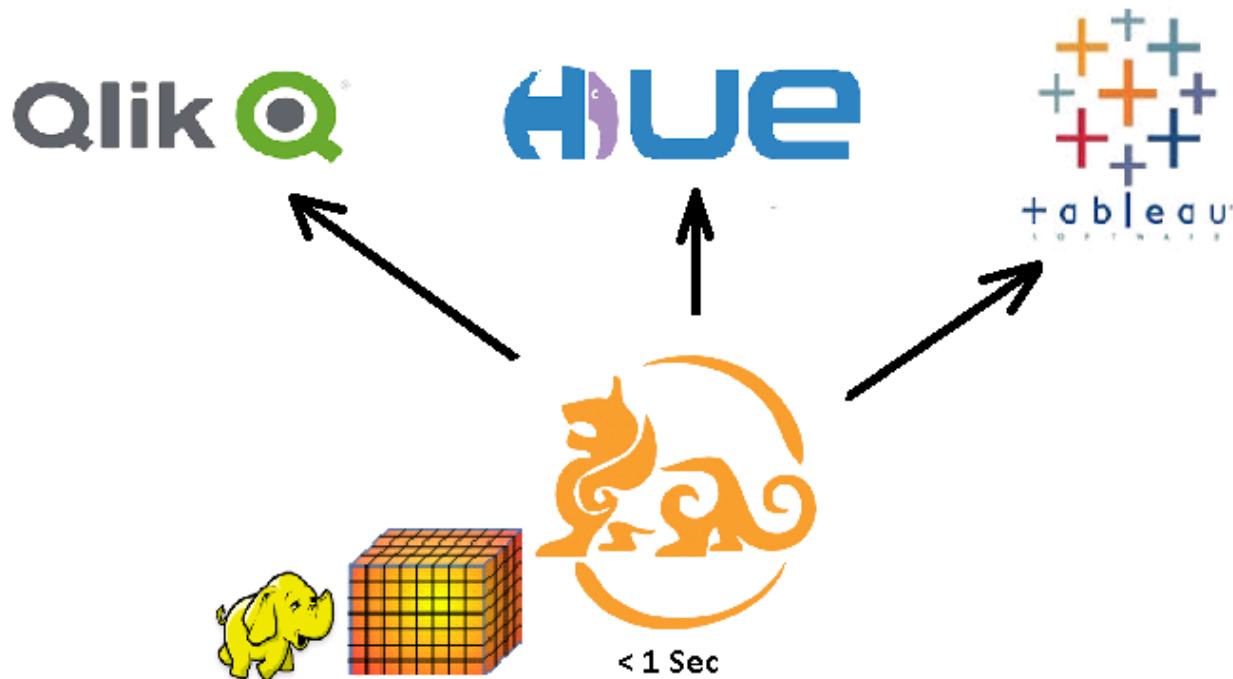# BI Tools and Apache Kylin

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Intro: Kylin Project

Apache Kylin 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 eBay and Kyligence.io teams

Unfortunately is little known, perhaps some causes can be:

- Few documentation: some nice features are undocumented, only developers know how to use them team developers

- It is developed / used by big companies with many 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 .… it hasn't… 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

For our test use : Use Kylin v1.5.2 (on docker) Kylin ODBC v1.5

Resume Table

Soft	Data Import	Data Integration	Detailed Manual	Version	License
Tableau Desktop	★★★	★★★	GitGub	v9.3.3	Free
Apache HUE	★★★	★☆☆	GitGub	v3.10	GPL
Qlik Desktop	★★★	★★☆	GitGub	v3.0.2.0	Free
Kylin Carabel	☆☆☆		Internal*	v0.91	GPL
Sisense	☆☆☆		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 them with you

License:

- GPL: Full features are free , code free

- Free: With noout code, but for freeut you can use it free.

- Demo: Limited usage to certain Use restricted to a time period of time.

Tableau

View full Report

Resume:

- Some warning importing metadata but no issues when it is done.

- Some Warning with import metadata, once already no more problems

- The data integration is complete100% full

Apache Hue

View full Report

Resume:

- Some issues and code changes must be made and need some change in code before compilinge (see steps in manual)

- View / Import meta-data is not available, need more changes in code are needed(exits GIRA)

- Only 1000 rows can be Imported 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 an official connector, you must write "load script", it's easy and works fine (see instructions)

- This type of data have some limits:

- You can't see the data preview

- The associations (between tables are automatically made), ~~you~~ can't be change. This means if th~~ey~~is aren't correct, your results will be worng

Kylin Carabel

Caravel is a UI for data exploration, developed by Airbnb, that uses Druid, as database
Rocky Qi (thanks, for the suggestions) creates a fork Kylin – Caravel, to support Kylin as database

After 2 weeks of ~~tests to~~ running tests~~., try with master~~ (there is a bug in the internal metadata database) and previous branch didn't work~~,~~ on Ubuntu (there is some problems with this SO) and Centos… I desisted (sorry)

I will retry in the future / next version. Its a good candidate for docker (and makes life easier for others) (I like docker !!!)

~~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: it didn'~~not~~t work and there was no~~ing nor~~ manual that could explain ho~~ho~~w to configure it to make it work.

You can see this video

Microsoft PowerBI Desktop

I tried to import data using the~~in~~ automatic mode~~,~~ and writing select queries ~~by me~~. In the best case, I could~~can~~ see the pre~~-~~view of data before an import. But the import never work~~ed.~~
In logs, I saw some data conver~~sion~~t errors / overflows

You can see this video

Others

Other tools that nowadays, can't work with Apache Kylin (need changes in code, doesn't support SQL, doesn't support ODBC sources, …)

Kibi /Kibana

From: Giovanni Tummarello (thanks, for the info)

*"**Kibi dashboard DO NOT support SQL or JDBC** a Kibi datasource is only used for special filters or certain other operations, check the documentation. We will likely support it in the future though.*
saying this so that you dont waste your time.. you will not be able to see anything now with Kibi if you dont load things in ES also"

Ploty

From: Chris Parmer (thanks, for the info)

"*Thanks for reaching out! We haven't added this yet. Do you use Apache Kylin at your work? We are going to be adding spark and redshift next before we get to something like Kylin.*"

ToDo:

Test and doc the integration of Kylin with Saiku and Zeppelin

For any suggestions, feel free to contact me

Thanks, Alberto