

Project: Realtime stock data analysis

How to use Tableau?

1. Installation

Download and install the [Tableau Desktop](#) and [Hive ODBC connector](#)

2. Connection with data source

1) First start hive server in cloudera

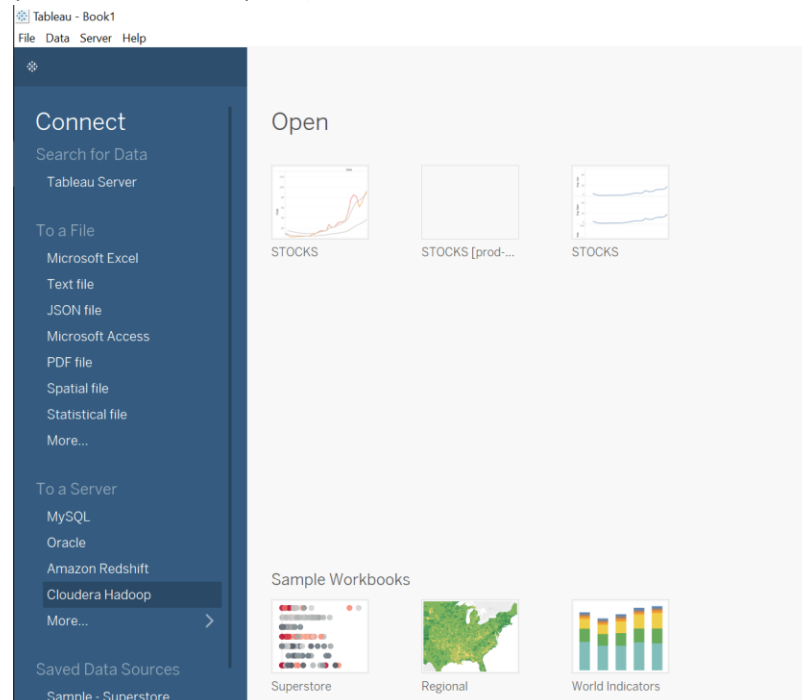
Type this command in terminal:

```
sudo service hive-server2 start
```

```
[cloudera@quickstart ~]$ sudo service hive-server2 start
Started Hive Server2 (hive-server2): [ OK ]
[cloudera@quickstart ~]$
```

2) Open the Tableau Desktop and connect to a server

In left pane under 'To a Server' section select 'Cloudera Hadoop' (Click 'More...' in case you don't see the option)



3) Input the server IP (Get it from Cloudera Quickstart Terminal)

Type: ifconfig in terminal

```
cloudera@quickstart:~$ ifconfig
eth1      Link encap:Ethernet  HWaddr 00:0C:29:DD:26:36
          inet addr:192.168.112.132  Bcast:192.168.112.255  Mask:255.255.255.0
          UP BROADCAST RUNNING MULTICAST  MTU:1500  Metric:1
          RX packets:536 errors:0 dropped:0 overruns:0 frame:0
          TX packets:409 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:1000
          RX bytes:182230 (177.9 KiB)  TX bytes:44240 (43.2 KiB)

lo        Link encap:Local Loopback
          inet addr:127.0.0.1  Mask:255.0.0.0
          UP LOOPBACK RUNNING  MTU:65536  Metric:1
          RX packets:26683 errors:0 dropped:0 overruns:0 frame:0
          TX packets:26683 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:0
          RX bytes:42604598 (40.6 MiB)  TX bytes:42604598 (40.6 MiB)
```

Select

Type : HiveServer2

Authentication : Username

Username : cloudera

****Note:** Don't change 'Port' and make sure you install the connector from above link in step 1.

Now Sign In

Cloudera Hadoop

Server: 192.168.112.132 Port: 10000

Enter information to sign in to the server:

Type: HiveServer2

Authentication: Username

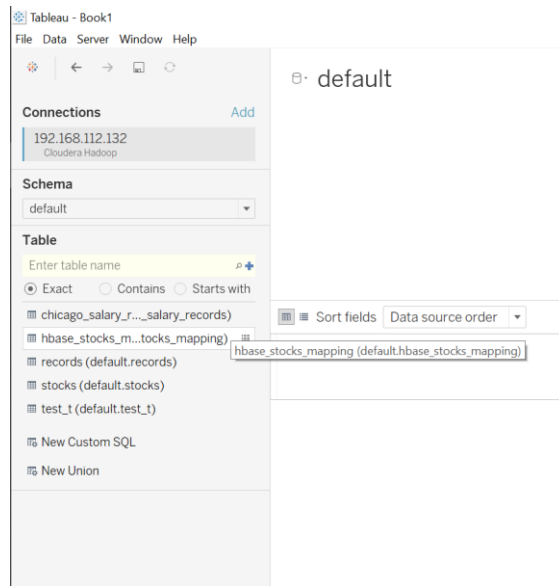
Transport: SASL

Username: cloudera

☐ Require SSL

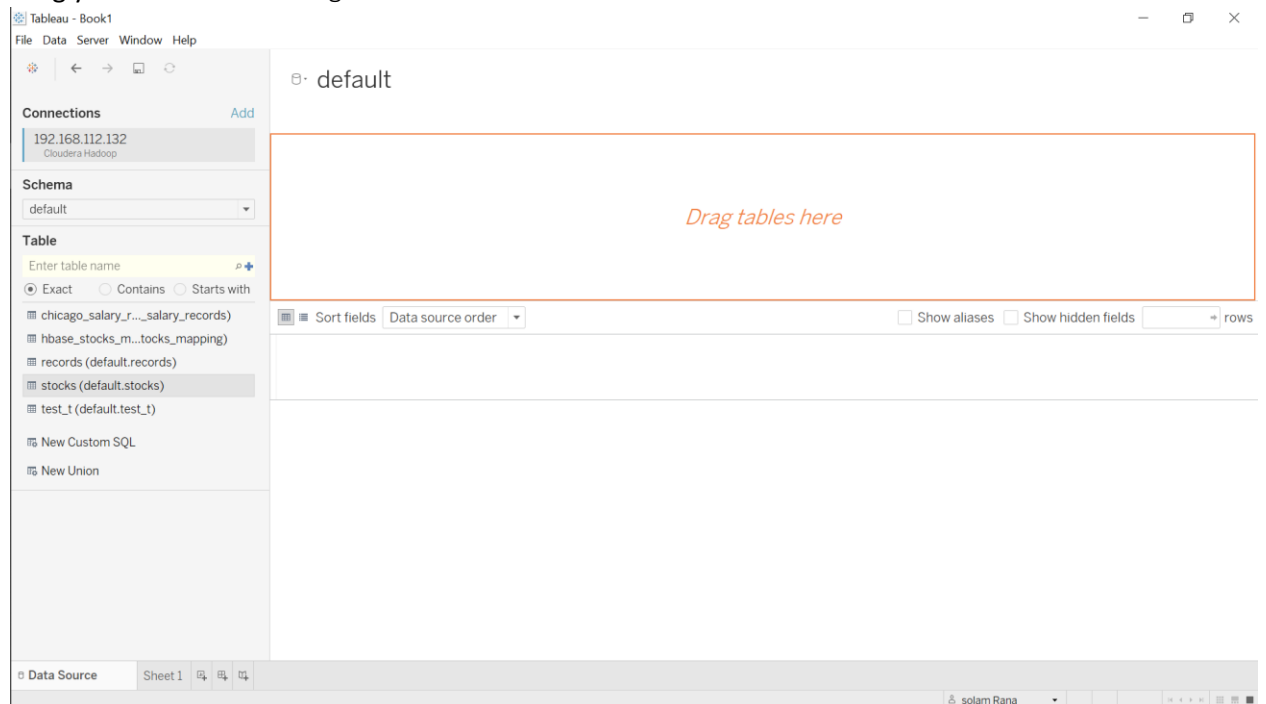
[Initial SQL...](#) Sign In

4) Select your 'Schema' and 'Table'

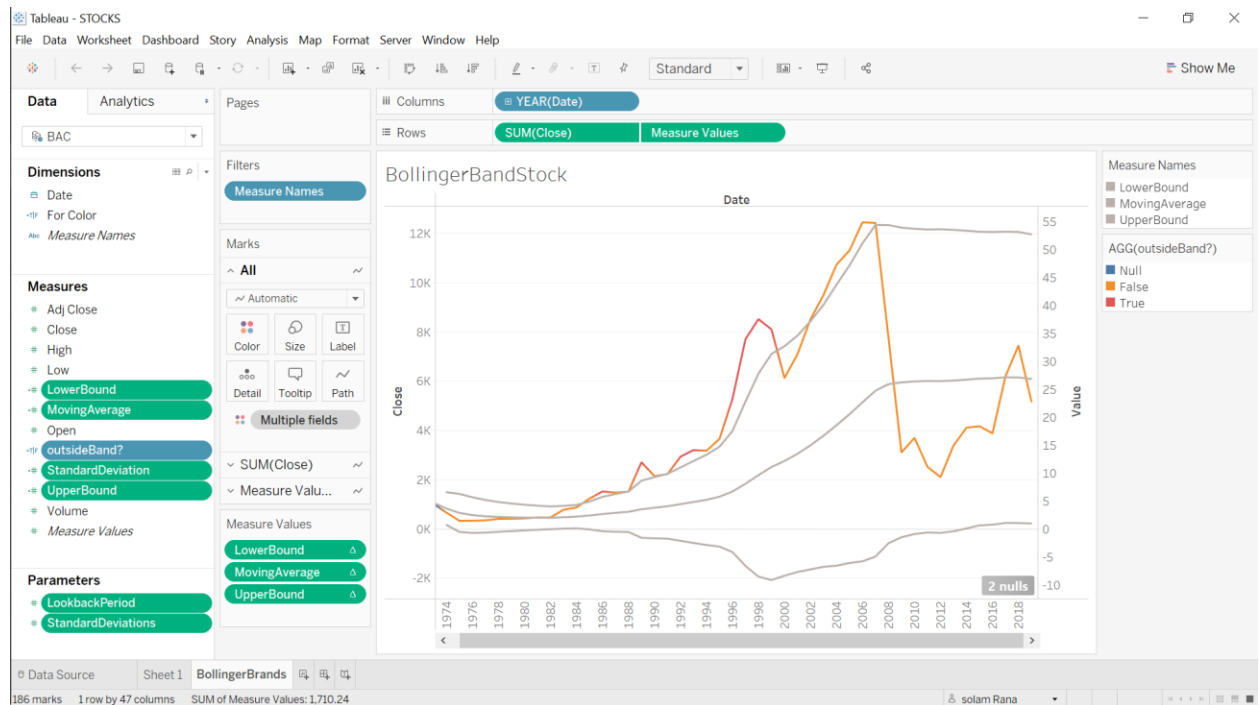


3. Loading data

Drag your table to the 'Drag tables here' box



4. Creating sheets



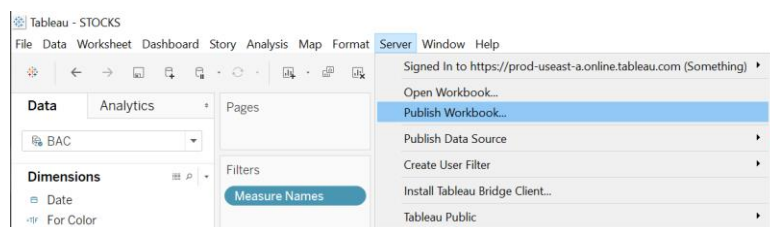
Drag your Dimensions/Measures/Parameters field in *Columns* and *Rows* as per need.

You can also create new Measures(*LowerBound*, *MovingAverage*, *outsidBand?*, *StandardDeviation*, *UpperBound*) to make your visualization more efficient.

Create new Parameters(*LookBackPeriod*, *StandardDeviations*) to set some values needed to be applied in the visualization. (Algorithms for the measures are already mentioned in presentation Slide)

5. Publishing to the Tableau server

In toolbar go to *Server* tab and go to *Publish WorkBook* to publish it in the Tableau Server.



(Make sure you have logged in to the Tableau Server with credentials)

Get your workbook published in Tableau Server

