

Kylin and Tableau Tutorial

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*There are some limitations of Kylin ODBC driver with Tableau, please read carefully this instruction before you try it. * Only support "managed" analysis path, Kylin engine will raise exception for un-expected dimension or metric * Please always select Fact Table first, then add lookup tables with correct join condition (defined join type in cube) * Do not try to join between fact tables or lookup tables; * You can try to use high cardinality dimensions like seller id as Tableau Filter, but the engine will only return limited seller id in Tableau's filter now.*

More detail information or any issue, please contact Kylin Team:

kylinolap@gmail.com

Step 1. Install ODBC Driver

Refer to wiki page [Kylin ODBC Driver Tutorial](#).

Step 2. Connect to Kylin Server

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We recommended to use Connect Using Driver instead of Using DSN since Tableau team will not manage your DSN on Tableau Servers.

Connect to Data

In a file

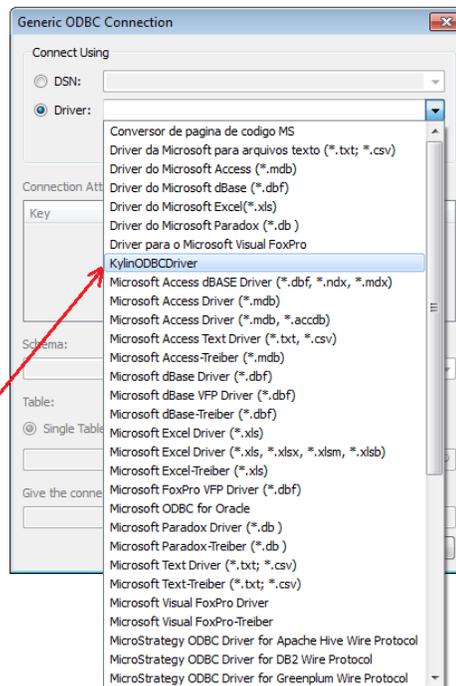
- Tableau Data Extract
- Microsoft Access
- Microsoft Excel
- Text File
- Import from Workbook

On a server

- Tableau Server
- Action Vectorwise
- Amazon Redshift
- Aster Database
- Cloudera Hadoop
- DataStax Enterprise
- EMC Greenplum
- EXASolution
- Firebird
- Google Analytics
- Google BigQuery
- Hortonworks Hadoop Hive
- HP Vertica
- IBM DB2
- IBM Netezza
- MapR Hadoop Hive
- Microsoft Analysis Services
- Microsoft PowerPivot
- Microsoft SQL Server
- MySQL
- OData
- Oracle
- Oracle Essbase
- ParAccel
- PostgreSQL
- Progress OpenEdge
- Salesforce
- SAP HANA
- SAP NetWeaver Business Warehouse
- SAP Sybase ASE
- SAP Sybase IQ
- Teradata
- Teradata OLAP Connector
- Windows Azure Marketplace DataMarket
- Other Databases (ODBC)

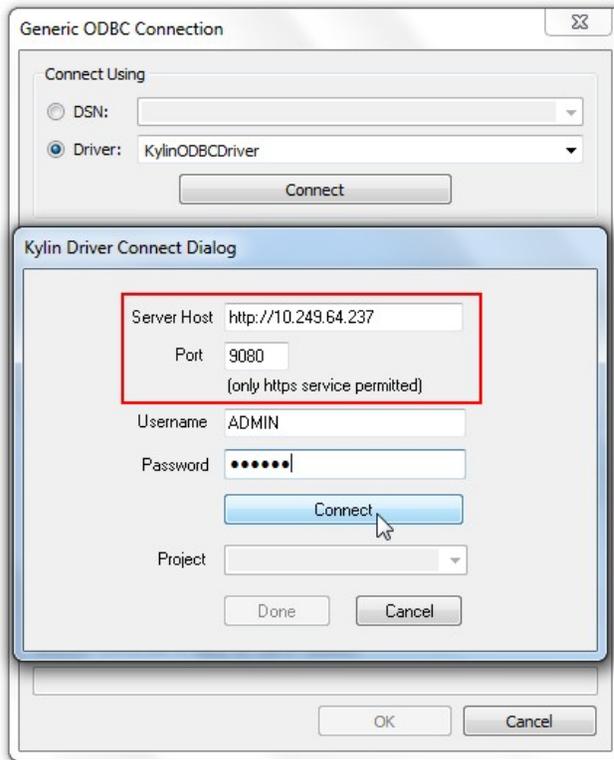
Saved data sources

- Sample - Coffee Chain (Access)
- Sample - Superstore - Chinese Simplified (E...
- Sample - Superstore Subset (Excel)
- Sample - World Bank Indicators (Excel)

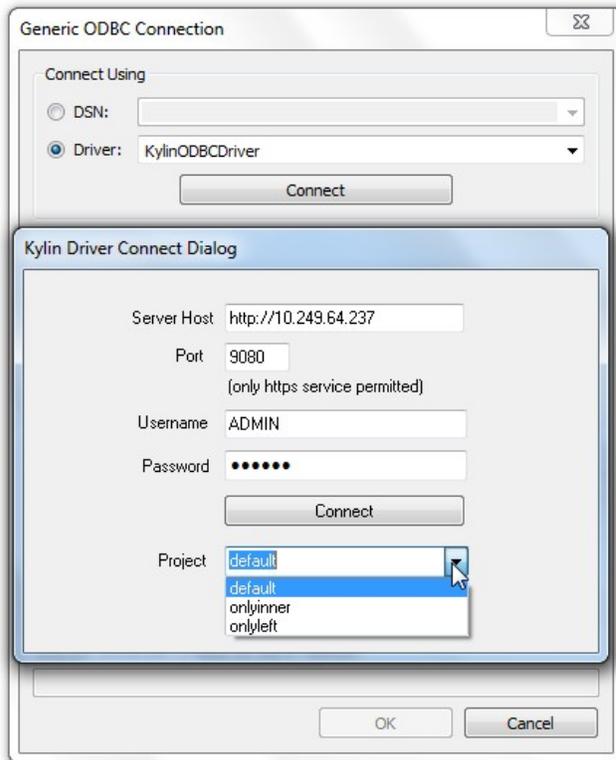


Connect Using Driver: Select "Other Database(ODBC)" in the left panel and choose KylinoDBCDriver in the pop-up window.

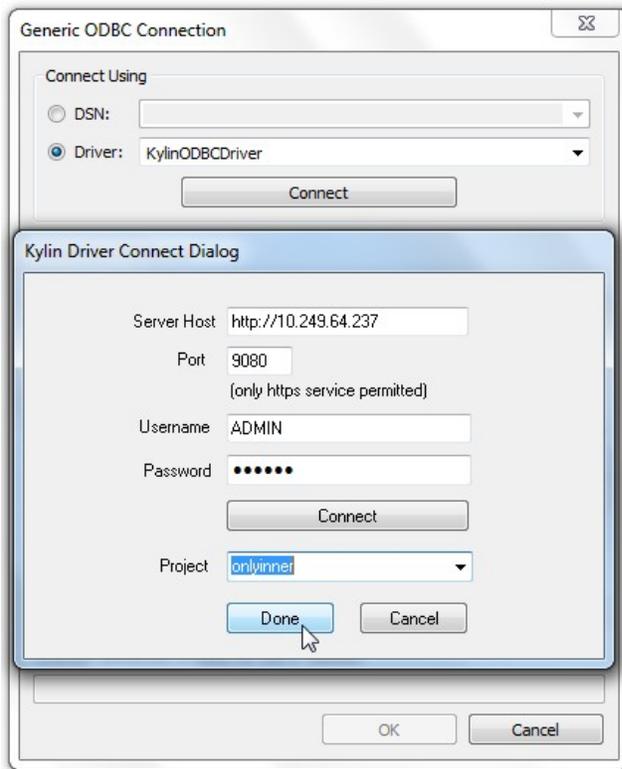
Enter your Sever location and credentials: server host, port, username and password.



Click "Connect" to get the list of projects that you have permission to access. See details about permission in [Kylin Cube Permission Grant Tutorial](#). Then choose the project you want to connect in the drop down list.



Click "Done" to complete the connection.



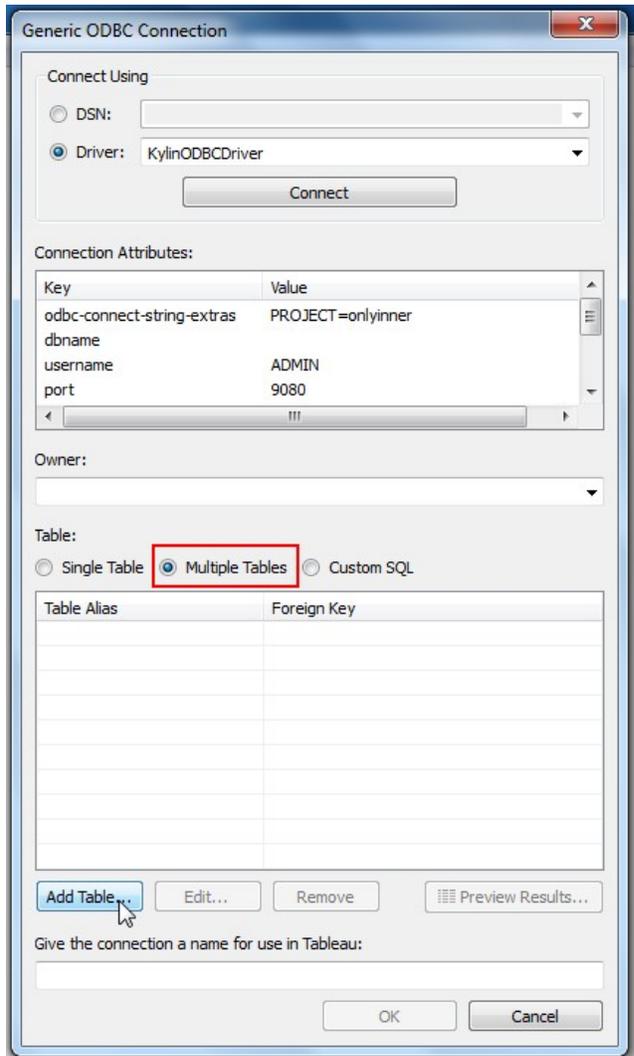
Step 3. Using Single Table or Multiple Tables

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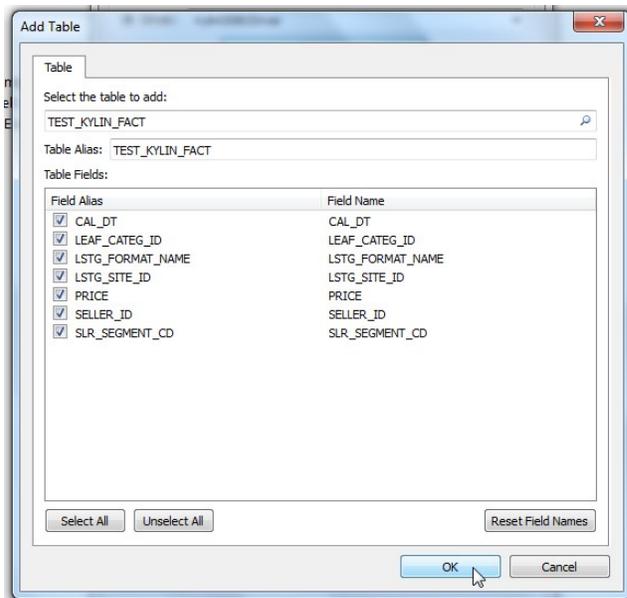
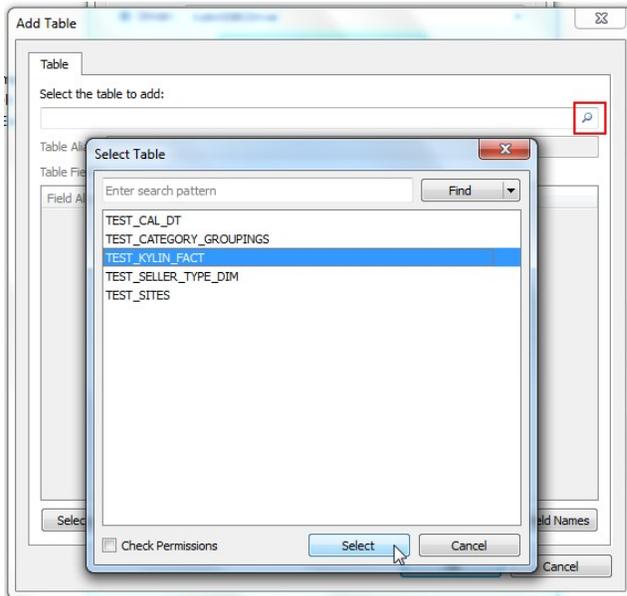
*Limitation * Must select FACT table first * Do not support select from lookup table only * The join condition must match within cube definition*

Select Fact Table

Select Multiple Tables.

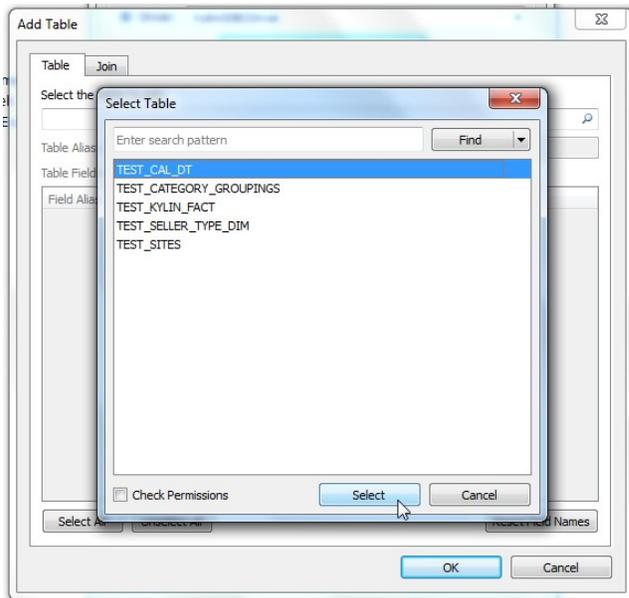


Then click **Add Table...** to add a fact table.

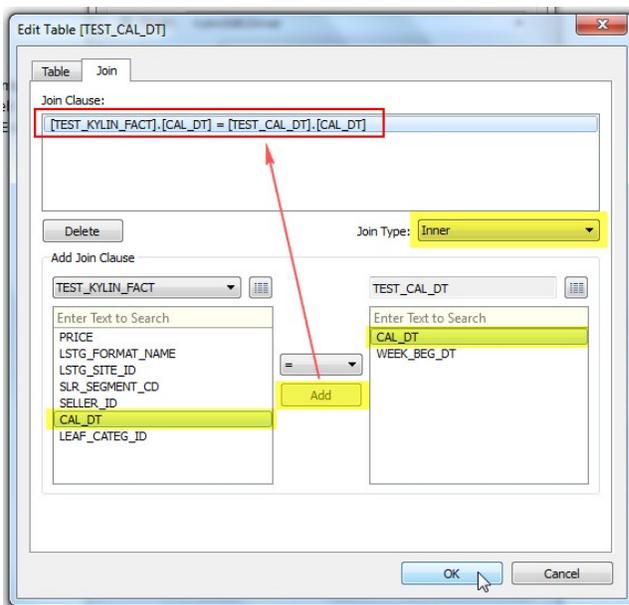


Select Look-up Table

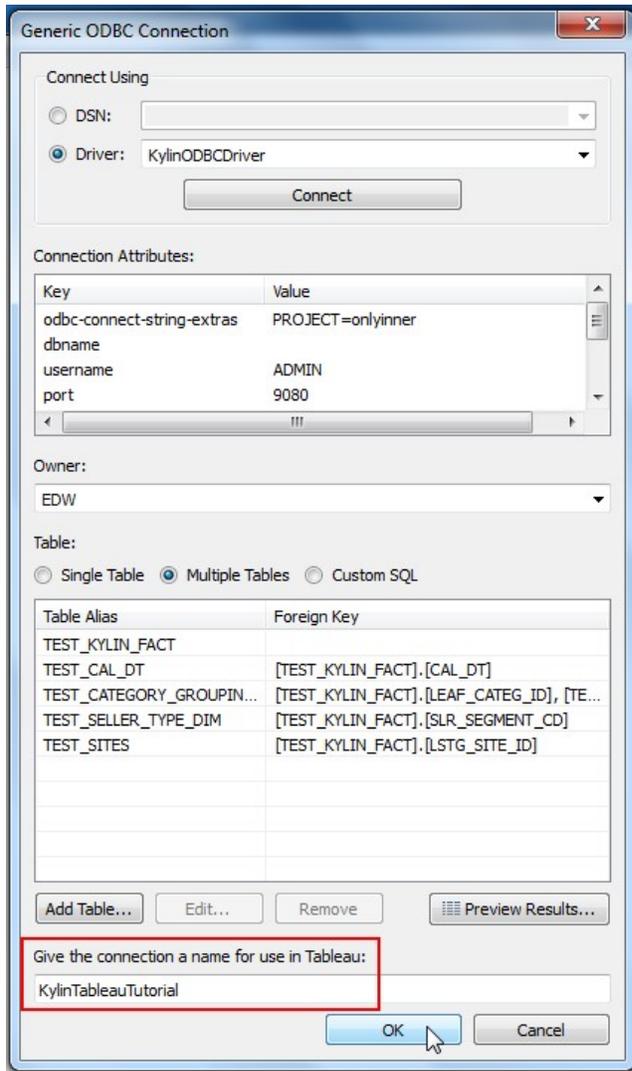
Click **Add Table...** to add a look-up table.



Set up the join clause carefully.



Keep add tables through click **Add Table...** until all the look-up tables have been added properly. Give the connection a name for use in Tableau.

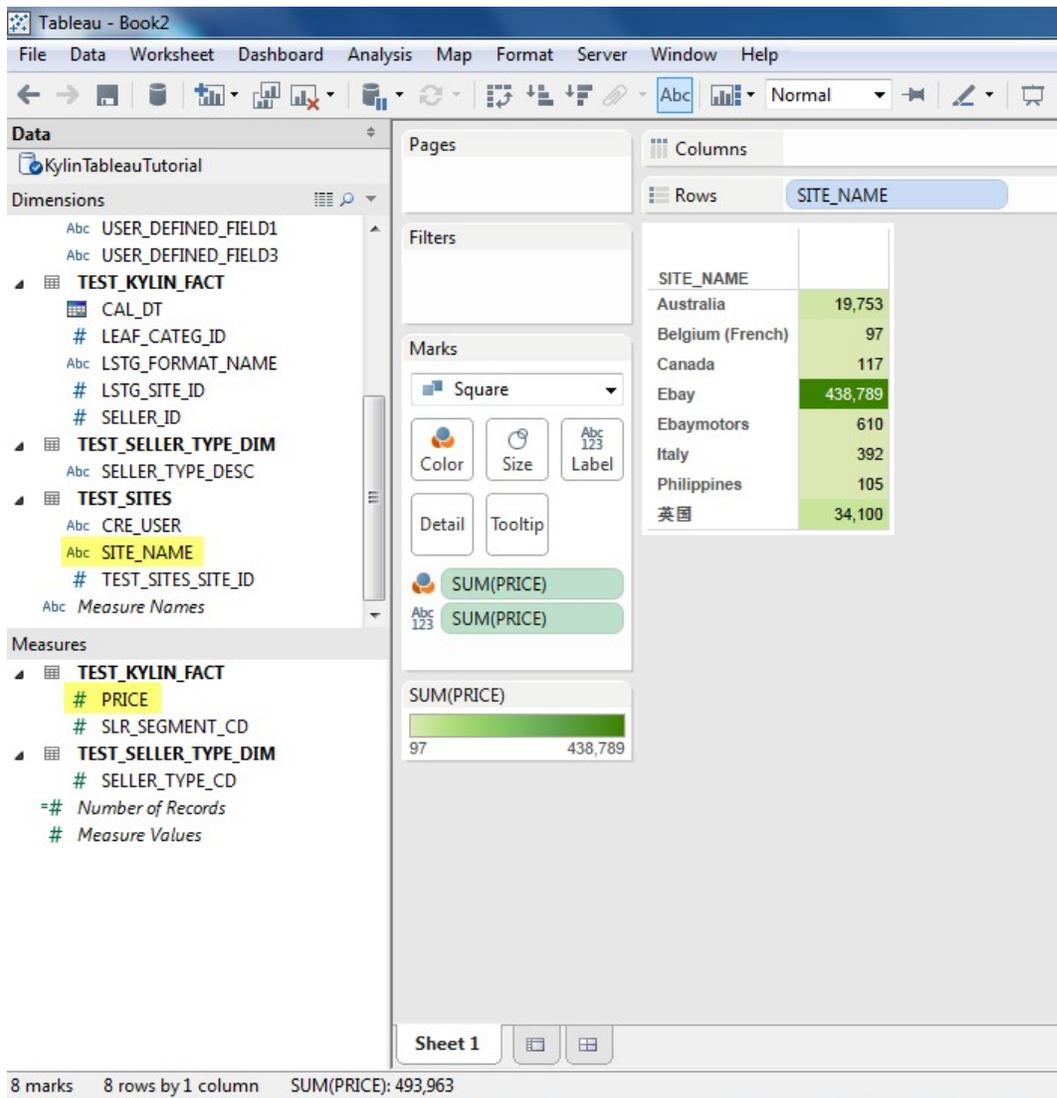


Using Connect Live

There are three types of **Data Connection**. Choose the **Connect Live** option.

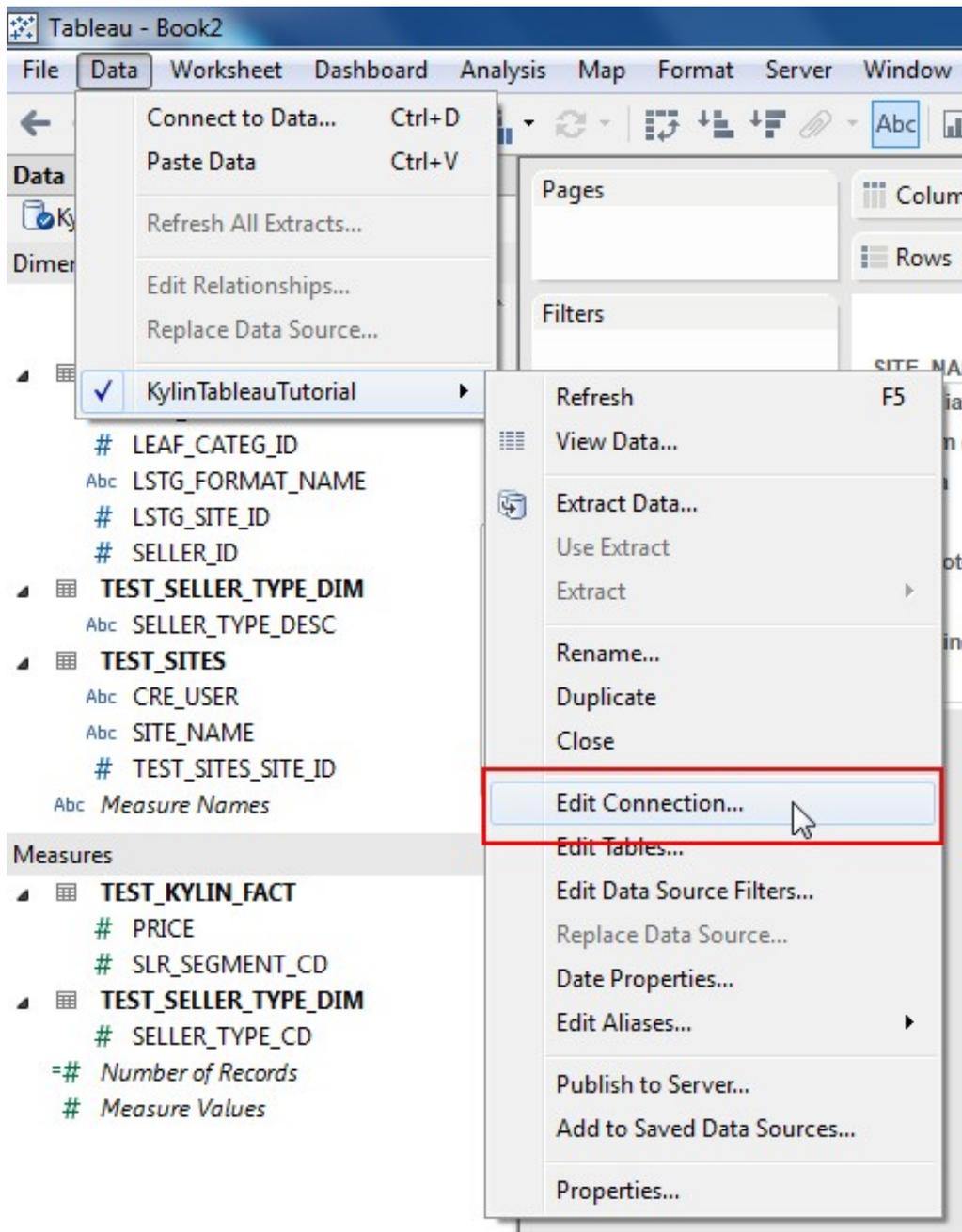


Then you can enjoy analyzing with Tableau.



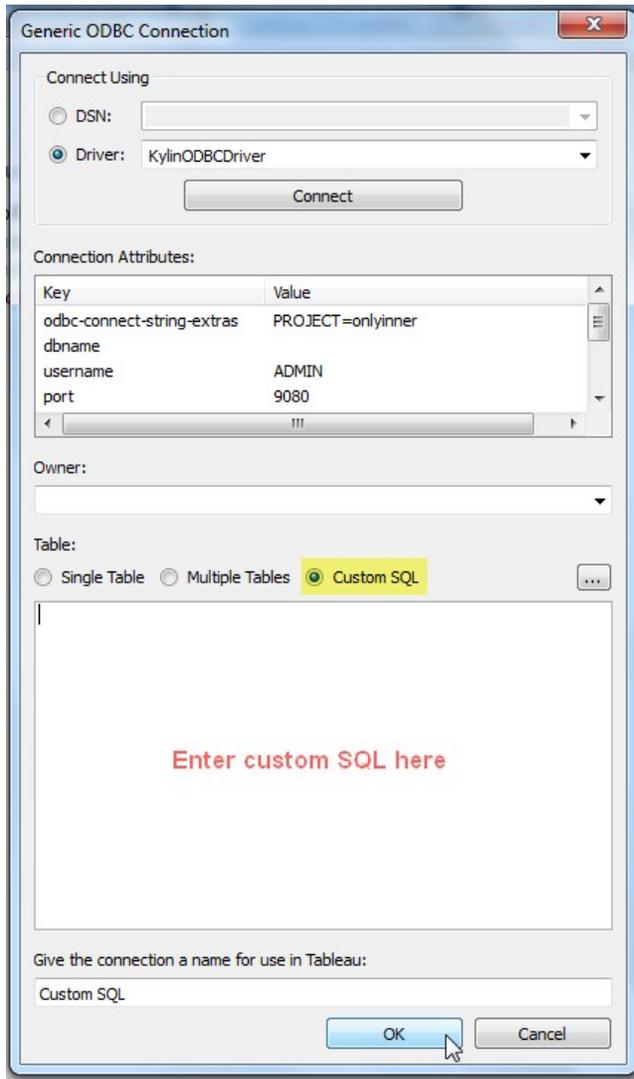
Add additional look-up Tables

Click **Data** in the top menu bar, select **Edit Tables...** to update the look-up table information.



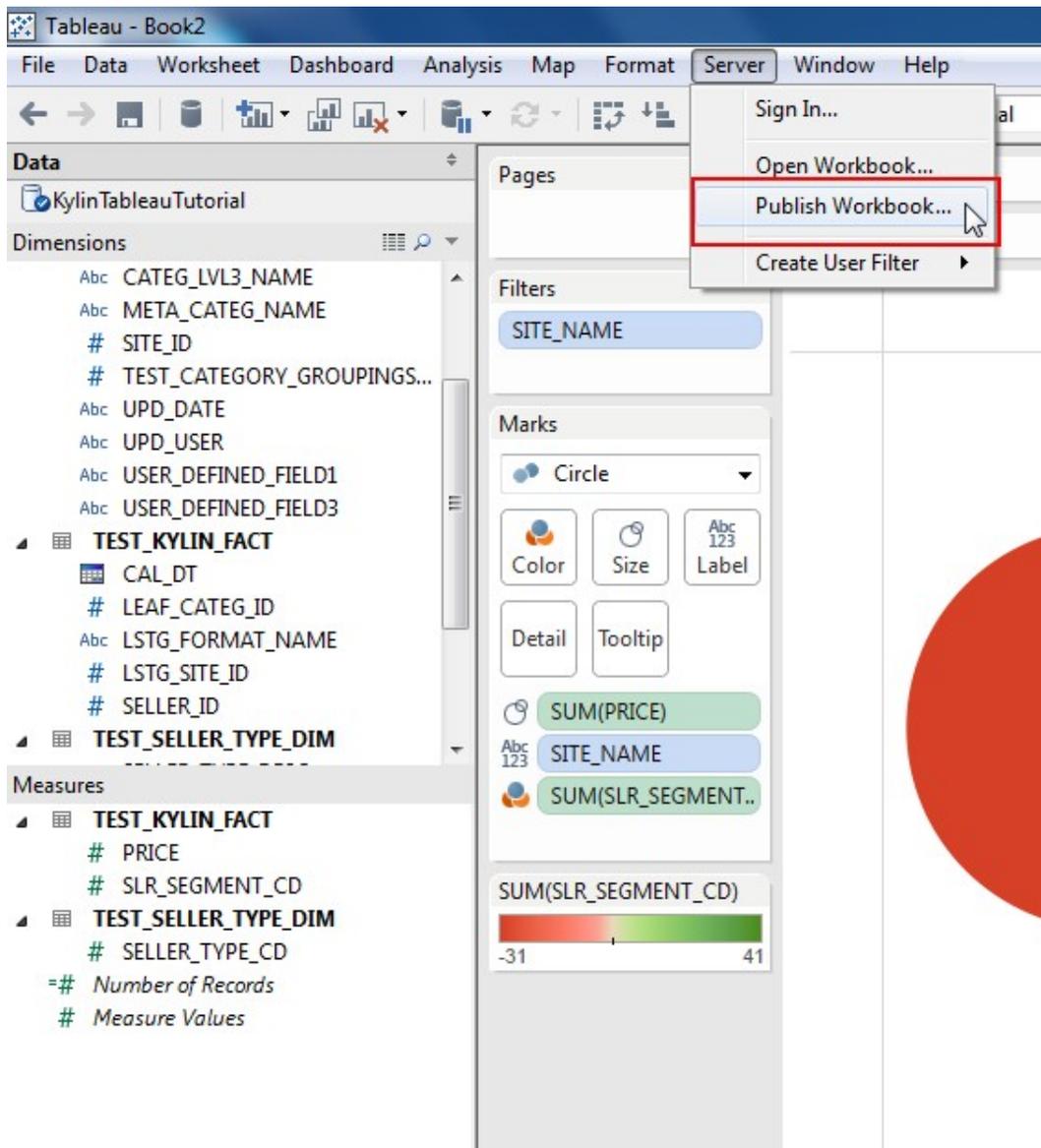
Step 4. Using Customized SQL

To use customized SQL resembles using Single Table/Multiple Tables, except that you just need to paste your SQL in **Custom SQL** tab and take the same instruction as above.

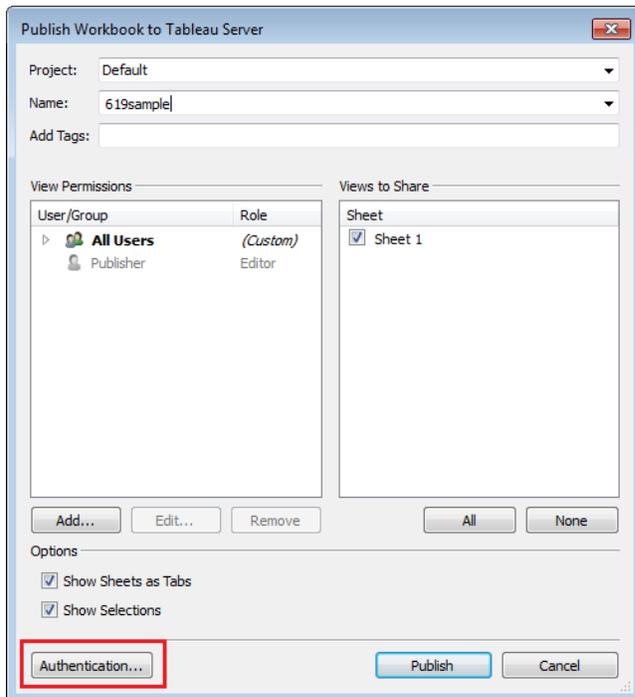


Step 5. Publish to Tableau Server

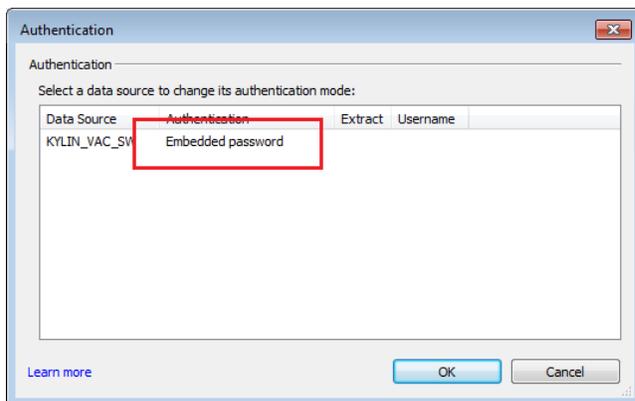
Suppose you have finished making a dashboard with Tableau, you can publish it to Tableau Server. Click **Server** in the top menu bar, select **Publish Workbook...**



Then sign in your Tableau Server and prepare to publish.



If you're Using Driver Connect instead of DSN connect, you'll need to additionally embed your password in. Click the **Authentication** button at left bottom and select **Embedded Password**. Click **Publish** and you will see the result.



Tips

- Hide Table name in Tableau
 - Tableau will display columns be grouped by source table name, but user may want to organize columns with different structure. Using "Group by Folder" in Tableau and Create Folders to group different columns.

The image shows the Tableau Desktop interface with a context menu open over the 'CATEG_LVL2_NAME' field in the Dimensions pane. The menu options include 'Add to Sheet', 'Show Quick Filter', 'Copy', 'Paste', 'Duplicate', 'Rename...', 'Hide', 'Group by', 'Create Folder...', 'Create Hierarchy...', 'Create Calculated Field...', 'Create Group...', 'Create Set...', 'Create Parameter...', 'Convert to Measure', 'Geographic Role', 'Default Properties', 'Replace References...', and 'Describe...'. The 'Group by' option is selected, and a sub-menu is open showing 'Folder' and 'Data Source Table'.

Data

KylinTableauTutorial

Dimensions

- Abc CAL_DT
- Abc CATEG_LVL2_NAME
- Abc CATEG_LVL3_NAME
- Abc CRE_USER
- # LEAF_CATEG_ID
- Abc LSTG_FORMAT_NAME
- # LSTG_SITE_ID
- Abc META_CATEG_NAME
- # SELLER_ID
- Abc SELLER_TYPE_DESC
- # SITE_ID
- Abc SITE_NAME
- TEST_CAL_DT_CAL_DT
- # TEST_CATEGORY_GROUPINGS_LE
- # TEST_SITES_SITE_ID
- Abc UPD_DATE
- Abc UPD_USER
- Abc USER_DEFINED_FIELD1
- Abc USER_DEFINED_FIELD3
- WEEK_BEG_DT
- Abc Measure Names

Measures

- # PRICE
- # SELLER_TYPE_CD
- # SLR_SEGMENT_CD
- =# Number of Records
- # Measure Values

5 marks 1 row by 1 column SUM(SLR_SEGMENT_CD): 33