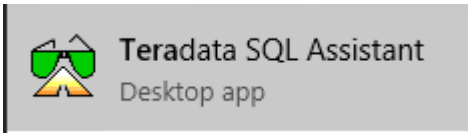
Dillards 2016 Data Extraction

Teradata Connection

This tutorial assumes you have access to the University of Arkansas VMWare client or the Remote desktop client for participating universities. The intent of this exercise is to extract KPI data from the Dillard's 2016 dataset to an Excel file in order to load the information into an application of your choice.

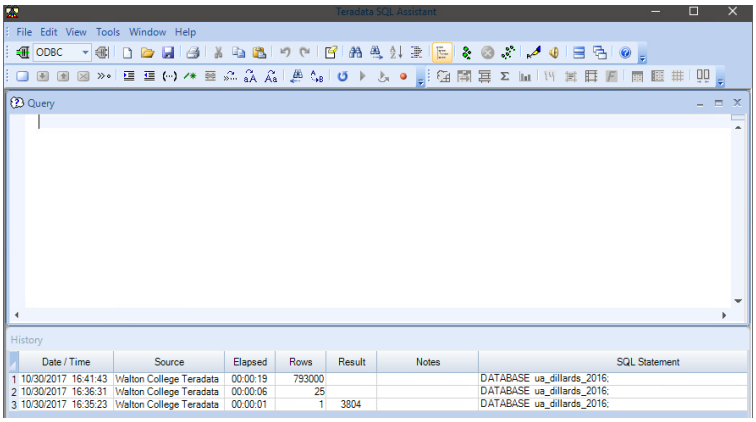
NOTE: the data used during this workshop should not be downloaded to your personal drives and should remain on the Remote Desktop S: drive provided by the University of Arkansas. This is due to our agreement with the data providers.

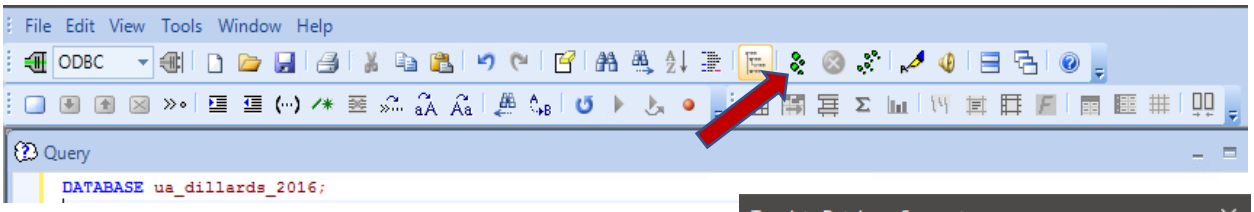
1. From the Desktop or Start Menu, search for and open the software Teradata SQL Assistant. You will see a Windows similar to the below screenshot.



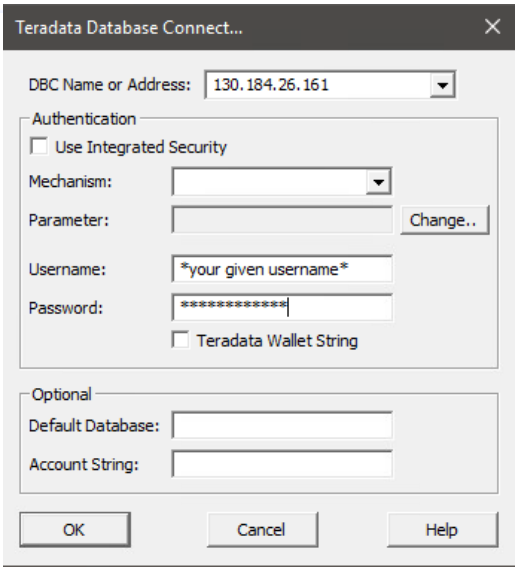
2. Copy and paste the query below onto the Query window to access the UA_Dillards_2016 and click on the "footsteps" execute button

```
DATABASE ua_dillards_2016;
```





3. A Select Data Source window will pop up to ask you the credentials to access the Dillard's database. Navigate to the **Machine Data Source** tab on top. Then double-click on **Walton College Teradata** (as shown to the right).
4. Click **OK**



5. Here you will see another pop-up window called **Teradata Database Connect…**
6. Enter the **Username**: and **Password**: provided by your instructor. Click **OK**

7. Congratulations! Now you are connected to the UA_Dillards_2016 database and ready to extract the data needed for your assignment.

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Dillards 2016 Data Extraction

SQL Query to extract data

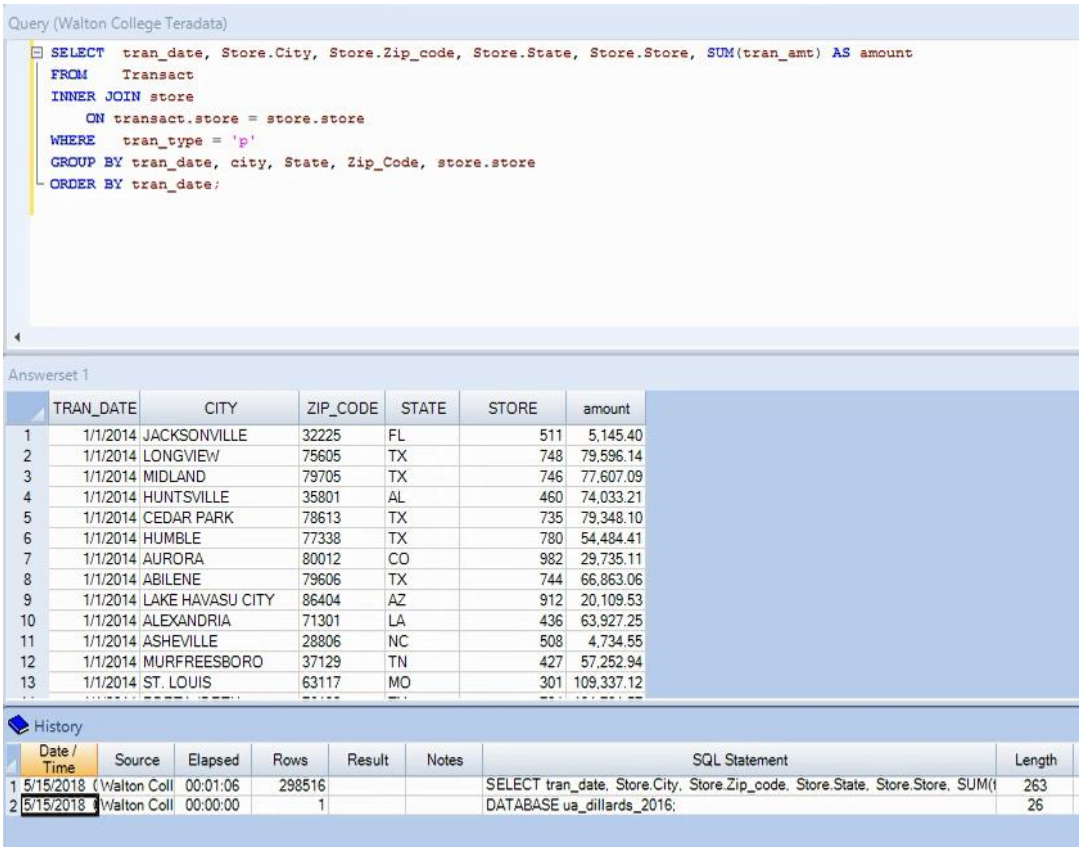
The Dillard's 2016 dataset has approximately 450 million rows. We need to narrow the data extraction down to only the KPI's we are interested in reviewing. To do this, we will run a query to extract transaction data from the TRANSACT table and associated identifying information (Store, City, State & Zip_Code) from the STORE table.

8. Running the Query
   - **a.** Navigate to the query window and delete any current code
   - **b.** Copy and paste the SQL query below into the query window

```
SELECT      tran_date, Store.City, Store.Zip_code, Store.State,
            Store.Store, SUM(tran_amt) AS amount
FROM  Transact
INNER JOIN store
      ON transact.store = store.store
WHERE tran_type = 'p'
GROUP BY tran_date, city, State, Zip_Code, store.store
ORDER BY tran_date;
```

9. Click the "footsteps" execute button  on the menu bar.

10. The final query should take **approximately 30 seconds to 1 minute to run** depending on the connection from your computer. You should have 298,516 rows of records in the final selection. Your result table should look like the picture below and the records can be verified on this screen.



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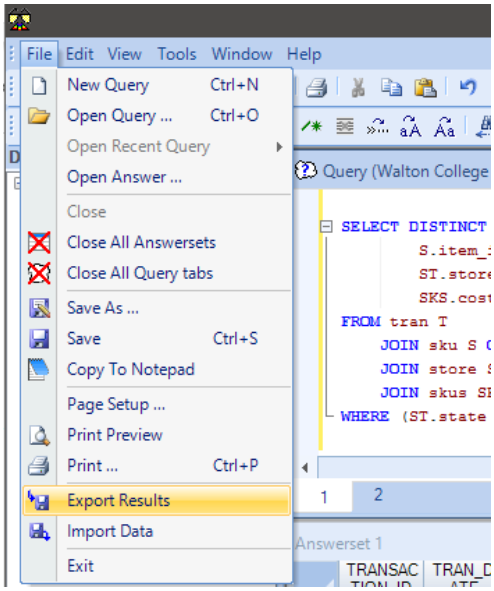
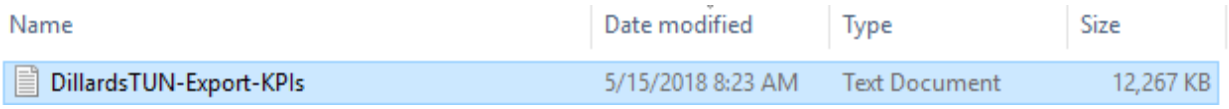
Export result table in a text file

Now we will export to a file in order to provide access to the application of our choice

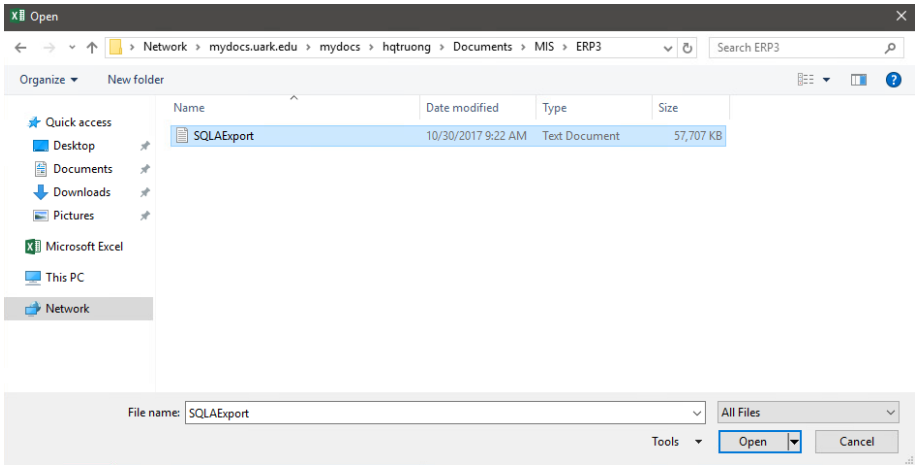


11. Navigate to File on the top bar, and select Export Results…
12. Now click the "footsteps"  execute button again to have Teradata run the query again and export the result directly.
13. You will now see a pop up window, prompting you for the location you want to save
14. Select your desired location, the File name: and make sure you Save as type: Delimited Text [ANSI] (*.txt).
15. **IMPORTANT**: after you click Save, Teradata will take a while to export everything. It will take about 3 minute or less depending on your computer, since there are 298,516 rows of data to be exported.
16. After Teradata finishes saving the result table as txt file in your folder, go to the location that you saved it to make sure it exports successfully. In this example, the file has been named DillardsTUN-Export-KPIs.txt



Import Text file into Excel

17. Open MS Excel.
18. Select **File** -> **Open** and Navigate to your .txt file folder
19. Choose the file format as **All Files** (as shown below)
20. Select your file
21. Click **Open**.



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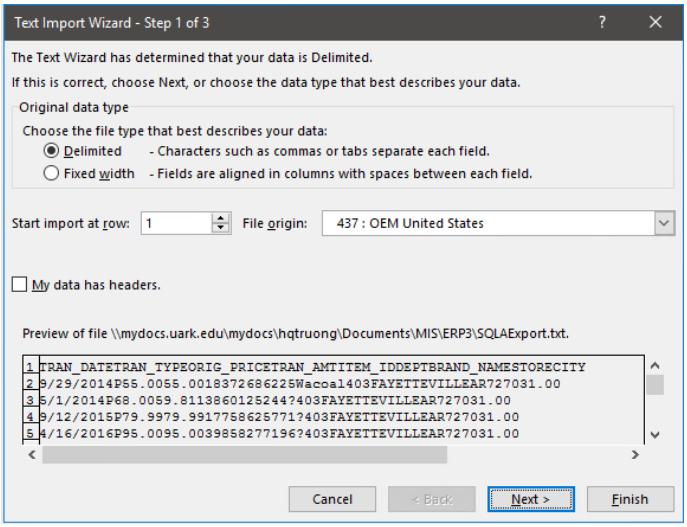
Dillards 2016 Data Extraction

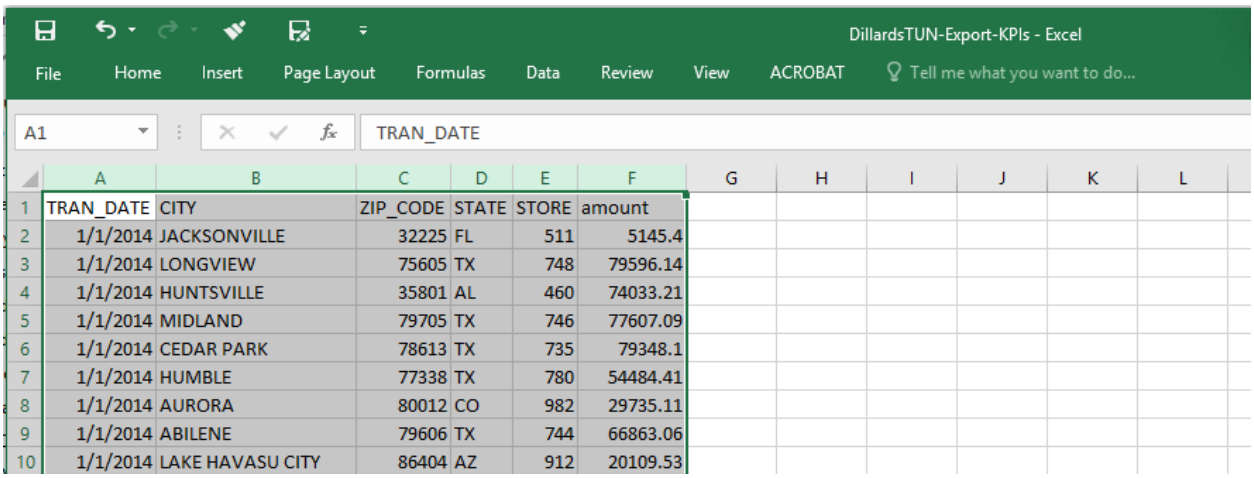
22. You will now see a window called **Text Import Wizard**, with different options of how you want to format your Excel file from a text file.



23. Accept the default settings and click **Finish** to import the file.

24. After couple seconds, you will now see the result is successfully imported into Excel. See next page for a screen shot.

25. **Save** the Excel file after you are done reviewing the data as a **.csv** comma delimited excel file



	A	B	C	D	E	F
1	TRAN_DATE	CITY	ZIP_CODE	STATE	STORE	amount
2	1/1/2014	JACKSONVILLE	32225	FL	511	5145.4
3	1/1/2014	LONGVIEW	75605	TX	748	79596.14
4	1/1/2014	HUNTSVILLE	35801	AL	460	74033.21
5	1/1/2014	MIDLAND	79705	TX	746	77607.09
6	1/1/2014	CEDAR PARK	78613	TX	735	79348.1
7	1/1/2014	HUMBLE	77338	TX	780	54484.41
8	1/1/2014	AURORA	80012	CO	982	29735.11
9	1/1/2014	ABILENE	79606	TX	744	66863.06
10	1/1/2014	LAKE HAVASU CITY	86404	AZ	912	20109.53

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