

New Data Lake/Tutorial 4c Getting ...

Tutorial 4c Getting Started with Oracle Data Visualization Desktop

FINISHED

This tutorial was built for BDCS-CE version 17.4.1 and Data Visualization Desktop 4.0 as part of the New Data Lake User Journey: here (<https://github.com/oracle/learning-library/tree/master/workshops/journey2-new-data-lake>). Questions and feedback about the tutorial: david.bayard@oracle.com (<mailto:david.bayard@oracle.com>)

Note: Please complete the tutorial "Adding more datasets" before attempting this one as you will need the hive table bike_trips_weather_parquet to continue

Took 0 sec. Last updated by anonymous at November 16 2017, 9:17:12 AM.

About Oracle Data Visualization Desktop

READY

Oracle Data Visualization Desktop (here (<https://docs.oracle.com/middleware/bidv1221/desktop/index.html>)) is a lightweight, single-file download tool to easily analyze data. Data Visualization Desktop can connect to a variety of data sources. In this tutorial, we will show you how to install DV Desktop, connect it to BDCS-CE, and start to build visualizations on our Bike Trip dataset.

Download Data Visualization Desktop

FINISHED

If you have not already downloaded DVD 4.0, you will need to do so before continuing.

****Please follow the instructions in the "xtra Downloading DV Desktop" notebook. Then return here and continue.****

Took 0 sec. Last updated by anonymous at November 15 2017, 3:16:01 PM.

Setting up DVD and BDCS-CE to connect

FINISHED

As of BDCS-CE 17.4.1 and DV Desktop 4.0, there are some specific steps you need to follow to connect.

****Please follow the instructions in the "Connecting DV Desktop4.0 and BDCS-CE" notebook. Then return here and continue.****

Took 0 sec. Last updated by anonymous at November 16 2017, 9:13:51 AM.

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Defining a connection to BDCS-CE in DVD

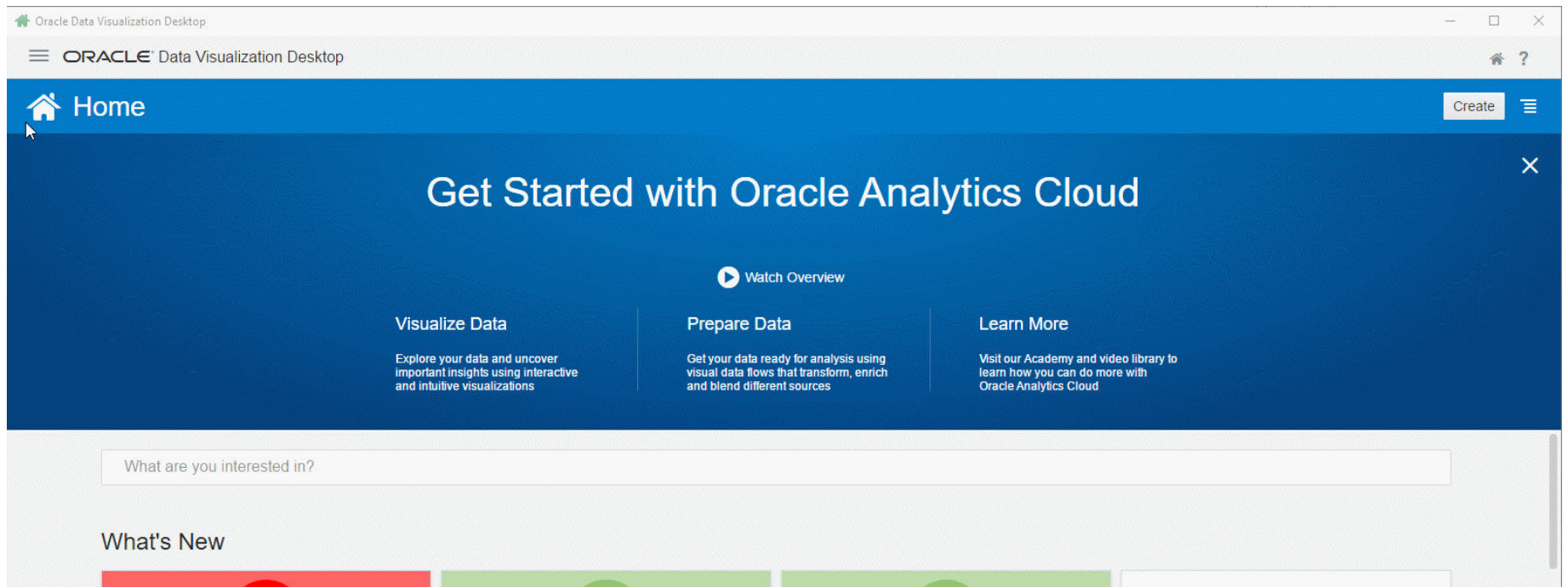
If you completed the “xtra Connecting DV Desktop4.0 and BDCS-CE” notebook, then you should have defined a connection in DVD for Oracle Big Data Cloud (BDCS-CE). If you did not do so yet, please finish up the instructions in the “xtra Connecting DV Desktop and BDCS-CE” notebook.

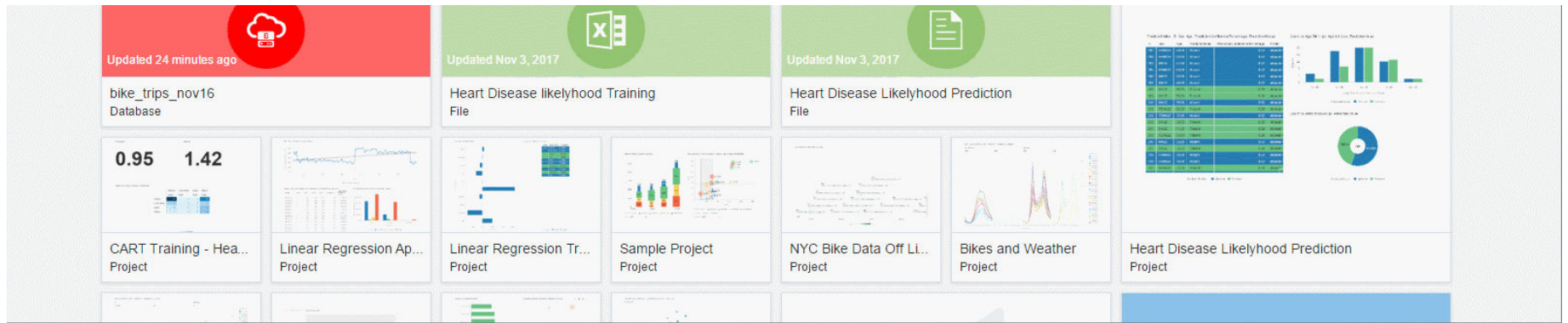
Took 0 sec. Last updated by anonymous at November 16 2017, 9:15:39 AM.

Create a DV Desktop Data Set for your Spark connection

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- From the upper left menu, choose Data
- Click on Create and choose “Data Set”
- Select the connection you created for Oracle Big Data Cloud (BDCS-CE)
- Click on the Default database
- Select the “bike_trips_weather_parquet” table.
- Click on “Add All” to add all the columns.
- Once you have selected your table and columns, click on the rightmost icon in the dataflow pipeline (it will be the icon after the filter icon). Then, click on the Refresh property. Change this to be “Live - Always use the database”.
- Name the new data source and click the Add button. It will take a moment while DVD inspects the data.
- Once the preview data is showing, scroll to the PRECIPITATION column and invoke Properties from the column header menu. Change “Treat As” to attribute
- Click Create Project





Took 0 sec. Last updated by anonymous at November 16 2017, 10:41:30 AM.

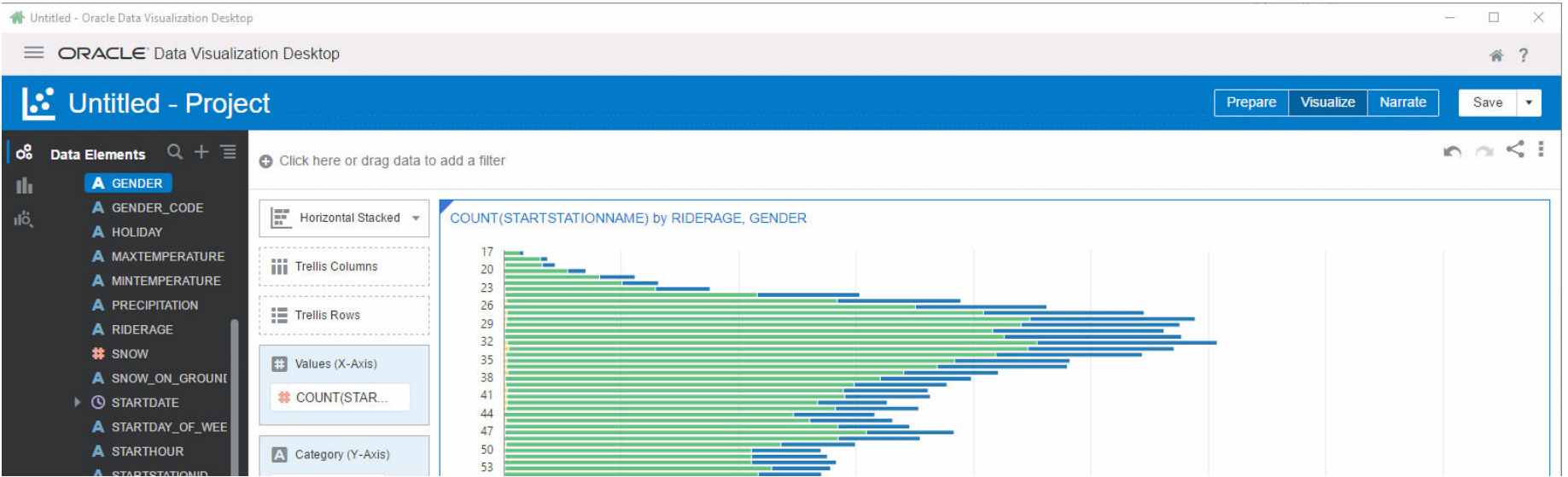
Took 0 sec. Last updated by anonymous at November 16 2017, 10:43:04 AM.

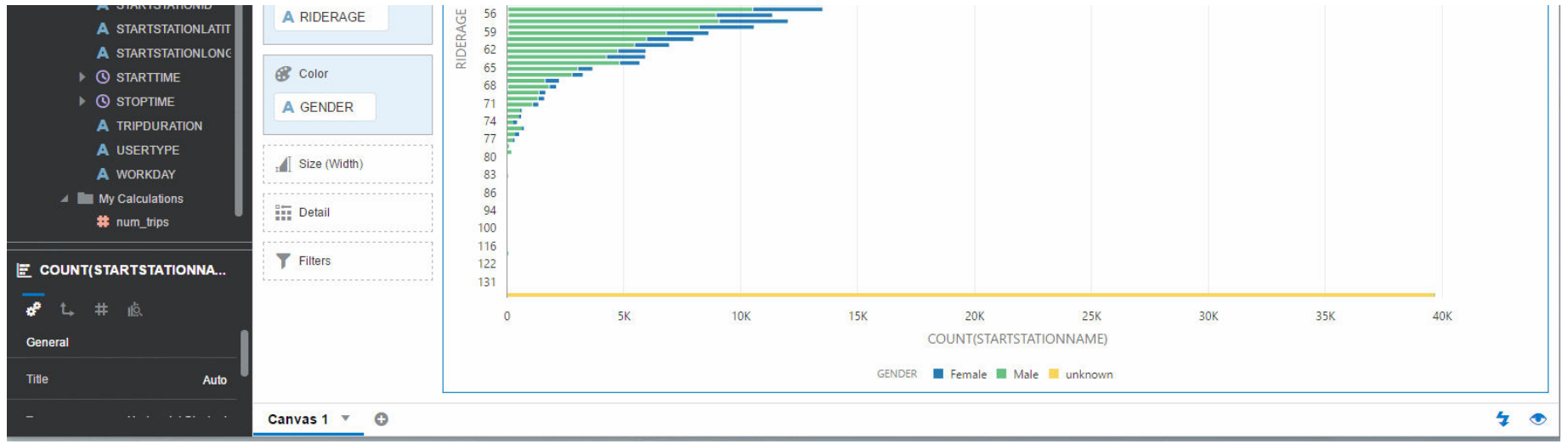
FINISHED

Create a second visualization (Trips per hour)

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- Click the + sign next to Canvas1 to create a new canvas
- Click on num_trips
- Ctrl-click on STARTHOUR
- Drag STARTHOUR (and num_trips will drag with it) onto the canvas
- Change the visualization to Line
- Drag the STARTDATE to the Color Section

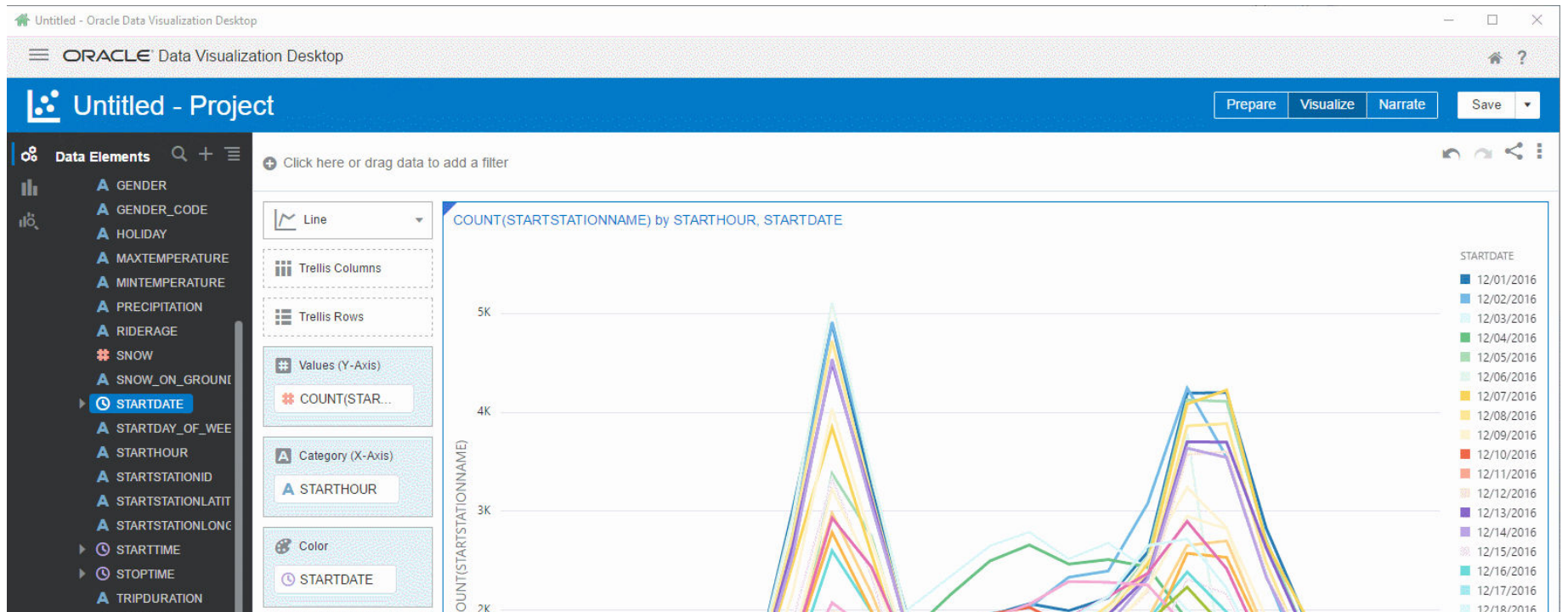


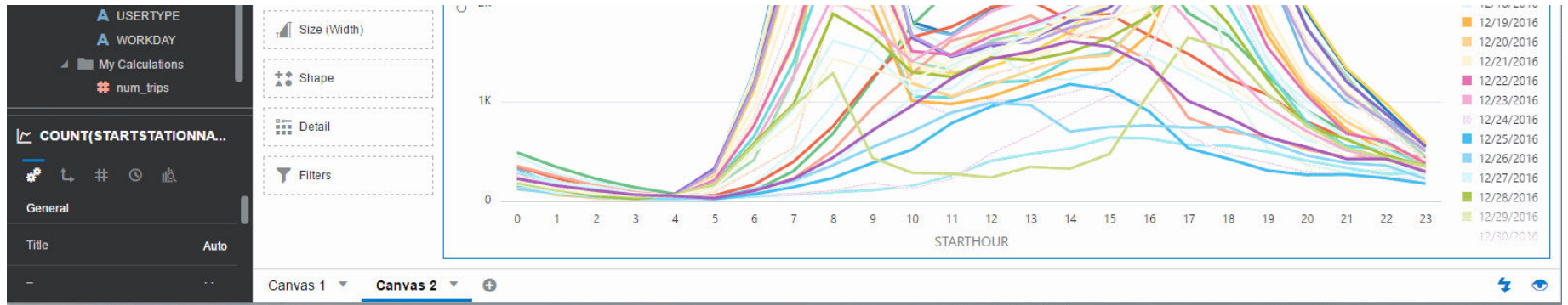


Extend the second visualization (Trips per hour based on workdays)

READY

- Drag the WORKDAY to the Trellis Columns section





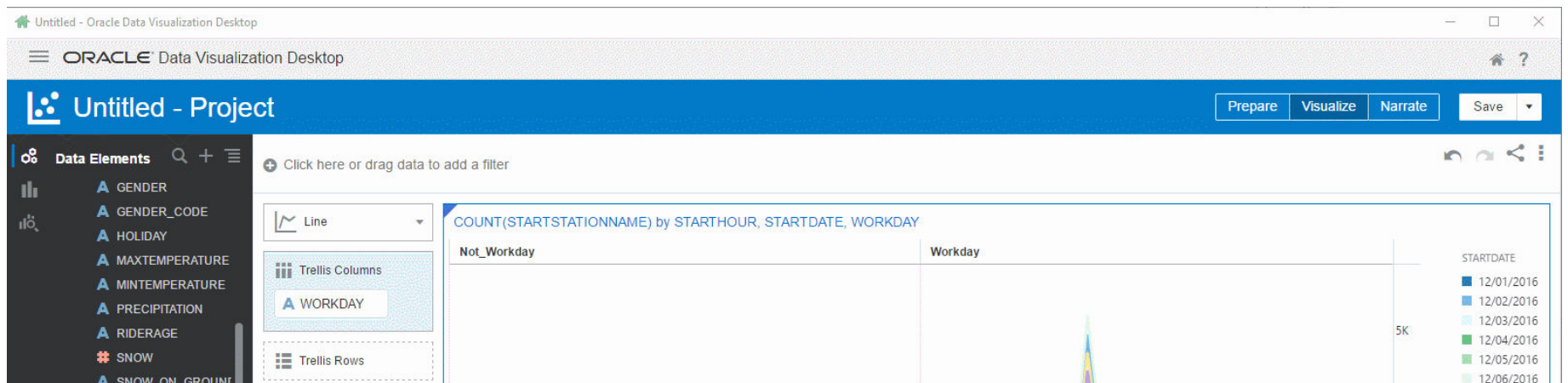
Further extend the second visualization (Trips per hour based on workdays and weather)

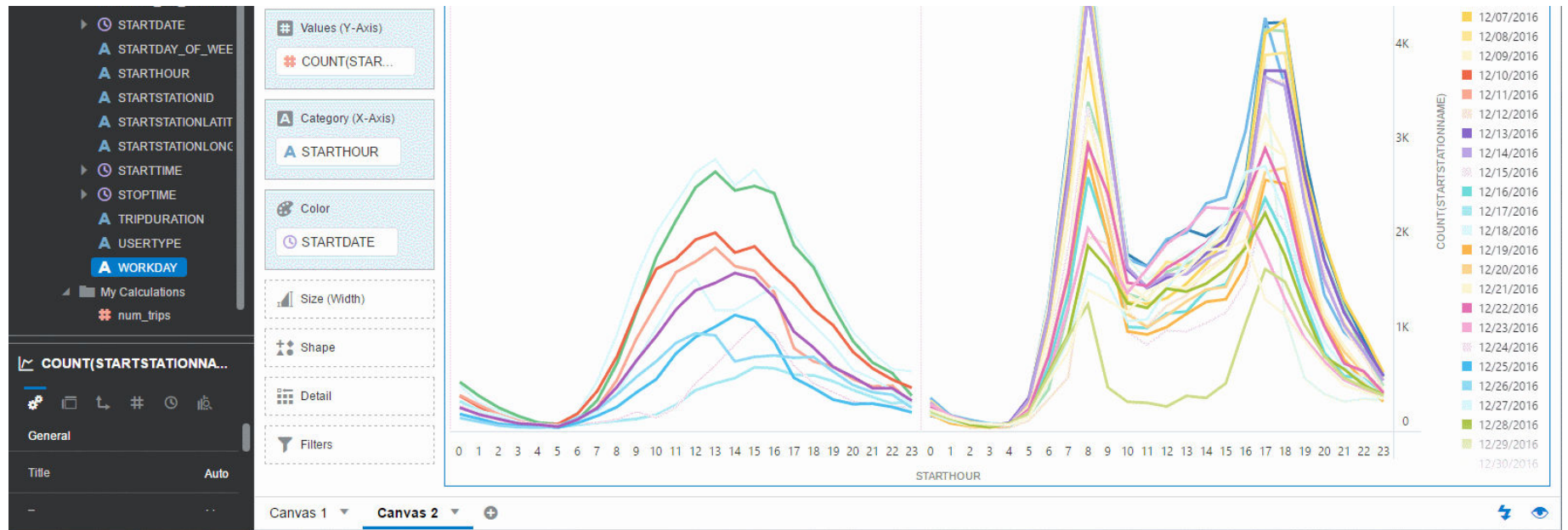
READY

- Right Click on My Calculations and choose Add Calculation
- Expand Expressions and double-click on Case (If)
- Enter this expression
CASE WHEN PRECIPITATION>0.1 THEN 'WET' ELSE 'DRY' END
- Name the calculation "weather"
- Drag weather to the Trellis Columns section
- Drag PRECIPITATION to the Item (Detail) section
- Drag MAXTEMPERATURE to the Item (Detail) section

We can now hover over individual lines and see the Item detail like precipitation and daily max temperature.

What observations do you make? Notice that on non-workdays, if it is WET, then there seems to be visually fewer bike trips. Notice also that on workdays, if it is WET, then the number of trips does not seem to change that much. But there is one visual outlier.. on December 29, 2016, the wet weather seemed to possibly discourage some of the workers from making their usual commute and lunch hour trips. Something that could be explored further if desired...



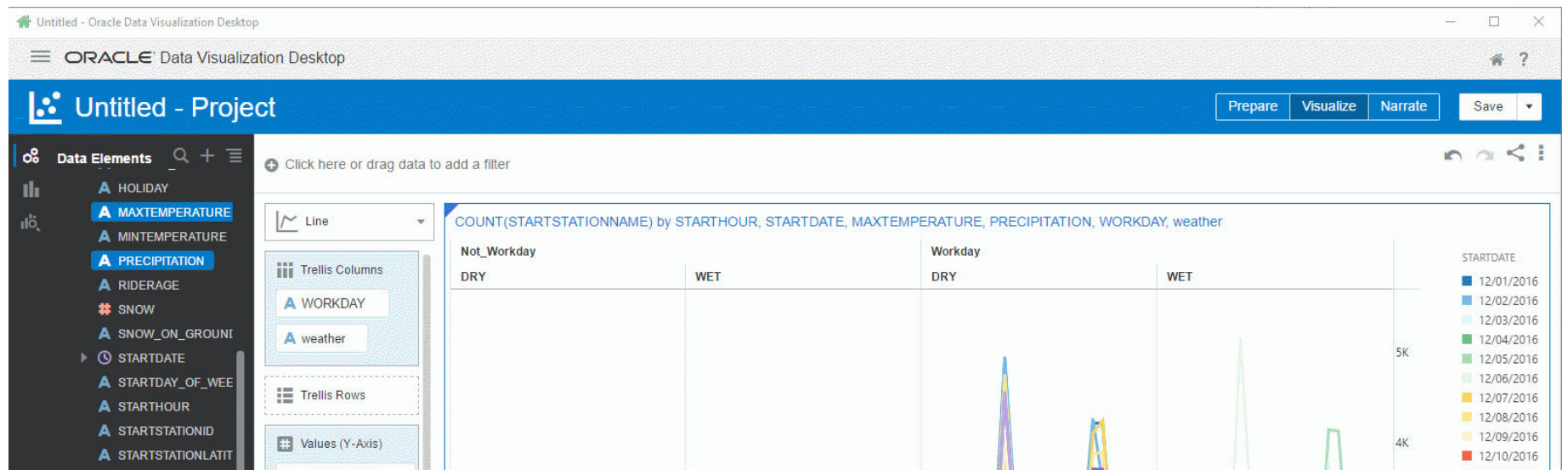


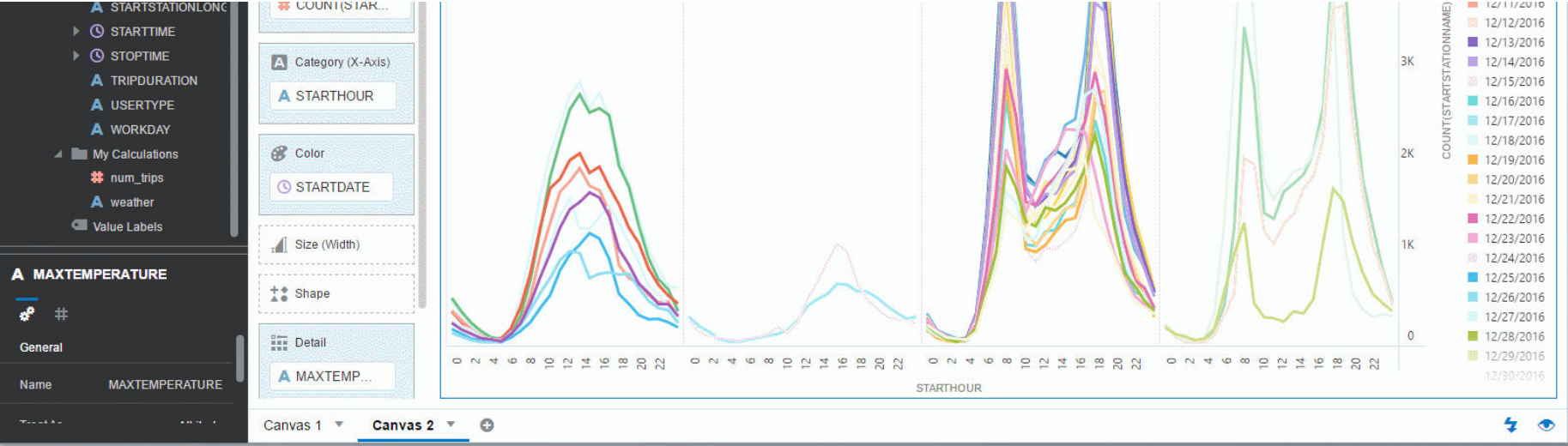
Finishing up

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Before exiting DVD, you probably will want to save your project.

- In the upper right, click on the Save button to save your project.





Took 0 sec. Last updated by anonymous at November 16 2017, 9:27:34 AM. (outdated)

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