# On-Demand Training: Getting Started with Data Transcript

Welcome to the Getting Started with Data video. This video walks through the fundamentals of how to connect to your data in Tableau Desktop.

## Connect to Data Screen

Tableau can connect to many data sources.

- You'll notice here, in the Connect pane, we have a long list of native connections to all sorts of data sources including
    - flat files,
    - relational databases,
    - OLAP cubes,
    - Big Data data sources,
    - and online data sources.
    - When using a Mac, certain data connections are not available due to limitations from the database side.

## Excel, CSV, and Text

Today we'll be using the Global Superstore Excel file available for download under this video. Superstore is a data set of sales for a global retail chain that sells furniture, office supplies, and technology goods. If you save this file on your local computer, you'll be able to recreate everything we do here with the exact same data set.

To connect to the Superstore file, click on Excel, navigate to where you saved the file and click open.

## Connecting to Tables

Now Tableau brings us to the data connection window.

- Here we can see the name of the file – and here we can click to rename the connection if desired –
- Down below, we can see all the sheets in the Excel file.
    - Sheets in Excel are treated the same as tables in databases, and we can choose to connect to a single table or join multiple tables.
- Simply drag a sheet into the data connection canvas.
    - Tables can be renamed simply by clicking on the name. The gear icon brings up options related to the data source.
- We can see the data down in the preview pane.

There's a lot we can do on this screen.

- If our column names aren't ideal, we can click on the drop down arrow to the right of the name and select rename.
- Clicking on the data type icon allows us to change the default data type for that column.

- If a field contains data that is concatenated, like Order ID and we'd like to split it, we can do that with the Split option – either custom or automatic

For more information how to shape your Excel and Text files for analysis in Tableau, please refer to the Data Prep video.

## Live versus Extract

Something to consider before we begin analyzing our data is if we want to connect live or extract.

Connecting live leaves the data in the database or source file.

- This is best when we want to leverage a high performance database's capabilities, or to get up-to-the-second changes in data visualized in Tableau.
- That being said, sometimes connecting live can result in a slow experience, depending on the database.

The other option is to extract the data into Tableau's high performance in-memory data engine.

- This can help when connecting to a slow database or to take query load off critical systems.
- We can also choose to only import some of the data and bring in specific elements.
    - To access those options, click Edit.

It should also be noted that some data sources may have limitations regarding connecting live or being extracted depending on the nature of that data source – for example, most OLAP data sources cannot be extracted, and some cloud-based data sources must be extracted.

For now, we'll connect live.

Click on the first Sheet tab to open the canvas. If we ever want to go back to the data connection window, simply click on the Data Source tab.

Now that we're connected, we can see our column names here to the left and we're ready to do our analysis.

- If we want to look at our data,
- say Sales by Order Date,
- and drill down to get quarters,
- what if we want to see Year on Color,
- it's that easy.

So with just a few clicks, navigate to the data source, select your data, connect, and you're ready to do your analysis.

## Connecting to Multiple Tables

What if we realize we need to bring in additional data?

- To add columns from other tables in the same data source, we need to edit our data connection.

- To do so, click on the Data Source tab.
- Let's join our returns table to the orders table.
    - Double click or drag out Returns.
- The icon here indicates Tableau has automatically joined these tables as an inner join.
    - Click on the join icon to show the details.
    - The default join clause is shown here.
    - Tableau has figured out that Market is a common field between these two tables.
    - If desired, we could edit the join clause, or even create a new one
- Right now, the join type is an inner join.
    - For these data we could also select a left join.
    - Right or full outer joins may also be available if your data source supports them.
    - For more information on types of joins, please see the Joins video in this section.
    - For now we'll leave it on Left and close the dialog.
- Again, we can view the data down here and verify the data we'll be connecting to.
- It looks good, so we'll click back onto our sheets, down here at the bottom.
- We now have columns from both Orders and Returns in our data window and we can see which column headers are showing up under which table.

A handy thing to know is that Tableau has this search function – if the data pane has a long list of fields, it's possible to search for a key word in the name and here we can see and select from that list.

## Conclusion

This is just the beginning - there's a lot more Tableau can do with data connections. For more information, check out the other videos in in the Connecting to Data series.