

Introduction to Tableau

<http://bit.ly/2019tableau>

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Overview

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- ❖ Introduction
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- ❖ Work with Tableau
 - Intro to Tableau Interface
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- ❖ Create the visual
 - Overview of a worksheet
 - Create worksheets
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Step 1: Download & Install Tableau

Everyone can download Tableau Public for free from
<https://public.tableau.com/en-us/s/download>

Once it's installed, go to **<https://public.tableau.com/s/>** to sign up for an account/profile.

Tableau Academic Program: **<https://www.tableau.com/academic>**

The student/Instructor license expires after one year; you can request a new license each year as a full-time student.

What is Tableau?

An interactive data visualization software that allows you to tell a story about your data.

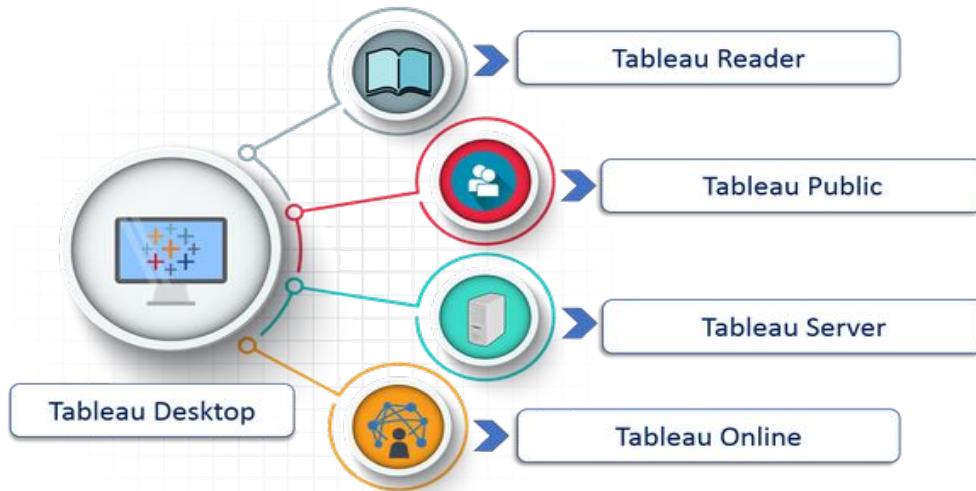


Tableau Family

Tableau offers five main products which are:

<https://www.tableau.com/products>

Developer Tools

❖ **Tableau Desktop**

❖ **Tableau Public**

Sharing Tools

❖ **Tableau Server:** Collaboration in organizations

❖ **Tableau Reader:** Let you read files saved in Tableau Desktop

❖ **Tableau Online:** Similar to Tableau Server (On Cloud)

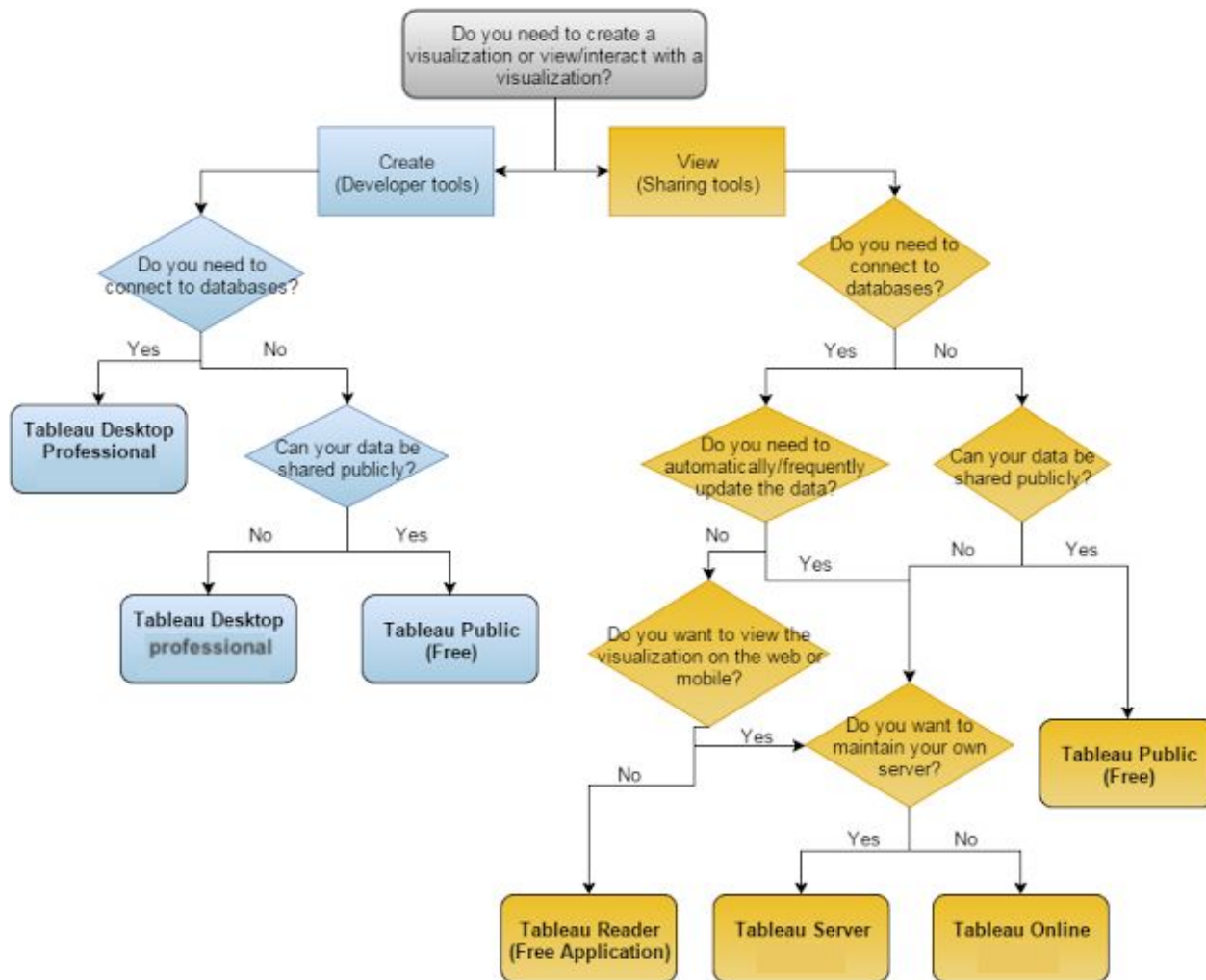


Tableau file types:

❖ **Tableau Workbook (.twb)**

It relies on a live data source connection and doesn't contain the actual data within the workbook file.

❖ **Tableau Packaged Workbook (.twbx)**

It contains both the Tableau workbooks and the data!



Workbooks are made up of:

- ❖ **Worksheet(s):**

Worksheets are where you create your visualization.

- ❖ **Dashboard(s):**

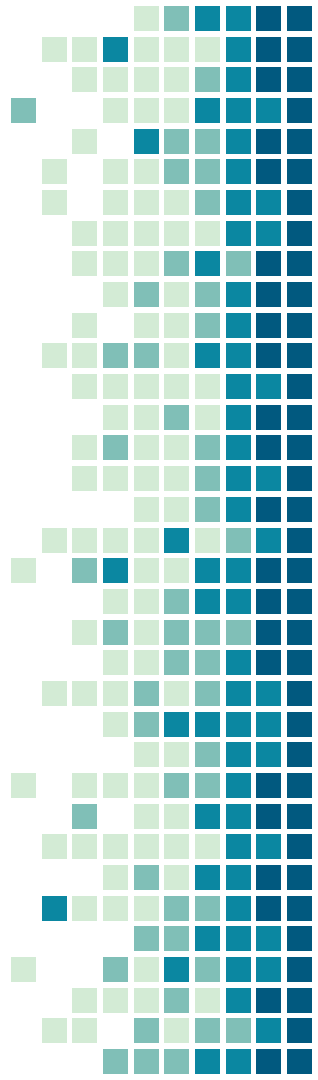
It is a canvas that displays one or more worksheets.

Example: [Visual Vocabulary](#) by Andy Kriebel

- ❖ **Story(s):**

Enables you to snapshot visualizations and step a user through a story.

Example: [Race to Alaska](#) by Anthony Gould



Step 2: Getting Started with Tableau

- ❖ The dataset we will use in this workshop can be downloaded from <http://bit.ly/2019tableau>

Go to Introduction to Tableau Workshop folder,
download [`marathon_results_2017 Tableau workshop.xlsx`](#)



Step 3: Connecting With Data

Connect

To a File

Excel

Text file

JSON file

PDF file

Spatial file

Statistical file

To a Server

OData

Google Sheets

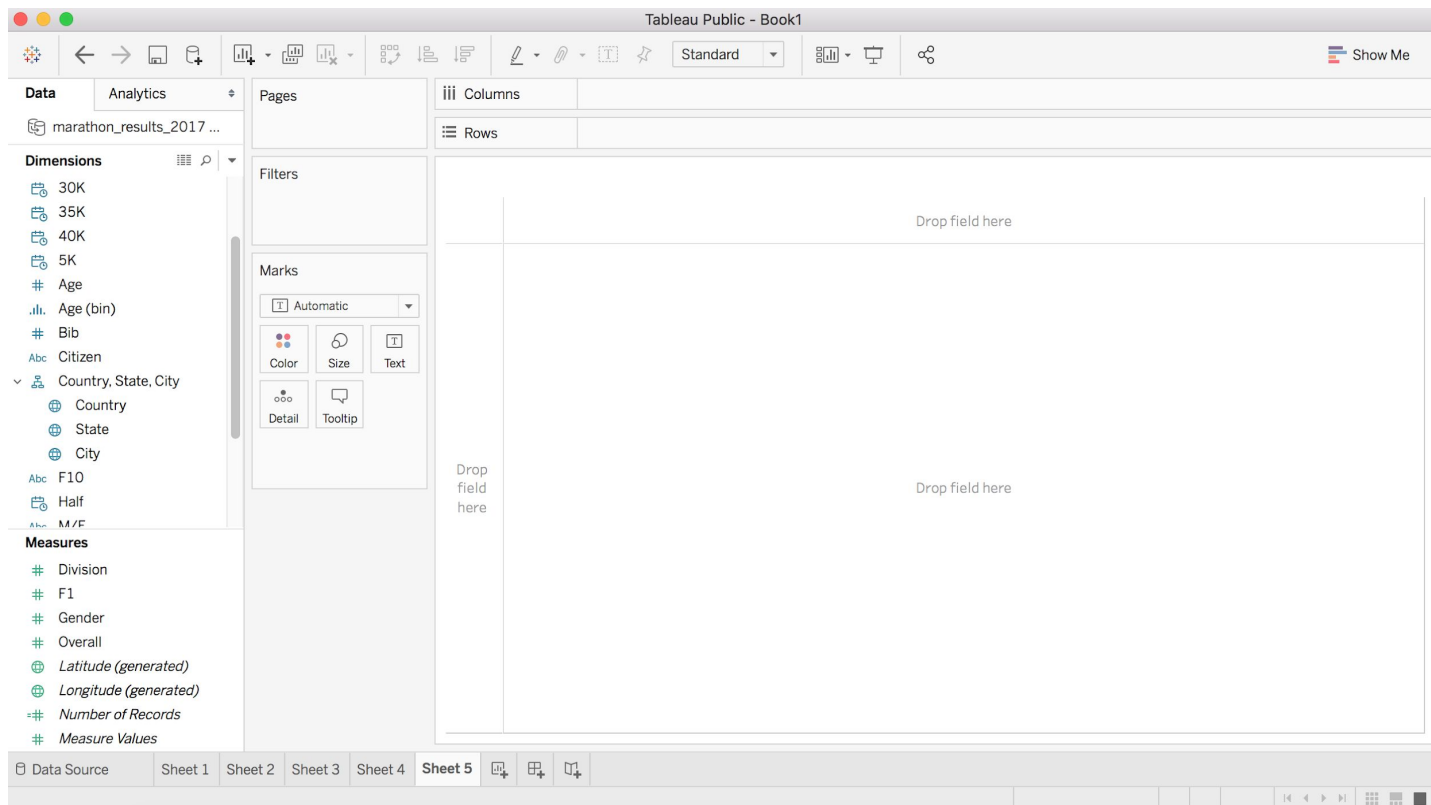
More...

To connect to an excel file, click “Excel” on the left hand side. Navigate to the file on your computer and double click to open it.

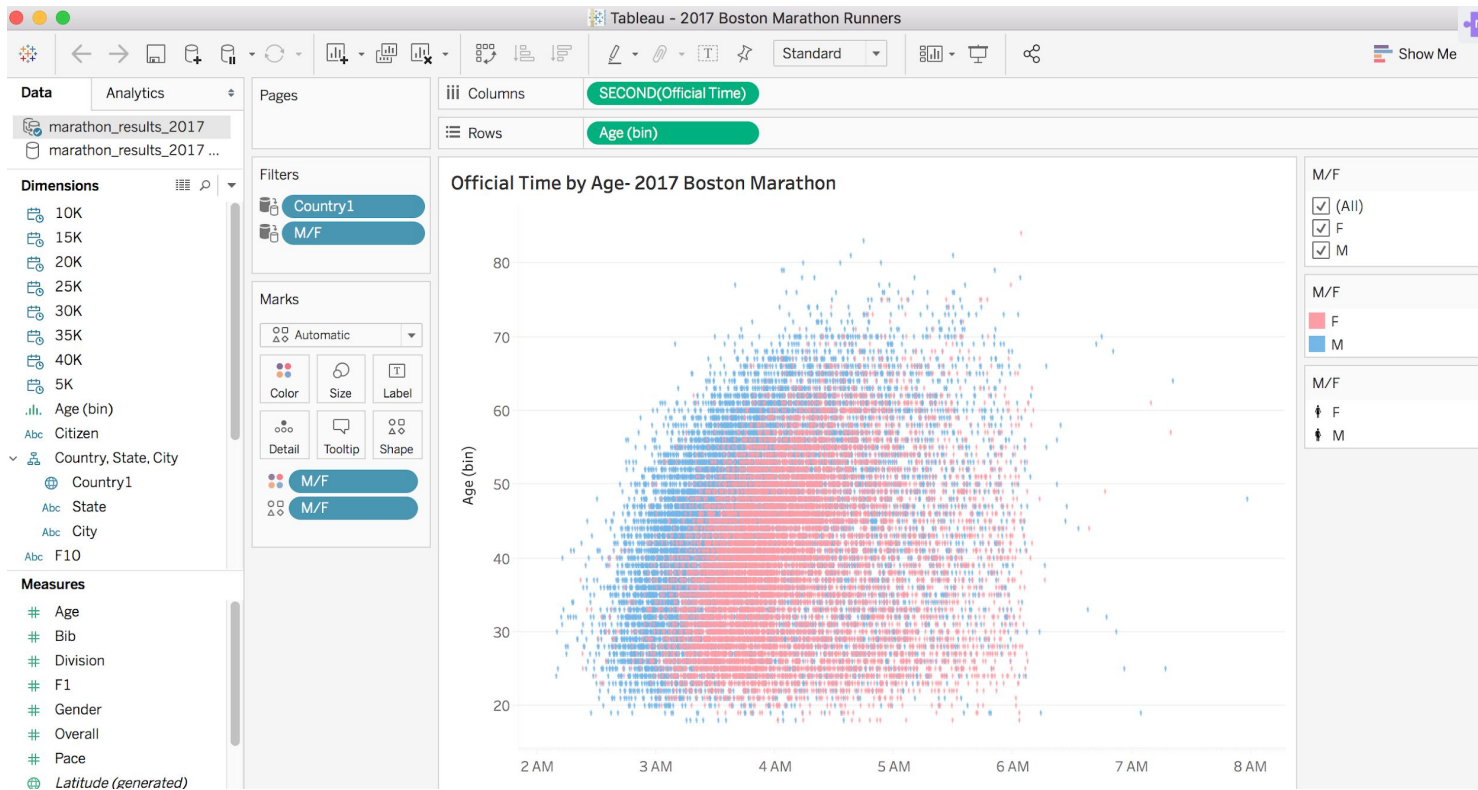
The screenshot shows a data connection interface. On the left, a 'Connections' panel lists files, including 'marathon_results_2017'. Below this, a 'Files' panel shows a list of files with a search bar. A 'Go to Worksheet' dialog is open, showing 'Sheet 1'. The main area displays a preview of the 'marathon_results_2017.csv' file, showing columns like 'Bib', 'Name', 'Age', 'M/F', 'City', 'State', 'Country', 'Citizen', and 'F10'. The table contains 10 rows of data.

#	marathon...	marathon...	marathon...	marathon...	marathon...	marathon...	marathon...	marathon...	marathon...
F1	Bib	Name	Age	M/F	City	State	Country	Citizen	F10
0	11	Kirui, Geoffrey	24	M	Kerinet	OR	USA	null	12/30/
1	17	Rupp, Galen	30	M	Portland	OR	USA	null	12/30/
2	23	Osako, Suguru	25	M	Machida-City	JP	JPN	null	12/30/
3	21	Biwott, Shadrack	32	M	Mammoth Lakes	CA	USA	null	12/30/
4	9	Chebet, Wilson	31	M	Marakwet	KE	KEN	null	12/30/
5	15	Abdirahman, Abdi	40	M	Phoenix	AZ	USA	null	12/30/
6	63	Maiyo, Augustus K.	33	M	Colorado Springs	CO	USA	null	12/30/
7	7	Sefir, Dino	28	M	Addis Ababa	ET	ETH	null	12/30/
8	18	Prokhorov, Ilya	27	M	Funafu	TV	TVA	null	12/30/

Step 4: Tableau Workbook Interface



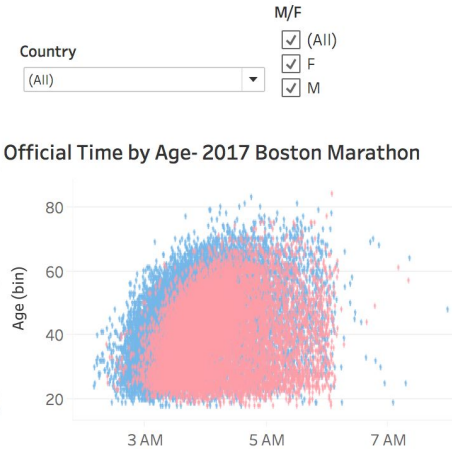
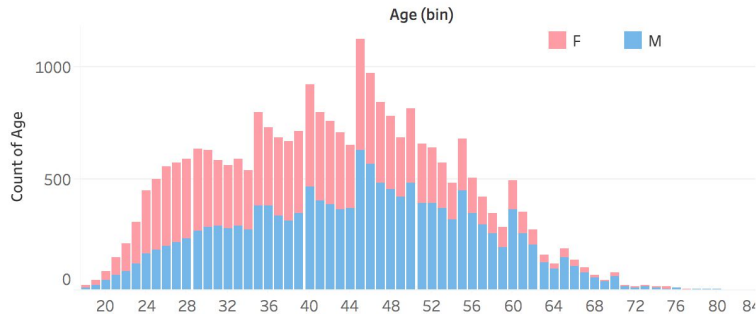
Step 5: Creating Views and Analysis



Step 6: Create an interactive dashboard

2017 Boston Marathon Results Analysis

2017 Boston Marathon Runners by Age & Gender



Pace by Gender



Step 7: Save and Publish

The screenshot shows the Tableau Desktop interface. The 'Server' menu is open, highlighting 'Publish Workbook...'. The dashboard, titled '2017 Boston Marathon Results', contains three visualizations:

- 2017 Boston Marathon Runners by Age:** A bar chart showing the count of runners by age bin (20-84) for females (F, red) and males (M, blue). The y-axis is 'Count of Age' (0-1000).
- Official Time by Age- 2017 Boston Marathon:** A scatter plot showing age (bin) on the y-axis (20-80) against time on the x-axis (3 AM, 5 AM, 7 AM). Data points are colored by gender (F, red; M, blue).
- Pace by Gender:** A line chart showing the count of pace on the y-axis (0-1500) against age on the x-axis (20-84). Two lines represent females (F, red) and males (M, blue).

The left sidebar shows the 'Sheets' list (Sheet 1 to Sheet 12) and the 'Objects' panel with options for layout (Horizontal, Vertical, Tiled, Floating) and a checkbox for 'Show dashboard title'.

Additional Resources

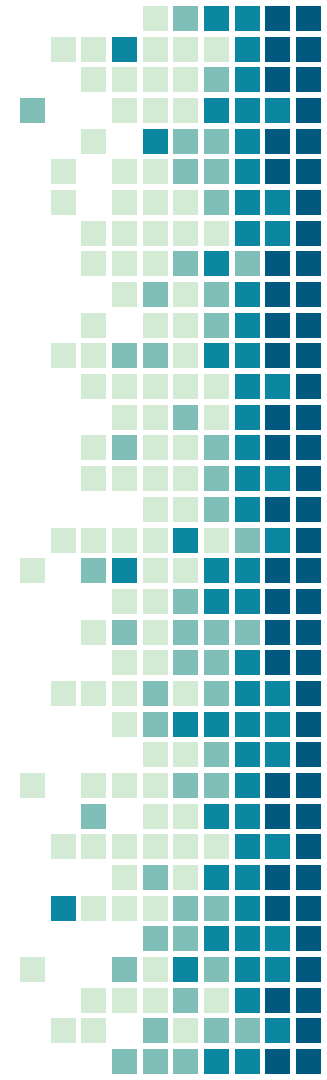
- [Tableau Community](#)

Join the Tableau Community Forums to find solutions for what you need to accomplish. Ask questions to receive help and feedback.

- [Tableau Visual Gallery](#)

Get inspired by the many interactive visualizations in the Visual Gallery. Download the workbooks to play with on Tableau Desktop

- [How-to Videos](#)
- [Lynda.com](#)



THANKS!

Any questions?