

Frequently asked Questions:

1. Data Extract Error:

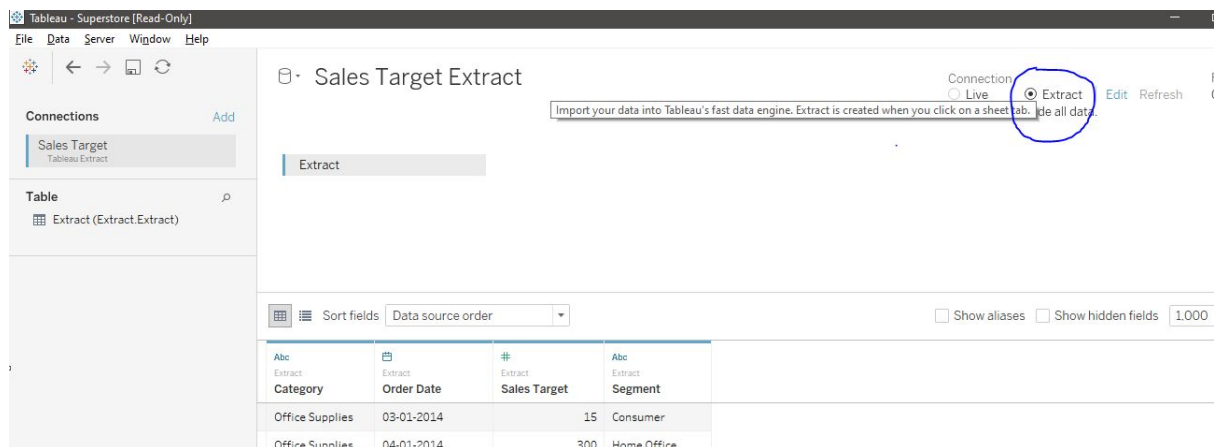
Please try with below options:

In Data Source, there are two options: 'Live' and 'Extract' (Upper right corner).

Live is a live connection to a file or a database

Extracts are saved subsets of data that you can use to improve performance and Provide offline access to your data.

Before publishing the workbook, please select 'Extract Option' and then try again.



For more info:

<https://kb.tableau.com/articles/issue/error-data-extract-required-saving-workbok-to-tableau-public>

2. Extract Button not present

In Tableau Public, there is no extract option available as of now. If the user has a small data source, then it is easily published but If there are large data sources and joins have been used then the user can save the updated data source in one new file and then try to publish the workbook to Tableau Public Online.

The limit is 15 million rows (<https://community.tableau.com/thread/238885>)

Note: This document has been created with Tableau Version 2019.4 for both Public and Student Editions.

Tableau Help Links

- I. Link for Data: <https://community.tableau.com/docs/DOC-10635>
- II. Link for FAQs: <https://community.tableau.com/thread/151382>
- III. Link for About Tableau: <https://community.tableau.com/docs/DOC-9135>
- IV. Academic Programs Tableau Files : <https://public.tableau.com/profile/tableau.on.campus#!/>
- V. How to get started with Tableau Desktop:
<https://help.tableau.com/current/guides/get-started-tutorial/en-us/get-started-tutorial-home.htm>
- VI. Tableau Calculation Library:
<https://community.tableau.com/community/viz-talk/tableau-community-library/twl>
- VII. Official Knowledge Base: <https://www.tableau.com/support/knowledgebase>
- VIII. All Tableau Formulae:
https://help.tableau.com/current/pro/desktop/en-us/functions_all_alphabetical.htm
- IX. Create a calculated field in Tableau:
https://help.tableau.com/current/pro/desktop/en-us/calculations_calculatedfields_create.htm
- X. Tableau , Which chart? :
http://www.tableau.com/sites/default/files/media/which_chart_v6_final_0.pdf
- XI. Saving workbook to Tableau Public:
https://help.tableau.com/current/pro/desktop/en-us/publish_workbooks_tableaupublic.htm
- XII. Tableau Desktop Documentation:
https://help.tableau.com/v2019.4/offline/en-us/tableau_desktop.pdf
- XIII. Tableau Extracts: https://help.tableau.com/current/pro/desktop/en-us/extracting_data.htm
- XIV. Tableau Extract Error:
<https://kb.tableau.com/articles/issue/error-data-extract-required-saving-workbok-to-tableau-public>

Common Tableau Jargons

Reference link:

<https://www.dummies.com/programming/big-data/big-data-visualization/tableau-for-dummies-cheat-sheet/>

1. Sheet: A sheet is a singular chart or map in Tableau.
2. Dashboard: A dashboard is a canvas for displaying multiple sheets at a time and allowing them to interact with each other.
3. Workbook: A workbook is the entire Tableau file containing your sheets and dashboards.
4. Measure: A variable from the dataset that is meant to be aggregated. (This means it should be a number that it makes sense to do math with: sum, average, and so on.) Measures are often continuous data. Examples include GPA, sales, quantity, quota, height, and salary.
5. Dimension: A categorical variable from the dataset that is used to slice and dice the data into different categories. Dimensions are often discrete data. Examples include country, gender, student ID, and name.
6. Filter: A filter is used to limit what data is being displayed on the sheet. Visible controls for a filter on a sheet or dashboard are called Quick Filters.
7. Tooltip: Tooltips are text boxes that appear when hovering over a mark on a sheet in order to give more information. The text and text formatting in them are easily edited through the Marks card.
8. Marks card: The Marks card is the tool used to create a sheet that controls most of the visual elements in a sheet. Using the Marks card, you can switch between different chart types (bar, line, symbol, filled map, and so), change colors and sizes, add labels, change the level of detail, and edit the tool tips.
9. Rows and Columns Shelves: The Rows shelf and the Columns shelf is where you determine which variables will go on what axis. Put data you want displayed along the X-axis on the Columns shelf and data you want displayed on the Y-axis on the Rows shelf.

For Summarized function list : <https://www.absentdata.com/tableau-function-list/>

Number Functions

In Tableau, a user can use different types of built-in functions which can be applied to numbers only. Following are the some of the commonly used "Number" functions:

a) ABS: This function returns the absolute value of the specified number.

Example: $ABS(-10) = 10$

b) CEILING: It rounds the given number to the nearest integer of equal or greater value.

Example: $CEILING(5.1265) = 6$

c) FLOOR: It rounds the given number to the nearest integer of equal or lesser value.

Example: $FLOOR(5.1265) = 5$

d) LOG: "LOG" returns the logarithm value of the number for the given base. If the base value is omitted, base 10 is being used by default.

Example: LOG(100) = 2, LOG(256,2) = 8

e) MIN: Returns the minimum value of an expression across all records

Example: MIN([Profit]) – This expression will return the minimum value of the profit across all the profit values

f) MAX: Returns the maximum value of an expression across all records

Example: MAX([Profit]) – This expression will return the maximum value of the profit across all the profit values

g) POWER: It returns the result of a number raised to the given power

Example: POWER(5,2) = 25

h) SQRT: It returns the square root of a given number

Example: SQRT(25) = 5

i) ZN: "ZN" stands for "Zero if Null". It means it returns the given expression if it is not null, otherwise returns zero.

String Functions:

For the manipulation of different types of strings, a user can use built-in string functions in Tableau. Following are the some of the commonly used "String" functions:

a) CONTAINS: This function returns "True" if the user's mentioned sub-string is present in the given string.

Example: CONTAINS("University", "versi") = True

b) ENDSWITH: It returns "True" if the given string ends with the user's mentioned substring

Example: ENDSWITH("University", "sity") = True

c) FIND: Similar to excel "Find" functions, in tableau also FIND functions returns the position of the mentioned sub-string within the given string. If the sub-string isn't found then it returns 0(zero)

Example: FIND("University", "versi") = 4

d) ISDATE: This function is used to check whether the given string is a valid date. If the string is valid date then it returns "True"

Example: ISDATE("2017-05-12") = True

e) LEFT: It returns the specified number of characters from the start of the string.

Example: LEFT("Calculation", 4) = Calc

f) LEN: This function returns the number of characters in the given string.

Example: LEN("Calculation") = 11

g) LOWER: Convert a text string to all lowercase letters

Example: LOWER("CalCulation") = calculation

h) MID: It returns the characters from the middle of a text string given a starting position and length.

Example: MID("Tableau", 2, 4) = able

i) REPLACE: It returns a string in which every occurrence of the substring is replaced with the replacement string.

Example: REPLACE("Calculation", "ion", "ed") = Calculated

j) RIGHT: It returns the specified number of characters from the end of the given string.

Example: RIGHT("Calculation", 4) = tion

k) TRIM: Returns the string with both trailing and leading spaces removed

Example: TRIM(" Budget ") = Budget

l) UPPER: Convert a text string to all uppercase letters

Example: LOWER("Budget") = BUDGET

Date Functions:

For the manipulation of dates, a user can use built-in date functions in Tableau. Following are the some of the commonly used "Date" functions:

a) DATEADD: Add an increment to the specified date and returns the new date.

Example: DATEADD('month', 3, #2017-07-12#) = 2017-10-12 12:00:00 AM

b) DATEDIFF: Returns the difference the two dates where start_date is subtracted from end_date

Example: DATEDIFF('month', #2017-04-12#, #2017-07-15#) = 3

c) DATENAME: Returns the part of the given date as string.

Example: DATENAME('month', #2017-05-14#) = May

d) DATEPARSE: It converts a string to a date in the specified format

Example: `DATEPARSE("dd.mmmm.yyyy", "15.April.2017") = 2017-04-15 12:00:00 AM`

e) `DATEPART`: Returns a part of the given date as an integer where the part is defined by `date_part`.

Example: `DATEPART('month', #2018-01-17#) = 1`

f) `MONTH`: Returns the month of the given date as an integer

Example: `MONTH(#2018-02-19#) = 2`

g) `TODAY`: Returns the current date

h) `YEAR`: Returns the year of the given date as an integer

Example: `YEAR(#2018-02-19#) = 2018`

Data Type Conversion Functions:

Using "Data Type Conversion" functions of Tableau, a user can convert the values of one data type to another data type.

a) `DATE`: Returns a date given a number, string or date expression

Example: `DATE("2011-03-12") = 2011-03-12`

b) `FLOAT`: It returns the floating number from the given expression of any type

Example: `FLOAT("3") = 3.00`

c) `INT`: Returns an integer given an expression

Example: `INT(-9.7) = -9`

d) `STR`: Returns a string given an expression

Example: `STR(90) = "90"`

Logical Functions:

The following are some commonly used Logical Functions in Tableau:

a) AND: This function performs the logical conjunction of two or more expressions. "AND" returns "True" when all the given expressions are true.

b) CASE: This function finds the first that matches the given and returns the corresponding

Example:

```
CASE [Name] WHEN "John" THEN 90  
WHEN "Emma" THEN 95  
END
```

c) IF-ELSE: It tests a series of expressions and returns only that value corresponding to the first expression is true

Example:

```
IF [Profit] >0 THEN "Profitable"  
ELSEIF [Profit] = 0 THEN "Breakeven"  
ELSE "Loss"  
END
```

d) OR: This function performs the logical disjunction on two or more expression. "OR" returns "True" when any of the given expressions are true.

Aggregation Functions:

In Tableau, a user can use a different type of aggregating Functions to aggregate the required fields at the required data level. Following are commonly used aggregating Functions:

a) ATTR: It returns the value of the given expression if it only has a single value for all the row in the group., otherwise it displays an asterisk (*). NULL values are ignored by this function

b) AVG: It returns the average value of the given expression or array of values

c) COUNT: It returns the count of items in the group. NULL values are not counted

d) COUNTD: It returns the unique count of items in the group.

e) MAX: Returns the maximum value of an expression across all records

Example: MAX([Profit]) – This expression will return the maximum value of the profit across all the profit values

f) MEDIAN: Returns the median value of an expression across all records

Example: MEDIAN([Profit]) – This expression will return the median value of the profit across all the profit values

g) MIN: Returns the minimum value of an expression across all records

Example: MIN([Profit]) – This expression will return the minimum value of the profit across all the profit values

h) PERCENTILE: an aggregate calculation that returns the percentile value from the given expression, corresponding to the specified percentile value

Example: PERCENTILE([Sales],0.9) = This expression will return the 90th percentile value from all the Sales value

i) SUM: It returns the sum of the given expression or array of values