



# ORGANISE YOUR DATA

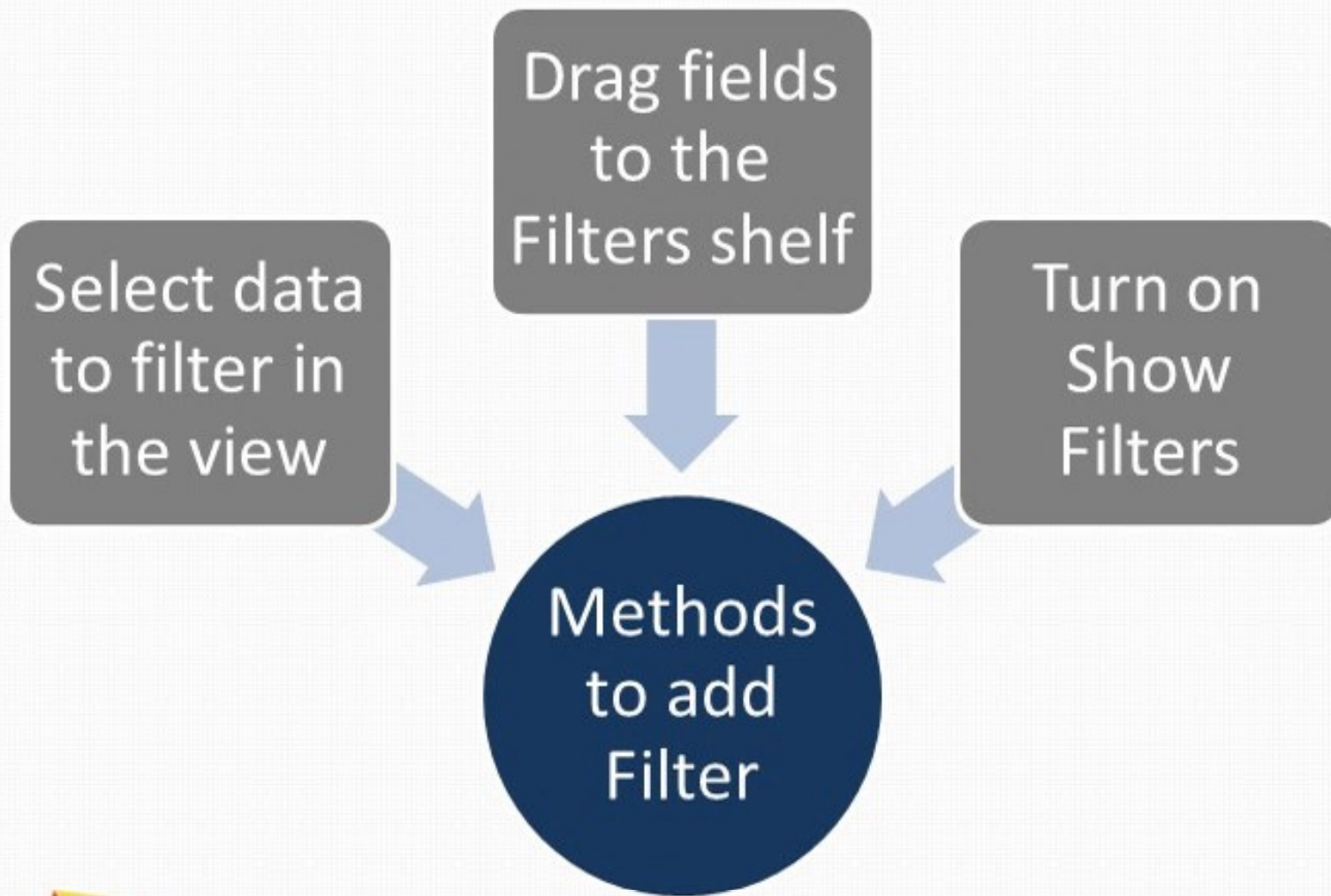
Filters

# Filters

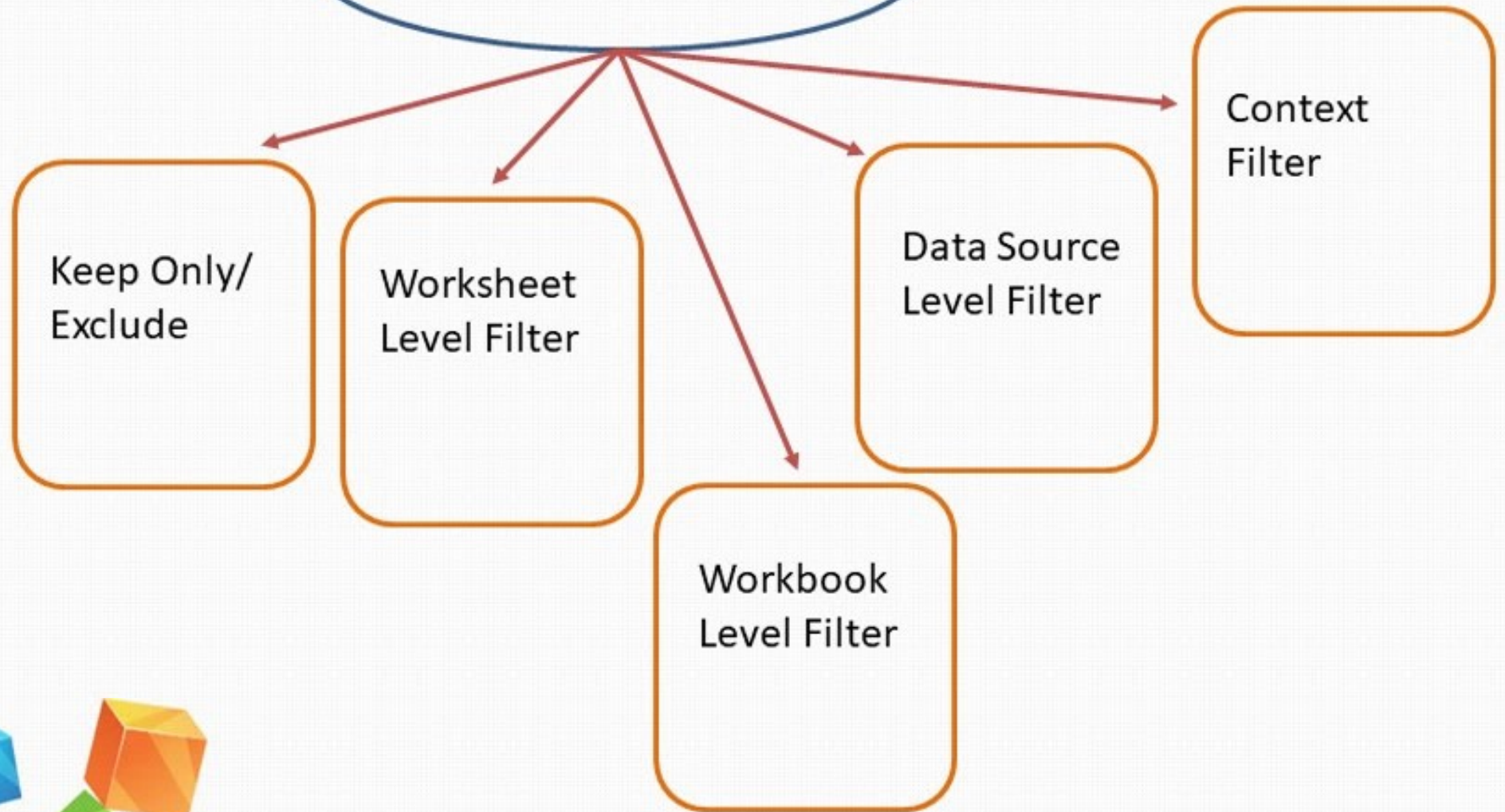
- Filtering is a way in which you can restrict the amount of data shown on a sheet or a workbook.
- You also get an option to keep or exclude the data that you want for your analysis through filters.
- Through Show Filter you give the end user the right to change the Filter added to the sheet and do the analysis accordingly.







# Filters in Tableau



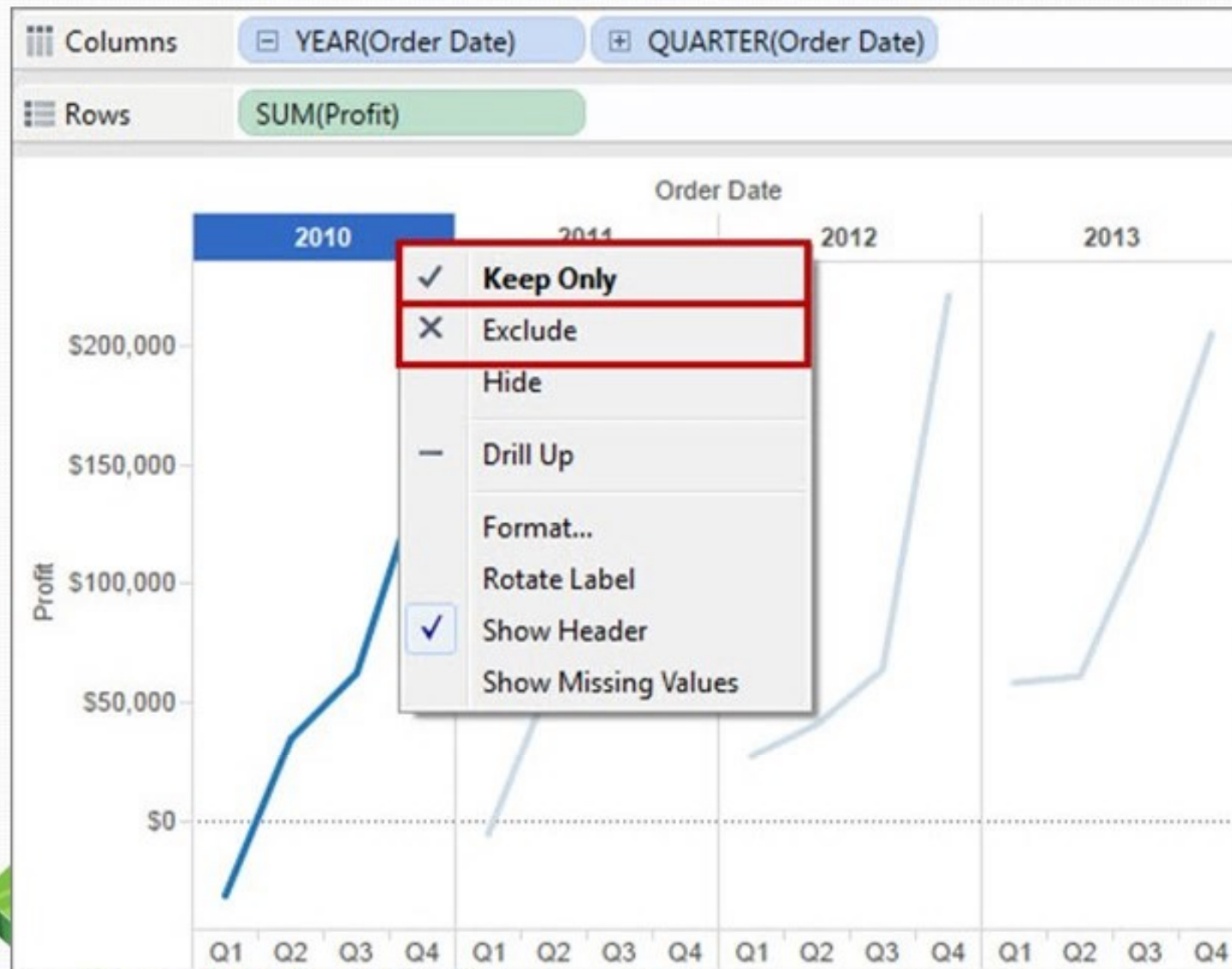


# Select data to filter

- You can filter data by selecting headers or marks in the view and then selecting **Keep Only** or **Exclude**.
- The dimension members are removed from the view and the filtered fields are added to the Filters shelf.



# Select data to filter



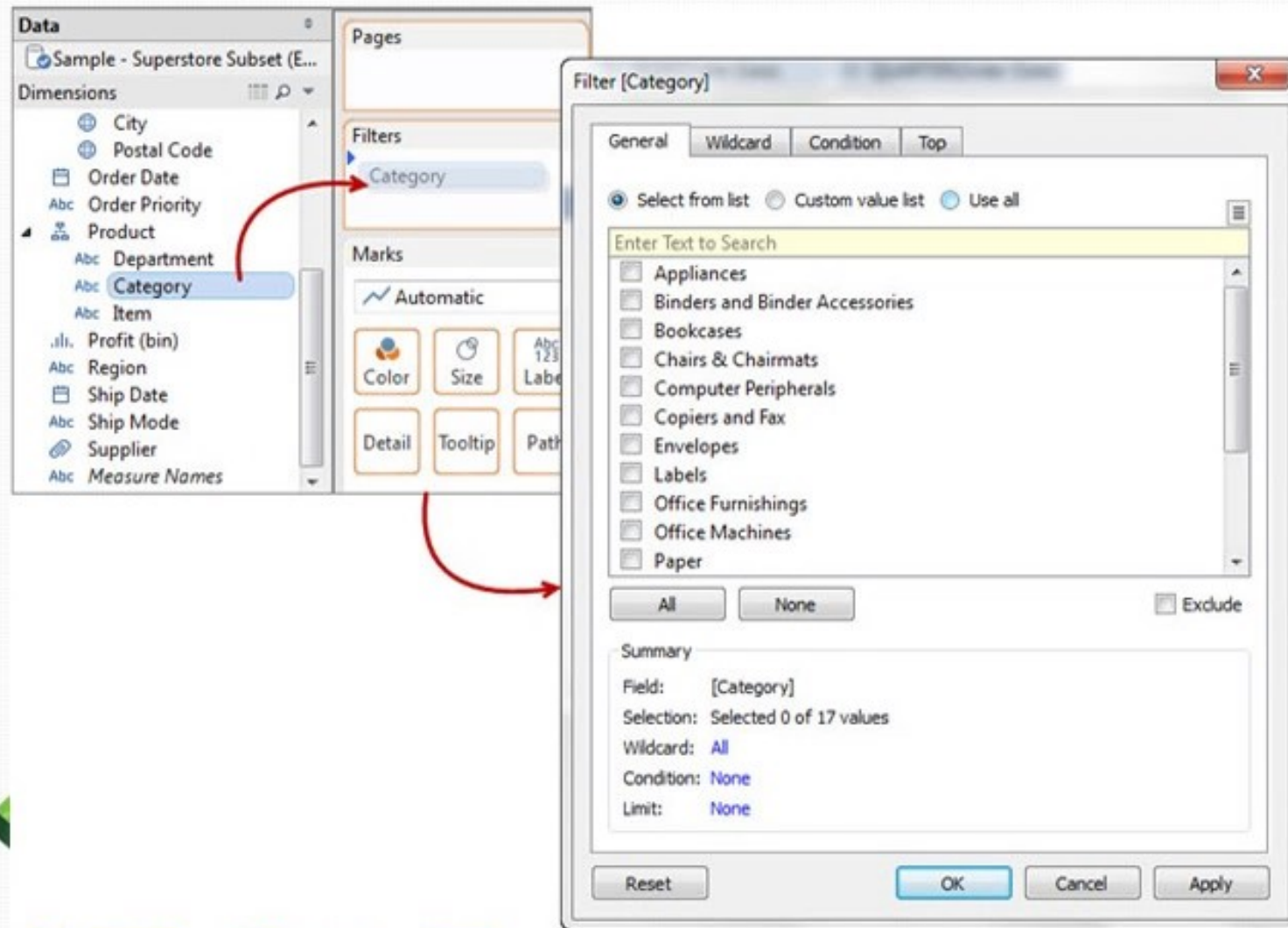


# Drag fields to filter shelf

- Another way to create a filter is to drag a field directly to the Filters shelf. When you add a field to the Filters shelf, the Filter dialog box opens so you can define the filter. The Filter dialog box differs depending on whether you are filtering a dimension, measure, or date field.



# Drag a Dimension to filter shelf





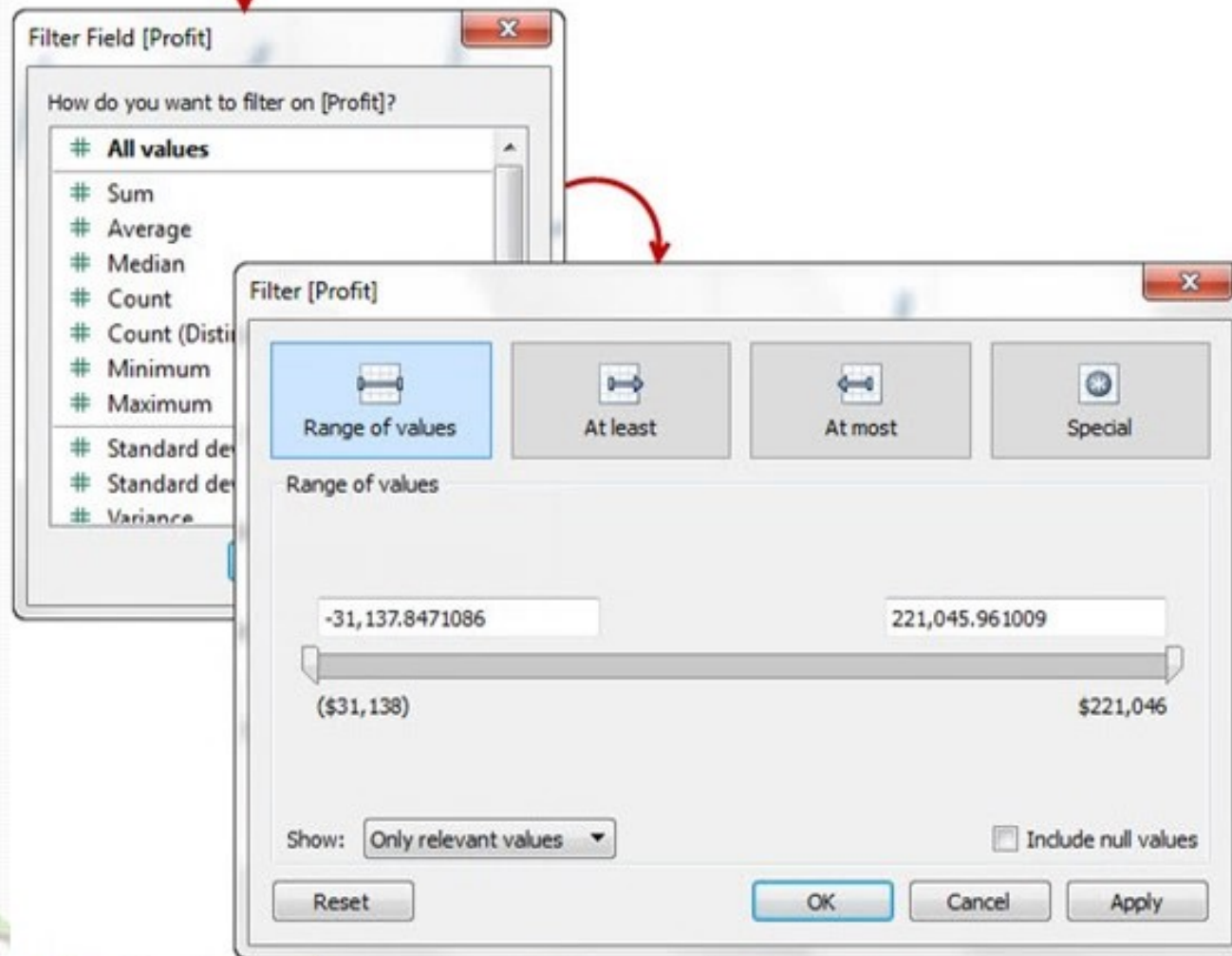
# Ways in which you can add a Dimension filter

- **General** – This is a manual selection of the dimension members from the list as per the data.
- **Wildcard** – This helps to filter the dimensions on the basis of alphabets/ words in the name.
- **Condition** – This allows the filtering on the basis of a measure field condition or a formula. Remember, if you are writing a formula then you have to write a one liner formula only. No If cases have to be written here.
- **Top** – You can filter your best/ worst performing dimension here. You can use a field or a formula option here.



# Filter measures

Drag Measure to Filters Shelf





# ways in which you can add a Measure filter

While adding a measure filter, we first have to select the aggregation of the measure.

- **Range of Values** – We have to specify both the start and an end range of the measure for filtering.
- **At Least** – We have to specify the starting value for the measure. Anything above a specific range.
- **At Most** – We have to specify the end value for the measure. Anything below a specific range.
- **Special Values** – Here we can filter null, non null and all the values from a measure.



# List of various show filters and their use

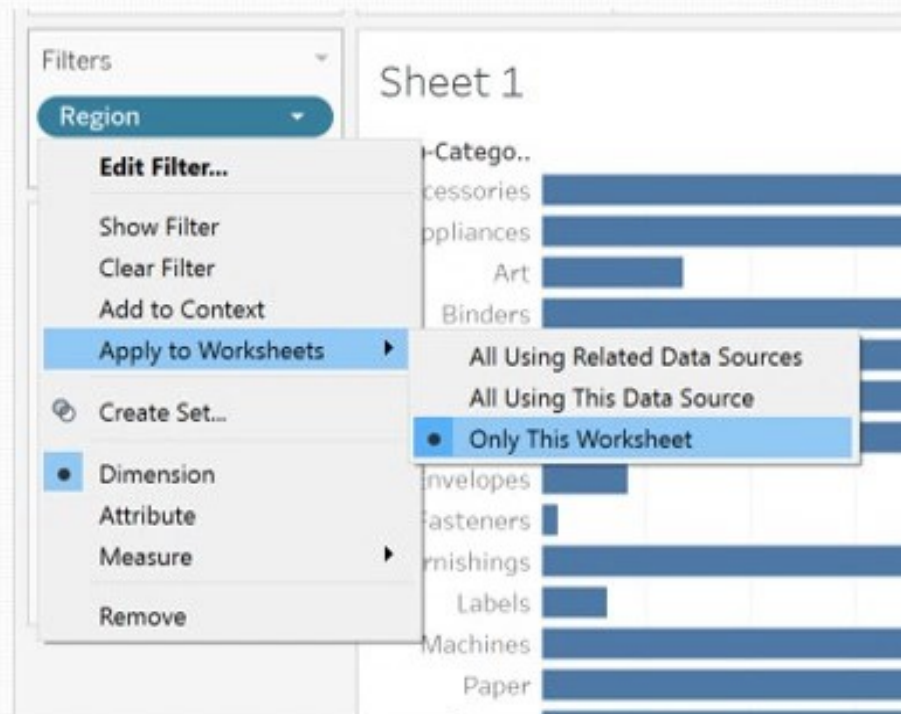
Filter name	Purpose
<b>Single Value(List)</b>	Select one value at a time in a list.
<b>Single Value(Dropdown)</b>	Select a single value in a drop-down list.
<b>Multiple Values(List)</b>	Select one or more values in a list.
<b>Multiple Values(Dropdown)</b>	Select one or more values in a drop-down list.
<b>Multiple Values(Custom List)</b>	Search and select one or more values.
<b>Single Value (Slider)</b>	Drag a horizontal slider to select a single value.
<b>Wildcard Match</b>	Select values containing the specified characters.



# Applying a filter

Once a filter is added to a sheet, it can be applied in the following ways in tableau:

- **All using Related Data Sources** – If you are working on a blended relationship and you want this filter to be applied to the other data source as well
- **All Using this Data Source** – this filter will apply to all the new and the pre created sheets in this particular workbook
- **Only this worksheet** – The filter will be only for this specific sheet.



# Important points to remember for Filters

- You can add multiple Filters to a particular sheet, a workbook and a Data source.
- Each Filter added will affect the performance at the server level.
- The Dimension filter & the Measure filter behave in a different manner when added to a sheet.
- The arrangement of the fields in the Filter shelf play an important role on the way the filtering on a sheet is being executed.
- Show Filter option helps the end user to interact with the Filters added.
- Any filter added at the sheet is carried to the dashboard and a Filter on one sheet can be applied to a single sheet or multiple sheets as well.





# Filter- Hands On

- Show the Sub- category sales of 2012 for the East region.

The screenshot shows a Tableau interface with the following configuration:

- Pages:** Empty.
- Filters:** Region: East, YEAR(Order Date): 2012.
- Marks:** Color: Automatic, Size: Automatic, Text: Automatic, Detail: Automatic, Tooltip: Automatic, SUM(Sales).
- Columns:** Region, YEAR(Order Date).
- Rows:** Sub-Category.

The resulting table is as follows:

Sub-Category	East 2012
Accessories	17,911
Appliances	6,691
Art	1,707
Binders	14,207
Bookcases	19,653
Chairs	20,009
Copiers	4,960
Envelopes	877
Fasteners	192
Furnishings	5,270
Labels	516
Machines	14,427
Paper	3,968
Phones	22,561
Storage	13,309
Supplies	1,188
Tables	8,885

# Data Source filter

- Data Source filter is considered to be a bigger filter in Tableau.
- If you want to remove or keep a particular dimension or a range of numeric value or a date range from the entire analysis, you add a Data Source filter.
- When we add a Data Source Filter, the entire workbook is affected by this, which in turn effects the performance also.
- We don't have to worry about adding this kind of filter again and again at sheet level. Once it is added at the data source leve, it is consistent across the workbook.





# How to add a Data Source filter

- Data Source Filter, as the name suggests, is added at the data source page.
- Go to the Data Source Page → Add button on the right → put the values or filtering.
- You can use a dimension, a measure and a date filter also here.
- You get an Option of Keep or Exclude here.



Connections Add

Sample - Superstore  
Microsoft Excel

Sheets

- Orders
- People
- Returns

# Orders (Sample - Superstore)

Connection ☒ Live ☐ Extract Filter ☐ Add

Orders

Edit Data Source Filters

Filter

Details

Add... Edit... Remove

OK Cancel

Filter [State]

General Wildcard Condition Top

☒ Select from list ☐ Custom value list ☐ Use all

Enter search text

- ☐ South Carolina
- ☐ South Dakota
- ☐ Tennessee
- ☒ Texas
- ☐ Utah
- ☐ Vermont
- ☐ Virginia
- ☐ Washington
- ☐ West Virginia
- ☐ Wisconsin
- ☐ Wyoming

All None ☒ Exclude

Summary

Field: [State]

Selection: Excluded 1 of 49 values

Wildcard: All

Condition: None

Limit: None

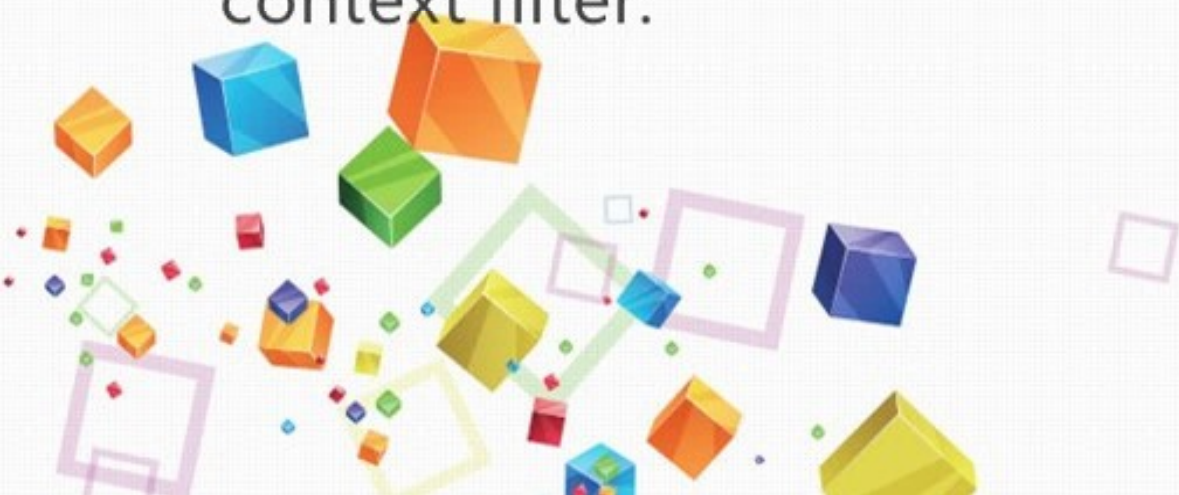
Reset OK Cancel

		how aliases	<input type="checkbox"/> Show hidden fields	1,000	rows
Customer Name	Segment	Country			
Gute	Consumer	United States			
Gute	Consumer	United States			
Van Huff	Corporate	United States			
O'Donnell	Consumer	United States			
O'Donnell	Consumer	United States			
na Hoffman	Consumer	United States			
na Hoffman	Consumer	United States			
na Hoffman	Consumer	United States			
Brosina Hoffman	Consumer	United States			
Brosina Hoffman	Consumer	United States			
Brosina Hoffman	Consumer	United States			



# Context Filter

- By default, all filters that you set in Tableau are computed independently.
- You can set one or more categorical filters as context filters for the view.
- Context filter is an independent filter. Any other filters that you set are defined as dependent filters because they process only the data that passes through the context filter.



# Why to create a context filter

You may create a context filter to:

- Improve performance – If you set a lot of filters or have a large data source, the queries can be slow. You can set one or more context filters to improve performance.
- Create a dependent numerical or top N filter – You can set a context filter to include only the data of interest, and then set a numerical or a top N filter.





# How to create Context filter

- To create a context filter, select **Add to Context** from the context menu of an existing categorical filter. The context is computed once to generate the view. All other filters are then computed relative to the context.

## Context filters:

- Appear at the top of the Filters shelf.
- Are identified by a gray color on the Filters shelf.
- Cannot be rearranged on the shelf



Pages

Columns Region

Rows Sub-Category

Filters Region

Marks

Automatic

Color Size Text

Detail Tooltip

SUM(Sales)

Context Filter

Sub-Category Central East South West

Accessories 33,956 45,033 27,277 61,114

Appliances 23,582 34,188 19,525 30,236

Art 5,765 7,486 4,656 9,212

Binders 56,923 53,498 37,030 55,961

Bookcases 24,157 43,819 10,899 36,004

Chairs 85,231 96,261 45,176 101,781

Copiers 37,260 53,219 9,300 49,749

Envelopes 4,637 4,376 3,346 4,118

Fasteners 778 820 503 923

Furnishings 15,254 29,071 17,307 30,073

Labels 2,451 2,603 2,353 5,079

Machines 26,797 66,106 53,891 42,444

Paper 17,492 20,173 14,151 26,664

Phones 72,403 100,615 58,304 98,684

Storage 45,930 71,613 35,768 70,533

Supplies 9,467 10,760 8,319 18,127

Tables 39,155 39,140 43,916 84,755

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SUM(Sales)

Context Filter

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Once a filter is added as a Context, it starts appearing in black colour on the filter shelf.