



On-Demand Training: Additional Filtering Topics Transcript

Welcome to this video on Using the Filter Shelf. You can download the Exercises workbook to follow along in your own copy of Tableau.

Let's say we're looking at this breakdown of our sales data, and we want to filter based on Market. We can drag the Market field from the data window to the filter shelf, select how we want to filter, maybe we want to exclude our emerging markets, Africa, Canada, and EMEA so we simply uncheck them, click OK, and that's it! We've filtered our view.

But let's look into this a bit more deeply. If we right click on that field on the filter shelf and click Filter, we can bring the dialog back up. This is actually a very powerful window, let's go through some features.

Pill Types and Filtering

Note: the options presented when filtering varies by pill type. For a full explanation on pill types and their impact, see the Pill Type video in the "Why is Tableau Doing That" section.

Filtering Discrete Dimensions

This is the dialog we get when we're filtering on a discrete dimension.

- The first tab, General, lists the values in the field we're filtering on. We can select All or None with these buttons, or maybe select our values and exclude them
 - · If the list is very long, even search, like so
 - Use All can be a useful option if the list of members in this field may change and we want to ensure that we're always including every member as input to the filter
- Wildcard lets us filter very specifically, maybe if we were working with a list of email addresses we could
 exclude our company's domain, by saying does not end with @tableau.com, this would filter out our
 employees
- Condition lets us filter based on another field. First, let's cancel this and instead filter Product Name, as this illustrates the concept a bit better. For example, let's say we want our view to only include products whose average quantity sold is greater than 1.
- We can do that on the Condition tab, like so
 - · Set the field to quantity,
 - change the aggregation to average,
 - the comparison to greater than
 - And we'll say 1
 - If we wanted to make sure that our condition makes sense, Load brings in the range of values for that field so we can see what we're working with
 - If you're familiar with SQL, Condition is like adding a HAVING clause to the WHERE
- The Condition tab can also accommodate calculations, here "by formula".

- Top also lets us filter based on another field.
 - And we can choose to filter top or bottom
 - If Top filtering is giving you unexpected results, check out the video Filtering for Top and Top N

Condition and Top filtering can be made more dynamic using parameters instead of constants for conditions. There's a video on Parameters with more information about creating and using Parameters.

That's filtering discrete dimensions.

Filtering Measures or Continuous Dimensions

When we bring a Measure like Shipping Cost, or a continuous (green) dimension, to the filter shelf, we get a different dialog window.

If our field is a Measure specifically, first, we're offered the Filter Field and asked to specify a level of aggregation. For a complete discussion on aggregate versus record level filtering, please see the video "Where Tableau Filters".

For now, we'll click All values, which is record level filtering, and now we're brought to our options for all quantitative filters, including continuous dimensions.

- · Range of values lets us select an upper and lower cutoff
 - The prefilled limits are based on what's in the data source and how our view is built
 - Let's see what that means. Here, our view contains Furniture for the LATAm market. We see our
 Shipping Cost ranges from \$0 to \$810, which is the range of shipping costs for Furniture. If we
 change this option, Show, from "Only Relevant Values" to "All Values in Database", we'll see that we
 have some products whose shipping costs who range up to \$2,842
- At Least & At Most are useful options if you only need to specify a lower or upper limit
 - Let's take a look at another example. Right click on the filter shelf to see how the filter is set up. Here we have a filter on Profit, and the lower range is set to 0 to filter out unprofitable marks.
 - If we click OK, we'll see how that looks in the quick filter.
 - But watch what happens if we roll up to Product Category. We've inadvertently locked our upper range as well, and we filtered out our two more profitable Categories!
 - · Let's go back into that filter and here we see that trimming
 - we should actually use "At Least" zero, as this allows our upper range to fluctuate as we adjust the view
- Lastly, we have an option for Special this helps us filter on nulls, with each option keeping only null, nonnull, or all

That's filtering quantitative data!

Filtering Continuous Dates

Dates deserve their own mention with filtering. When a date field, as identified by this calendar icon, is brought to the filter shelf, we're given a Filter Field just like with a Measure and asked to specify how we want to filter the date.

A discrete date is treated like a dimension, and

· There are specific discrete date parts listed here. Note that they're blue

Continuous dates, however, have their own date specific options

- Here we can pick relative date or range of dates
- Either one brings us to the options for continuous dates
- Relative dates let us set a specific unit of time
 - Maybe we would do the last 2 years
 - We can set ranges, including something like week to date
 - · By default the filter is anchored to today, which is dynamic, but we can change it to a static date
- · Range of dates, starting, and ending are similar to measures, but with calendar date pickers.
 - This quick filter is for a range, we can use the slider, or click on the date to bring up a calendar picker or type in a date.
 - Ranges are inclusive the data for boundary dates will be shown

Conclusion

That's an in-depth review of the filter shelf and its options. For information on Quick Filters, please continue to the next video in the Filtering series, or you can switch to another topic in the On-Demand Training videos to learn more about using Tableau.