



On-Demand Training: Filtering Conditions Transcript

Welcome to the Tableau Conditional Filtering Video. We are going to go over a series of examples here illustrating the different levels of filtering that you can do within Tableau and we'll conclude with some of those more advanced examples using the conditional filters options available to us.

So to start with, we're just going to do a quick example illustrating row level filtering within Tableau, where we filter out specific rows within the visualization. So maybe, I want to filter this just for a specific customer. You can hover over Aaron Hawkins and choose to Keep Only. And, just like that, I filtered the row for the customer Aaron Hawkins.

Furthermore, there are options available to us to filter based on a summary level. So, in this case, if I were looking at just a list of customers and their raw sales, maybe I want to see customers who have purchased at least ten thousand or more. So that would be a way we could do filtering at the summary level. So, we can filter based on that summary measure, Sum of Sales, and choose the At Least option, so that it holds not on a fixed range but when new data comes in it will still filter based on at least ten thousand up to the greatest possible range within the new data. And just like that, you have a list of customers that have purchased at least ten thousand.

Now, where this gets a little bit tricky is if I were to bring out something else onto the view and change this to see maybe customers and their sales broken down by product category. So we can see that we have 523 rows currently with this filter working exactly how we would like. But if I bring out Category onto the view, now that list changes to 383 rows. And that is because each of those marks, so each individual bar, is being evaluated based on that summary filter, so whether or not each individual bar per each product category is ten thousand or more. And that is a slightly different list than what we are looking to see, which is just customers at the overall customer level, whether or not they have purchased ten thousand or more.

So to do that, we are going to use something called a conditional filter. We can see the same view here with nothing filtered now. If we go at the customer level, so all the rows we're wishing to filter, and just those customers, and we can choose to filter and we have a variety of options available to us. We can choose specific customers, or customers based on a certain value that we're searching for, could be a string or a number, or we get this Condition tab here, which is actually what we're going to use. It should be noted that these are applied in a cascading order, so I can pick specific customers and then choose a condition to evaluate after that, and then filter for the Top list based on some other field, and all that would be applied in a cascading order.

This example, though, we're going to choose the Condition tab, we're going to filter. Since we're filtering at the customer level, we can now choose to filter by that Sum of Sales field and we're going to choose greater than or equal to ten thousand. When we apply this, rather than being applied at the summary level for the individual marks for Sum of Sales, we're just applying this to the rows that we have here for all those customers. And this will now give us a dynamic solution so when we change the view in different ways, we still achieve that same list of customers. So that would be an example of using the Conditions tab to filter within Tableau.

Now let's move on to a more advanced example of how we would apply conditional filters within Tableau. It would be... say we wanted to choose a filter for customers who have purchased two specific product categories, customers who purchased both office supplies and furniture. To do that, we would need a conditional filter again, we're doing this at the customer level. So we'll filter customers based on that condition, but in this case there is not a specific field that dictates to us that exact list of customers, who have purchased in those two specific product categories. So we would need to do a simple calculation to define that logic and create that conditional filter.

We'll go ahead and open up our calculation dialog box within this conditional filter. We can write something out that dictates if they have purchased furniture and if they have purchased office supplies, we want those customers. It's going to read something like this. If and only if product category equals, start with Furniture, we need the exact string to match, and we'll return us a one for those customers who have purchased furniture and a zero for those who haven't. Then we'll type out the second part, if and only if, for those customers who have purchased office supplies, we'll do the same thing with a one for a returning result for those customers and zero for the ones who haven't.

So from here, to complete this, we actually need to take the results of these two parts of the formula, where just the ones occur. So, the people who have ones for the first part of the "if and only if" statement and ones for the second part as well, customers who have purchased furniture and office supplies. We can do that by taking the max of each of these equations here, and adding them together, and taking only the result of that where the condition equals two. So if they've met the first part of the condition, where the product category equals furniture they would have got a one, and if they meet the second part of the condition, they would have also got a one for purchasing office supplies and together that's two, and we just want the customers who have purchased at least two. Select OK. We can apply that now.

And now we have that exact list of customers who have purchased those two specific product categories. And you see that as we drop Category onto the color shelf, here. If we hide Technology, every customer on this list will have purchased both office supplies and furniture. So that would be an example of using a calculated field to define the condition within the conditional filtering in Tableau. The slightly more advanced example, but quite powerful.

So that concludes the training for conditional filters within Tableau. Thank you for attending, and please do check out some of the other filtering videos on the web site as well.