Free Training Transcript: Working with Sets

Welcome to this video on Working with Sets. You can download the Exercise workbook to follow along in your own copy of Tableau. This content builds on the Creating Sets video.

Editing Sets

Sets can be edited, but to what degree is dependent on how they were created.

If a set was created from marks, such as LATAM Corporate, right clicking on the set and selecting "Edit Set" will bring up the list of requirements to be a member– and the only option will be to remove individual requirements. Members cannot be added to this existing set, though a second set can be created from the desired new requirements, and the two sets can be combined.

If the set was created from a calculation, such as "Customers with "A" Names", right clicking and selecting "Edit Set" will bring up the same dialog that was originally used to create the set. This can be modified and saved.

If the set was created by combining sets, right clicking and selecting "Edit Set" will bring up the combination window. This can be modified and saved.

IN/OUT versus Members

Sets can be used like any other field, but they have the additional feature of In/Out versus Members. By default, when a set is brought into the view, say to color, the marks are colored for which fall within the set and which are not in the set. By contrast, if we change the set to Detail by clicking on the color icon in front of it and changing it to detail. Then right click the pill and change the mode to Show Members, we're now only looking at members of the set, and the filter shelf shows we're actually filtering by that set.

Sets and Filters

Sets can be thought of similarly to filter results. If there is a subset of the data that can be thought of as a useful set, or a frequently used combination of filters, it may be worthwhile to create a formal set from those filter results, and then use the members of

that set instead of constantly evaluating the filters. When a set is first created, like so, there's an option "Add to filter shelf" to immediately use only the members in that set. This is the same behavior as using "Show Members". Alternatively, to create a set from a single filter, right click on the filter shelf's pill and select "Create Set". Note that if we were to remove all of these other filters, this set shows exactly those same filter results.

Sets in Hierarchies and Calculations

Like Groups, Sets can be added to hierarchies. We can drag "LATAM Corporate" into the Products hierarchy. Now when we drill in the bar chart, we see the only place that has "in" bars is in LATAM, and the smaller bar is corporate sales. Sets can also be used in calculations.

Here, we have a set based on Customer Names that start with A. If we wanted to know the profits from only those customers, all it takes is a simple calculation. Right click on the set and say "Create Calculated Field". We'll name this "A Name Profits", and the formula will be a simple IF statement. IF [Customers with "A" Names] THEN [Profit] END. This will check to see if a customer is in the set, and if they are, it will return the profits for their orders.

This is a very basic example, but using sets in a calculation like any other field gives a lot of power to the analysis.

Conclusion

Thank you for watching this video on working with Sets. We invite you to continue with the Free Training videos to learn more about using Tableau.