



On-Demand Training: Grouping Transcript

Hello and welcome to Tableau. Today I'm going to be talking about the grouping functionality in Tableau Desktop.

So, what is grouping? It's really just the ability to combine members that are within a dimension. So, what does that mean? Let's take a look at an example.

I'll grab the subcategory from my products hierarchy and I'll grab my sales. Let's go ahead and sort this thing. Coming into this data set, I might notice that there's some like items, or some small items, really I'd like to just combine those together. Well, as opposed to doing some scripting or something like that or fixing it in the data source, we can just do that stuff on the view itself. So let's grab maybe our four smallest items, hit the tooltip and say Group Members here, or actually click the paper clip icon up top, or maybe just right-click this and say Group. It's combined all of those different members together, while the alias is going to be comma-separated values of each one of those member names. But I might want to edit that alias and just say Small Items.

So we've created this new group here, but what's actually happened? Well, we didn't write back to the data source, of course. We didn't write over our subcategory field, that's still here. We've just created a new field call Sub-category (group). I might actually want to rename that and call that Small Items Group. And this field is now independent of everything else. So I can still take my subcategory and drop it out, here, and see that breakdown of what's inside of that group. Maybe it would even make sense for me to add that to the hierarchy. So now when I go to drill from Category, I'll hit the group, then I'll actually parse out the members within that group. And then we can go all the way down to our product names.

It's very versatile, it's almost exactly like every other field. The only difference is that you're not going to be able to use it inside of a calculated field. So, if I come in here to Calculated Field we'll notice that that group isn't there.

Let me go ahead and clear the view, here. Let's take a look at one other way to group together items. I can actually just right-click any field, so I'll right-click my customers and say Create Group. Here's a list of all of my customers, and I'll make this a little longer. And I can just create groups from here. So, I'll grab a bunch of these names that start with A and group them together and call them A-Names. I've noticed that I've missed some, so I'll come in here and actually just grab another big group of these names and say Add to A-Names. So that just added it all to that group. And I've got a couple left here that I can grab and I'll just actually drag it in there.

With Tableau, there's always a couple of way of getting where you want to be. In this case, you can drag it into the group. You can say Add to, here. The Add to is really nice if we have some other fields that are really sporadic through the source. And I want to use the Find functionality to find a bunch of different names, I can come in here and say Find, and let's find, I don't know, Jane. We'll go ahead and find her. Well, now that I've got her, all add her to A-Names, which, you know, doesn't make too much sense, but it works. And so, this is a nice way to manage your groups. That's how I use this dialog box. When I need to group things together, I typically don't right-click the field and start grouping together here. I use this as a way to manage and modify groups once they have already been built.

It's very nice if you're working with a data source that someone has tailored for you already. Maybe they added it to Data Server and you want to edit a copy of one of those groups, just to see what are each one of those groups, what are the members, you know, how does this group actually work? I'm going to give an example of that here with just our suppliers. So I would hit Edit Group. I would see all these nice groups created and I can just sort of un-collapse, expand all these different groups, see what's in there. Maybe do some modifications, here. So this is nice for managing groups. The view is nice for building them on an axis and that's about as far as it went in Version 7, but

now we actually have the capability to group some members that are on the marks in a view. So let me show you what that means.

Let's grab our Category, and maybe this time I'll grab our Region, and let's take a look at our subcategories after Region, here. Pull Sales out, so we get some context. So, pretty easily, if I wanted to group together some members of a dimension, I could come here and grab them on axis, as we did before and say Group. But what if I actually wanted to group the marks on the view? Well, now we have that capability. So let's go ahead and show a couple of examples.

I'll grab these five members here, go to click on the Group icon, and now I'm presented with a choice, here. This is called visual grouping. It's something that's new to Tableau and it gives me the ability to customize how I want to group this stuff together. So let's go ahead and try all of these. The first one we'll try is All Dimensions. What that's done is it's just grouped together those marks that are on the view and we'll notice something else here. Different from when we're grouping on an axis, what it's done is that it's done that same group together, but it hasn't actually combined them on the view. It's taken that group field and dropped it on Color and left our fields untouched, up here. What it's also done, is it's grouped everything together as we had before, with the comma-separated values, but it's also grouped everything else into a category call Other.

What's nice about this is once I've created and added this to a view, I can now grab some more members, just click Group and start creating some different groups, here. So you can kind of see why we call this visual grouping. Very quick and easy way to group together some things on a view.

So, I'm going to go ahead and just duplicate this sheet, pull my group off of there, and we're back to square one. Let's take a look at some of those other options. So I'm going to grab some marks on my view, and as opposed to selecting All Dimensions, right, grabbing these very unique marks, and these unique dimension members, let's group on our high level. Let's group on Category. So what did that do? What it actually did is it grouped together everything within these two categories. So now we're looking at Furniture and Office Supplies. The reason for that is because my selection had spanned across this partition and we were dealing with two categories. So if I scroll down, we'll have everything in this group, everything that's indicated as Other under Technology. So that drop-down is really telling you "Hey what do you actually want to group together here?"

Let me go back and do one more example. Let's make sure we span a couple of partitions, here. Go ahead and hit our Group icon. In this case, let's actually click Region. So it's grouped together the entire West and Central Region. Also, nicely, it's done that down here, too. So, every instance of West and Central we have grouped together, and then everything as Other, here. And you can kind of expect, if we do one more group, and we grab just a couple of subcategories, and we group together Sub-Category, and unselect, now we see every instance of Copy and Fax, Telephone and Communications, and Office Machines. I can now scroll up and down and see where all those are.

So this is a really nice sort of quality of life thing when it comes to creating groups. It's also very functional, when you have big data sets and you want to create these groups ad hoc, with marks on a view. I'll show you one example that comes up quite a bit, that you can use this tactic for. So here's a sort of a practical application. Let's grab all of our states, and let's say, let's pretend for a second that I don't have Region in my data sets. So, let's just assume that this

isn't here. And I want to group together some regions, here. Well, previously I would need to put all my states on an axis, or just right-click on State and actually create a group here. But now I can do that visually. I can come in here and grab some states, hover over the point and say Group. So we'll call this our, I don't know, maybe we'll call this West Coast, and for the time I'm just going to grab the East Coast and do that, too. So, visually grouping on a map is very nice. So we've created that nice visual group. It's still in my data set, here. So here's my state group. I can use it in any other view or anything else that I want.

One other functionality of these groups is you can also Quick Filter off of them. So if we don't want all those values with in a Quick Filter, we want to group them up and then give somebody the ability to pick a coast, we can do that here very quickly.

The last thing that I wanted to talk about today with groups, and this is no different from 7 than it is with 8, is a calculated group or programmatic group as I call it. Let's take an example of this. So, as opposed to actually using the grouping functionality, let's just go ahead and create a calculated field. Maybe we'll do here, we'll say "I want to group together all of my states that start with A." So why would you want to do this, as opposed to doing it on the view, or doing in that Create Group box? Well, this is programmatic. This will change and be dynamic to your data set. So I can say, in this particular case, if the left, so this is just a little string manipulation. If the left of my state, by one character, is equal to A, then we'll call it States that Start with A. And then maybe I'll say Else, Other.

So just if you're wondering what Left does, it just pulls the first character, since I put the number 1 here. If I had put the number 2 here, we would be pulling the second character of a member within State. It doesn't really matter in this particular function, but this is just what I'm using for this example.

So, once I've created this, we'll now have a new field called States that Start with A. I can pull that out onto the view. So, we have States that Start with A, and Other. Then I can maybe just go grab my state afterwards and make sure I did this thing correctly. Yep. So there's all our states that start with A, and then everything else.

What is the benefit of doing this programmatically as opposed to doing it manually? Well, first of all, sort of scalability, right? If I need to do a contain statement or do some certain grouping based on something that I can write out in a calculated field, it might save you a lot of time than going through and clicking all those items. The other thing is that this is dynamic. If maybe the United States acquires a new state, or maybe Alaska is added to the data set, that'll now fall into this category. Whereas if I had created this group just by selecting all the states that started with A and clicking Group, then I would have to go in and enter that group and add Alaska, if we ended up having some sales there. So that's what's nice about doing the calculated field grouping.

One other thing with those calculated field groups is that we can use those in a calculated field. So now we can use this, and say, you know, if it's one of these states, then show me the sales, else profit, or something like that. So, you can kind of take all these different ways of grouping and apply them to the analysis that you're doing. If you want a little extra work, or a little extra practice with this, I'm going to attach the workbook to this page and you'll be able to go through a couple of example questions and answers using Tableau.