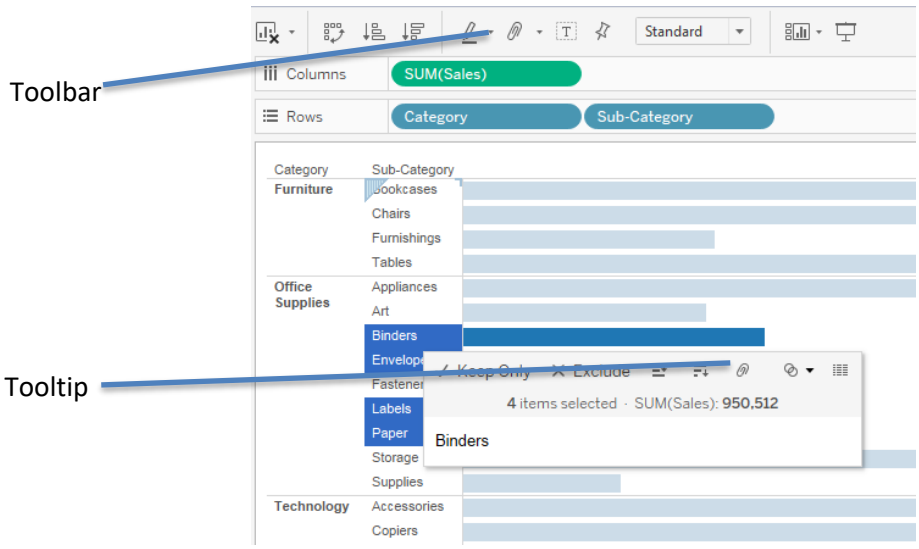
# Organising Data

If you have large numbers of dimensions then is can be useful to group them together, either because they are all related to the same topic, or because they form a structured hierarchy such as an address or a location. E.g. multiple products might be grouped into a single category, or multiple cities grouped into a region. Groups can be created directly from the main view.

## Create a Group from the View

1. CTRL+Click to select several dimension labels in the view then click the **Group** icon (the paperclip) on the toolbar, within the tooltip or in the right-click menu. The new group will appear in the **Data** window.
2. To add or remove group members, right-click the new group in the **Data** window, choose **Edit Group** and edit the members.

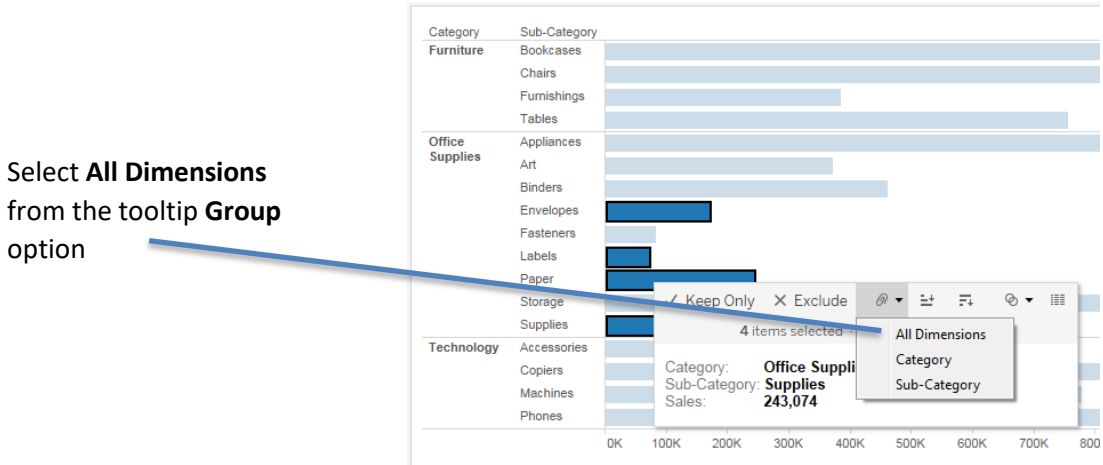



## Create a Group from the Data Window

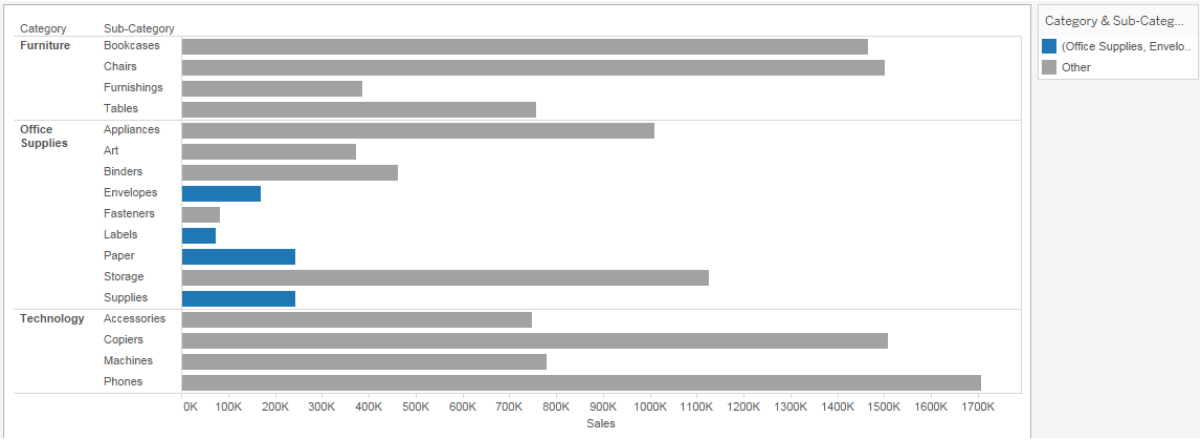
1. Right-click on a dimension in the **Data** window and then select **Create Group**.

## Create a Group using Visual Grouping

1. Select a group of marks in the fiew and click the **Group** icon in the tooltip. This allows you to group on a single dimension and allows you to show items as members of a group without losing their labels or individuality.



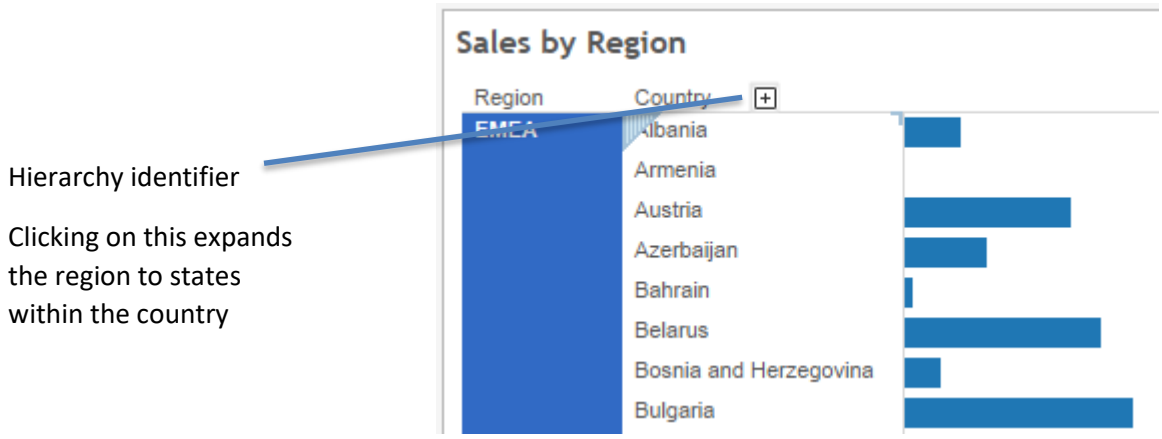
The resulting group will be placed on Color in the Marks Pane. All items that are not part of the group will be designated as 'Other'.




# Creating and using Hierarchies

In many databases, and in data warehouses that use a snowflake schema rather than a star schema, data is commonly structured into hierarchies. Geographical data is the most common of these structures, with country at the top of the hierarchy, followed by postcode, county, town and street. Product data is also often hierarchical, using product categories, sub-categories and unique products.

Tableau includes the ability to manually define a hierarchical structure for any dimensions in your **Data** window. Once these have been created, users can click on a + sign to drill down into the data to display more layers of detail based on the hierarchy created.




## Building a Hierarchy using Drag and Drop

1. In the **Data** window, drag and drop the child field onto the parent field.
2. (Optional) Give your hierarchy a name using the **Create Hierarchy** dialogue box. Click **OK**.

## Building a Hierarchy using the Right-Click Menu

1. In the **Data** window, CTRL-Click to multi-select the fields to add to the hierarchy.
2. Right-click on one of the selected fields to bring up the menu, select **Hierarchy|Create Hierarchy**.
3. This will create an alphabetically-ordered hierarchy. To re-order the fields drag and drop them into place.

# Tasks

1. Open the packaged workbook **Workshop 4.1 – Groups and Hierarchies Starter.twbx** and create a view (View One) that has the following:
    a. A group that includes the following dimension members and uses the alias "Desk Supplies" for the grouped members: Envelopes, Fasteners, and Labels
    b. A hierarchy named Products with the following dimensions in this order: Category, Sub-Category (group), Sub-Category, Product Name.
    c. Category is drilled down two levels to display Sub-Category (group) and Sub-Category in the view.

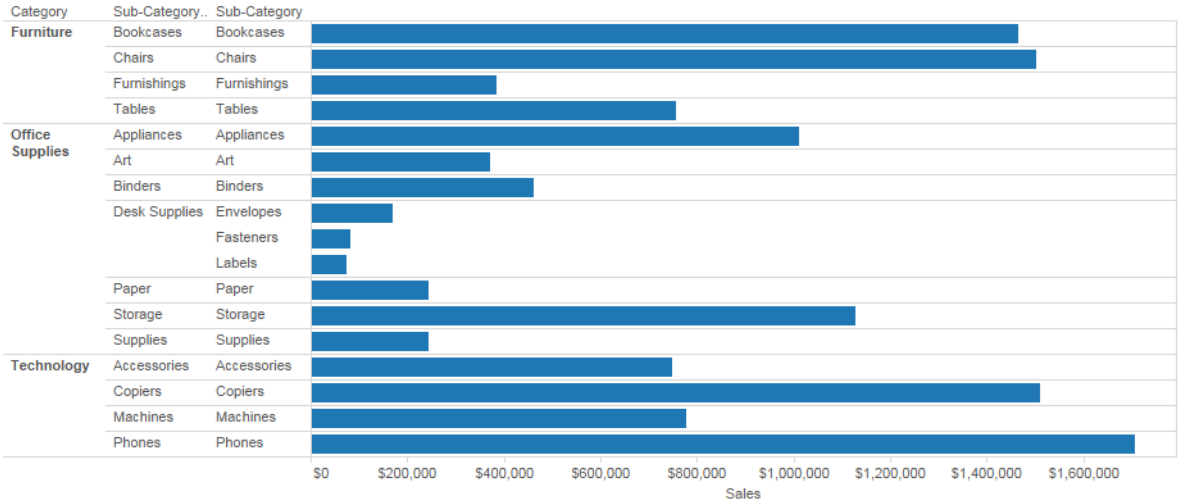



**FIGURE 1: VIEW ONE**

2. Open the packaged workbook **Workshop 4.2 – Visual Groupings Starter.twbx** and create a view (View Two) that has the following:
    a. A visual group that uses the alias "Desk Supplies" using the following Sub-Categories: Envelopes, Fasteners, and Labels
    b. A visual group named "Office Machines" with Copiers, Machines and Appliances.
    c. All other Sub-Categories are grouped as "Other".

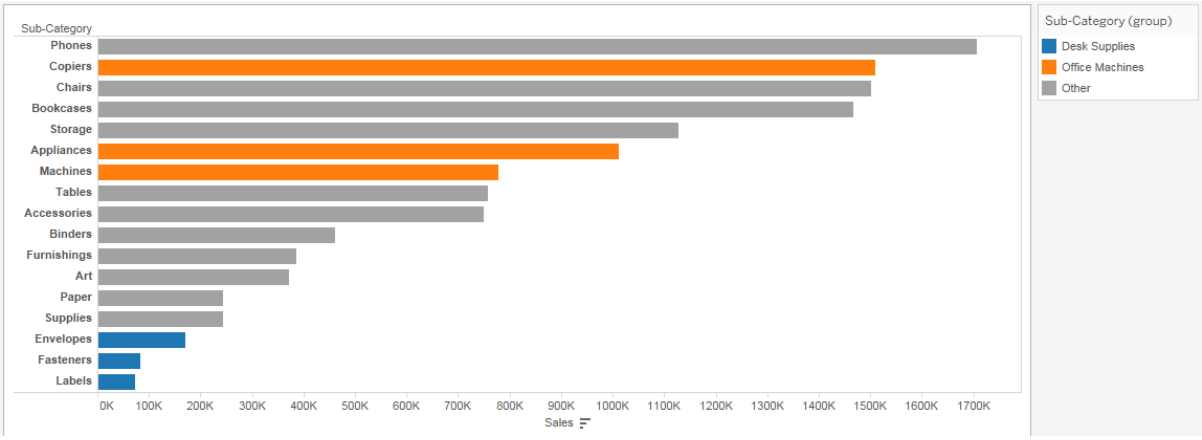



**FIGURE 2: VIEW TWO**