Types of LOD Calculations

In this section, you will learn about the various LOD calculations. There are three LOD calculation types:

- **FIXED**
- **INCLUDE**
- **EXCLUDE**

You will now learn about each of these LOD calculations in greater depth. You will also learn their application in visualizations by performing an exercise for each.

FIXED

FIXED LOD calculations compute an expression using specified dimensions. An example would be identifying the top-performing product categories per region per country. This can easily be done using **FIXED** LOD calculations.

Exercise 02: Creating a FIXED LOD Calculation

In this exercise, you will calculate **SUM(Profit)** fixed at a **Country** level. Suppose, as a country-level manager, you are only interested in the profits generated at country level, but occasionally would like to hone in on the **Region** level of that country. Now, you will compute a measure at a specific dimension level, rather than making calculations using all dimensions in the view.

Note

If you are using the local copy of **Superstore** that comes with Tableau, the field **Country** will have the label **Country/Region** instead. This will not affect the calculations.

Perform the following steps to complete this exercise:

1. Load the **Sample – Superstore** dataset in your Tableau instance.

2. Create a view that shows **Country** and **Region** along with **SUM(Profit)**. Currently, the view shows **SUM(Profit)** at the **Region** level, as follows:

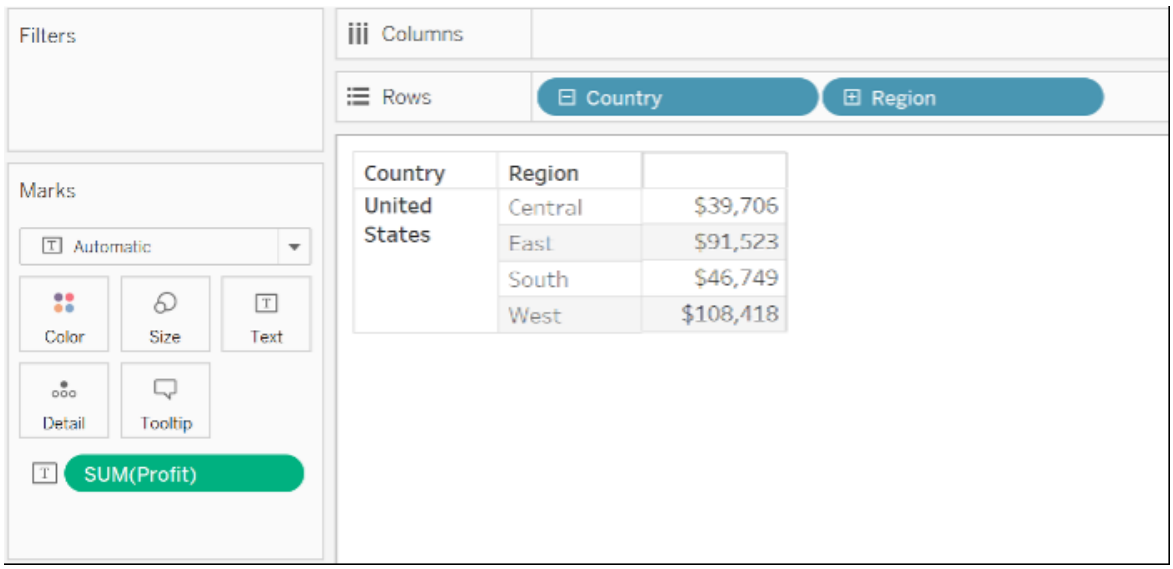

Figure 1: Initial view with country and region

3. Create a **FIXED** LOD calculation:

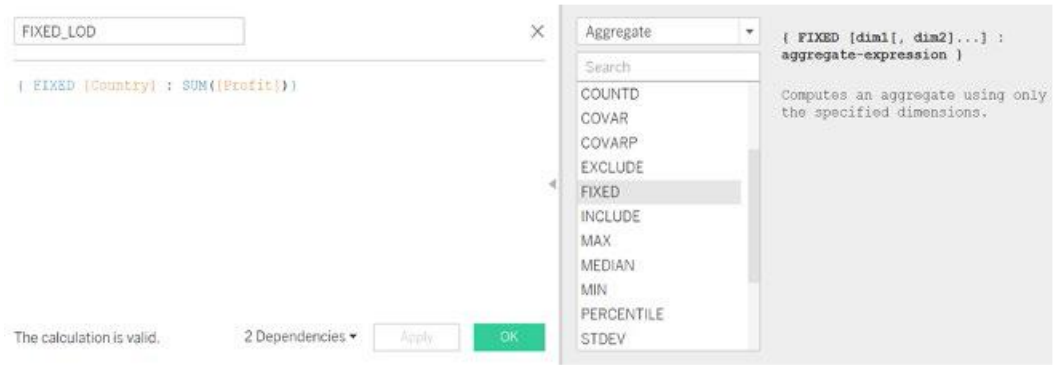

Figure 2: Calculation editor

You can use any number of dimensions in the expression before the colon (**:**). Note the expression on the right side of the colon (**:**) has to be an aggregation, or else you will get a syntax error:

Figure 3: Understanding the syntax of LOD calculations

5. Add this calculation to the view:

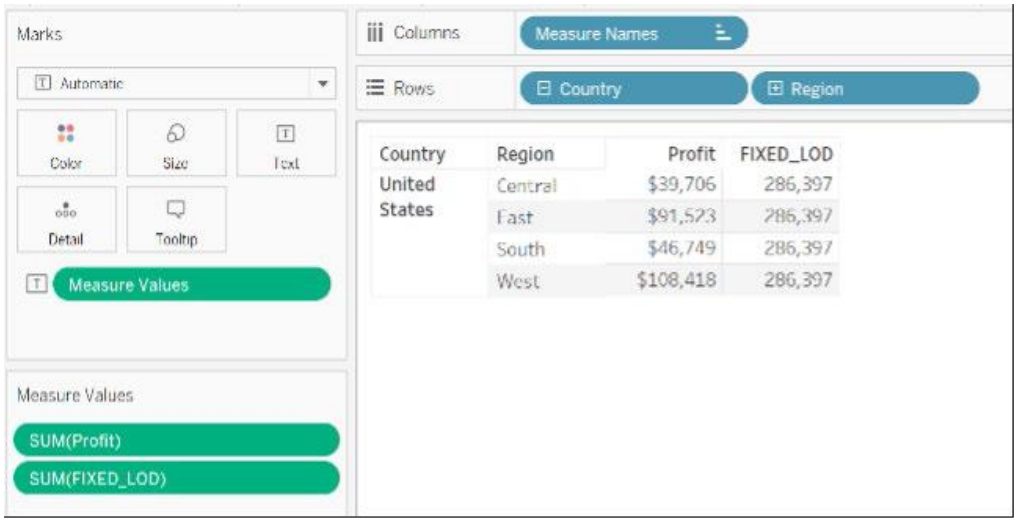

Figure 4: Comparing LOD and normal calculations

The second calculation in each row is the LOD calculation. Notice how the value remains constant irrespective of the Region dimension in the view.