

Creating Calculated Fields - Cubes

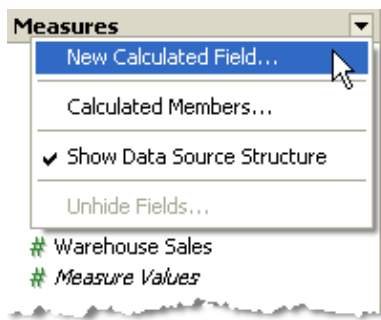
Tableau now supports calculated fields on multidimensional data sources. There are two kinds of calculated fields: calculated measures and calculated dimensions. You can create calculated fields using either Tableau formulas, which are simple, or MDX formulas, which are more complex. Follow the instructions below to learn how to create new calculated fields.

Defining Calculated Fields

When you define a new calculated field, you create a new field in your data source based on existing measures in the data source as well as standard functions and operators. The steps below explain how to create calculated measures using Tableau formulas. For more advanced calculations refer to page two to learn about MDX.

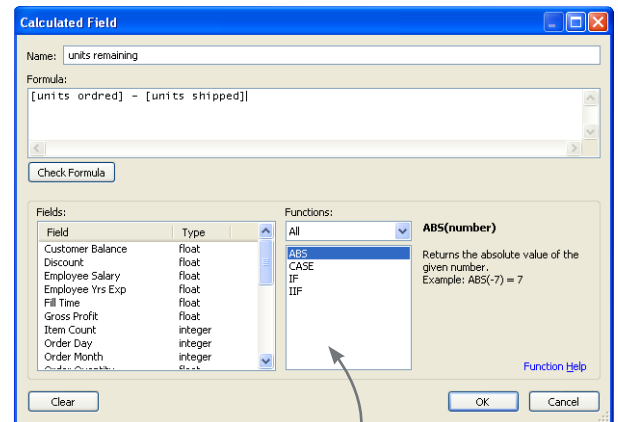
1 Open the Calculated Field dialog box.

Right-click the schema and select **New Calculated Field**.



2 Define a formula.

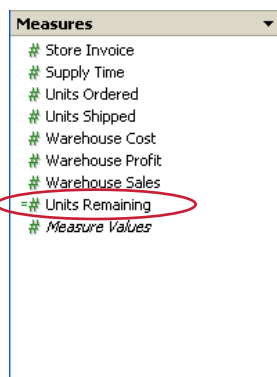
In the Calculated Field dialog box, give the new field a name and define a formula. When you are finished, click **Check Formula** to validate.



Double-click the fields and functions in the lists to add them to the formula.

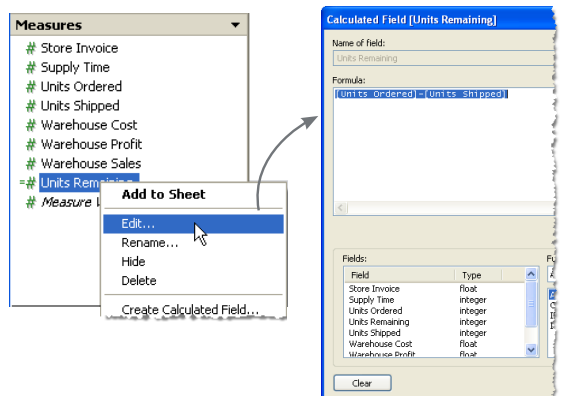
3 Use the new field.

When your formula is correct, click **OK** to save the new field. It displays in the Measures area of the schema.



4 Edit the formula.

If you need to change the formula for a calculated field, simply right-click the field in the schema and select **Edit**. Keep in mind that the changes you make will affect any worksheets that use the new field.

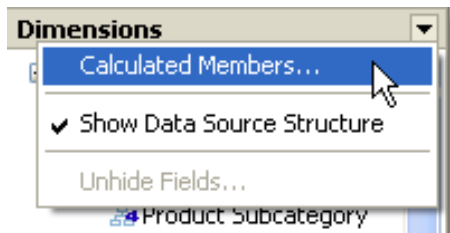


Defining Calculated Members with MDX

Rather than use Tableau formulas to create new fields, you can also create calculated members using MDX. With MDX you can create more complex calculations and reference both existing measures and dimensions. Calculated members can either be new measures or new dimension members depending on the hierarchy that you choose.

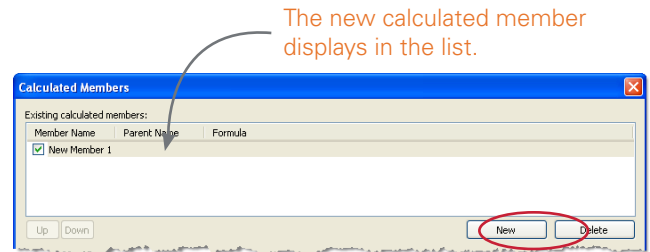
1 Open the Calculated Members dialog box.

Click the Data window menu and select **Calculated Members**.



2 Create a new calculated member.

In the Calculated Member dialog box, click **New**.

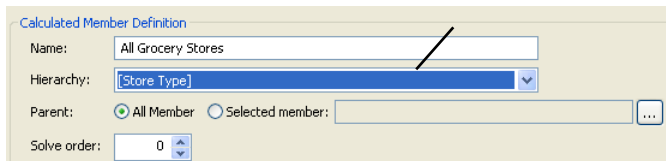


3 Specify a name, hierarchy, parent, and solve order.

Name the new member and select its location in the hierarchy. Also, for calculated dimension members, specify a parent member. You can either select the All Member or use a Selected Member.

Finally select a solve order for the member.

If you are creating a calculated member as a measure, select [Measures] in the Hierarchy list.



Note: Sometimes a single cell in your data source can be defined by two different formulas. The solve order defines the precedence given to each formula. Formulas with a lower solve order are solved first. The default solve order is zero.

4 Define a formula.

Type a formula that defines the new member and click **Check Formula** to validate. When finished click **OK**. The new member displays in the Data window under the parent and hierarchy that you specified.

