

Add Additive Or Non-Additive Measures

You can add additive or non-additive measures to a cube by choosing a column in the fact dataset, and choosing a supported aggregate calculation to apply to the data in that column.

Before You Start

When using Databricks SQL as a data warehouse, you can use the `databricks.estimateddistinctcount.deviation` engine setting to specify the maximum relative standard deviation allowed for the `approx_count_distinct` aggregate function. The default value is 0.02.

Procedure

To add an additive or non-additive measure:

1. Open the main cube canvas.
2. Locate the fact dataset for your cube model.
3. Click the plus icon or drag a column to the Measures panel.
4. In the Create a Measure dialog, enter the following general details:
 - ▲ **Measure Name:** The user-friendly name that users will see when they connect to the cube from a client tool.
 - ▲ **Query Name:** The alias that the AtScale query engine will use for the target column. This can be the same as the **Target Column** name, or you can enter a more readable name.
 - ▲ **Description:** A description of the data that this measure contains. Some BI tools can show this description, some can't. It's a good practice to enter descriptions to help other people get familiar with the data in the cube.
5. In the Sources section, enter the following details:
 - ▲ **Dataset:** The source dataset that contains the column that the measure is based on. This should be the fact dataset of the cube model.
 - ▲ **Target Column:** The dataset column that the measure is based on.
6. In the Aggregation Handling section, enter the following details:

- ▲ Aggregation Type: The aggregate calculation to apply to the data.

| Type of Measure | List of Measures |
|-----------------------|---|
| Additive Measures | Average Distinct Count Estimate Max Min Non-distinct Count Population Standard Deviation Population Variance Sample Standard Deviation Sample Variance Sum |
| Non-Additive Measures | Distinct Count Percentile |

- ▲ Semi-Additive Measure: This field appears when the selected aggregation type is **Max**, **Min**, or **Sum**. Keep the value set to **Default Behavior**.
- ▲ Quality: These options appear when the selected aggregation type is Percentile. For details, see [Non-Additive Measures](#).
- ▲ Percentile: This field appears when the selected aggregation type is Percentile. For details, see [Non-Additive Measures](#).

7. In the Data Handling and Formatting section, enter the following details:

- ▲ Override Default Handling: For information about this field, see [About Queries on Dimensions that are Unrelated to One or More Queried Measures](#).
- ▲ Formatting: Choose the format for the values. See [Formats for Data Values](#) for a description of the available formats.

8. In the Visibility in Published Data Sources section, enter the following details:

- ▲ Include in the list of available measures: If selected, the measure will be visible in published versions of the cube. You may want to make a measure not visible if you intend to use it in a calculation, but not as a measure on its own.
- ▲ Folder: (Optional) The name of a folder that this measure should go in. If your cube has a lot of measures, folders are a good way to organize them.

9. Choose Save.

The new measure appears in the Measures panel and the Preview panel of the cube.