



## WHAT'S NEW AND RELEASE NOTES

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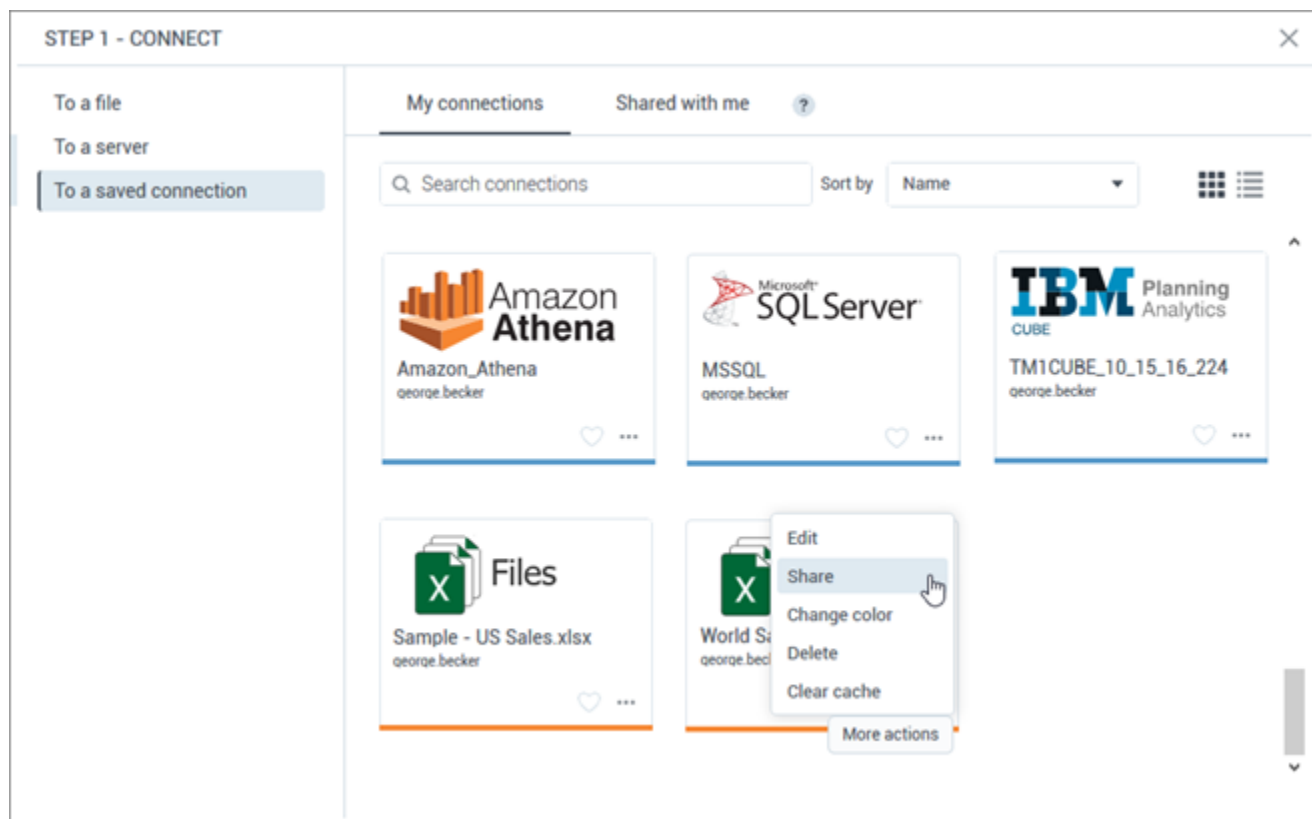
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## NEW FEATURES AND IMPROVEMENTS

### DATA PREPARATION

#### *Reuse uploaded files to create multiple datasets*

Now, users can reuse uploaded files as saved connections when creating new datasets. When a file is uploaded to the system, the file connection is added automatically in the **Data connections** pane. Afterwards, it can be used as any other connection. When managing a file connection, you can edit its name, share it with other users, set to cache it, clear its cache, categorize by color, or delete the connection.



### *Restrict the rows of data a certain user can see in a dataset*

Previously, when dataset managers shared a dataset, all the data was visible to all dataset consumers. Now, a dataset modeler can use the Row Level Security (RLS) capability to add a security filter to specify which data rows any assigned consumer can access in the shared dataset. For example, if a dataset contains sales data for different regions, the row-level security (RLS) allows each manager to see only the data that is relevant to the corresponding region and not the whole dataset.

To add a row level data filter, you add one-line conditions and assign users to the corresponding subset of data. Each condition can have the same or different users or groups assigned. Only the data that matches all the conditions is visible to the assigned users.

SECURITY FILTERS ? ✕

Only the data that matches the conditions is visible to the assigned users. Each condition can have different users assigned. + CONDITION

Country ▾	is in list ▾	Canada ✕	👤 (1)
Country ▾	is in list ▾	France ✕	👤 (1)

CANCEL APPLY

### Calculations: new functions for string phonetic encodings

To normalize inconsistencies between spellings for better matching (fuzzy matching between string values), users can now calculate phonetic encodings for string columns by using the following new built-in functions:

- **DOUBLEMETAPHONE(expr)** – Returns a phonetic encoding through the Double Metaphone algorithm. The algorithm removes silent letters, normalizes combinations of characters to a single formula, and removes vowels (if it is not a first letter). For example, **DOUBLEMETAPHONE('Floor Care')** will return **FLRK**.
- **METAPHONE(expr)** – Returns a phonetic encoding through the Metaphone algorithm. The algorithm removes silent letters, normalizes combinations of characters to a single formula, and removes vowels (if it is not a first letter). For example, **METAPHONE('Floor Care')** will return **FLRK**.
- **SOUNDEX(expr)** – Returns a phonetic encoding through the Soundex algorithm. The encoding is a four-character code based on the English word pronunciation. For example, **SOUNDEX('Floor Care')** returns the code **F462**.
- **REFINEDSOUNDEX(expr)** – Returns a phonetic encoding for the input string (expr) by using the Refined Soundex algorithm. The encoding is a refined Soundex code based on the English word pronunciation. For example, **REFINEDSOUNDEX('Floor Care')** returns the code **F27093090**.

The screenshot shows the 'CALCULATIONS' interface. On the left, there are two panels: 'Dimensions' and 'Measures'. The 'Measures' panel is expanded, showing a list of measures including Discount, Entertainment Cost, Gross Sales, Items per Transaction, Manufacturing Cost, Marketing Cost, No of Customers, No of Transactions, Planned Gross Sales, Planned Profit, Profit, Quantity, and Sales Cost. The 'REFINEDSOUNDEX' measure is highlighted. On the right, the 'Type calculation' field is empty. Below it, there is a 'SAVE' button. At the bottom, there is a 'Search functions' field with 'String' selected in the dropdown. The 'REFINEDSOUNDEX' function is selected in the list of functions. Below the function list, the description for 'REFINEDSOUNDEX(expr)' is shown: 'Returns a phonetic encoding for the input string (expr) by using the Refined Soundex algorithm. The encoding is a refined Soundex code based on the English word pronunciation. The algorithm is used to normalize inconsistencies between spellings for better matching (fuzzy matching between string values)'. An example is provided: 'Example: REFINEDSOUNDEX('Floor Care') = F27093090'.

*Copying values from tabular preview*

Now, users can right-click any cell on the tabular data previews and copy the respective value. This feature can be useful when adding values against which you want to filter the dataset or create security filters.

STEP 2 - REFINE ?

Sample - World Sales.xlsx

Sales Store Types Locations Products

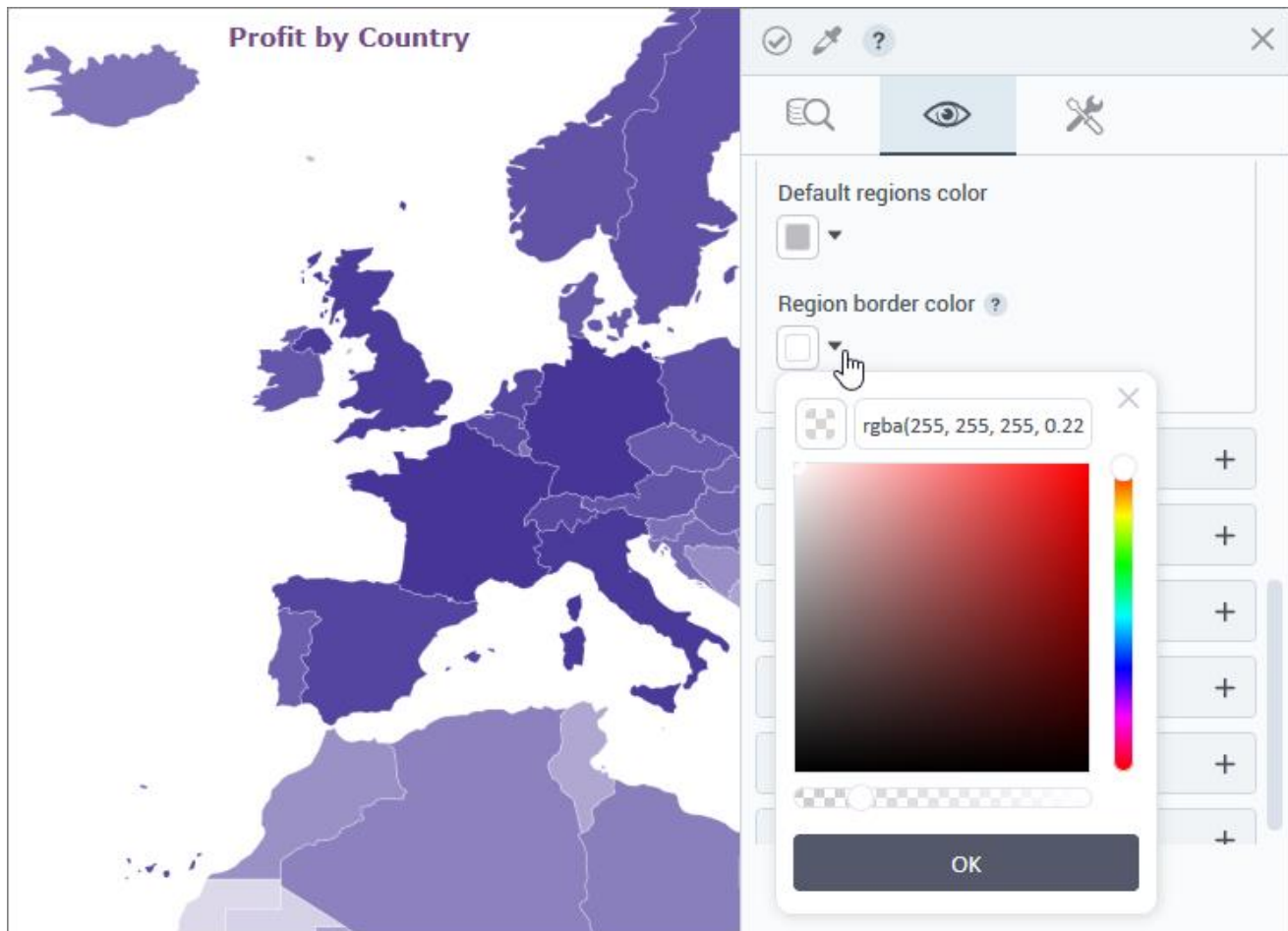
Location ID	Country	State Code	State	Region
abc		abc		
1	Mauritania	Mauritania	Mauritania	Africa
4	Mexico	Mexico	Mexico	South America
6	Azerbaijan	Azerbaijan	Azerbaijan	Asia Pacific
7	Albania	Albania	Albania	Southeastern Europe
9	Israel	Tel Aviv	Tel Aviv	Asia Pacific
10	France	Ile-de-France	Ile-de-France	Central Europe
12	Tunisia	Tunisia	Tunisia	Africa
15	Kosovo	Kosovo	Kosovo	Southeastern Europe
16	Cambodia	Cambodia	Cambodia	Asia Pacific
17	Canada	Ontario	Ontario	North America
18	India	Andhra Pradesh	Andhra Pradesh	Asia Pacific

*Note: A 'Copy' tooltip is shown over the 'Ile-de-France' cell in the State Code column of the row with Location ID 10.*

## STORYBOARDS

*Border color for regions on map visualizations*

The new setting, **Region border color**, has been added to customize the borders of the regions on the geospatial visualizations. Users can set a color and the transparency level to match borders with background or visualization style.



### Calculations: new functions for string phonetic encodings

To normalize inconsistencies between spellings for better matching (fuzzy matching between string values), users can now calculate phonetic encodings for string columns by using the following new built-in functions:

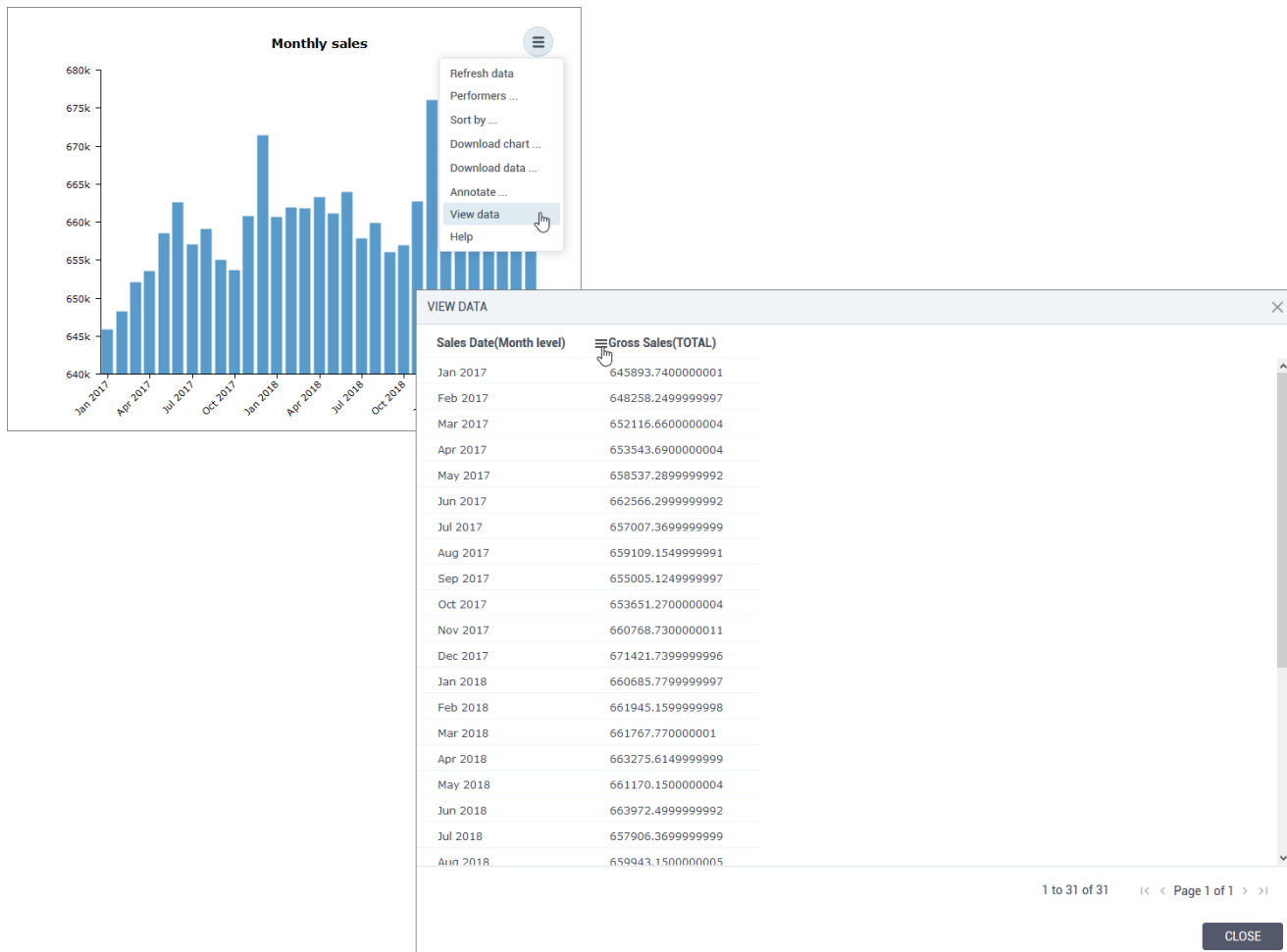
- **DOUBLEMETAPHONE(expr)** – Returns a phonetic encoding through the Double Metaphone algorithm. The algorithm removes silent letters, normalizes combinations of characters to a single formula, and removes vowels (if it is not a first letter). For example, **DOUBLEMETAPHONE('Floor Care')** will return **FLRK**.
- **METAPHONE(expr)** – Returns a phonetic encoding through the Metaphone algorithm. The algorithm removes silent letters, normalizes combinations of characters to a single formula, and removes vowels (if it is not a first letter). For example, **METAPHONE('Floor Care')** will return **FLRK**.
- **SOUNDEX(expr)** – Returns a phonetic encoding through the Soundex algorithm. The encoding is a four-character code based on the English word pronunciation. For example, **SOUNDEX('Floor Care')** returns the code **F462**.
- **REFINEDSOUNDEX(expr)** – Returns a phonetic encoding for the input string (expr) by using the Refined Soundex algorithm. The encoding is a refined Soundex code based on the English word pronunciation. For example, **REFINEDSOUNDEX('Floor Care')** returns the code **F27093090**.

The screenshot shows the 'CALCULATIONS' interface. On the left, there are two panels: 'Dimensions' with items like Location ID, Product ID, Sales Date, and Store Type ID; and 'Measures' with items like Discount, Entertainment Cost, Gross Sales, etc. The main area is titled 'Type calculation' and contains a search bar for functions, a dropdown for 'String', and a list of function buttons: POSITION, REFINEDSOUNDEX (highlighted), REGEXP\_LIKE, and REPLACE. Below the buttons, the description for REFINEDSOUNDEX(expr) is shown, including an example: REFINEDSOUNDEX('Floor Care') = F27093090.



## View data displayed in a visualization

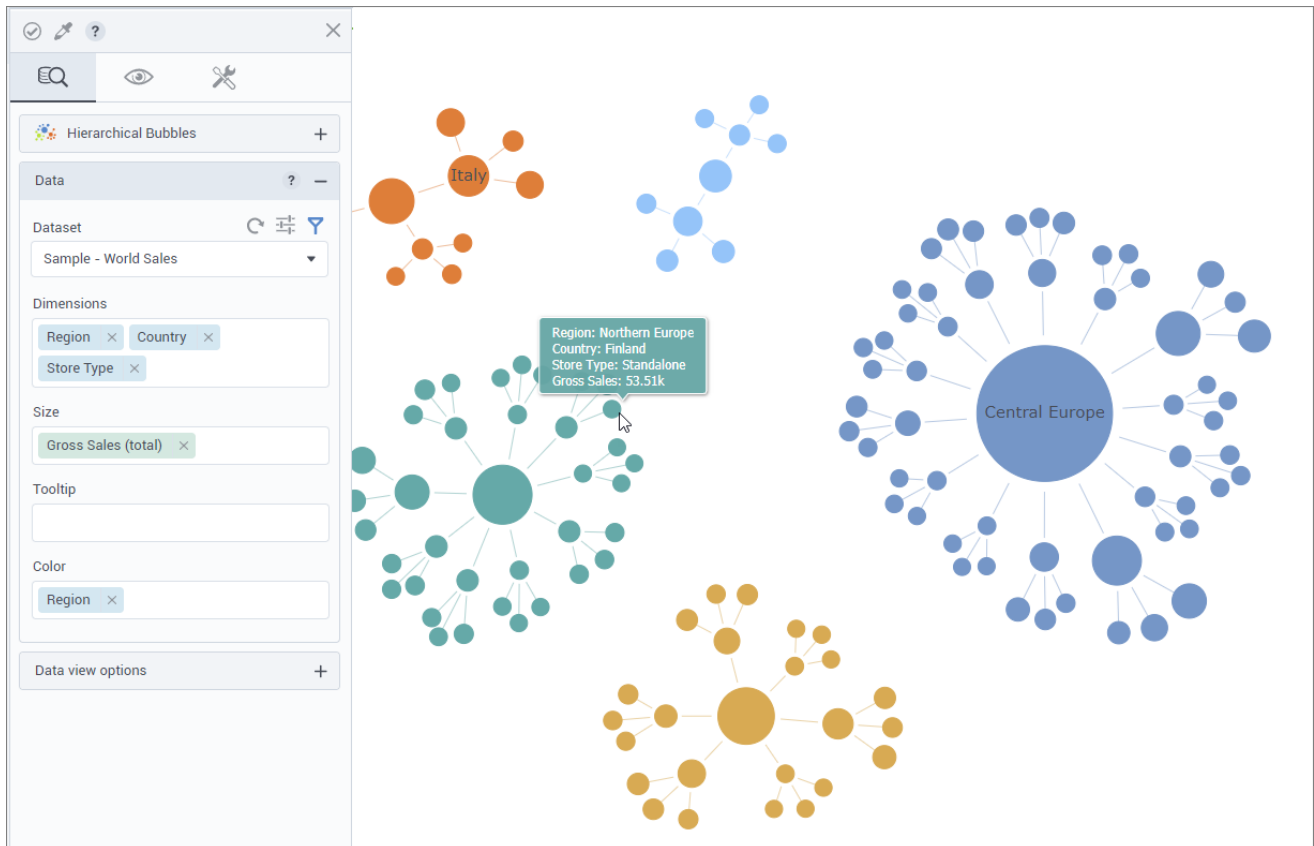
The underlying data of the generated chart has been redesigned to improve usability and interaction with the data. Clicking **View data** in the widget options will open the table with the columns selected in data fields for the visualization, on the **data** tab. Now, users can interact with the columns as in the Table widget: include and reinclude columns in the preview, search for a value in a column, filter the data in a column, and so on. If needed, users can also copy or export the table by using options of the right-click menu.



### *Hierarchical bubbles visualization (beta)*

Now, users can benefit from the new Hierarchical bubbles visualization that shows hierarchical levels (dimensions) and the proportions (based on a selected measure) through a series of bubble nodes in a network-like structure. Also, users can color bubbles by a specified dimension.

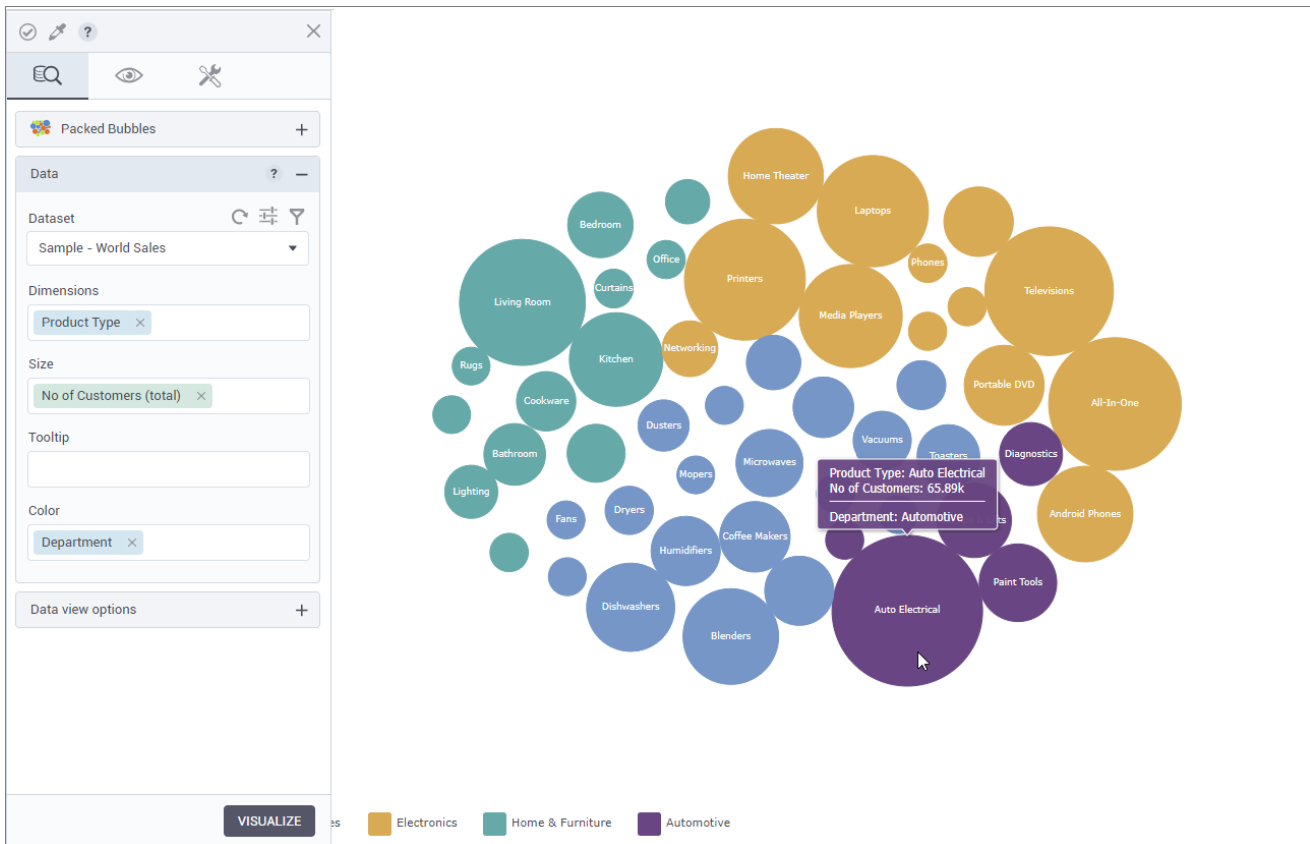
The **Hierarchical bubbles** visualization has been added under the **Network** section in the **Widgets** pane on the **Visualizations** tab.



*Packed bubbles visualization (beta)*

Now, users can benefit from the new Packed bubbles visualization that shows all the values of the specified dimension as bubbles, where the bubble size represents a specified measure. Also, users can color bubbles by a dimension.

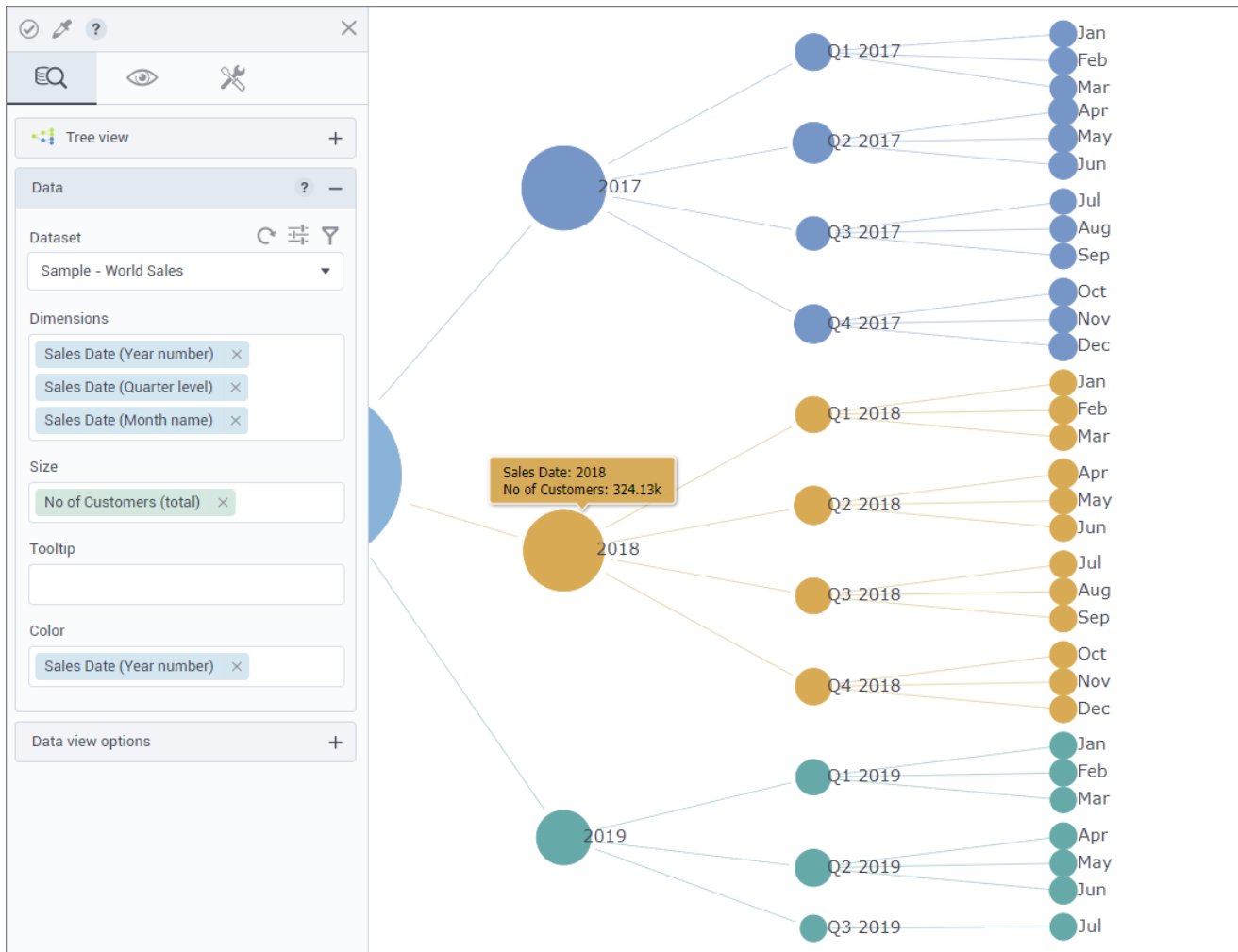
The **Packed bubbles** visualization has been added under the **Network** section in the **Widgets** pane on the **Visualizations** tab.



*Tree view visualization (beta)*

Now, users can benefit from the new Tree view visualization that shows hierarchical levels (dimensions) and the proportions (based on a selected measure) through a series of bubble nodes in a tree-like structure. Also, users can color bubbles by a specified dimension.

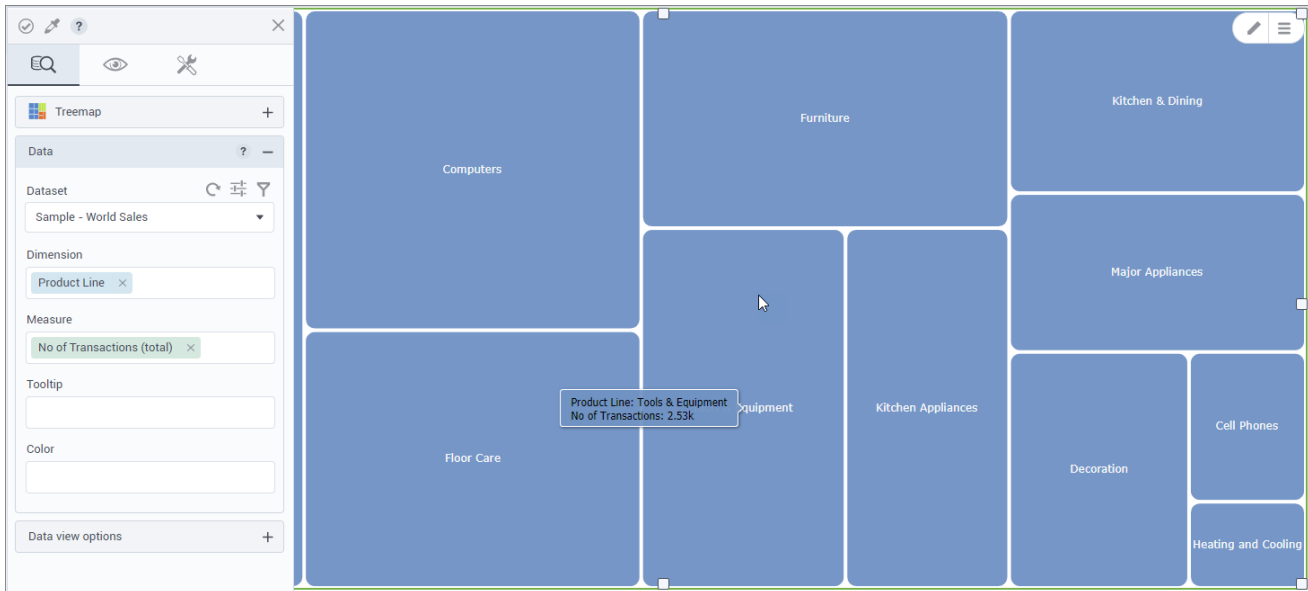
The **Tree view** visualization has been added under the **Network** section in the **Widgets** pane on the **Visualizations** tab.



### Treemap visualization (beta)

Now, users can benefit from the new Treemap visualization. Treemaps are used to visualize the data in the shape of rectangles proportional in size to their value of the selected measure.

The **Treemap** visualization has been added under the **Area** section in the **Widgets** pane on the **Visualizations** tab.



*Word Cloud visualization (beta)*

Now, users can benefit from the new Word Cloud visualization. Word Cloud allows users to visualize text data where the word size represents a measure assigned to it. For example, city's names can be visualized by unit price in the respective cities. Also, users can color words by a specified dimension.

The new **Word Cloud** visualization has been added under the **Network** section in the **Widgets** pane on the **Visualizations** tab.

