Alibaba Cloud
Quick BI

Quick Start

Issue: 20181214

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Generic conventions

Table -1: Style conventions

Style	Description	Example
	This warning information indicates a situation that will cause major system changes, faults, physical injuries, and other adverse results.	 **Danger:** Resetting will result in the loss of user configuration data.
	This warning information indicates a situation that may cause major system changes, faults, physical injuries, and other adverse results.	 **Warning:** Restarting will cause business interruption. About 10 minutes are required to restore business.
	This indicates warning information, supplementary instructions, and other content that the user must understand.	 **Note:** Take the necessary precautions to save exported data containing sensitive information.
	This indicates supplemental instructions, best practices, tips, and other content that is good to know for the user.	 **Note:** You can use **Ctrl** + **A** to select all files.
>	Multi-level menu cascade.	**Settings** > **Network** > **Set network type**
Bold	It is used for buttons, menus, page names, and other UI elements.	Click **OK**.
`Courier font`	It is used for commands.	Run the `cd /d C:/windows` command to enter the Windows system folder.
Italics	It is used for parameters and variables.	`bae log list --instanceid` *Instance_ID*
[] or [a|b]	It indicates that it is a optional value, and only one item can be selected.	`ipconfig` *[-all|-t]*
{} or {a|b}	It indicates that it is a required value, and only one item can be selected.	`swich` *{stand | slave}*

Contents

1 Connect Quick BI to RDS for MySQL

This topic uses MySQL database as an example to describe how to connect Quick BI to RDS MySQL.

Assume that you already have a MySQL database running properly and the data in this database can be used.

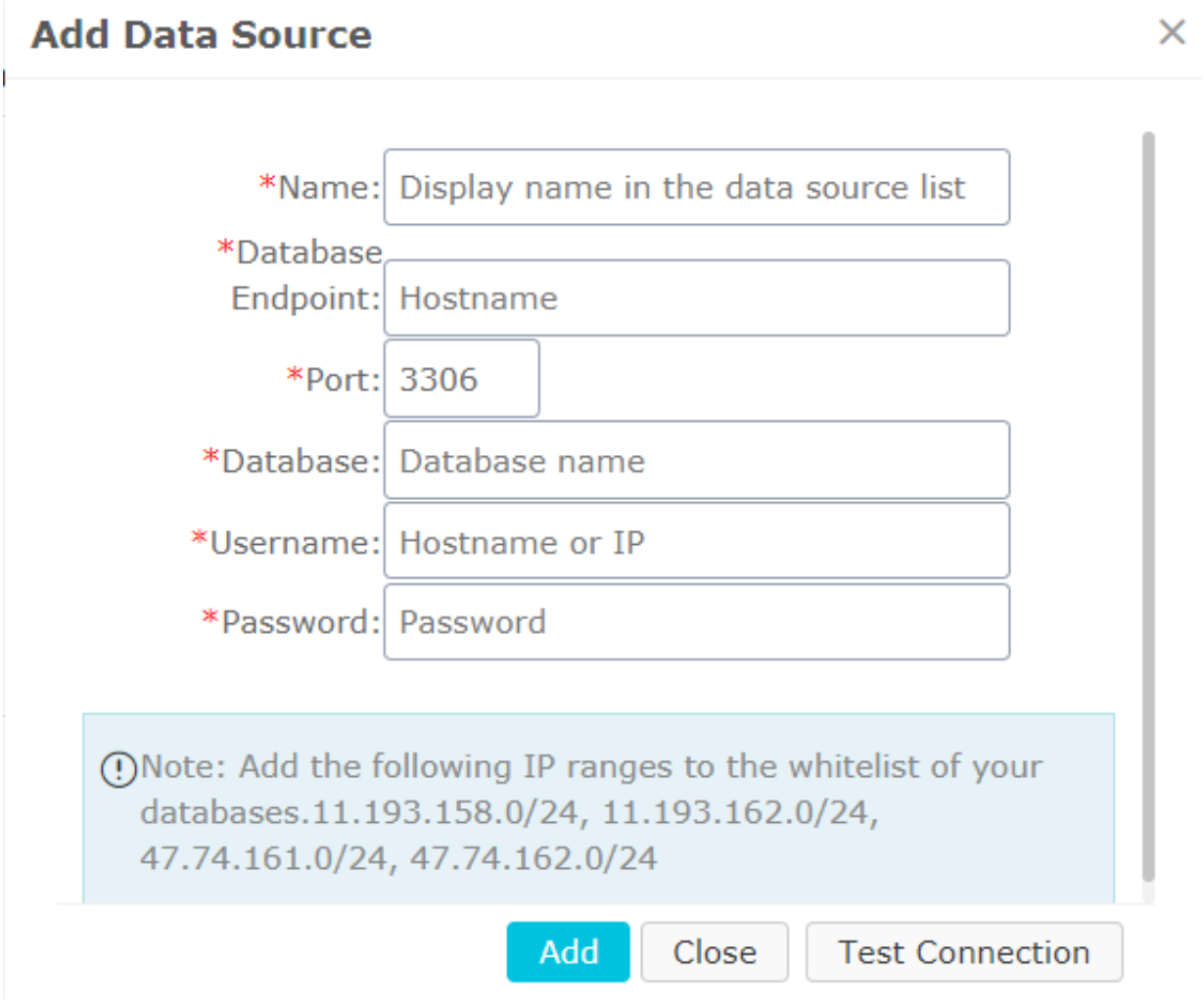
Prerequisites

- You have access permissions to the MySQL database. For more information, see *Create accounts and databases*.
- Obtain a free trial for Quick BI or a purchased edition. For more information, see *Purchase, upgrade, and renew Quick BI services*.

Configure Quick BI

Copy the IP address from Quick BI

1. Log on to the Quick BI console.
2. Click **Workspace** > **Data Sources** to go to the data source management page.
3. Click **Create Data Source** > **Cloud Database** > **MySQL** to create a MySQL data source.
4. Copy the IP address displayed in the blue area, as shown in the following figure.



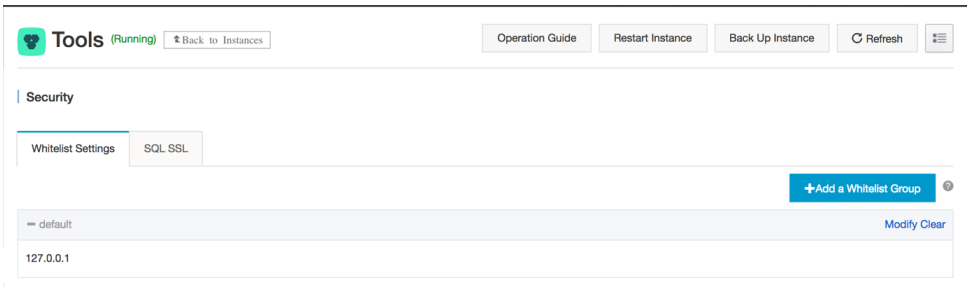
Obtain the endpoint of the MySQL database from RDS

1. Log on to the RDS console.
2. Select the region where the target instance is located.
3. Click the name of the instance to go to the **Basic Information** page.

   The IP address is the database endpoint.

Set the IP address whitelists on RDS

1. In the left-side navigation pane, click **Data Security** to go to the data security management page.
2. On the Whitelist Settings tab page, click **Modify**, as shown in the following figure.

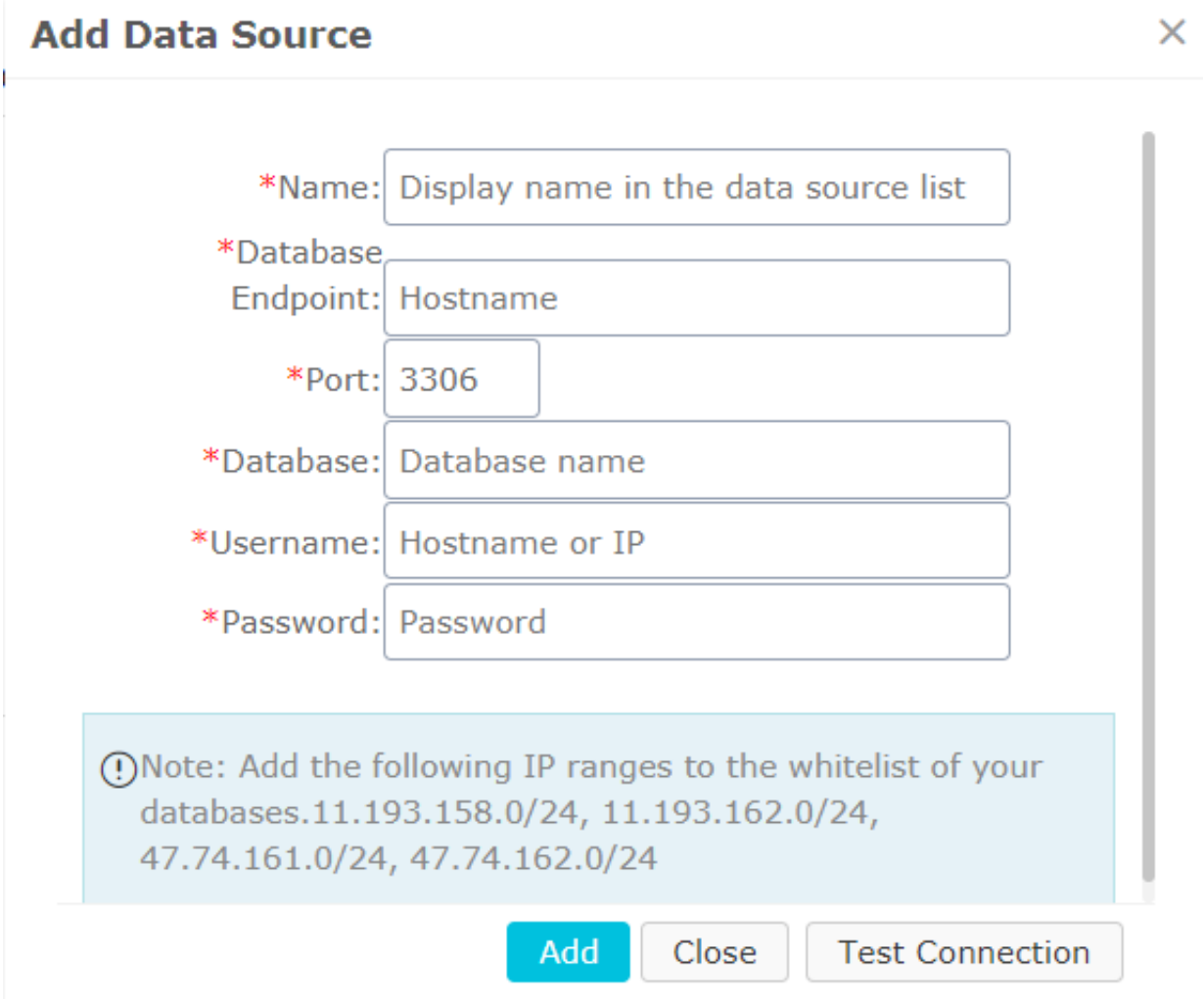


3. Click **Clear** to delete the IP address 127.0.0.1.
4. Click **Add Whitelist Group** to add a new whitelist group.
5. Enter a new group name and paste the IP address in the whitelist area.
6. Click **OK** to complete the whitelist settings.

   For more information, see *Set whitelists*.

Verify the data source connection

1. Go back to the Quick BI data source management page.
2. Click **Create Data Source** > **Cloud Database** > **MySQL**.
3. Enter the data source connection information as shown in the following figure.



- Name: The display name of the data source.
- Database Endpoint: The IP address of the database.
- Port: The port number.
- Database: The database name.
- User Name: The name of the database user.
- Password: The database password.

4. Click **Test Connection** to verify that the data source connection is functioning properly.

   If the connection functions properly, a prompt message is displayed.

5. Click **Add**. The data source is added.

   For more information, see *Create a cloud data source*, *Create a data source from external database*, and *Upload local files*.

More information

You can obtain more detailed information about Quick BI and RDS from the following links.

- *ApsaraDB for RDS*
- *Quick BI*

2 Example: Create a dashboard

This section describes how to use a dashboard to quickly prepare a report. As the example cannot describe all charts, for more information about the basic operations on a dashboard and creation process of each chart, see *Basic dashboard operations* and *Use dashboard to create charts*.

The dashboard supports the following two modes.

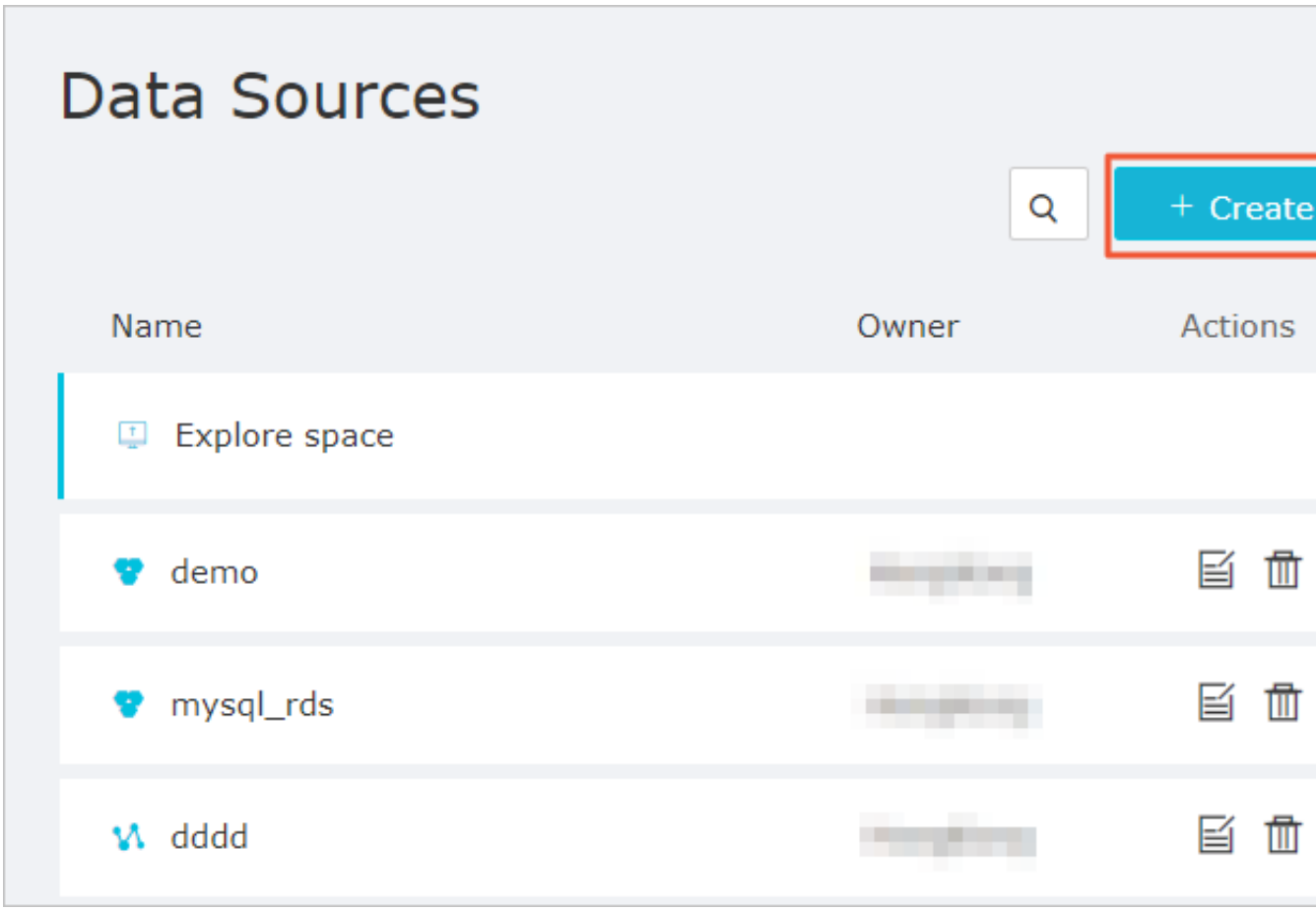
- Standard dashboard
- Full-Screen mode (Quick BI pro only)

Create a data set

Before creating a dashboard, you must prepare a dataset. As datasets are created using data sources, this section describes how to create a data source first.

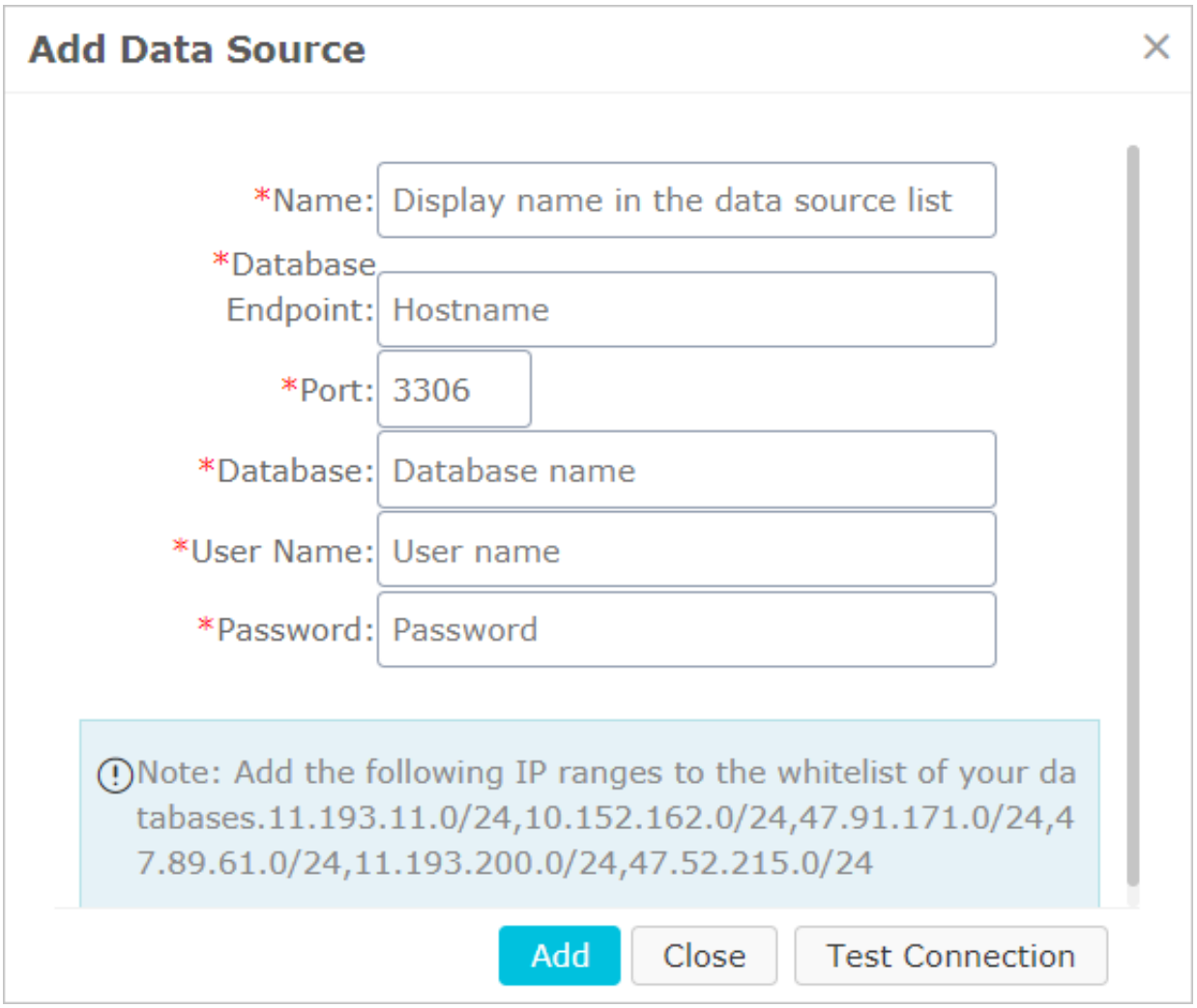
This section uses the connection to a MySQL data source as an example to describe how to create a data source.

1. Log on to the Quick BI console.
2. Choose **Workbench** > **Data Sources** . The data source management page is displayed.
3. Click **Create > MySQL (From Cloud Database)**. The data source connection menu is displayed.



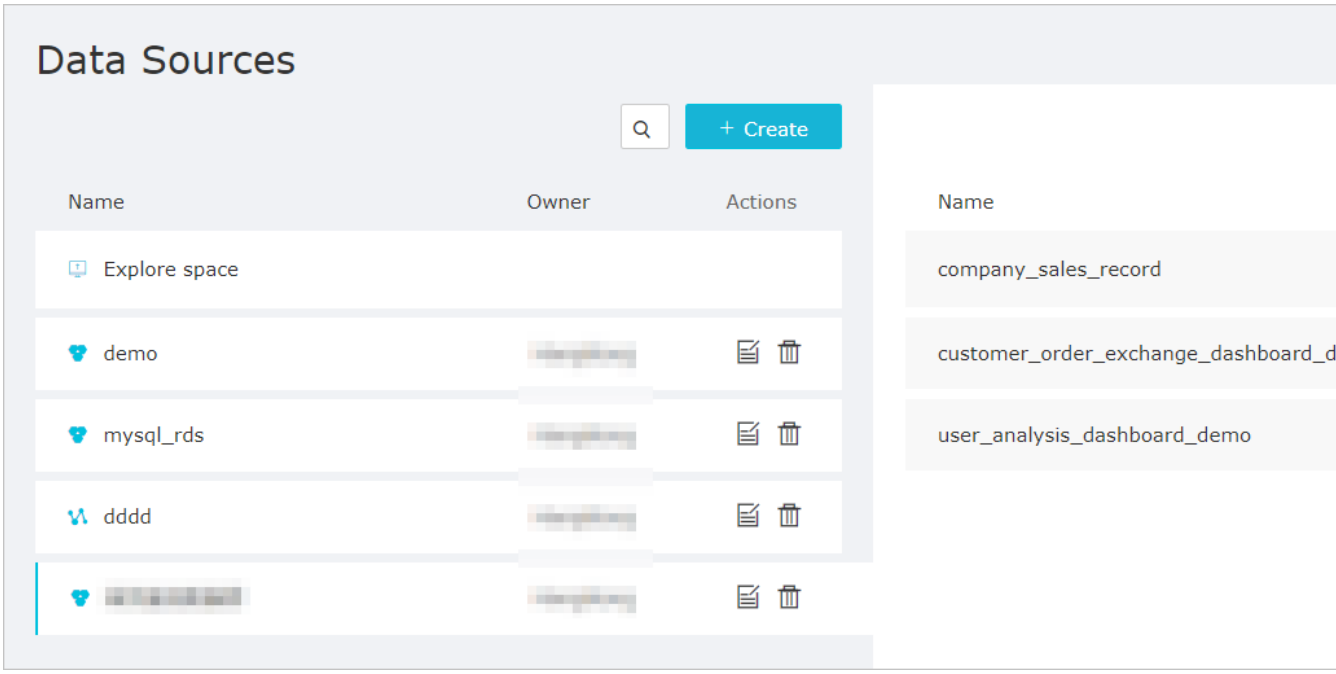
4. Enter the data source connection information and click **Test Connection** to check whether the data source is successfully connected.

   You can use the following MySQL connection address. For more information, see *Example: Create workbooks*.



If the data source cannot be connected, a corresponding message is returned. You can try to fix this problem by referring to *How to diagnose a data source connection exception*.

5. Click **Add**. The data source is automatically added to the data source list.
6. Click the **Create Dataset** icon next to a table, for example, company_sales_record, to create a dataset.



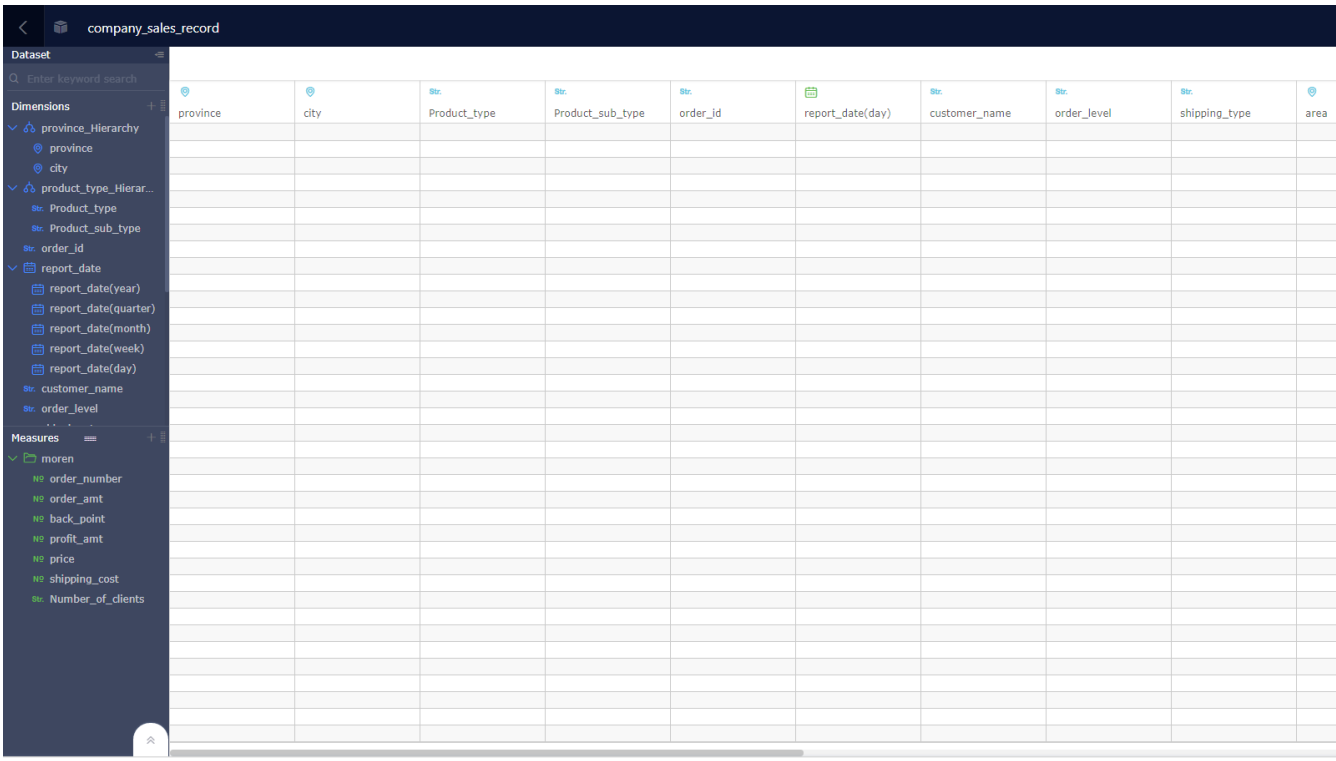
After the dataset is created, it is automatically saved to the **My Dataset** folder. New is displayed for the newly created dataset, which allows you to fast locate the dataset.

Edit Dataset

After a dataset is created, you can simply edit the dataset accordingly to meet the actual chart demands, for example, switching the field type or adding a calculated field.

Take company_sales_record as an example.

1. Click **Datasets**. The dataset management page is displayed.
2. Click a dataset name, for example, company_sales_record. The dataset editing page is displayed.

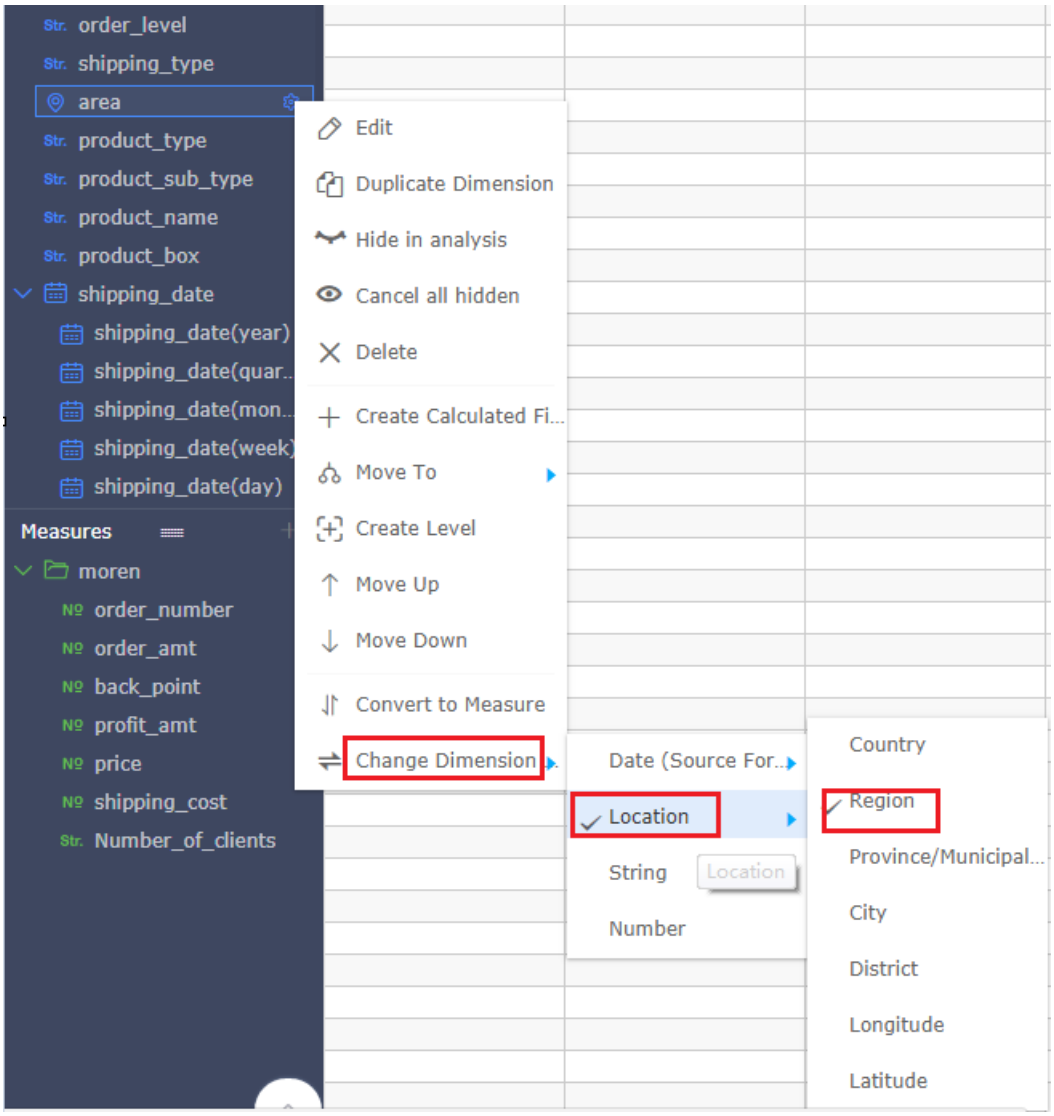


To create a map chart, such as a geo bubble or geo map, select dimension fields that contain geographical information, and then switch their field type from String to Geographical Informatio n. Otherwise, the map cannot be displayed.

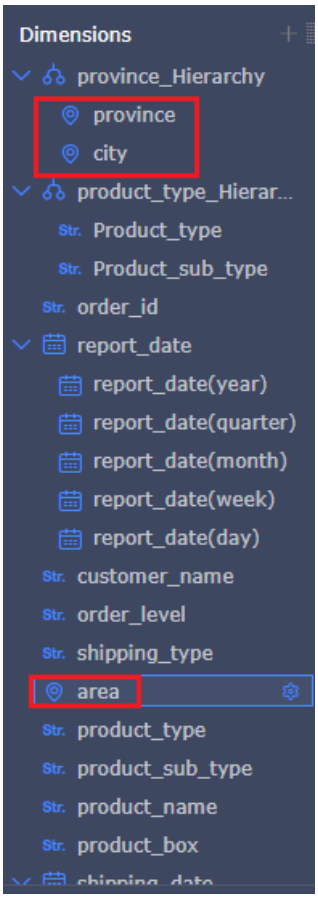
3. In the dimension list, select Area.
4. Right-click the dimension, and select **Change Dimension** > **Location** > **Region**. As shown in the following figure.

Note:

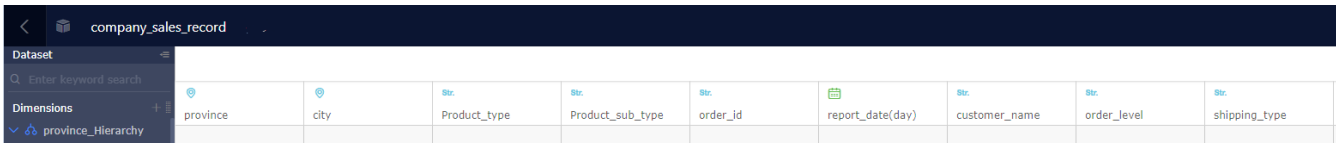
Note that the selected geographic information must match the field. For example, if the field is Area, you must select Area in the location information list. Otherwise, the field type cannot be switched.



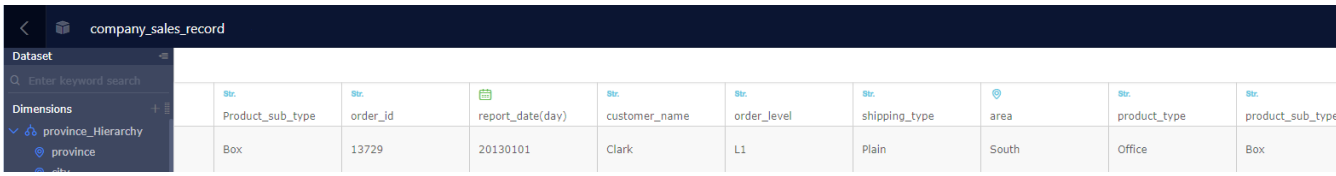
5. Switch Province field and City field in the same way.



6. After the dataset is edited, click **Save**.



7. Select **Synchronize > Refresh Preview**. The data is automatically displayed in the table.



For more information about how to edit a dataset, see *Edit a dataset*.

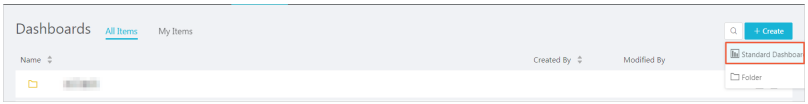
Edit a dashboard

After a dataset is edited, you can use a dashboard to create a report.

1. Click **Dashboards** in the left-side navigation pane. The dashboard management page is displayed.
2. Select **Create** > **Dashboards**. The dashboard editing page is displayed.

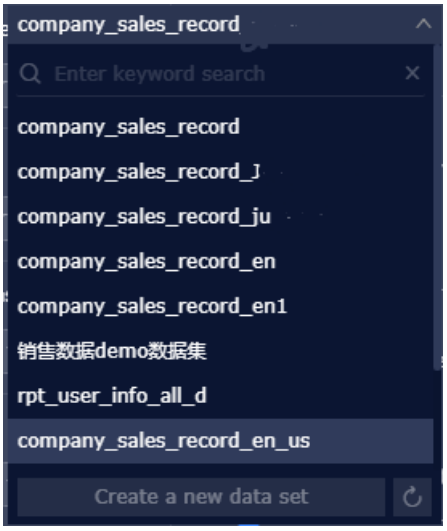
3. Select a dashboard display mode.

> **Note:**
> The full-screen mode is available for Quick BI professional edition, and the standard dashboard mode is available for Quick BI Basic and Quick BI Pro. Quick BI Basic has no Full-screen mode.

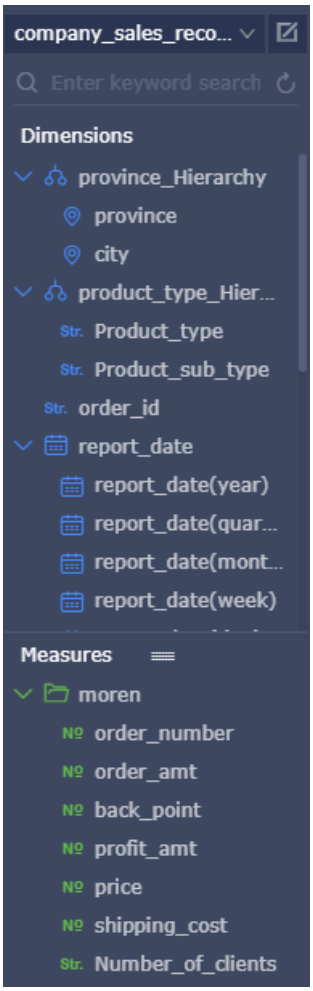


Add a dataset to a dashboard

1. Click the **Switch** icon and select a dataset.



2. Choose company_sales_record as a target dataset. The data is listed in the dimension and measurement lists, respectively.



If the dataset list is empty, click **Datasets** to return to the dataset management page and check whether the dataset is successfully created.

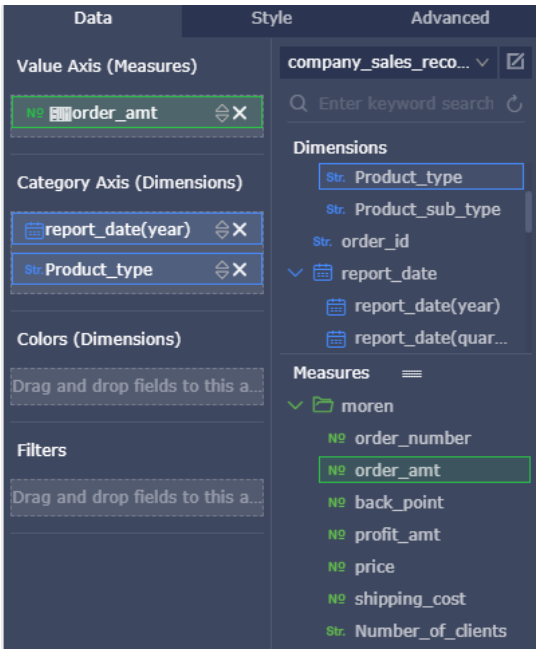
Create a data chart (Standard dashboard)

This section only describes how to create a bar chart. For more information about how to create other types of charts, see *Use dashboard to create charts*.

For more information about the data elements and application scenarios of each type of chart, see *Dashboard overview*.

For more information about other basic operations on a dashboard, see *Basic dashboard operations*.

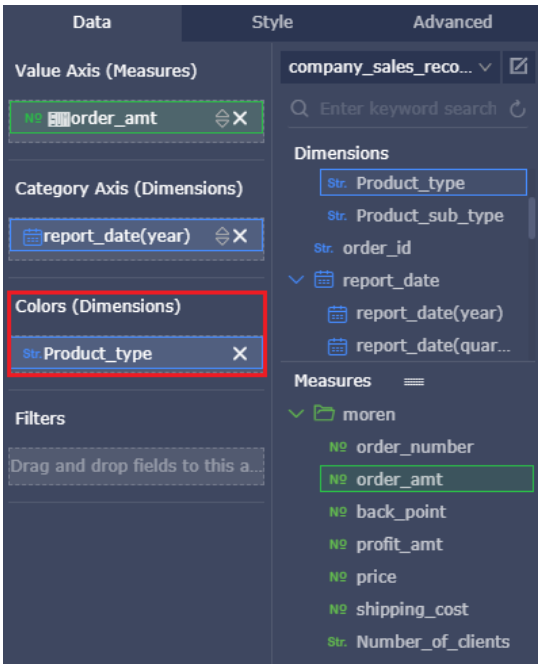
1. Click the bar chart icon.
2. Double-click a field on the Data tab. The data is automatically filled in the field, as shown in the following figure.



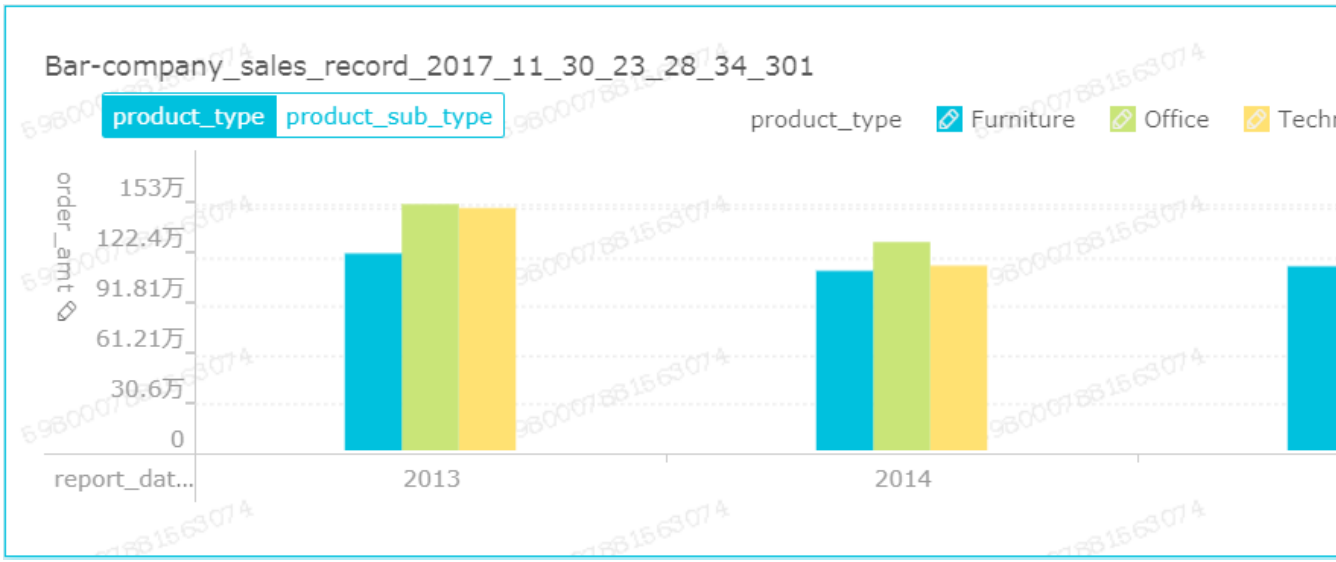
3. Click **Update**. The following figure shows the updated chart.

   If too much data is displayed, you can enable color legend. Drag and drop a dimension field to the color legend area. Information of this field is displayed in different colors in the chart.

> **Note:**
> Color legend is available when only one measurement field is in the value axis area. Otherwise, it cannot be used. When color legend is unavailable, you may receive a message on why it cannot be used. To enable the function, adjust the measurement and dimension fields as prompted.

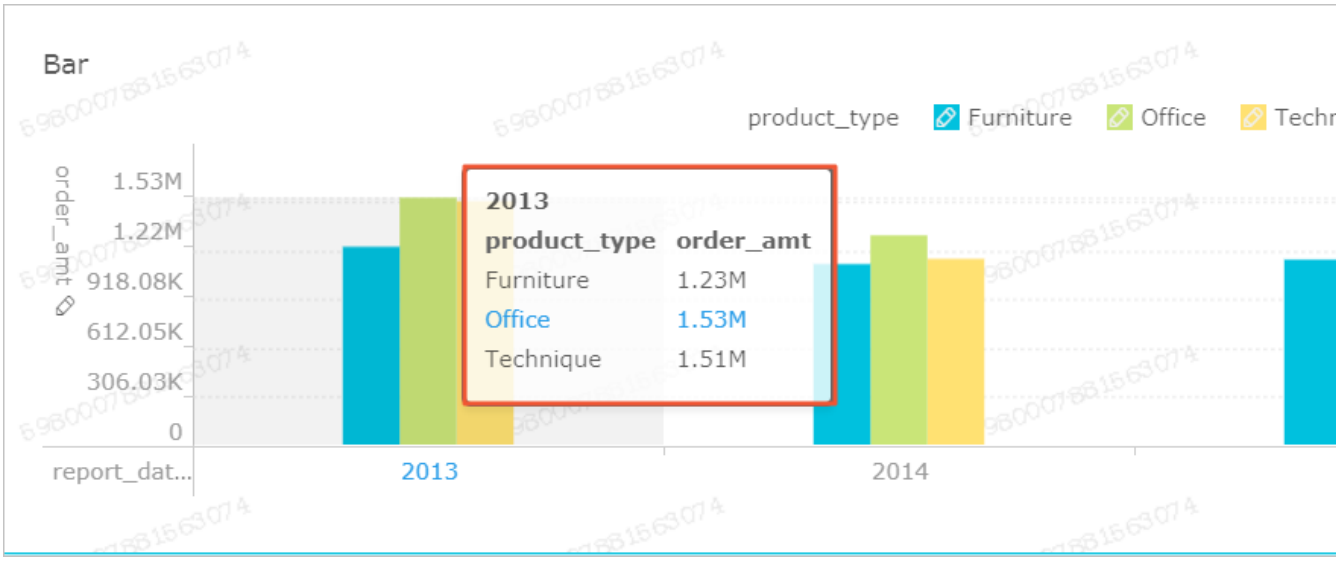


4. Click **Update**. The following figure shows the updated chart.

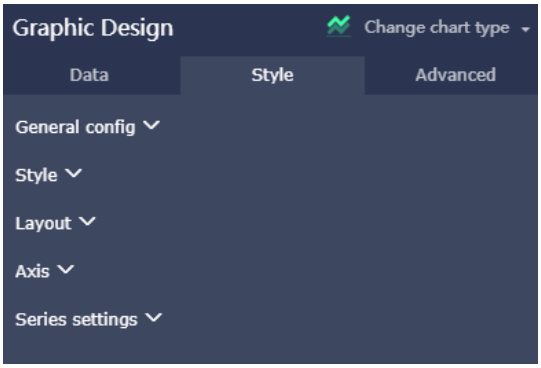


5. When mouse points to a set of data, the data details are automatically listed by using the tooltip function, as shown in the following figure.

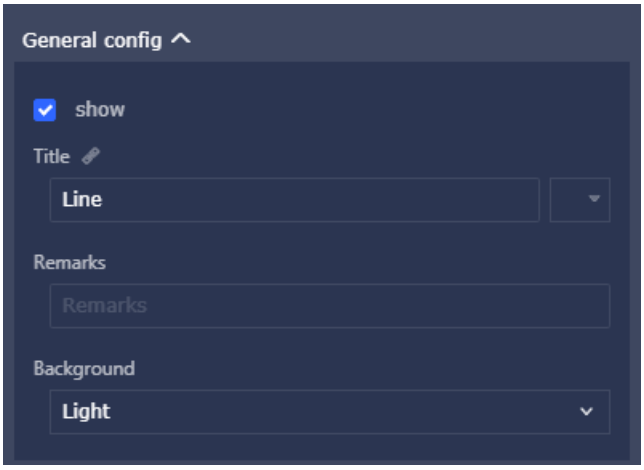
   Choose **Style** > **Style** > **Tooltip**, to disable this function.



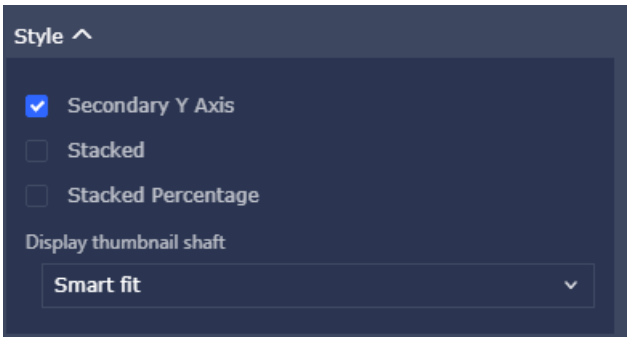
6. On the **Style** tab, edit the title, layout, and legend of the chart.



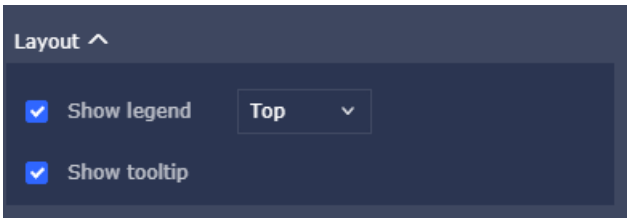
- Common Settings: you can set the title, the font color, and the background color, as shown in the following illustration.



- Layout: You can set chart display styles, for example, Double Y-axis, the percentage stacked, and stacked. See the following figure.



- Style: You can set the legend and tooltip, as shown in the following figure.



- Axis: you can set the axis title, the Axis display style, and the axis value formatting and coefficients.
- Settings: you can set the alias, display type, and color of a class of data, including labels, value formats and decimals.

To delete the current chart, choose **More operations** > **Delete**, in the upper-right corner of the chart.

Create a data chart (Full screen dashboard)

This section only describes how to create a Geo Bubble chart.

1. Click the **Geo Bubble** chart icon.

   The chart contains the global map component, which can display data besides the Chinese area.

2. Double-click a field on the Data tab. The data is automatically filled in the field.

   Note:
   Make sure that the dimension type of the province field has been changed from string to geographical information.

3. Click **Update**. The system automatically updates the chart.
4. On the **Style** tab, edit the title, layout, and legend of the chart.

5. Click **Settings** to configure the page proportion, skin color, data update interval, and time interval of data carousel.

To delete the current chart, choose **More > Delete** in the upper-right corner of the chart.

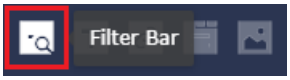
Add a widget

A dashboard supports the following widgets.

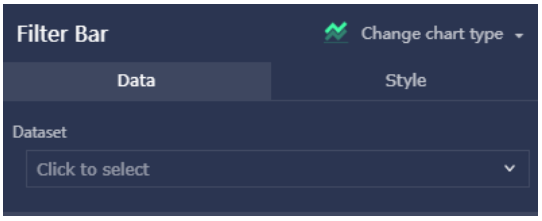
- Standard dashboard
  - Filter bar
  - Text box
  - IFrame
  - TAB
  - Image
- Full-screen dashboard
  - Text area
  - IFrame
  - Image
- **Add query conditions**

  You can select the **Filter Bar** to query data in one or multiple charts.

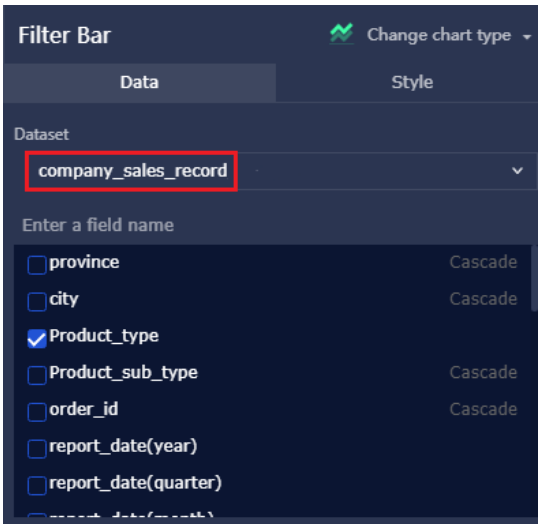
  1. Click the **Filter bar** icon, as shown in the following figure.

  2. Click the **Filter bar** on the dashboard show area. The editing menu of the control is displayed.

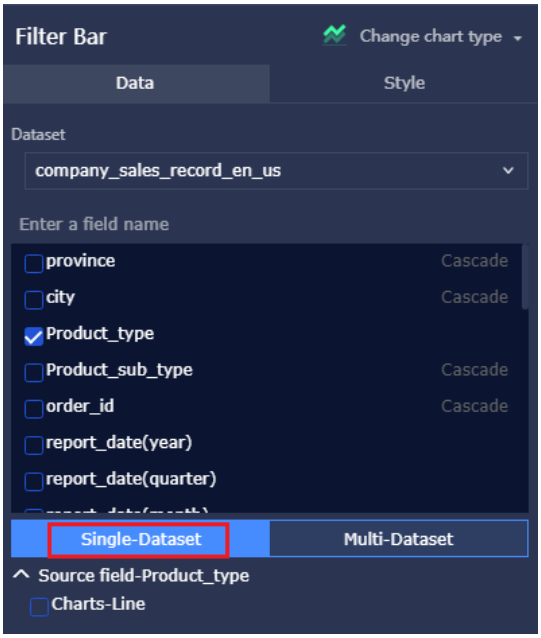
  3. Select the expected dataset, as shown in the following figure.



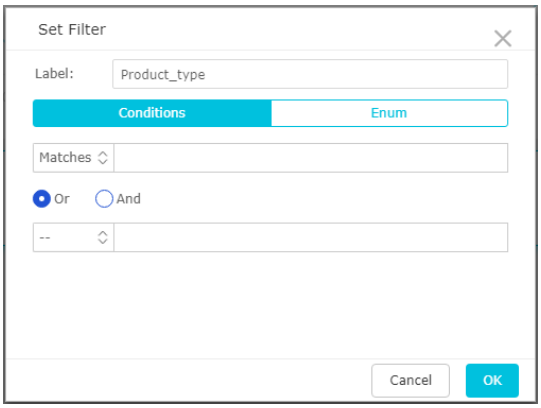
4. Select a field to be queried, for example, product_type field.

   The Filter bar control supports Single-Dataset and Multi-Dataset. The following uses the Single-Dataset as an example. For more information about the Multi-Dataset, see *Common widgets*.

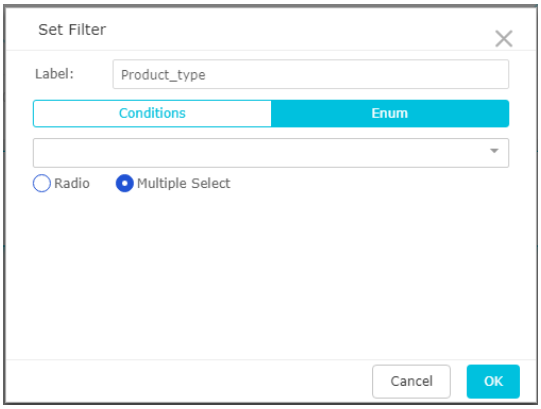
5. Click **Single-Dataset** and select an expected chart, as shown in the following figure.



6. Click **Style** to edit the Filter bar title.
7. Point to the field to be queried. A blue dashed line box is automatically displayed for the field. Click the dashed line box. The editing page of the field to be queried is displayed, as shown in the following figure.

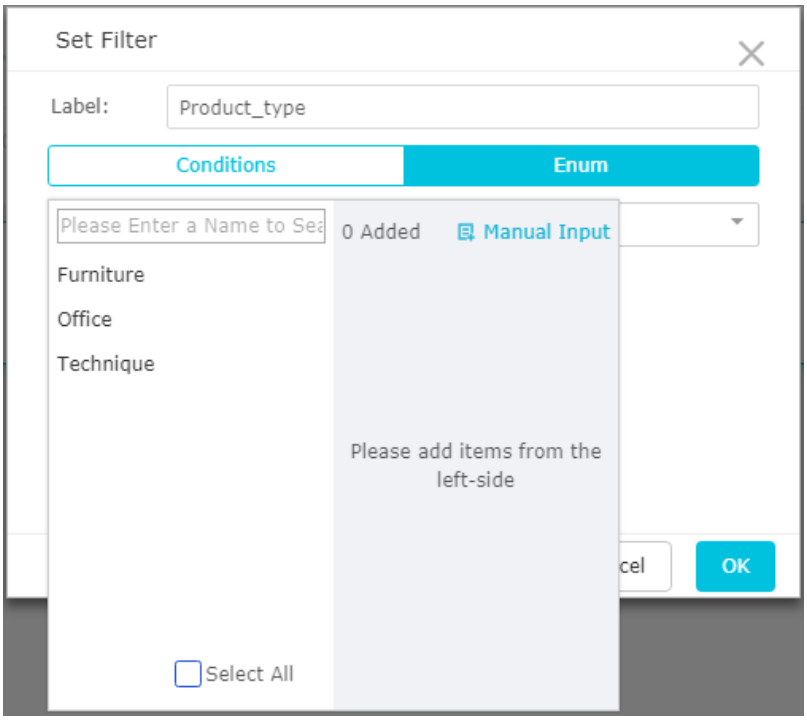


8. Click **Enumeration** and select **Radio** or **Multiple select**, as shown in the following figure.



9. Click the drop-down arrow and select the option to be queried, as shown in the following figure.

> **Note:**
> If Radio is selected, you can select only one option. Otherwise, you can select multiple options.



10. After the selection, click **Search**. The charts to which the queried field applies are automatically updated.

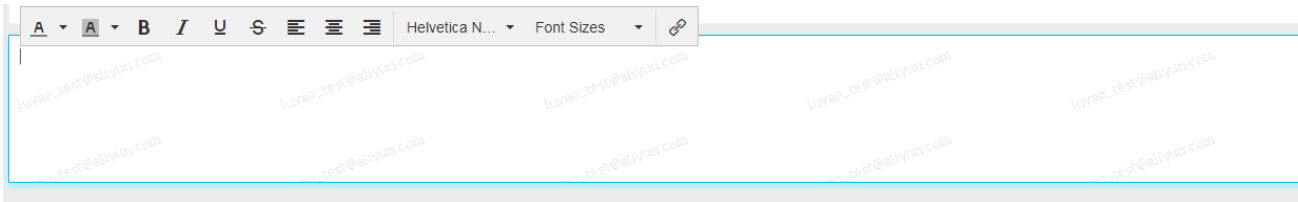
To delete the current widget, choose **More operations** > **Delete** in the upper-right corner of the widget.

You can also query a field by date or quantity. For more information about how to use the widgets, see *Common widgets*.

- **Add a text area**

  You can enter fixed text in a text box and use the text as a report title.

  1. Click the text area icon.
  2. Enter text in the text area.



To delete the current widget, select **More operations** > **Delete** in the upper-right corner of the widget.

- **Add an IFrame**

IFrame enables you to insert a required webpage in a dashboard to query network data in real time or to browse the webpage or website related to the current data.

1. Click the **IFrame** icon.
2. Enter a webpage address.

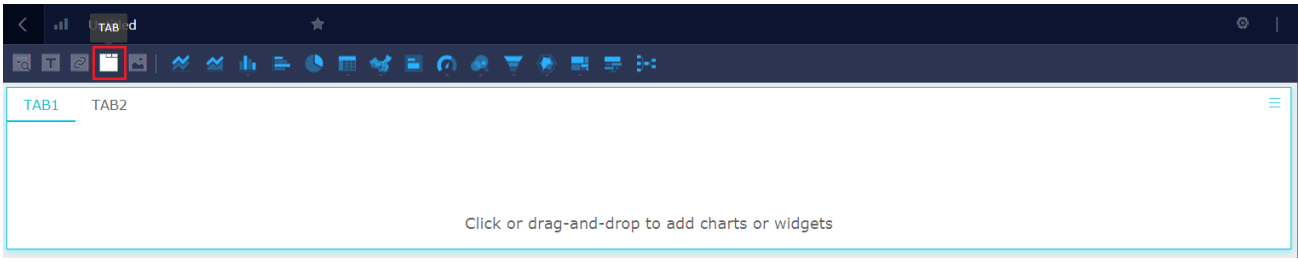
> **Note:**
> The webpage addresses must start with **https**.

To delete the current widget, select More > Delete in the upper-right corner of the widget.

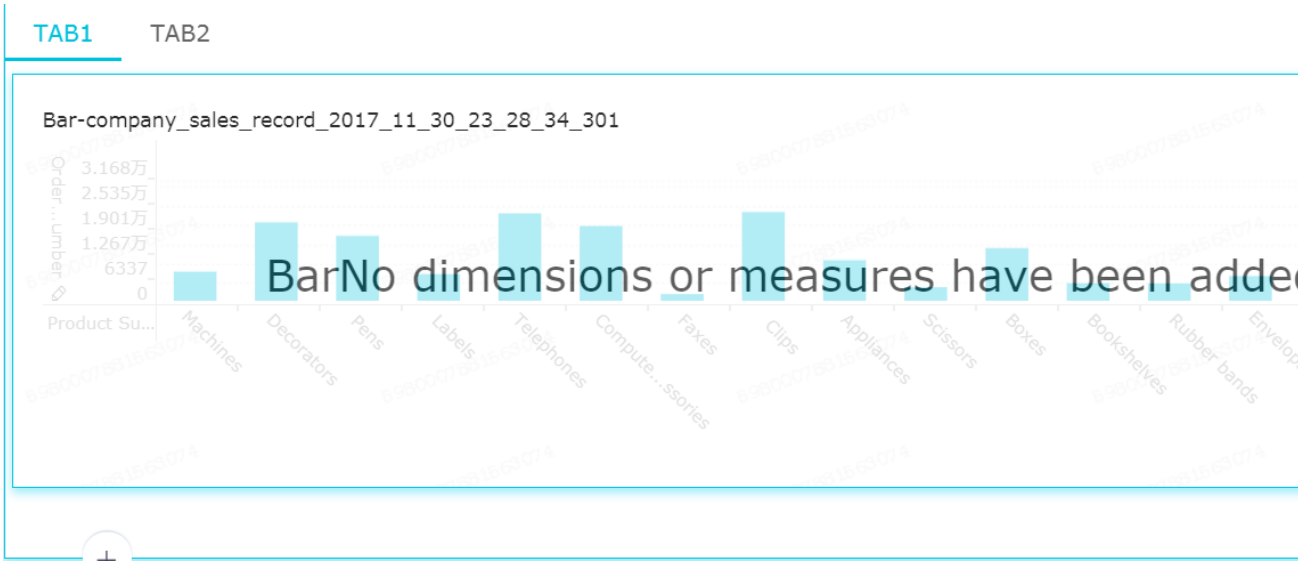
- **Add a tab**

The TAB feature enables multiple charts to be displayed in different tabs.

1. Click the **TAB** icon.
2. Click **Add TAB Page** to add a new tab, as shown in the following figure.

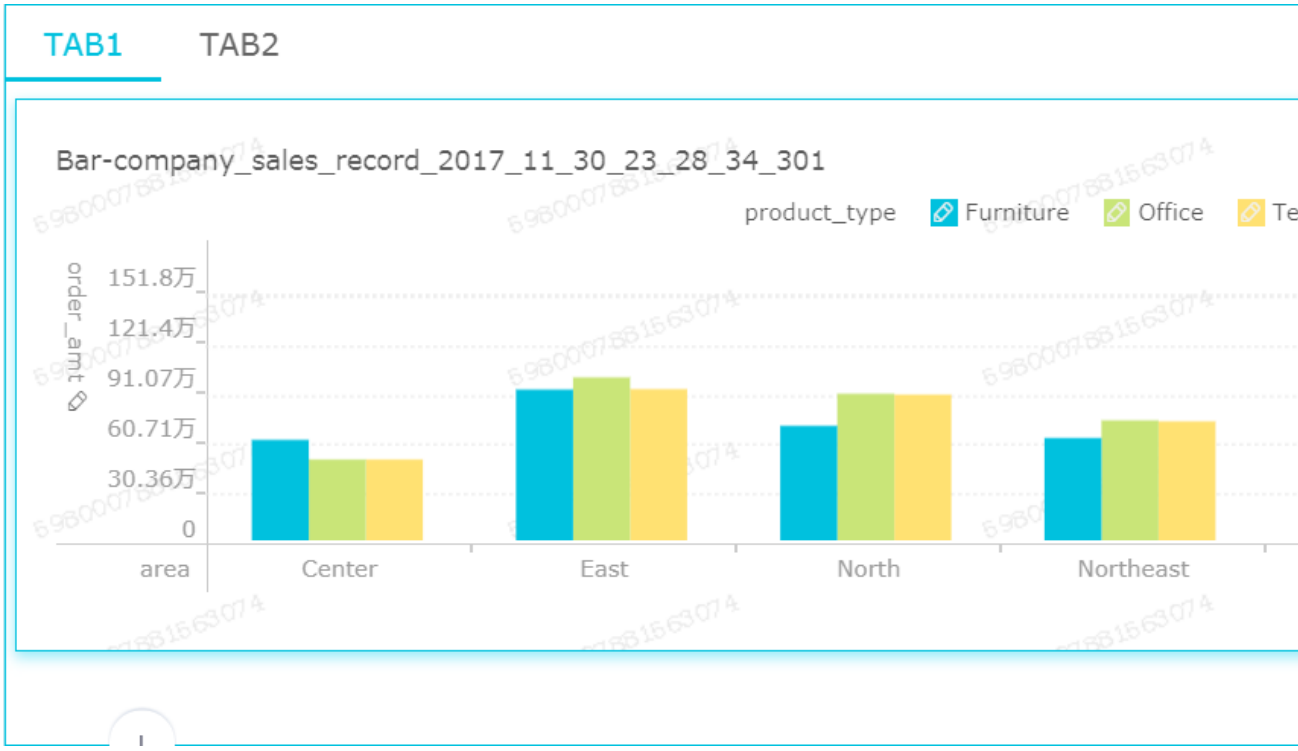


3. Click a tab and insert a chart in it. For example, click TAB1. TAB1 then becomes blue, as shown in the following figure.



4. Click the required chart icon. A chart is automatically inserted in TAB1.

5. Create the chart by following the chart creation process. After the chart is created, the tab control is as shown in the following figure.

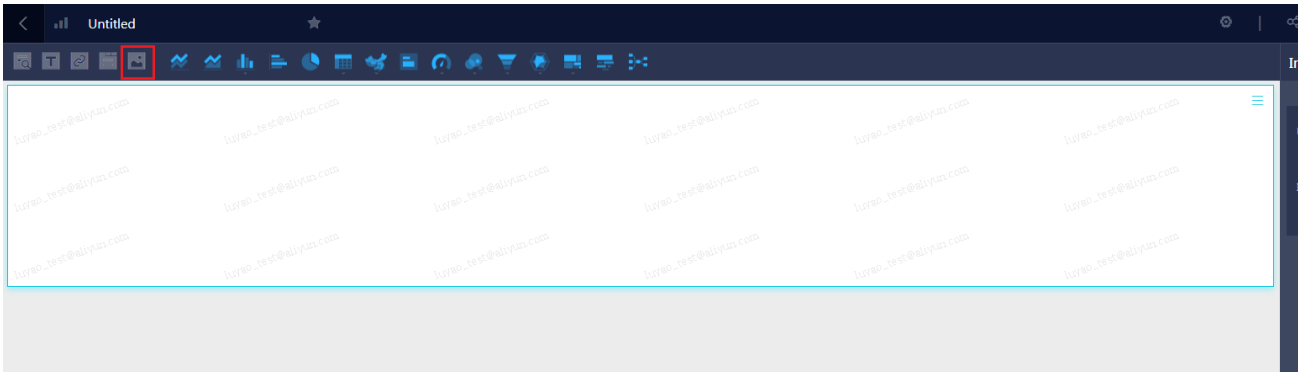


To delete the current widget, select **More operations** > **Delete** in the upper-right corner of the widget.

- **Add an image**

You can use the Image function to insert a picture as required.

1. Click the Image icon.
2. Enter the picture URL.
3. Click the drop-down arrow and select the picture display style, as shown in the following figure.



To delete the current widget, select **More operations** > **Delete** in the upper-right corner of the widget.

Preview the dashboard

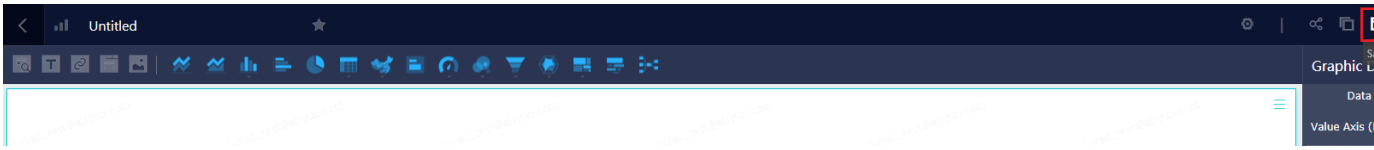
After the dashboard is edited, you can preview the chart demonstration effect.

Choose **Preview > PC or Mobile**, as shown in the following figure.

Save the dashboard

After the dashboard is edited, you can save it.

Click **Save** to save the dashboard.



3 Example: Create a workbook

Context

We can obtain a commodity sales trade table by using the Quick BI.

Log on to Quick BI main page.

Procedure

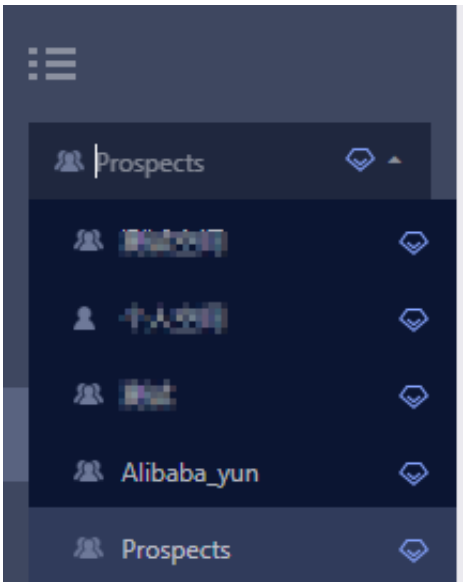
1. Click **Console > Workspace** to go to Quick BI.
2. Select a workspace to enter a workspace workbench.

Add a data source

When using Quick BI to analyze data, you must specify the data source for raw data. After adding data sources, you can use tables of different data sources as datasets and classify and filter data. After adding a data source, you can use a tables in the data source to create the dataset. The following uses adding a MySQL data source as an example.

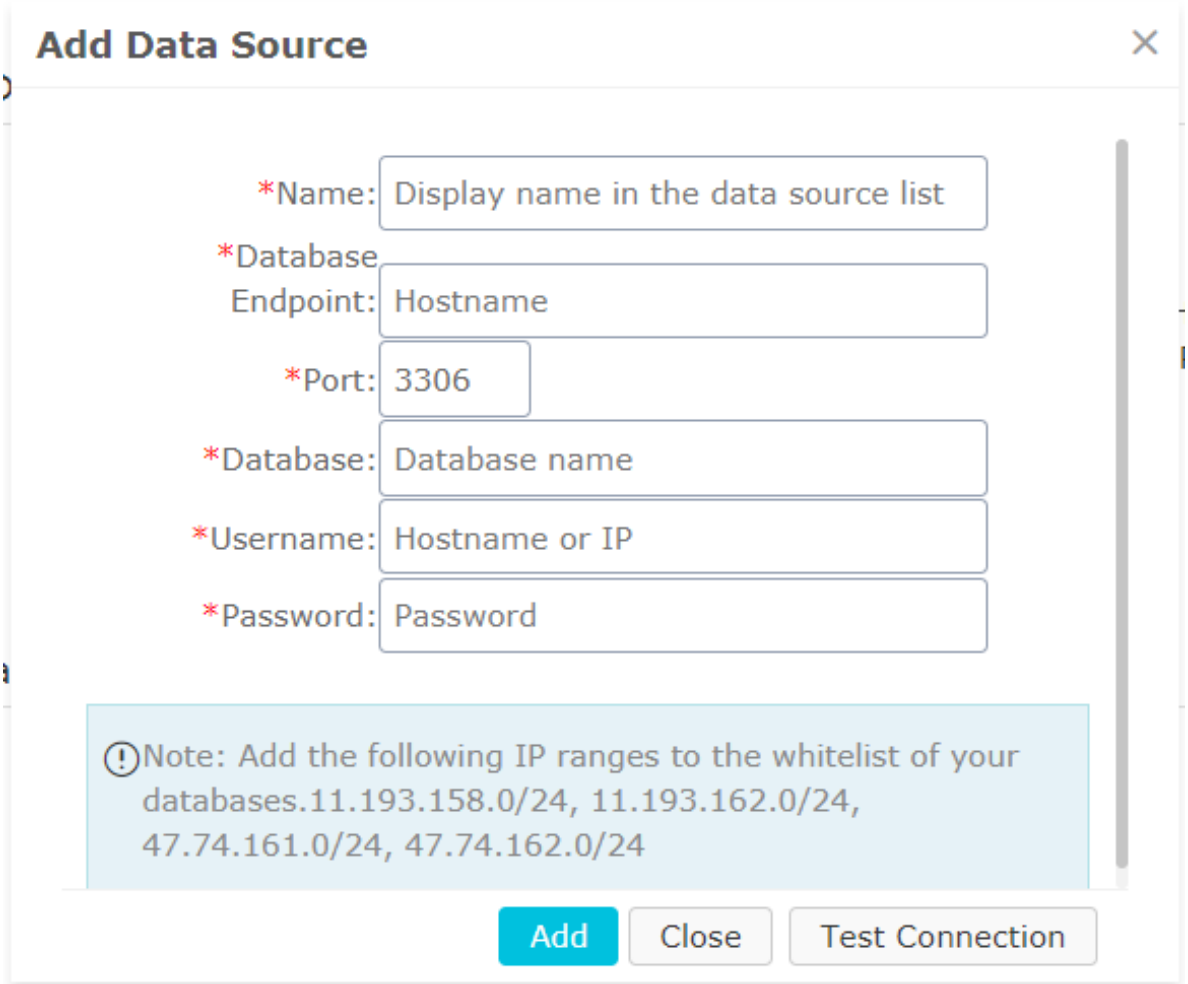
Procedure

1. Log on to the Quick BI console.
2. Choose **Workbench** > **Data Sources**, to go to the data source management page.
3. Switch to a workspace by clicking the Switch icon.



4. Click **Create > MySQL**, to add a new data source.
5. Enter the connection information, as shown in the following figure.

Note:
The following figure only shows an example to add a data source, please enter the information based on an existing environment.



- Name: Enter a display name
- Host name: rm-bp180925lcrm7xtc6.mysql.rds.aliyuncs.com (To obtain the host name, see *Connect Quick BI to RDS for MySQL*.)
- Port: Default 3306
- Database: bi_demo
- User name: bi_demo
- Password: Database password

6. Click **Test Connection** to test whether the database can be connected.
7. Click **Add**. The data source is added.

Create a data set

Procedure

1. On the right of the data source list, locate the data table that you want, such as the **company_sales_record** table.
2. Click **Create Dataset**, to create a new dataset.

   After the dataset is created, the dataset page is automatically displayed.

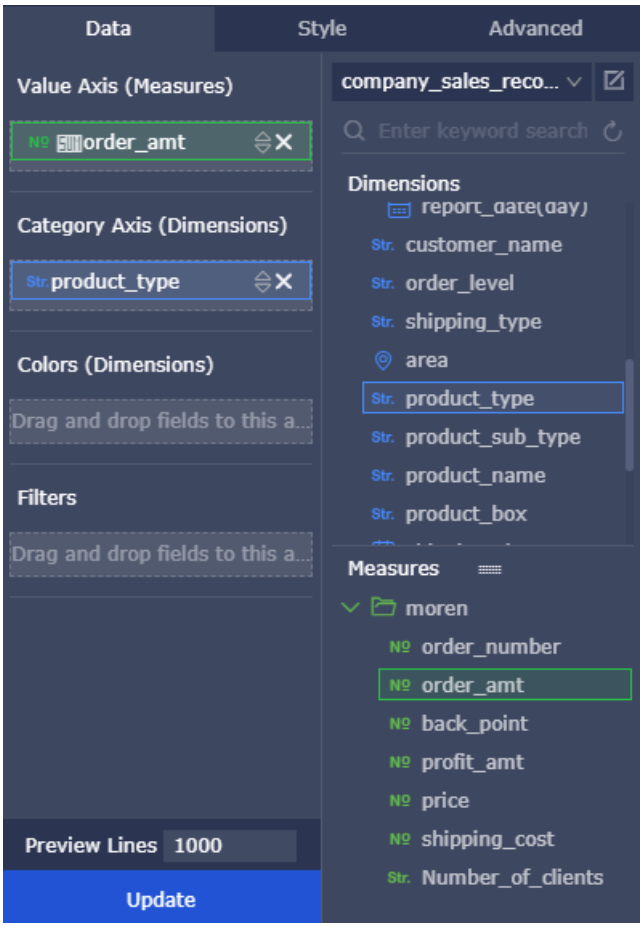
Create a workbook

The columns in the workbook are classified into dimensions and measurements based on certain rules. Generally, columns of the String type are in the dimension category, while columns of the Double or Bigint type are in the measurement category. You can select columns from the dimension and measurement categories as the rows or columns of the workbook and configure appropriate filtering criteria.

Procedure

1. Click **Workbooks** to enter the workbook management page.
2. Click **Create > Workbook** icon, the workbook editing page is displayed.
3. Click **Select All** icon, or the data cannot be displayed normally.

   You can also select the scope to be displayed on the workbook, and the data can be displayed in partitions. For more information, see *Highlight pivot tables*.
4. Locate the dataset company_sales_record and double-click the **product type** field and the **order quantity** field, as shown in the following figure.



5. Click **Update**, the data content is automatically update.
6. Click **Save**, and select a location to store the workbook.

   In **Quick BI Professional edition**, you can save the current workbook to local directory.
7. Enter **Commodity sales trade table** as a table title, and click **OK**.

Insert Chart (Quick BI Professional edition)

If you have purchased a **Quick BI professional edition**, you can insert charts and widget in the workbook.

Currently, the workbook provides 8 charts and 1 widget to you. You can insert charts and widget to display data based on your actual needs.

Procedure

1. Click **More**, and select a chart. For example select a bar chart.
2. In the workbook, Select data that needs to be used to make a chart.
3. Click **OK**, the chart automatically displays in the workbook.

4. In the chart, click the icon in the upper right corner, and select **Refresh**, **Settings**, and **Delete** functions.
5. Click on the chart to drag the chart to other locations.

Insert query editor (Quick BI Professional edition)

Procedure

1. Click **Query** editor to open the query menu.
2. Click **+** to add a query widget.
3. Click drop-down arrow to select a dataset.
4. Select a field from the list of fields that you want to query, such as **shipping costs**, as shown in the following figure.
5. Select a chart that the widget needs to work, the widget automatically displays on the top of the workbook. The widget is automatically displayed on the upper of the table.

   Currently, the workbook supports Single-dataset and Multi-dataset, the following steps use the **Single-dataset** as an example.
6. Click Settings icon in the widget, and set up a query range of the widget.
7. Enter a query range value manually, and click OK.
8. Click **Search** to filter the data.
9. Click **Delete** icon in the widget to delete the current field, but the widget is still available.
10. Click Delete icon in the query menu to delete the current widget.

    For more operations about the workbook, see *Highlight pivot tables* and *Add filter bars*.

4 Create a report

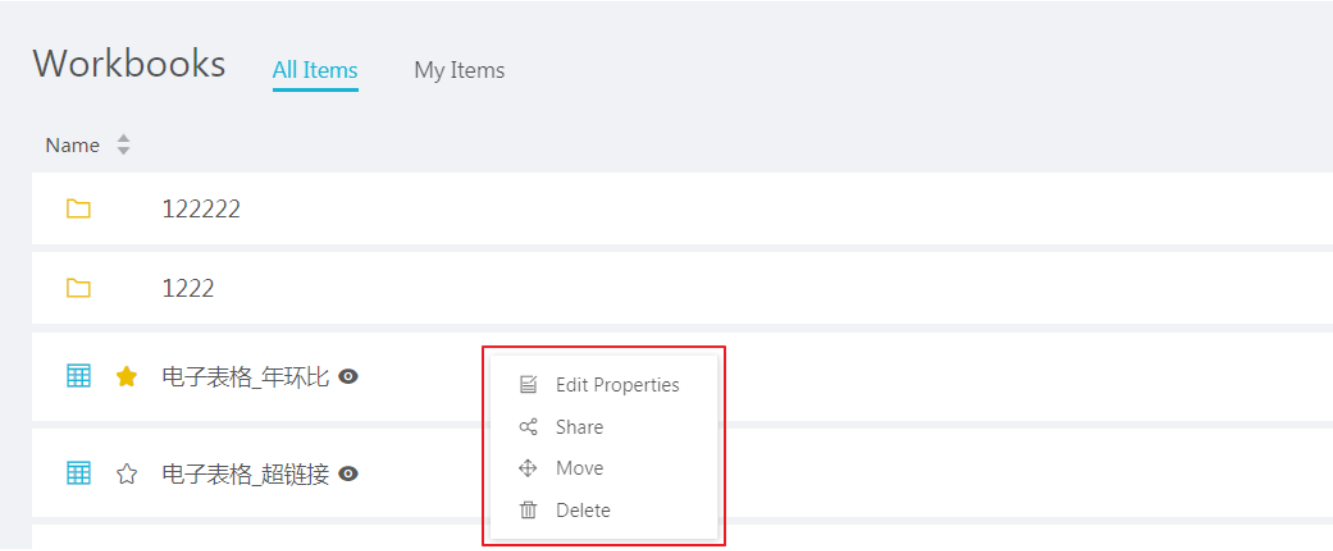
4.1 Files management

All the worksheets, dashboards, and data portals that have been created in the system are report files. A data portal can be also called a data file. You can query and edit your own report files.

Procedure

> **Note:**
> The Quick BI Basic only contains the worksheet. The Quick BI Pro and Quick BI Professional edition contain both worksheet and workbook. The workbook is only available in the workspace.

1. Log on to the Quick BI console.
2. Choose**Workbench** > **Workbooks**, to go to the workbook management page.
3. Select and right-click a workbook, as shown in the following figure.

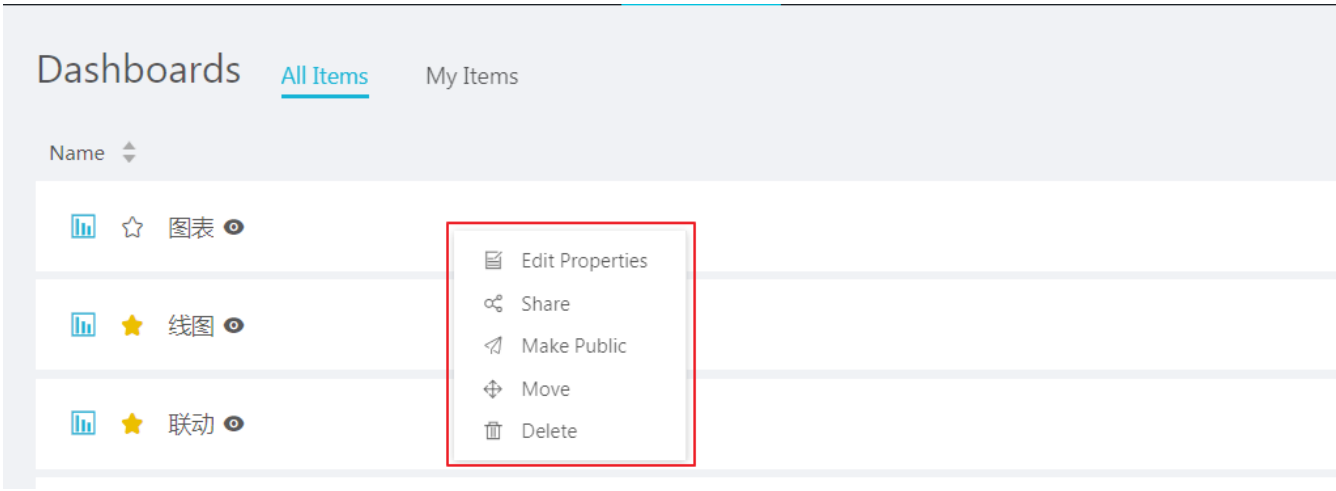


- Edit Properties: Modify the worksheet name.
- Share: Share the workbook with other users within the specified period of time.
- Move: Move the workbook to other folders.
- Delete: Delete the workbook.

> **Note:**
> A shared workbook is read-only and it cannot be edited.

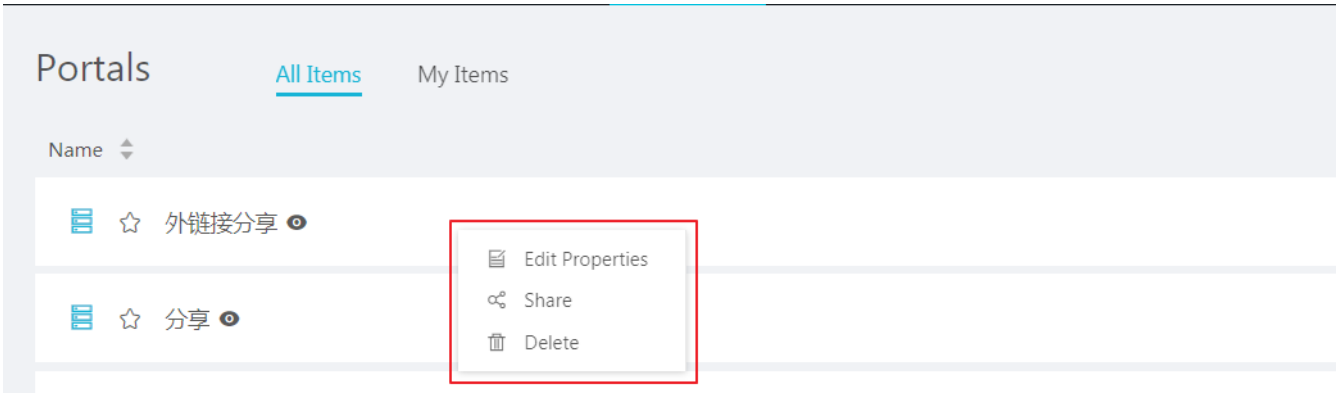
4. Click **Dashboards** to go to the dashboard management page.

5. Select and right-click a dashboard, as shown in the following figure.



- Edit Properties: Modify the dashboard name.
- Share: Share the dashboard with other users within the specified period of time.
- Make Public: Publish the dashboard so that other people can view the dashboard without logging on to Quick BI.
- Move: Move the dashboard to other folders.
- Delete: Delete the dashboard.

6. Click **Portals** to go to the data portal management page.
7. Select and right-click a data portal, as shown in the following figure.

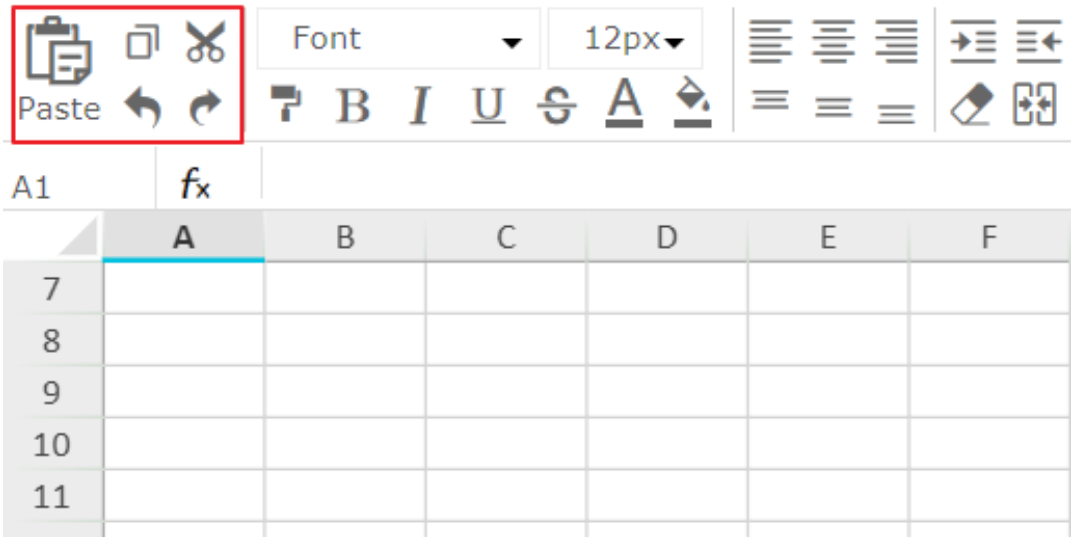


- Edit Properties: Modify the data portal name.
- Share: Share the data portal with other users within the specified period of time.
- Delete: Delete the data portal.

4.2 Workbook overview

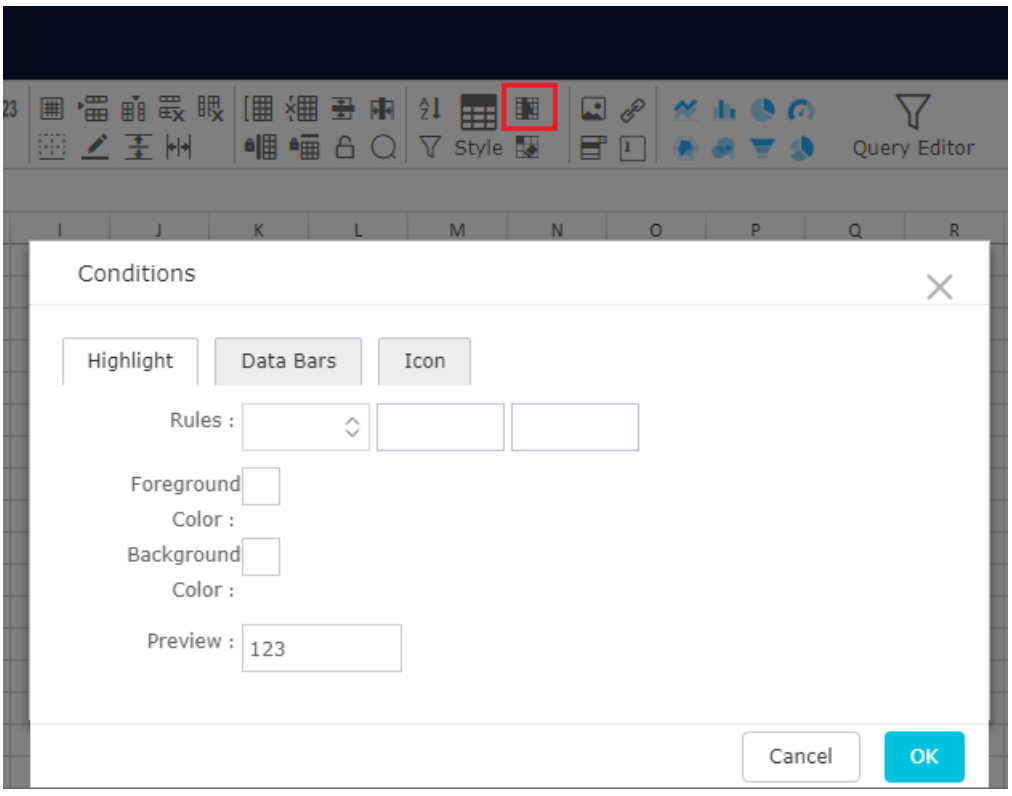
Common features

After accessing a workbook, you can **Undo**, **Redo**, **Cut**, **Copy**, and **Paste** data content. See the following figure.



Condition rules

By clicking **Set Conditional Formatting** on the toolbar, you can add rules for data results. For example, you can highlight data within a certain range. See the following figure.



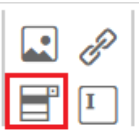
Add hyperlinks

The Workbook provides the **Add Hyperlink** icon, which helps you create more beautiful charts with richer content. See the following figure.

Add drop-down lists

You can click **Drop-Down List** on the toolbar to add labels for data entries.

Note:
Multiple labels must be separated by commas (,).



Text format

The text format feature enables you to adjust text in charts. This feature supports the following operations:

- Set the font, color, and background of text.
- Set the size and style (such as bold, italic, underline, and strikethrough) of text.
- Set the format of cells (such as text alignment, text wrapping, indentation, and cell merging).
- Set the format of text (such as general, number, text, percentage, date, and custom settings).

Table attributes

The table attribute feature enables you to adjust table attributes. This feature supports the following operations:

- Insert rows, insert columns, delete rows, delete columns, autofit row height, and autofit column width.
- Group, ungroup, hide rows, hide columns, freeze rows, and freeze columns.
- Set borders.
- Sort, filter, and set table styles.

4.3 Highlight pivot tables

You can use the highlight pivot table feature to show data in different pivot tables.

1. Open the workbook editing page
2. Click the **Data Preview** icon and select a dataset.
3. Double-click or drag the fields to the panel, and then click **Update**.
4. Click **Highlight Pivot Table**, and then select the area to show the data.
5. Double-click or drag the fields to the panel, and then click **Update**.

You can modify the display name for different pivot tables.

4.4 Dashboard overview

This section introduces basic concepts of the dashboard, including the types, application scenarios, and data elements of charts in the dashboard.

For more information about the basic operations on a dashboard, see *Basic dashboard operations*.

To learn how to create other types of charts, see *Use dashboard to create charts*.

Dashboards use a more flexible tile layout to show interactions between data. A dashboard not only visualizes data but also supports data filtering and query and multiple data display modes to highlight the key fields of data.

In terms of data display, dashboards display data in a more intuitive and clearer way through the wizard and drag, drop, and click operations on fields. In terms of data analysis, dashboards improve interaction experience of users by friendly prompts.

The data display performance is also greatly improved. You can query dynamic data on the dashboard editing page.

Types and application scenarios of data charts

Different data needs to be displayed using different chart types. Currently, Quick BI supports 17 types of data charts, including line charts, bar charts, bubble map, and funnel charts.

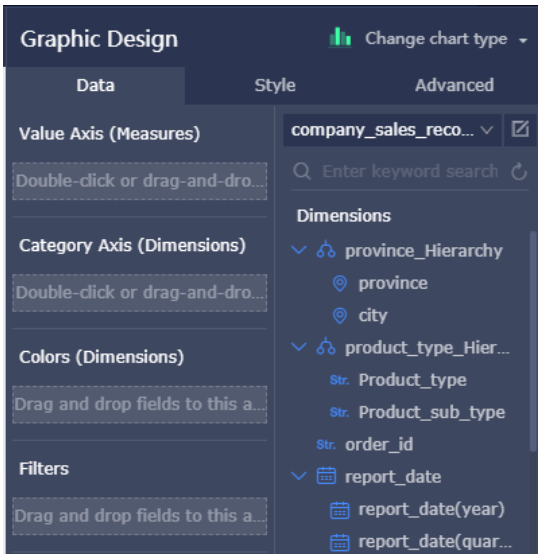
The following table lists the analysis type and common application scenarios of each type of chart.

Analysis type	Description	Scenario	Applicable chart
Comparison	Compare the differences between each value or display	Compare the sales/ income differences of	Bar chart, radar chart , funnel chart, table,

Analysis type	Description	Scenario	Applicable chart
	a simple comparison of measurements between different categories.	different countries or regions.	polar chart, tornado chart, and word cloud
Percentage	Display the percentage of a part or the ratio of a value to the whole.	Display which salesperson contributes the most to the total sales.	Pie chart, funnel chart, gauge, and tree chart
Relation	Display relationship between each value or compare multiple measurement values.	View the relativity between two values and display the affect of the first value on the second value.	Scatter chart, tree chart, card chart, hierarchy chart, and conversion chart
Trend	Display the trend of a value (especially the trend changes with time (for example, by year, month, or day) or the progress or possible modes of an indicator.	View the sales or income trend of a product in a period of time.	Line chart
Geographic chart	Intuitively show the size and distribution of related data indicators in a country or region on a map. The datasets used must contain geographical data.	View the income of each region in a country.	Geo bubble and geo

Data elements of a data chart

Each chart contains the Data, Style, and Advanced tabs, as shown in the following figure.



- The Data tab determines data displayed on the chart.
- The Style tab determines the chart appearance and displayed details.
- The More tab determines whether data is associated with multiple charts and whether to dynamically display interaction and comparison between data based on your needs.

Each chart is differentiated from other charts by its core data elements. For example, the core element of a map is its geographic latitude. Otherwise, data cannot be displayed on the map.

The following table lists the core data elements of each type of chart.

Chart name	Data elements	Composition of data elements
Line chart	Category axis and value axis	The category axis has at least one dimension, and the value axis has at least one measurement.
Area map	Category axis and value axis	The category axis has at least one dimension, and the value axis has at least one measurement.
Bar chart	Category axis and value axis	The category axis has at least one dimension, and the value axis has at least one measurement.
Code Charts	Category axis and value axis	The category axis has at least one dimension, and the

Chart name	Data elements	Composition of data elements
		value axis has at least one measurement.
Pie Chart	Slice label and slice angle	Slice labels have only one dimension, and the dimension value is smaller than or equal to 12. The slice angle has only one measurement.
Geo bubble map	Geographic region and bubble size	Geographic regions have only one dimension, which is the geographic latitude. The bubble size has one to five measurements.
Geo map	Geographic region and color saturation	Geographic regions have only one dimension, which is the geographic latitude. The color saturation has one to five measurements.
Table	Row and column	Rows have unlimited dimensions, and columns have unlimited measurements.
Gauge	Pointer angle and tooltip	A gauge has only one measurement.
Radar chart	Branch label and branch length	Branch labels have one to two dimensions, and the branch length has at least one measurement.
Scatter chart	Color legend, X axis, and Y axis	Color legends have only one dimension, and the maximum number of dimension members is 1000. The X axis has one to three measurements, and the Y axis has only one measurement.
Funnel chart	Funnel layer label and funnel layer width	Funnel layer labels have only one dimension, and the funnel layer width has only one measurement.

Chart name	Data elements	Composition of data elements
Card chart	Panel label and panel indicator	Panel labels have at most one dimension. Panel indicators have at least one and at most 10 measurements.
Tree map	Color block label and color block size	Color block labels have only one dimension, and the dimension value is smaller than or equal to 12. The color block size has only one measurement.
LBS map	Geographic region and LBS bubble size	Geographic regions have only one dimension, which is the geographic latitude. The LBS bubble size has one to five measurements.
Polar chart	Slice label and slice length	Slice labels have only one dimension, and the dimension value ranges from 3 to 12. The slice length has only one measurement.
Word cloud	Word size and word label	The word size has only one dimension, and word labels have only one measurement.
Tornado chart	Comparison subject and comparison indicator	The comparison subject has only one dimension, and comparison indicators have at least one measurement.
Hierarchy chart	Tree parent and child node label and tree parent and child node indicator	Tree parent and child node labels have at least two dimensions. Tree parent and child node indicators have at least one measurement.
Conversion chart	Previous page, current page , and next page; PV of the present, current, and next pages, UV of the present, current, and next pages, path	Each data element has only one dimension or measuremen t.

Chart name	Data elements	Composition of data elements
	conversion rate, and page bounce rate	
Progress bar	Progress indication	The Progress indication has one to five measurements.
Pivot table	Row and column	Rows have unlimited dimensions, and columns have unlimited measurements.

4.5 Dashboard basic operations

4.5.1 Basic dashboard operations

This topic describes how to go to the Dashboards page and perform basic dashboard operations.

For more information about dashboards, see *Dashboard overview*.

To learn how to create charts, see *Use dashboard to create charts*.

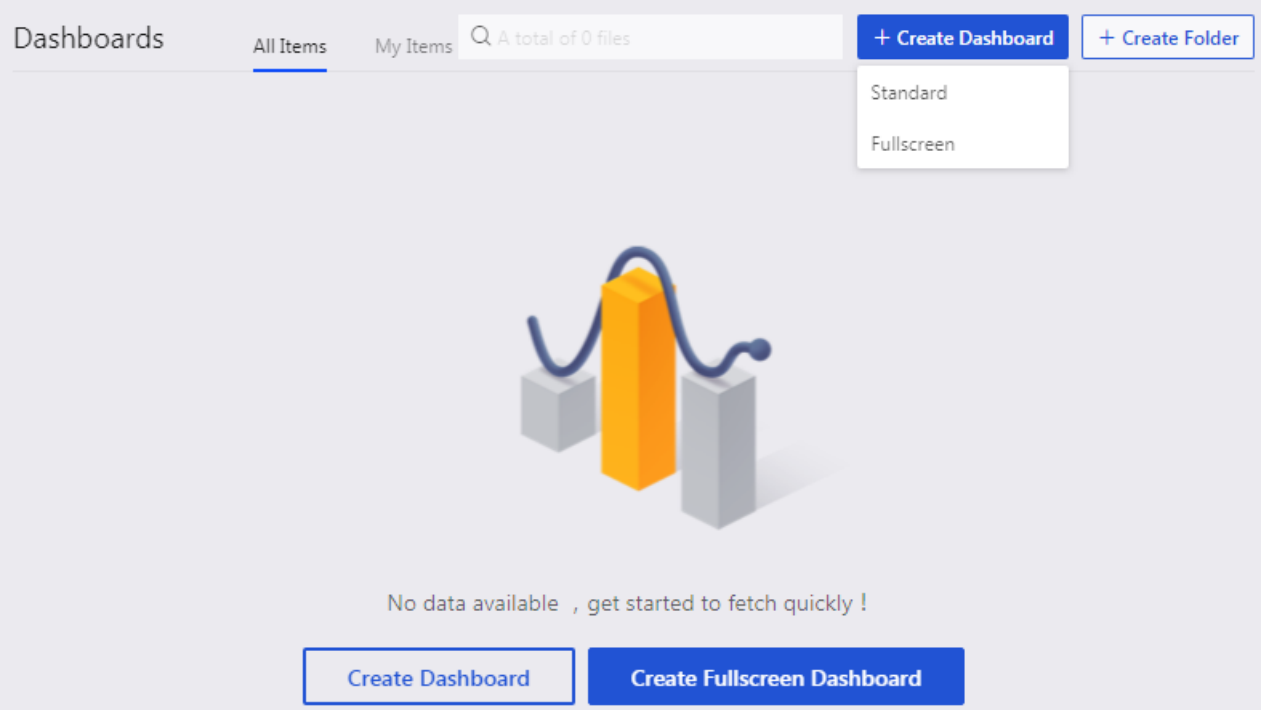
Go to the Dashboards page

Quick BI Quick BI Pro

1. Log on to the Quick BI console.
2. Click **Workspace** > **Dashboards** to go to the Dashboards page.
3. Click **Create Dashboard** > **Standard** to go to the dashboard editing page.

Quick BI Professional edition

1. Log on to the Quick BI console.
2. Click **Workspace** > **Dashboards** to go to the Dashboards page.
3. Hover your mouse cursor over **Create Dashboard** button and select a display mode. Click the display mode, as shown in the following figure.



For more information about how to **create standard dashboards**, see *Standard dashboards*.

For more information about how to **create full-screen dashboards**, see *Full-screen dashboards*.

Areas of a dashboard

You can perform basic dashboard operations in the following three areas.

- Dataset selection area
- Dashboard configuration area
- Dashboard display area

Dataset selection area

In the dataset selection area, you can switch from an existing dataset to another dataset. Based on the preset data types, the fields of the new dataset are displayed in the dimension list and the measure list. You can select dimension and measure fields based on the data elements in the chart.

Dashboard configuration area

In the dashboard configuration area, you can select a chart type, and edit the title, layout, and legend pattern of the chart. In Advanced Settings, you can relate multiple charts and display

analysis results from multiple perspectives. You can filter data using Filters. You can also insert a filter bar to search any key metric in a chart.

Dashboard display area

In the dashboard display area, you can drag and drop a chart to change its position as you like. You can also change the chart type based on your needs. For example, you can change a column chart to a geo bubble map. The system will display the missing or error elements based on the basic components of different charts. The dashboard provides a guide feature to help you learn how to create a dashboard.

4.5.2 Switch datasets

In the dataset selection area, you can select or switch datasets, and search for datasets by dimension and measure fields.

1. Click the **Dataset Switch** icon.
2. In the drop-down list, select or search for the datasets that need to be analyzed, such as company_sales_record.

If you cannot find the required dataset from the drop-down list, go back to the dataset management page and ensure that the dataset has been successfully created.

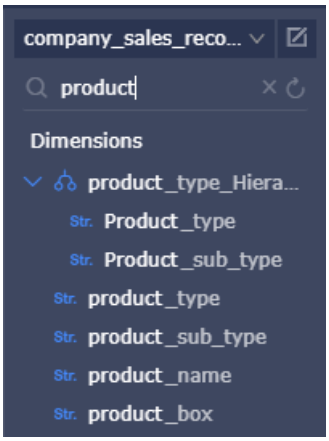
For more information about how to create datasets, see *Create a dataset* Create datasets.

4.5.3 Search for the dimensions field and the measures field

After you have selected the datasets, the system automatically separates fields into the dimension and measure areas.

You can enter a keyword in the search bar, and click the search icon. The system automatically searches for the fields that contain the keyword.

1. For example, enter a keyword called product in the search bar.
2. The fields that contain the keyword automatically appear in the list, as shown in the following figure.



4.5.4 Configure a chart

You can select a chart in the configuration area of a dashboard. After you select a chart, you can configure this chart.

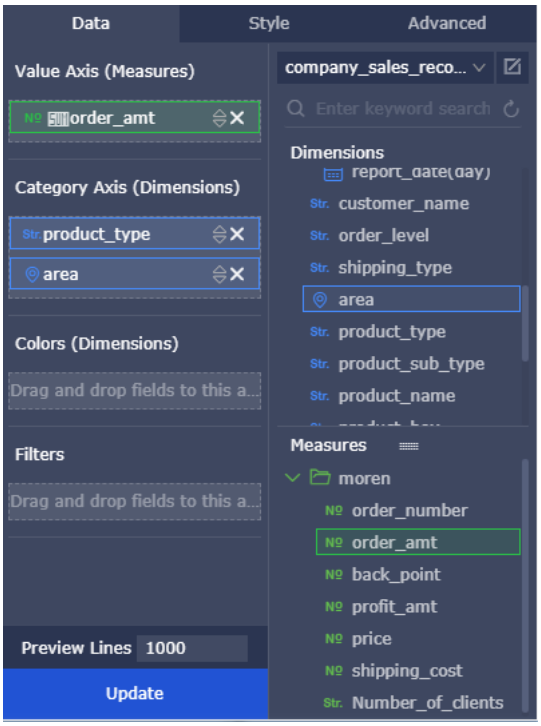
You must ensure that you have selected a dataset on the Data tab before you create a chart. In addition, dimensions and measures are applicable.

For more information about dimensions and measures, see *#unique_39*.

1. After you click a chart icon, the selected chart appears in a dashboard.

   You can switch a chart to other types by clicking Change chart type in the upper-right corner of the page.

2. On the **Data** tab, select the required dimensions and measures.



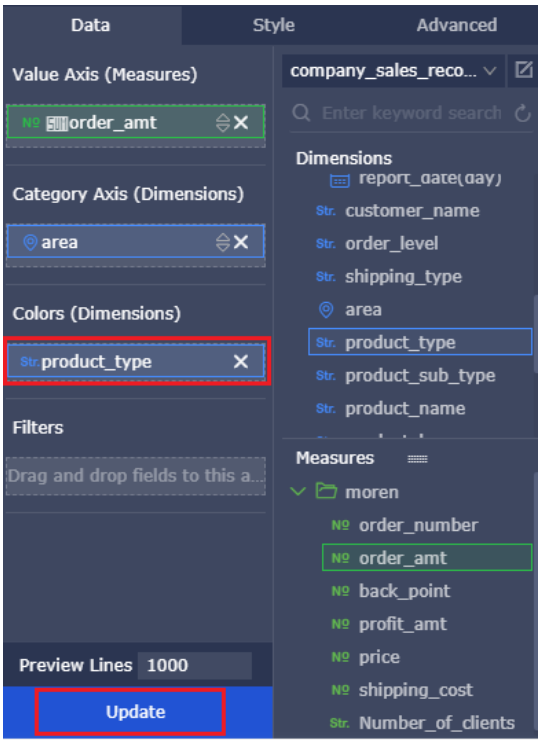
- Click the **cross** icon next to a field to remove this field from the Category Axis (Dimensions) area.
- Click the **triangle** icon next to a field to display the values of this field in ascending or descending order.

3. Select a field and drag this field to the Colors (Dimensions) area.

   The selected field appears in a chart with the specified color. If you fail to drag a field, an error message occurs. You can follow the instruction on the message to add or remove dimensions and measures.

   Take the **product_type** field as an example.

   1. Drag the **product_type** field to the **Colors (Dimensions)** area, and then click **Update**.



2. Select **Style** > **Series settings** to change your color matching themes.

4. Select the time interval that data automatically refreshes on the **Auto refresh** list.
5. On the **Style** tab, you can change the visual format of a chart by setting options in General config, Style, Layout, Axis, and Series settings.

   You can change a unit by setting a number in the **Unit** area. You can only multiply the values of a field by the number you set in the Unit area.

   Assume that the previous unit is centimeter. If you want to display data in meters, you must divide the previous unit by 100. In the Unit area, you can enter 0.01 in this case. For a multiplication operation, you can enter 100.
6. On the **Advanced** tab, you can associate the current chart with other charts.

   You must ensure at least two charts are created in the display area of a dashboard before you associate charts.

4.5.5 Filter by fields

When you work with a large dataset, you can use the filter feature to view only specific types of data from the dataset.

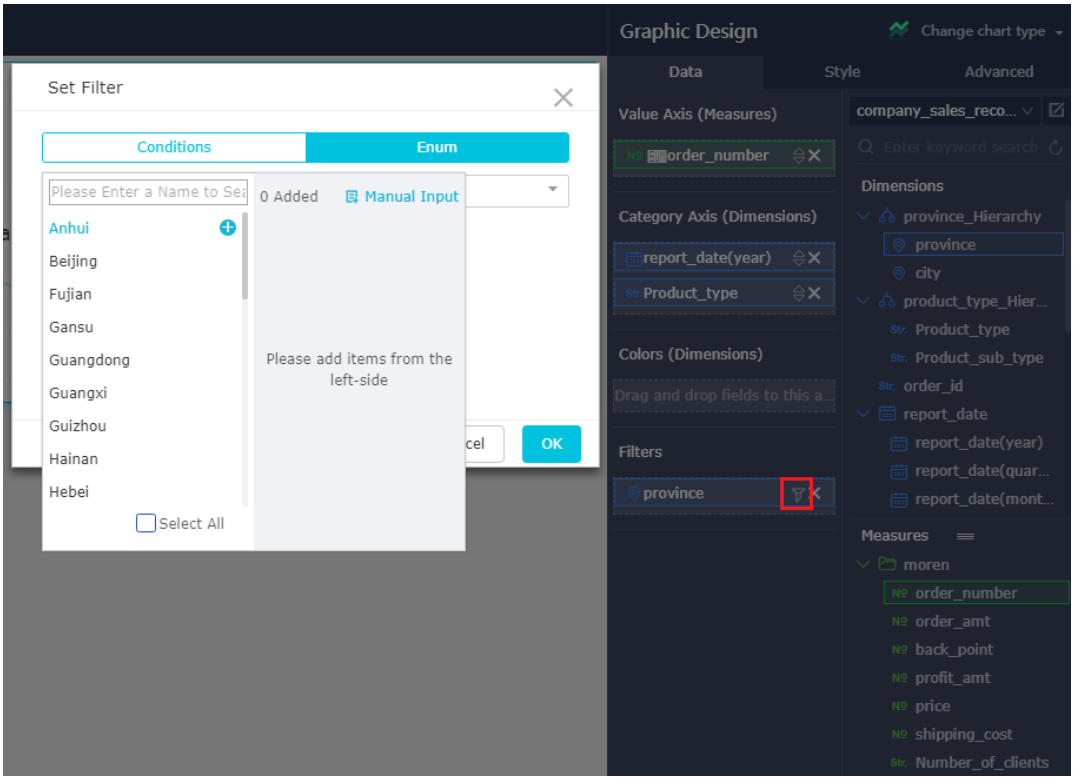
You can filter data of the string, number, or date type.

Filter data in string type

You can filter municipalities from the province field using the filter feature.

Take filtering municipalities as an example.

1. Drag the **province** field to the **Filter Bar** area, as shown in the following figure.
2. Click the **Set Filter** icon, and set filtering criteria.
3. Select the required filtering criteria. For example, select **Filter by Enumeration**, as shown in the following figure.



4. Manually enter the field names or select the city names from the list.
5. After you have specified the fields, click **OK**.
6. Click **Update**. The system automatically redraws the chart based on the filters.

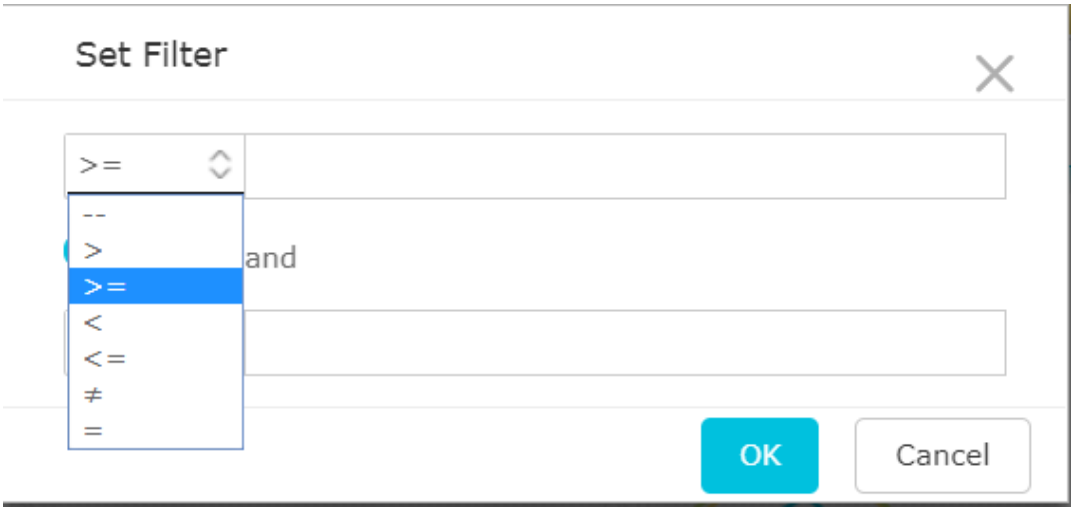
Filter numerical data

You can specify filtering criteria in the filter. For example, you can specify the order number with a value between 50 thousand and 100 thousand. In this case, the chart displays data based on your specified range.

Take filtering profit amount as an example.

1. Drag the **profit amount** field to the **Filter Bar** area.

2. Click the **Set Filter** icon, and set filtering criteria.
3. Select the filters as needed, such as greater than, less than, or equal to, as shown in the following figure.



4. After you have specified the fields, click **OK**.
5. Click **Update**. The system automatically redraws the chart based on the filters.

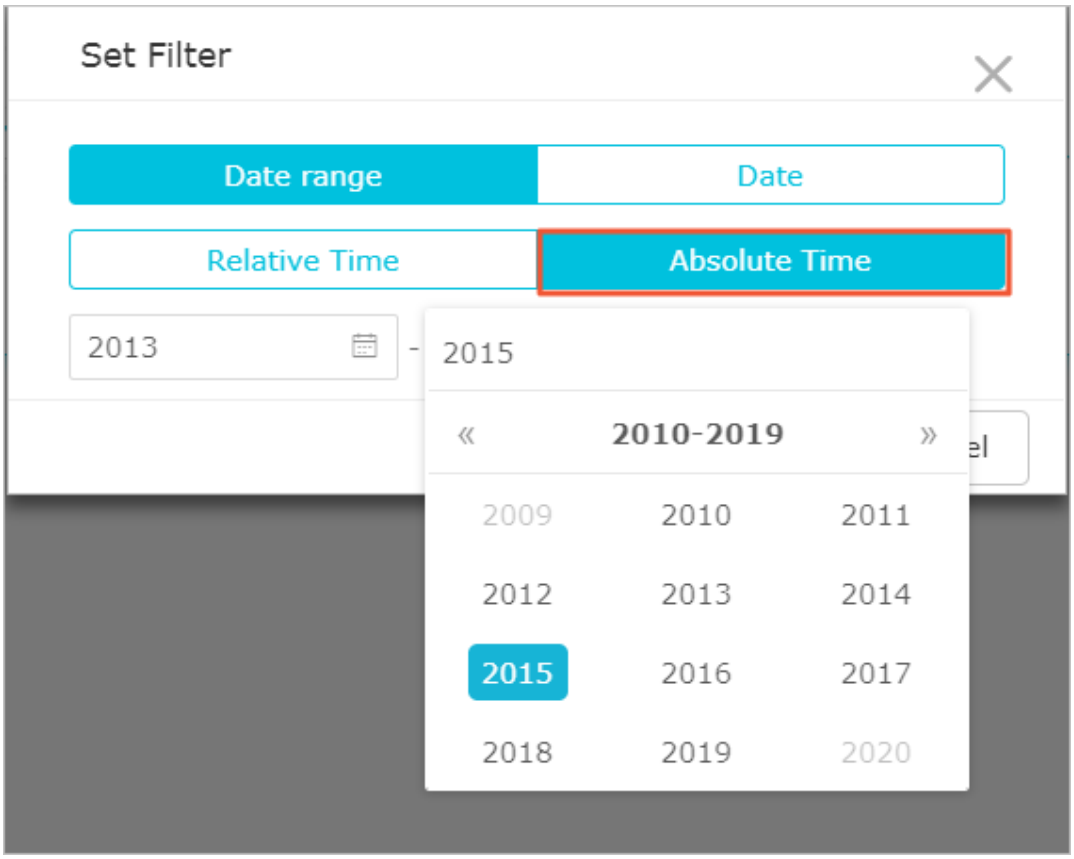
Filter data in date type

You can use the filter feature to filter data in a specific date range. For example, you can filter the order amounts in the range from 2013 to 2015.

Note:
You can filter data in date type exact to seconds.

Take filtering order dates (year) as an example.

1. Drag the **order date (year)** field to the **Filter Bar** area. Click the **Set Filter** icon, and set filtering criteria.
2. Select the filters as needed. For example, specify the **Absolute Time** with the range from 2013 to 2015, as shown in the following figure.



3. After you have specified the fields, click **OK**.
4. Click **Update**. The system automatically redraws the chart based on the filters.

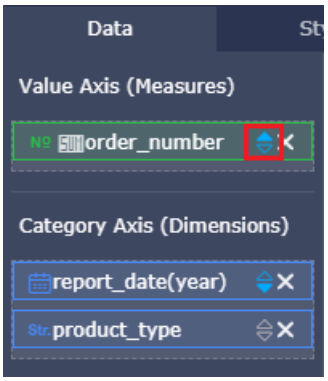
4.5.6 Sort data

In the **Data** tab, you can sort the data based on the selected measures and dimensions. The chart displays the data trend based on the sorted result.

Procedure

1. Select **order_number**, click the triangle icon next to the field, as shown in the following figure.

   The upward triangle indicates ascending order, and the downward triangle indicates descending order.



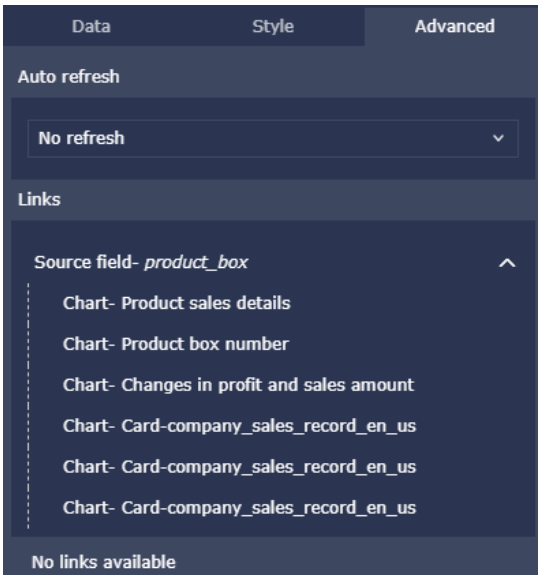
2. Click **Update**.

4.5.7 Associate multiple charts

Note:
The association function is enabled only if the dashboard has at least two charts.

On the **More** tab in the dashboard configuration area, associate multiple charts by performing the following steps.

1. Select a chart, such as a funnel chart.
2. Click the **More** tab.
3. The More tab displays the available charts that can be associated with the selected funnel chart, as shown in the following figure.



4. Select the same field as **Source Field** to associate this chart with the funnel chart.

   If the selected field is different from the source field, the system displays an error message.

5. Select **Preview** > **PC**. To go to the preview page.
6. Click the field that selected in Source Field in the funnel chart, the associated table chart automatically displays other data.
7. Click Unlink in the upper-right corner of the funnel chart can make the table goes back to the original status.

> **Note:**
> The Unlink function only restored the chart to its original condition.

4.5.8 Common widgets

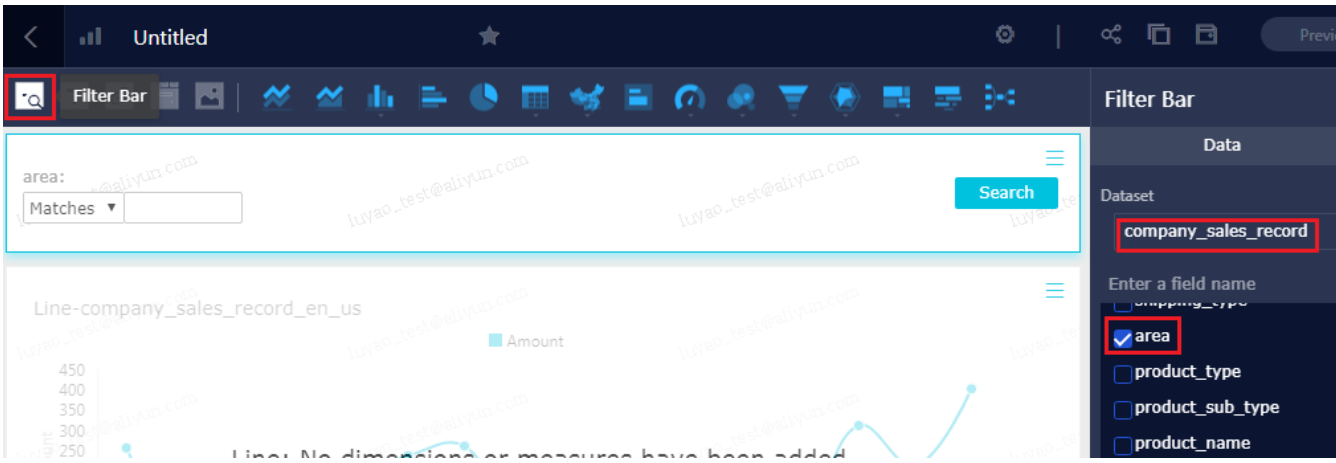
The dashboard display area supports the following widgets.

- Filter Bar
- Text Area
- IFrame
- TAB
- Image

Filter Bar

You can select the **Filter Bar** to query data in one or multiple charts.

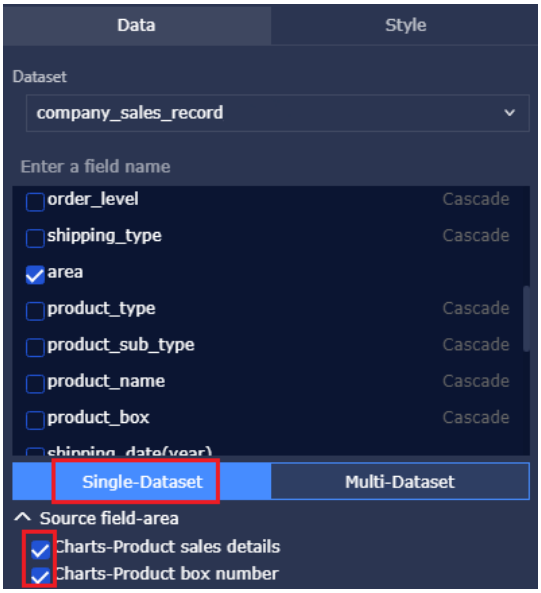
1. Double-click **Filter Bar** icon.
2. Select a dataset and query fields. See the following figure.



Currently, the Filter Bar supports Single-Dataset association and Multi-Dataset association.

Example of Single-Dataset

1. Select **Single-Dataset** and select charts that query fields can be applied. See the following figure.



2. Click **Style** to edit the Filter bar title.
3. Click **Search** to query data.

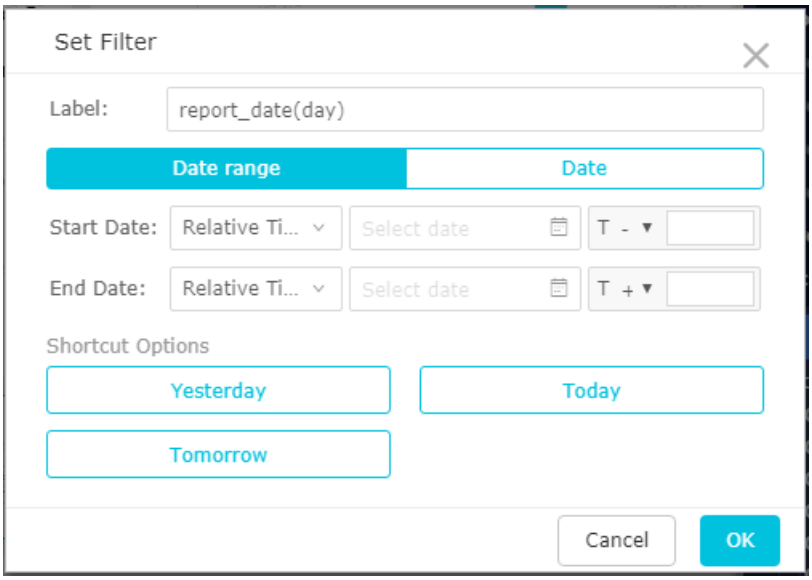
Example of Multi-Dataset

The Filter Bar can also associate data from different datasets. Make sure that the values of data members of association items are consistent. Otherwise, the association is invalid.

1. Select a chart, such as Table.
2. Drag or double-click the expected fields and then click **Update**.
3. Click **Style** tab to modify table label and its layout. For example, set table lable as **Overseas Report**.
4. Click dataset switch icon to switch to another dataset.
5. Select a chart, such as Table.
6. Drag or double-click the expected fields and then click **Update**.
7. Click **Style** tab to modify table label and its layout. For example, set table lable as **Domestic Report**.
8. Double-click **Filter Bar** and select dataset and expected fields.
9. Click **Multi-Dataset** and select associated items according to the field types.
10. Click **Style** tab and modify the filter bar label.
11. Click **Search**. The charts automatically update.

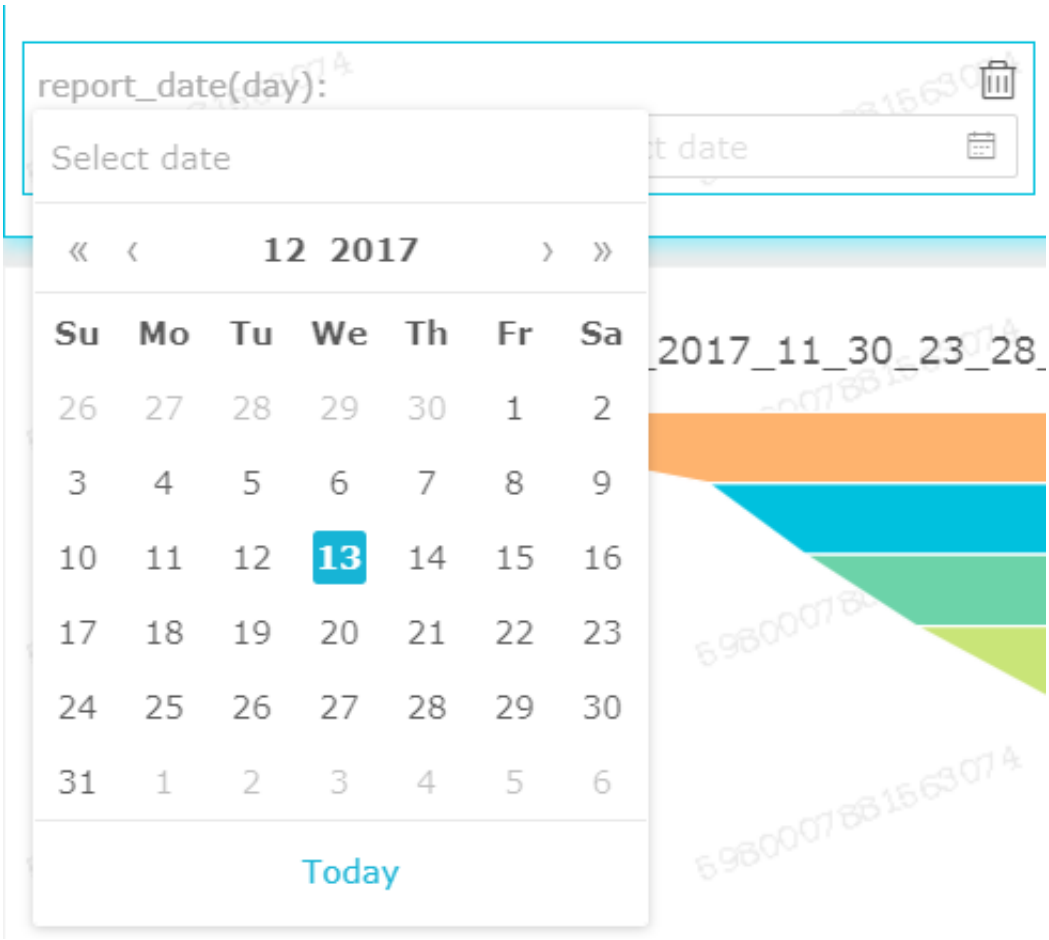
Query data based on days

1. On the **Data** tab, select a dataset and a query field, for example, report_date (day).
2. Select a chart, which is expected to be applied.
3. Click field in Filter Bar, and then the filtering tab is displayed on the right, as shown in the following figure.



4. Select a date range, as shown in the following figure.

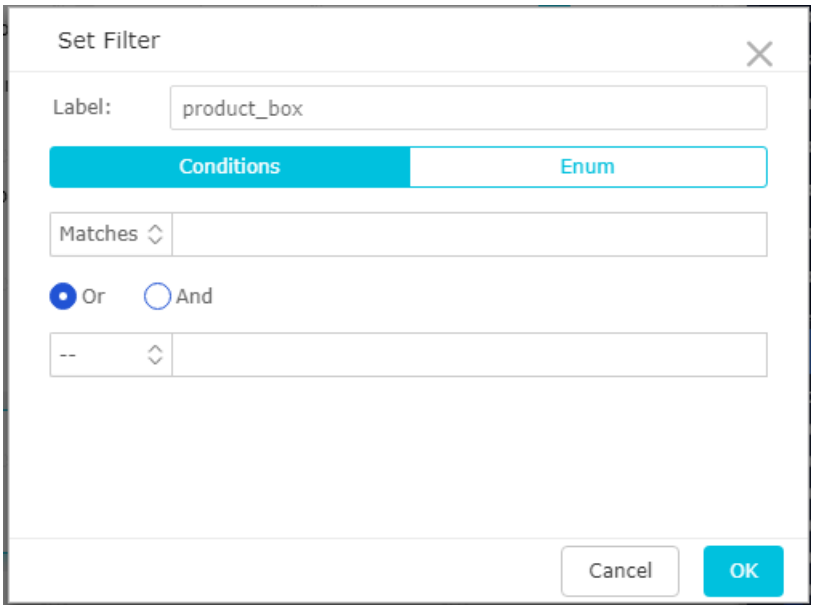
   The detailed time range for a month is automatically displayed, as shown in the following figure.



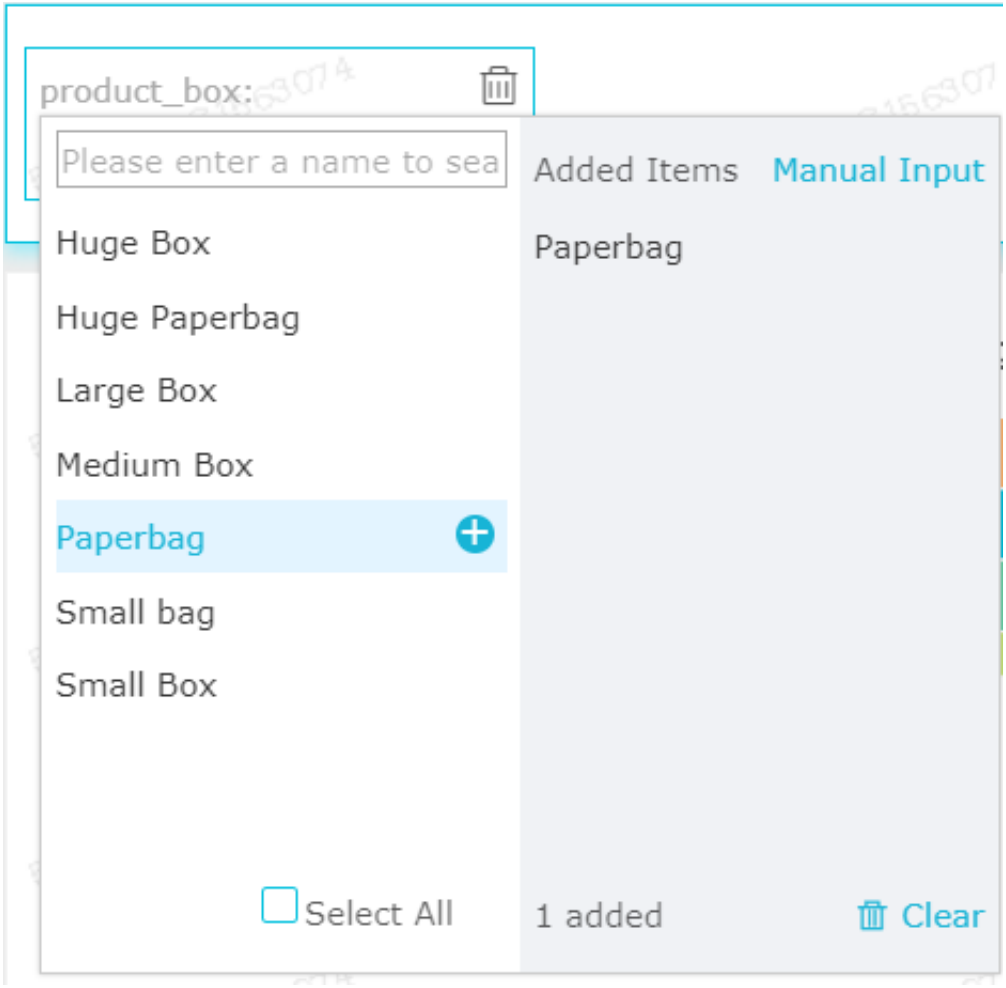
5. Click **Search** to query the date.

Query data based on text

1. On the **Data** tab, select a dataset and a query field, for example, Product_box.
2. Select a chart.
3. Click field in Filter Bar, then the text filtering tab is displayed on the right, as shown in the following figure.



4. Click **Enum**. The system automatically loads all available options of Product_Box to the Filter Bar.
5. Select an option from the Product_Box drop-down list, such as Paper Bag. See the following figure.



6. Click **Search**. The chart automatically update.

Text area

You can enter fixed text in a text area and use the text as a report title.

1. Double-click **Text Area**.
2. Enter text in the text area based on your requirements.

IFrame

IFrame enables you to insert an expected webpage in a dashboard to query network data in real time or to browse the webpage or website related to the current data.

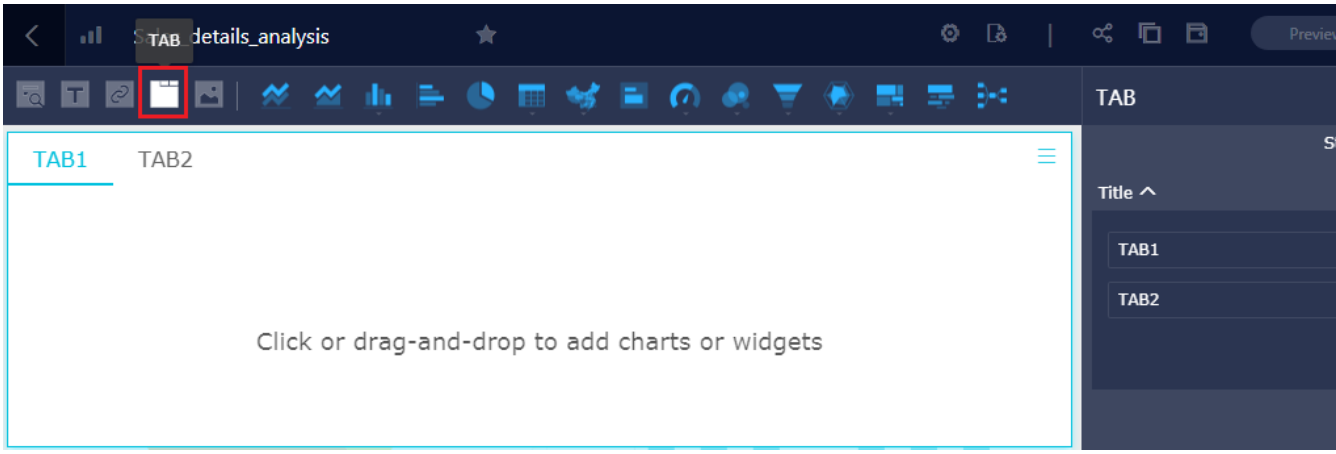
1. Double-click **IFrame** icon.
2. In the link area, enter a webpage address based on your needs or preferences.

> **Note:**
> Webpage addresses must start with https.

TAB

The TAB feature enables multiple charts to be displayed in different tabs.

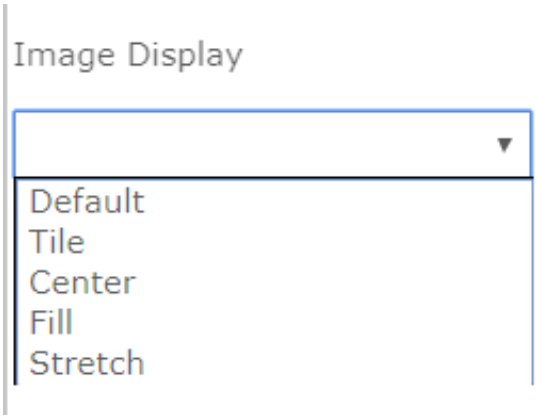
1. Double-click TAB icon.
2. In the TAB editing menu, you can add or delete the number of tabs based on chart requirements. See the following figure.



3. Click a tab and insert a chart in it. For example, click the TAB1, the color of TAB1 is marked as blue.
4. Double-click the expected chart type icon. A chart is automatically inserted in TAB.
5. Create the chart by following the chart creation process.

Image

1. Double-click **Image** icon.
2. Enter an image link.
3. Set a display style of image, as shown in the following figure.



4.5.9 Standard mode

In standard mode, you can perform the following operations in the display area of a dashboard.

- Change chart position
- View chart data
- Delete chart
- Change chart type
- Add to favorites
- Configure settings

If you are using a Quick BI dashboard for the first time, a wizard will appear in the display area to guide you through the dashboard features. Follow the instructions in the wizard to learn how to create a dashboard.

More

In the top-right corner, click **More** to perform the following operations on a chart.

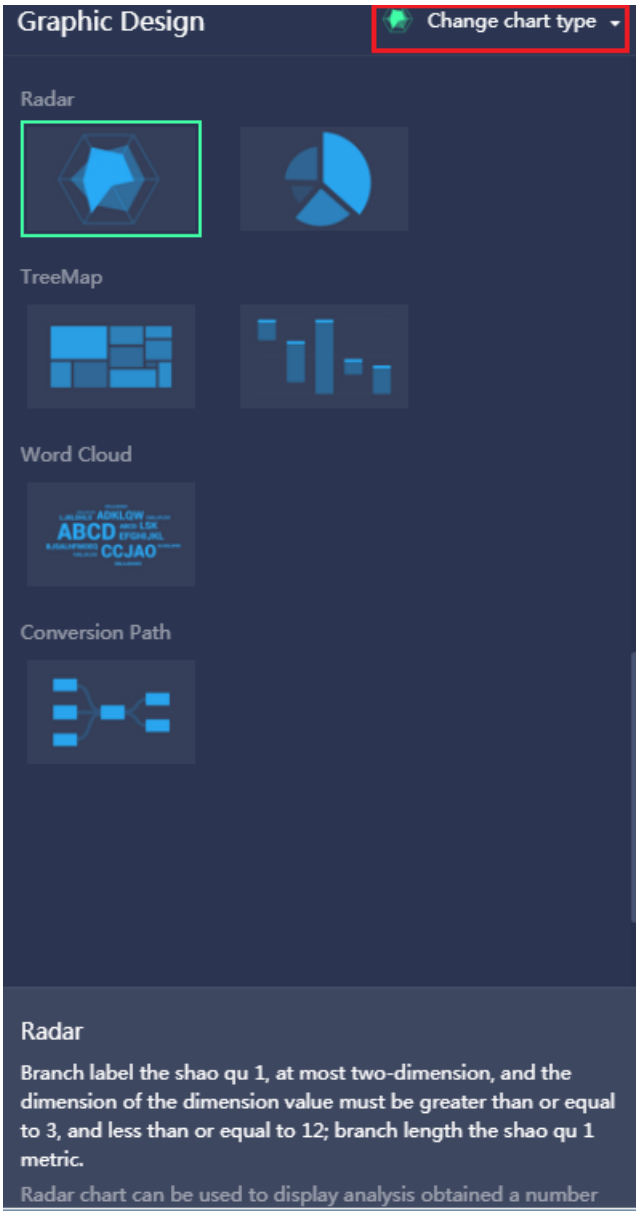
- View Data: view the data of this chart.
- Export: export the data of this chart with the Excel format.
- Delete: delete the chart.

Change chart type

You can change the type of a chart that appears in the display area.

Select a chart in the display area of a dashboard. Then, in the top-right corner, click Change chart type to select a chart type you want to change to.

1. Select a chart in the display area of a dashboard.
2. Click **Change chart type** as shown in the following figure. For example, you can change a pie chart to a **radar** chart as shown in the following figure.



3. The chart changes to the new type.

If a chart fails to change types, it is because the data fields of the selected chart type do not match those of the current chart data. You must modify these fields manually to change the chart type.

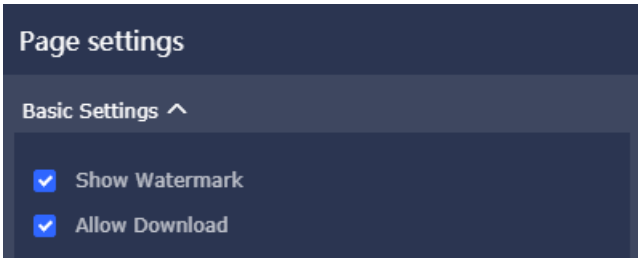
You will be prompted to modify some fields based on the selected chart type. To change chart types, follow the instructions on the screen to add appropriate dimensions or measures to the corresponding area.

Add to favorites

At the top of the display area of a dashboard, click the **star** icon to collect the current dashboard.

Configure settings

Click **Settings** to download the current dashboard or show a watermark, as shown in the following figure.



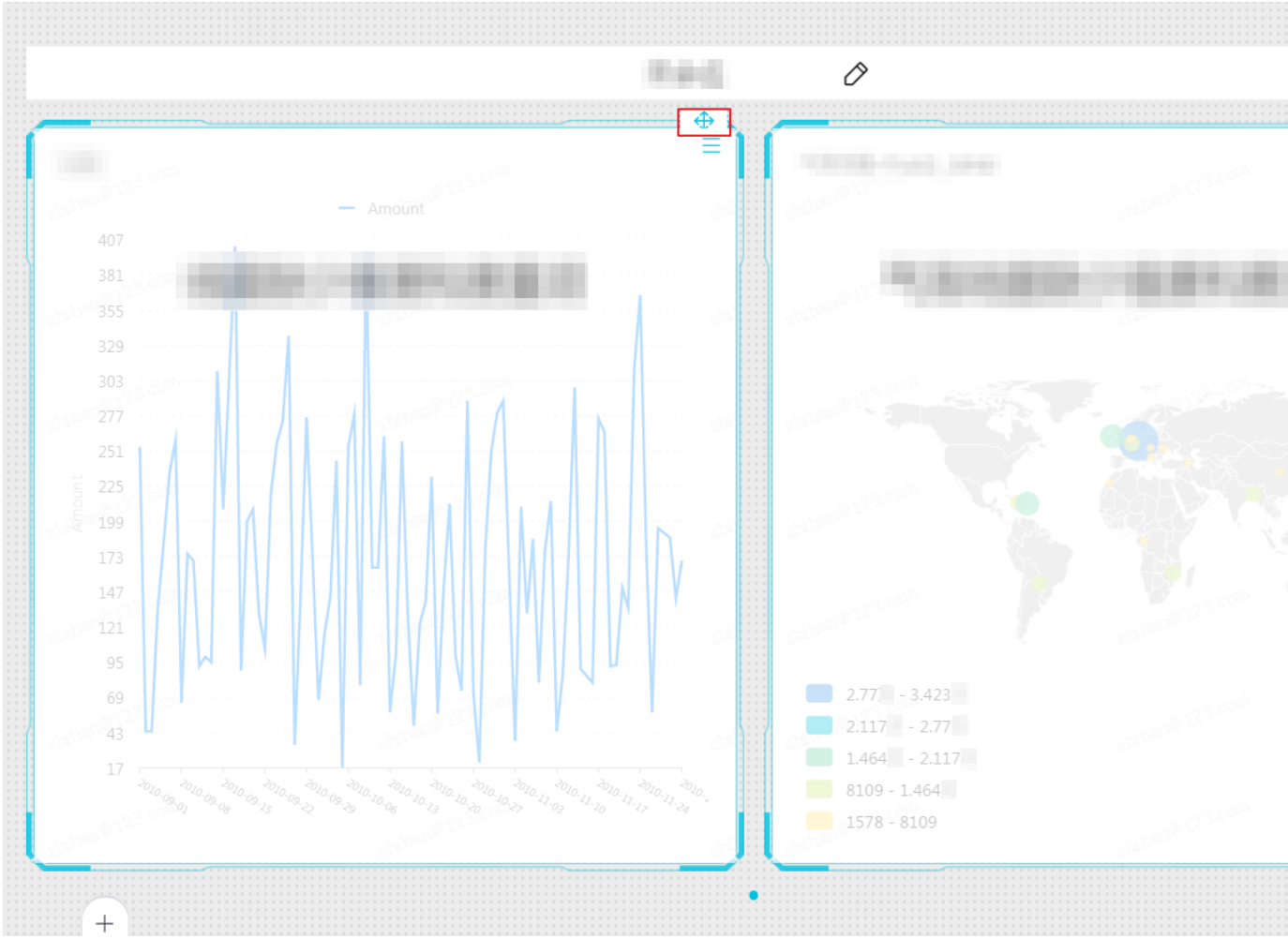
4.5.10 Fullscreen mode

In the fullscreen mode, you can perform the following operations in the display area of a dashboard.

- Change chart position
- Add a subscreen
- View chart data
- Delete chart
- Change chart type
- Configure settings

Change chart position

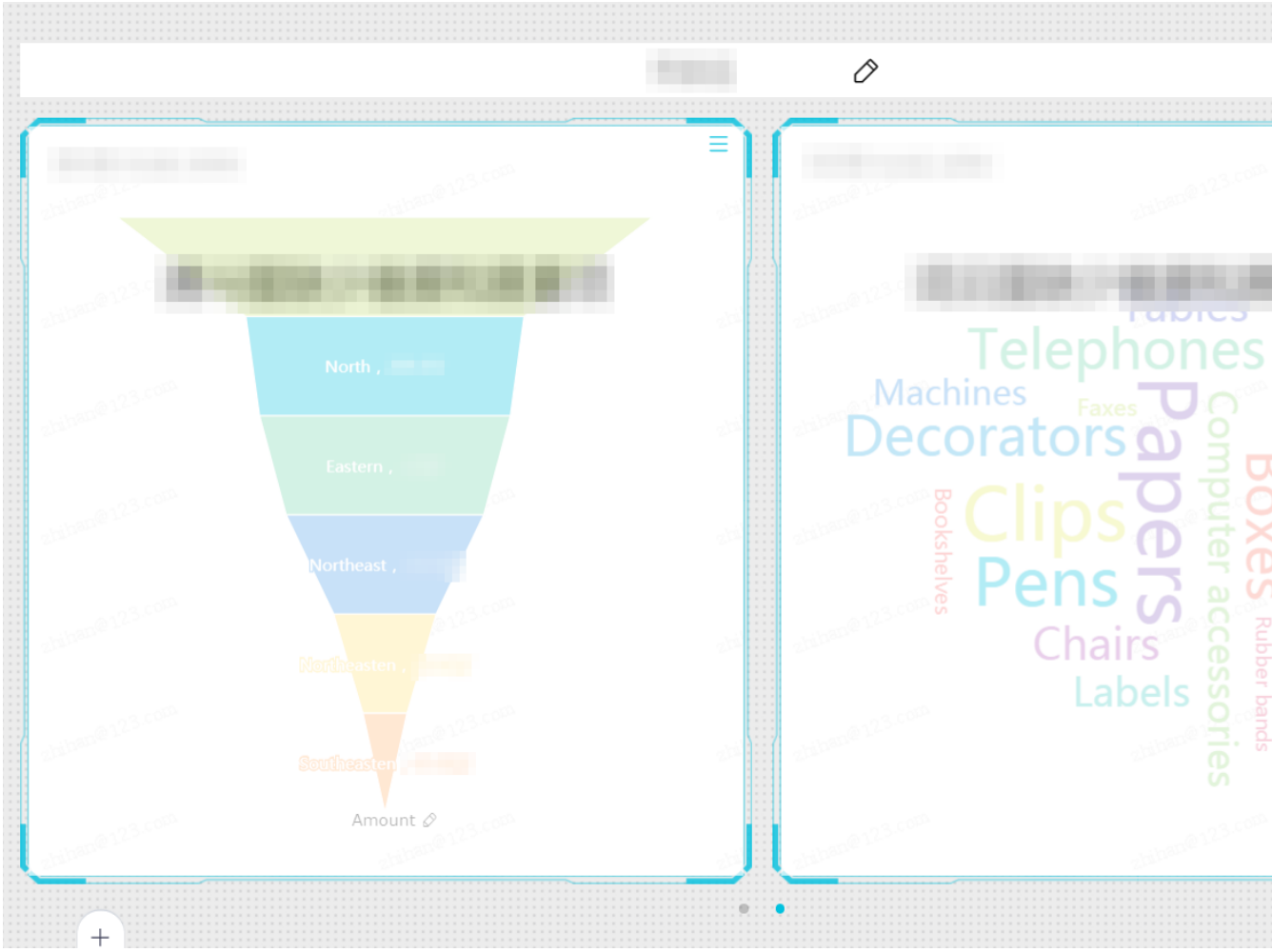
In fullscreen mode, a chart will be scaled to its maximum extent in the display area of a dashboard . In addition, when multiple charts exist in a dashboard, click the arrow cross icon and hold down the left button, and then drag charts to change the arrangement as shown in the following figure.



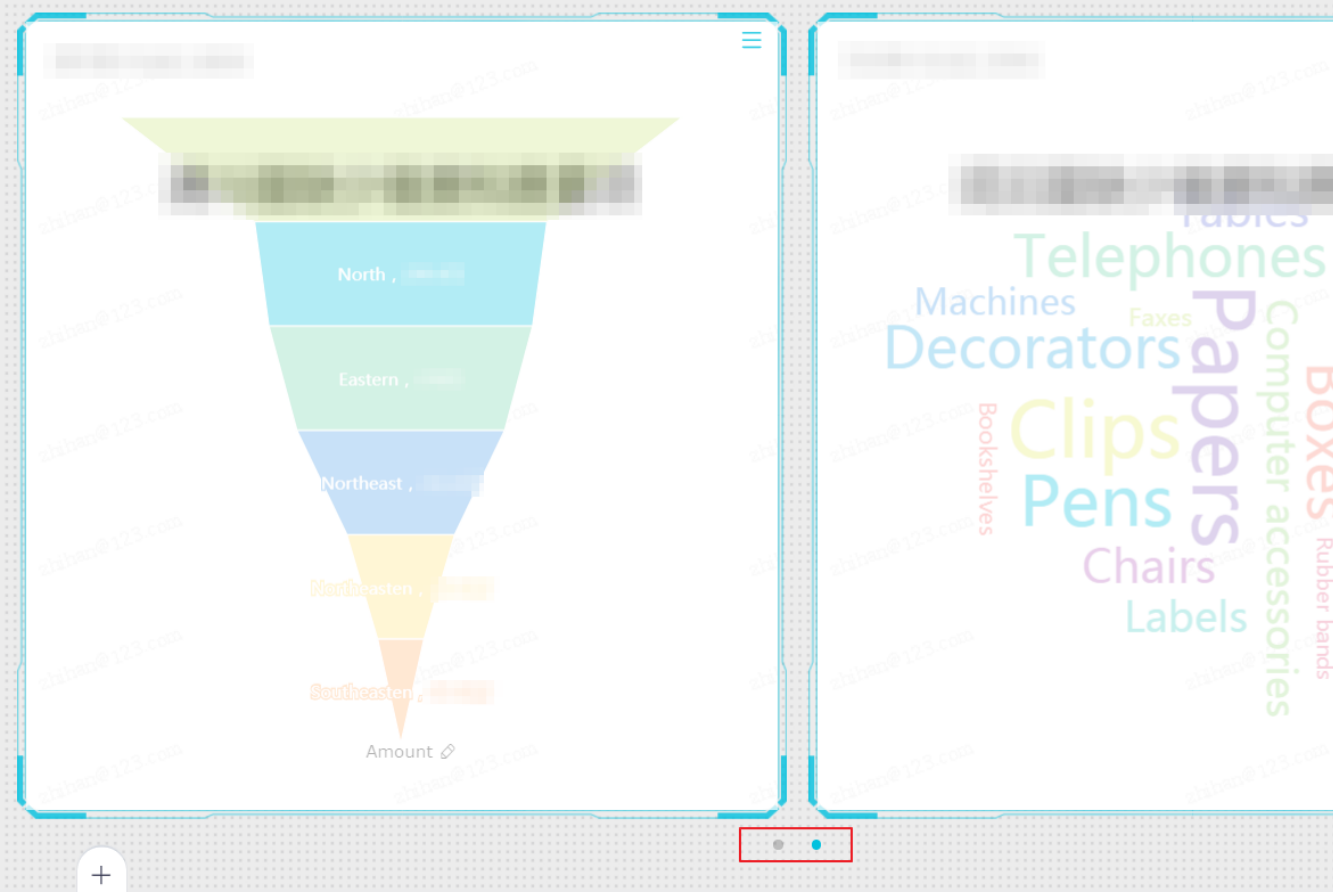
Add a subscreen

1. Click the plus icon in the lower-right corner as shown in the following figure.

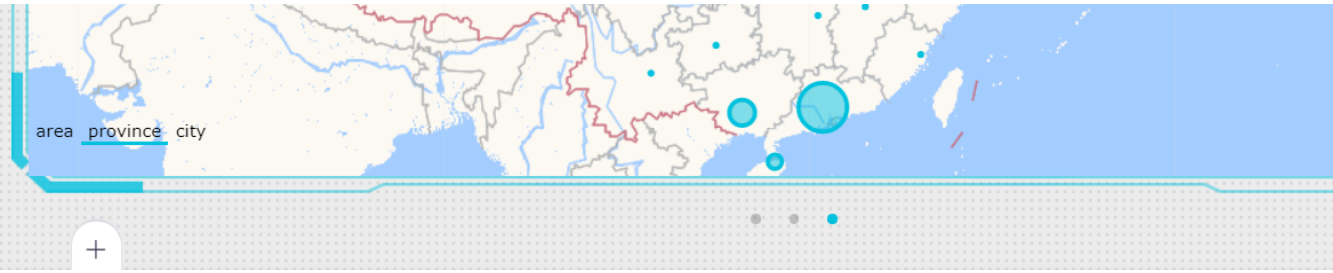
2. In a subscreen, you can add a chart as shown in the following figure.



3. Click the **dot** icon to switch between subscreens as shown in the following figure.



4. Click the **Delete** icon to delete a subscreen as shown in the following figure.



View chart data

1. Select a chart.
2. Click the More icon in the upper-right corner of a chart.
3. Select **View Data**.
4. Click the **Export** button in the Data Info dialog box to download data to your local disk.

Delete chart

1. Select a chart.
2. Click the More icon in the top-right corner of a chart.

3. Select **Delete**.

Change chart type

1. Select a chart in the display area of a dashboard.
2. In the configuration area of a dashboard, click Change chart type.
3. Select a chart type that you want to change to.

A chart may fail to change types. This issue occurs when data fields of the selected chart type do not match those of the current chart data. You must modify these fields manually to change the chart type.

You are required to modify some data fields based on the selected chart type. To change chart types, follow the instructions on the screen to change corresponding dimensions and measures.

Configure settings

Click **Page setting** to change the page scale, skin setting, theme, time interval to update data, and the time interval of carousel set.

4.6 Create charts

4.6.1 Line charts

Assume that you have read *Dashboard overview* and *Basic dashboard operations*. This section describes how to create a line chart. If you want to edit a dataset or create a dataset, see *Create a dataset*.

A line chart displays information as a series of data points connected by straight line segments. You can use a line chart to analyze and visualize a trend in data over equal intervals of time. In addition, you can use a line chart to analyze the correlation between multiple groups of data that changes over time. For example, you can analyze the sales volume of a group of products or multiple groups of products that change over time to obtain a forecast of sales trends.

A line chart consists of the category axis and the value axis. The category axis appears as a horizontal axis and oriented to the right. You can only add dimensions to the category axis such as date, province, and product_type. The value axis appears as a vertical axis and oriented upwards. You must add measures to the value axis such as metrics for analyzing objects including order_amt.

In a dashboard, fields have been automatically sorted into dimensions and measures as shown in the following figure. When you create a line chart, you can drag fields from the **Dimensions** list and the **Measures** list to the corresponding category axis and value axis as required.

Precautions

Select at least one dimension on the category axis and select at least one measure on the value axis. The Colors (Dimensions) area can take only one dimension at most.

> **Note:**
> You can add dimensions to the Colors (Dimensions) area when only one measure is added to the Value Axis (Measures) area. Otherwise, you are not allowed to add dimensions to the Colors (Dimensions) area.

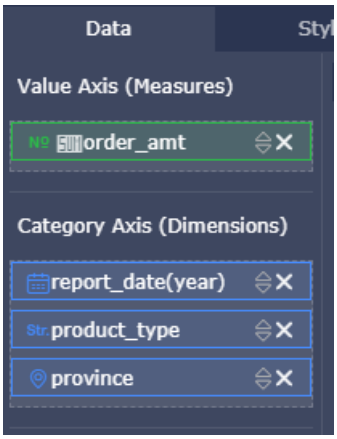
The following scenario is based on the company_sales_record dataset.

Scenario: Visualize the number of orders and price for each product category.

1. Log on to the Quick BI console.
2. Click **Datasets** to enter the Datasets page.
3. Click the **Create Dashboard** icon on the right side of the company_sales_record dataset.
4. Click the **Line** icon, a line chart appears in the display area of the dashboard.
5. Select required dimensions and measures.

   On the Dimension list, drag **product_type** to the Category Axis (Dimensions) area. On the Measures list, drag **order_amt** and **price** to the Value Axis (Measures) area in turn as shown in the following figure.

   > **Note:**
   > You must ensure that you have changed the province field from the string type to the location type. For more information about how to change data types of a dimension, see *#unique_39*.



6. On the **Style** tab, you can change some items such as the title, layout, legend, and axis format of a chart.

> **Note:**
> For more information about the **Style** tab, see *Configure a chart*.

7. Click **Save** to save the dashboard.

If you want to delete the current chart, click More in the upper-right corner of the chart and select **Delete** to delete the current chart.

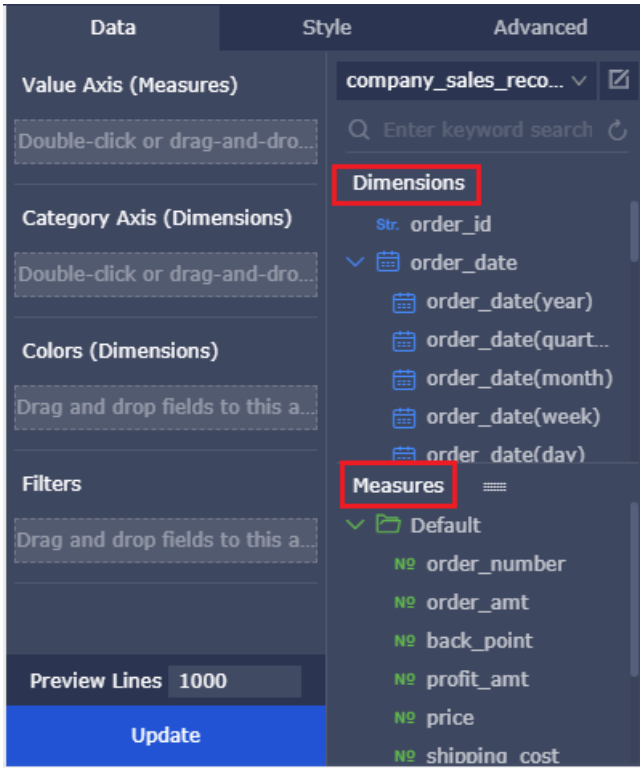
4.6.2 Area charts

Assume that you have read *Dashboard overview* and *Basic dashboard operations*. This section describes how to create an area chart. If you want to edit a dataset or create a dataset, see *Create a dataset*.

An area chart displays graphically quantitative data. You can use an area chart to analyze and visualize a trend in data over identical intervals of time. In addition, you can use an area chart to analyze the interactions between multiple groups of data that changes over time. For example, you can analyze the sales volume of a group of products or multiple groups of products that change over time to obtain a forecast of sales trends.

An area chart consists of the category axis and the value axis. The category axis is depicted as horizontal and oriented to the right. You can only add dimensions to the category axis such as date, province, and product_type. The value axis is depicted as vertical and oriented upwards. You can only add measures to the value axis such as metrics for analyzing objects including order_amt.

In a dashboard, fields have been automatically grouped into dimensions and measures as the following figure shows. When you create a line chart, you can drag fields from the Dimensions list and the Measures list to the corresponding category axis and value axis as required.



Precautions

You can set at least one dimension for the category axis, and set at least one measure for the value axis. The Colors field can take only one dimension.

Note:
You can add dimensions to the Colors (Dimensions) area when only one measure is added to the Value Axis (Measures) area. Otherwise, you are not allowed to add dimensions to the Colors (Dimensions) area.

The following scenario uses the company_sales_record dataset.

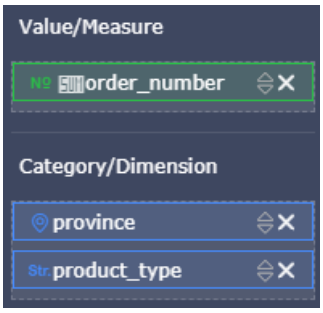
Scenario: Visualize the number of orders for each product type of each province.

1. Log on to the Quick BI console.
2. Click **Datasets** to enter the Datasets page.
3. Click the **Create Dashboard** icon next to the company_sales_record dataset.
4. Click the **Area** icon, an area chart appears in the display area of the dashboard.

5. Select required dimensions and measures.

   On the Dimensions list, drag the province and product_type fields to the Category Axis (Dimensions) area in turn. On the Measures list, drag the order_amt field to the Value Axis (Measures) area as the following figure shows.

   > **Note:**
   > You must ensure that you have changed the province field from the string type to the location type. For more information about how to change data types of a dimension, see *#unique_39*.

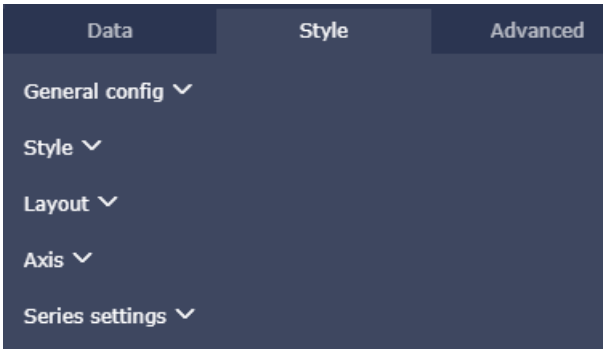
   

6. Drag the **product_type** field to the Colors (Dimensions) area and click **Update**.

   > **Note:**
   > You can add dimensions to the Colors (Dimensions) area when only one measure is added to the Value Axis (Measures) area. Otherwise, you are not allowed to add dimensions to the Colors (Dimensions) area.

7. On the **Style** tab, you can change some items such as the title, layout, legend, and axis format of a chart as the following figure shows.

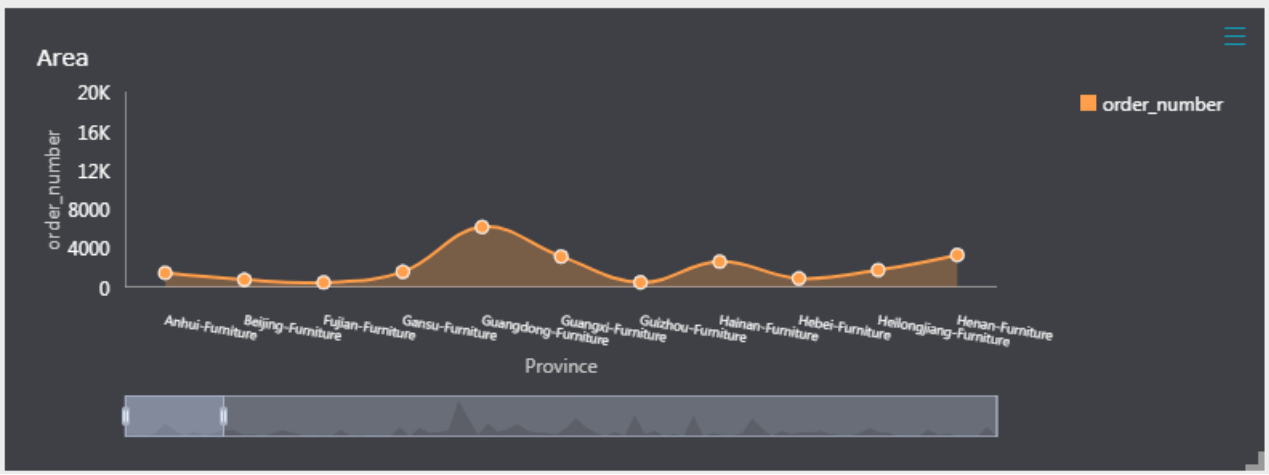
   > **Note:**
   > For more information about the **Style** tab, see *Configure a chart*.

   - In General config, select **Dark** as the background color.

- In Style, select **Secondary Y Axis**.
- In Layout, select **Right** to show the legend.
- In Axis, enter **province** in the Axis title field.
- In Series settings, change the color of the **Office** field to orange.

After you complete the configuration, the chart is shown in the following figure.



8. Click **Save** to save the dashboard.

If you want to delete the current chart, click More in the upper-right corner of the chart and select **Delete**.

4.6.3 Bar charts

Assume that you have read *Dashboard overview* and *Basic dashboard operations*. This section describes how to create a line chart. If you want to create a dataset or eidt a dataset, see *Create a dataset*.

A bar chart shows comparisons among discrete categories. You can use a bar chart to visualize data changes over a period of time or comparisons among discrete categories. For example, you can show the comparison of the traffic flow of vehicles over different periods of time at a crossing.

Like *Line charts*, a bar chart consists of the category axis and the value axis.

Precautions

You can set at least one dimension for the category axis such as province and product_type. In addition, you can set at least one measure for the value axis such as order_amt and profit_amt. The Colors (Dimensions) area can take only one dimension.

Note:
You can add dimensions to the Colors (Dimensions) area when only one measure is added to the Value Axis (Measures) area. Otherwise, you are not allowed to add dimensions to the Colors (Dimensions) area.

The following scenario is based on the company_sales_record dataset.

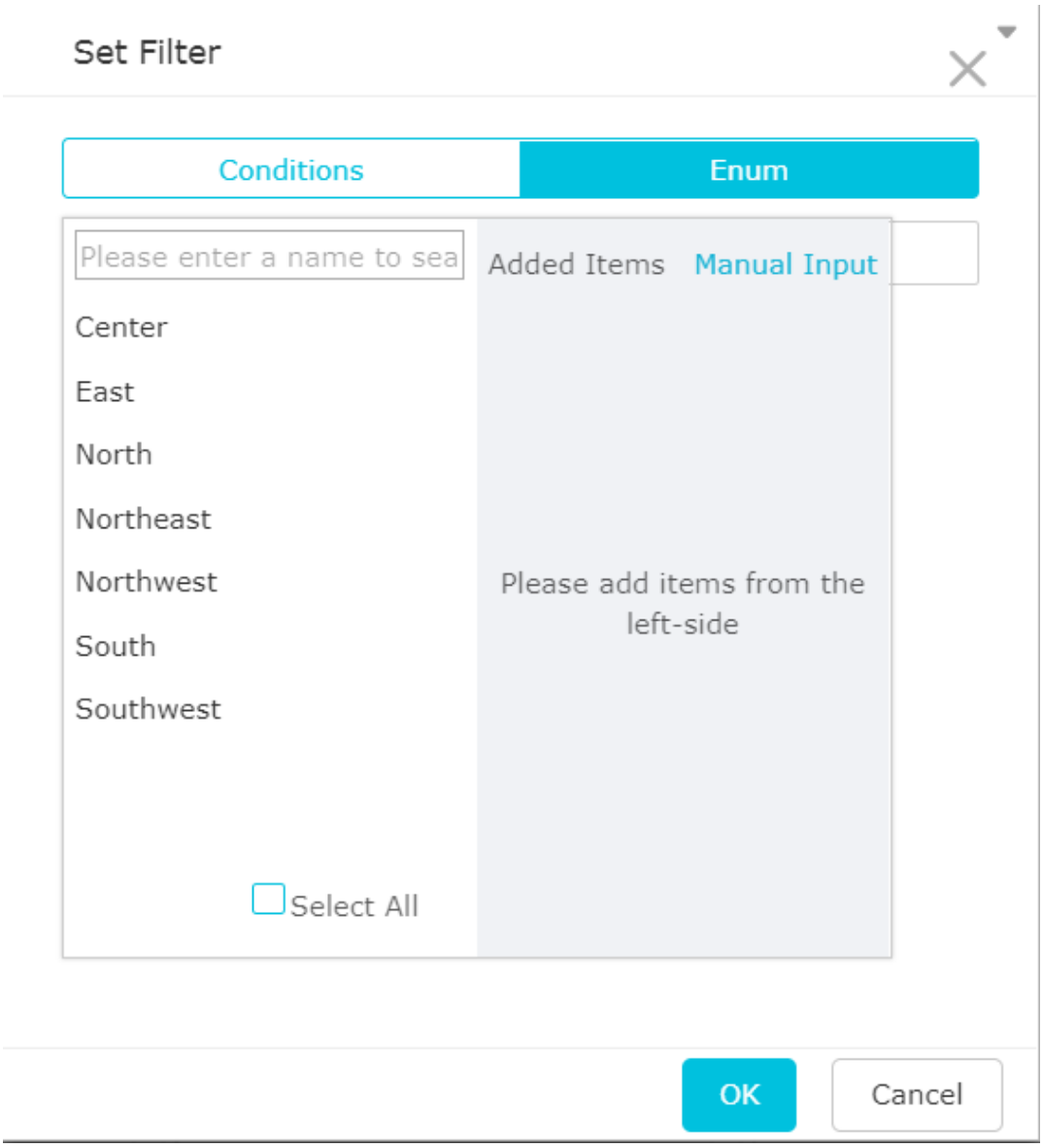
Scenario: Compare the shipping cost for different products of provinces of East China.

1. Log on to the Quick BI console.
2. Click **Datasets** to enter the Datasets page.
3. Click the **Create Dashboard** icon on the right side of the company_sales_record dataset.
4. Click the **Bar** icon, a bar chart appears in the display area of the dashboard.
5. On the dimensions list, drag **area** to the Filters area.

   You can search for the East China area by using filters as shown in the following figure.

6. Click the **Filter** icon. Select **Filter by Enumeration** in the Set Filter dialog box that appears as shown in the following figure.



7. Select East China and click **OK**.
8. Drag **province** and **product_type** to the Category Axis (Dimensions) area in turn.

> **Note:**
> You must ensure that you have changed the province field from the string type to the location type.

9. On the Measures list, drag **shipping_cost** to the Value Axis (Measures) area.
10. Drag the **product_type** field to the Colors (Dimensions) area.

> **Note:**

You can add dimensions to the Colors (Dimensions) area when only one measure is added to the Value Axis (Measures) area. Otherwise, you are not allowed to add dimensions to the Colors (Dimensions) area.

11. Click **Update** to update the chart.
12. On the **Style** tab, you can change some items such as the title, layout, legend, and axis format of a chart.

> **Note:**
> For more information about the **Style** tab, see *Configure a chart*.

13. Click **Save** to save the dashboard.

If you want to delete the current chart, click More in the top-right corner of the chart and select **Delete**.

4.6.4 Stripe charts

Assume that you have read *Dashboard overview* and *Basic dashboard operations*. This section describes how to create a stripe chart. If you want to edit a dataset or create a dataset, see *Create a dataset*.

A stripe chart shows comparisons between categories. You can use a stripe chart to visualize data changes over a period of time or comparisons between categories. For example, you can show the working progress of employees in a project group.

Like *Line charts*, a stripe chart consists of the category axis and the value axis.

Precautions

You can set at least one dimension for the category axis such as province and product_type. In addition, you can set at least one measure for the value axis such as order_amt and profit_amt. The Colors (Dimensions) area can take only one dimension.

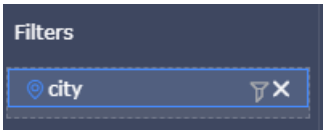
> **Note:**
> You can add dimensions to the Colors (Dimensions) area when only one measure is added to the Value Axis (Measures) area. Otherwise, you are not allowed to add dimensions to the Colors (Dimensions) area.

The following scenario uses the company_sales_record dataset.

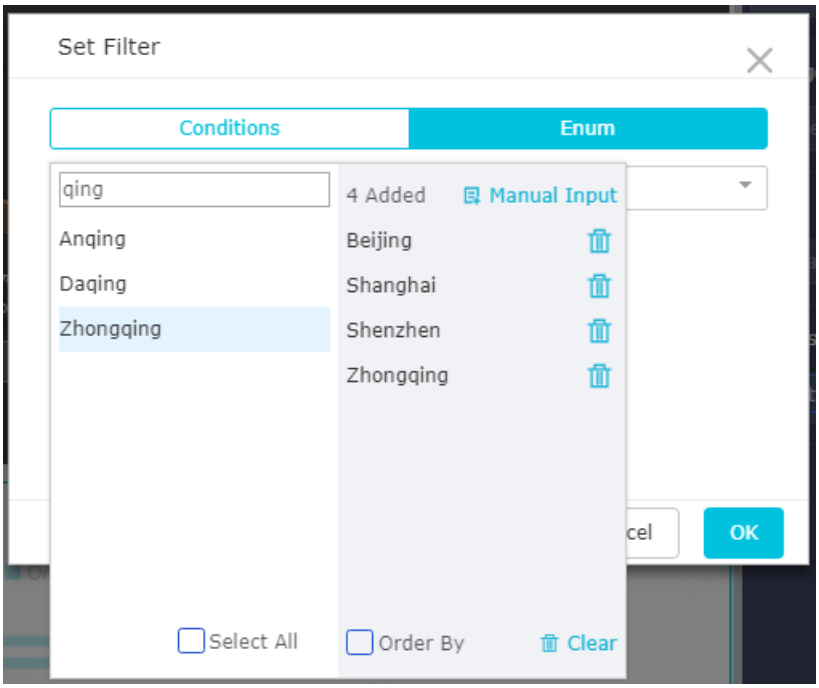
Scenario: Compare shipping costs for various products of each municipality.

1. Log on to the Quick BI console.
2. Click **Datasets** to enter the Datasets page.
3. Click **Create Dashboard** on the right side of the company_sales_record dataset.
4. Click the **Stripe** icon and then a stripe chart appears in the display area of a dashboard.
5. On the Dimensions list, drag **city** to the Filters area.

   You can search for municipalities from cities by using filters as the following figure shows.



6. Click the **Filter** icon and select **Filter by Enumeration** in the dialog box that appears.
7. Select four municipalities from the list or enter the names of them manually, and click **OK** as the following figure shows.



8. Drag the **city** and **product_type** fields to the Category Axis (Dimensions) area in turn.

   Note:
   You must ensure that you have changed the province field from the string type to the location type.

9. On the Measures list, drag **shipping_cost** to the Value Axis (Measures) area.
10. Drag **product_type** to the Colors (Dimensions) area.

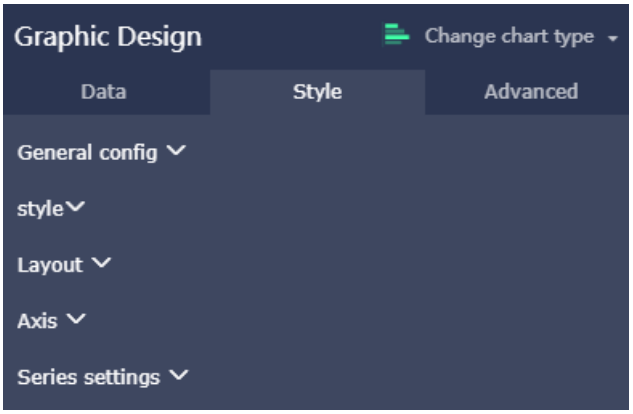
Note:

You can add dimensions to the Colors (Dimensions) area when only one measure is added to the Value Axis (Measures) area. Otherwise, you are not allowed to add dimensions to the Colors (Dimensions) area.

11. Click **Update** to update the chart.
12. On the **Style** tab, you can change some items such as the title, layout, legend, and axis format of a chart as the following figure shows.

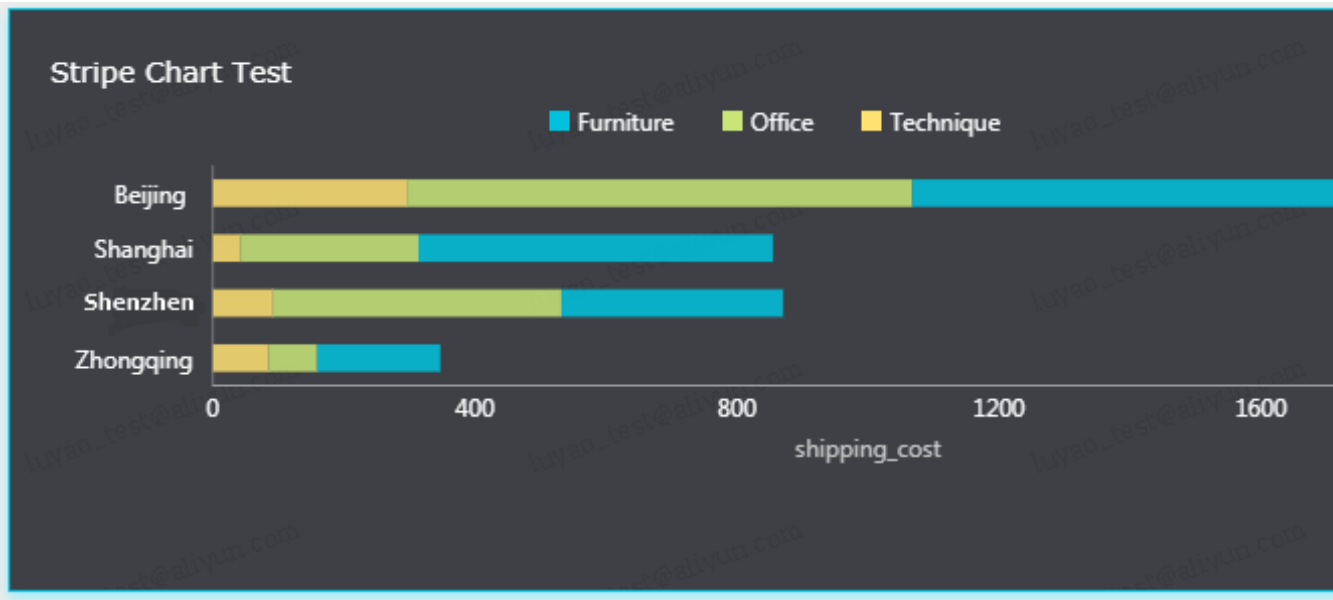
Note:

For more information about the **Style** tab, see *Configure a chart*.



- In General config, select **Dark** as the background color.
- In Style, select **Stacked**.
- In Layout, select **Top** to show the legend.
- In Axis, select **Display scale** on the X-Axis tab.

After you complete the configuration, the chart is shown in the following figure.



13. Click **Save** to save the dashboard.

If you want to delete the current chart, click More in the top-right corner of the chart and select **Delete** to delete the current chart.

4.6.5 Pie charts

Assume that you have read *Dashboard overview* and *Basic dashboard operations*. This section describes how to create a line chart. If you want to edit a dataset or create a dataset, see *Create a dataset*.

A pie chart shows a series of values for items in a dimension. Each item shown in a pie chart has a unique color or texture. Each sector in a pie chart represents one item in the dimension. Sector size represents the proportion of the value for the selected measure that the item represents compared to the whole dimension. For example, you can show the expenditure of five social insurances and one housing fund in proportion to the total personal income or the sales volume of a certain automobile brand in proportion to the total sales volume of all the brands.

A pie chart consists of sectors. The label of a sector is determined by a dimension such as the area field and the product_type field. The degree of an angle is determined by a measure such as order_amt and profit_amt.

Precautions

You can set at least one dimension in which the number of different values is less than or equals to 12 for the Slice Label (Dimensions) area such as area and product_type. In addition, you can set at least one measure for the Arc Angle (Measures) area such as order_amt and profit_amt.

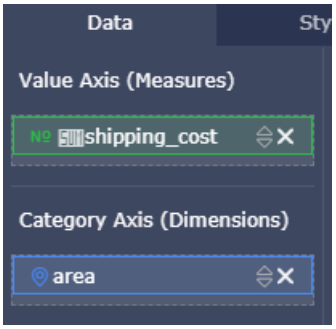
The following scenario uses the company_sales_record dataset.

Scenario: Compare shipping costs for various areas.

1. Log on to the Quick BI console.
2. Click **Datasets** to enter the Datasets page.
3. Click the **Create Dashboard** icon on the right side of the company_sales_record dataset.
4. Click the Pie icon, a pie chart appears in the display area of the dashboard.
5. On the **Data** tab, select required dimensions and measures.

   On the dimensions list, drag **area** to the Slice Label (Dimensions) area. On the Measures list, drag **shipping_cost** to the Arc Angle (Measures) as shown in the following figure.

   Note:
   You must ensure that you have changed the province field from the string type to the location type.



6. Click **Update** to update the chart.
7. On the **Style** tab, you can change some items such as the title, layout, legend, and axis format of a chart.
8. Click **Save** to save the dashboard.

If you want to delete the current chart, click More in the upper-right corner of the chart and select **Delete**.

4.6.6 Geo bubble charts

Assume that you have read *Dashboard overview* and *Basic dashboard operations*. This section describes how to create a line chart. If you want to edit a dataset or create a dataset, see *Create a dataset*.

A geo bubble chart is a map of a country or an area that is attached with bubbles to represent the amount of data. You can use a geo bubble chart to graphically display metrics for each country or

area and the distribution of these countries or areas. For example, you can show the traffic flow of tourists for each tourist attraction or show the per capita income for each area.

A geo bubble chart consists of locations and bubbles of different sizes. Locations are determined by a dimension such as the province field and the size of bubbles are determined by a measure such as shipping_cost and order_amt.

Precautions

You can set up to one dimension and the dimension type must be geographic information, such as area, province, and city. In addition, the bubble size area can be set from one to five measures.

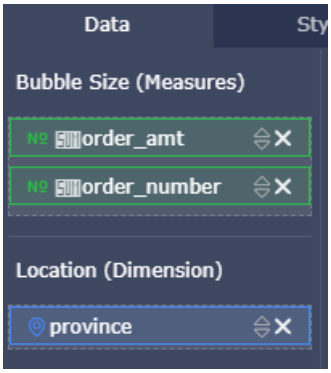
The following scenario uses the company_sales_record dataset.

Scenario: Compart the number of orders and the amount of profit for each province.

1. Log on to the Quick BI console.
2. Click **Datasets** to enter the Datasets page.
3. Click the **Create Dashboard** icon on the right side of the company_sales_record dataset.
4. Click the Geo Bubble icon and a geo bubble chart appears in the display area of a dashboard.
5. On the **Data** tab, select the required dimensions and measures.

   On the Dimensions list, drag **province** to the Location (Dimension) area. On the Measures list, drag **order_amt** and **profit_amt** to the Bubble Size (Measures) area in turn as shown in the following figure.

   Note:
   Ensure that you have changed the province field from the string type to the location type.



6. Click **Update** to update the chart.
7. On the **Style** tab, you can change some items such as the title, layout, and legend of a chart.
8. Click **Save** to save the dashboard.

If you want to delete the current chart, click More in the upper-right corner of the chart and select **Delete** to delete the current chart.

4.6.7 Geomap

This section describes how to create a geomap. For more information, see *Dashboard overview* and *Basic dashboard operations*. If you need to edit or create datasets, see *Create a dataset*.

Similar to *Geo bubble charts*, geomaps use the gradation of color to reflect data values and distribution.

A geomap is a geographical map with colors assigned to specific regions. Regions are determined by data dimensions, such as province. Colors are determined by data measures, such as order amount and profit amount.

Note

For each geomap, one dimension must be specified to determine the regions. This dimension must be about geographic information. One to five measures can be specified to determine the colors of regions.

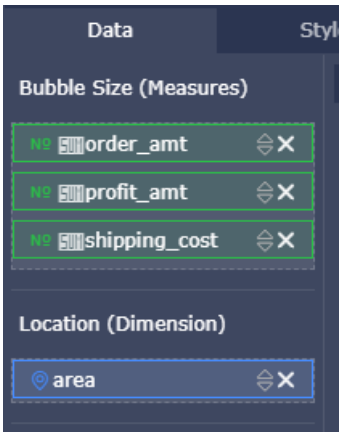
The following scenario uses the company_sales_record dataset as an example.

Scenario: Compare the transportation costs, orders amounts, and profits across multiple areas

1. Log on to the Quick BI console.
2. Click **Datasets** to open the dataset management page.
3. Select the company_sales_record dataset and click **Create Dashboard**.
4. Click the Geomap icon and the corresponding legend is displayed.
5. Click the **Data** tab to select the data dimension and data measures.

   In the Dimensions list, select **Area** and add it to Location. In the Measures list, select **Order Amount**, **Profit Amount**, and **Transportation Cost**, and add them to Color Scale, as shown in the following figure:

   Note:
   Make sure you have changed the data type of Area from String to Location.



6. Click **Update** to generate the diagram.
7. In the **Style** tab, you can change the title of the diagram, the legend, and the value range of each color.
8. Click the **Save** icon to save the dashboard.

To delete the diagram, move the mouse to the upper-right corner and click **Delete** in the toolbar that appears.

4.6.8 Table

This section describes how to create a table. For more information, see *Dashboard overview* and *Basic dashboard operations*. If you need to edit or create datasets, see *Create a dataset*.

A table can be used to display the distribution and total of specific variables. One variable defines the values in the header row and the other variable defines the values in the header column. The intersections of rows and columns contain the results of calculations on the data, such as the sum , average, maximum, minimum, or count of the data.

A table consists of rows and columns. Rows are determined by data dimensions, such as province and product type. Columns are determined by data measures, such as order quantity and profit amount.

Note

For each table, the numbers of dimensions and measures are unlimited.

The following scenario uses the company_sales_record dataset as an example.

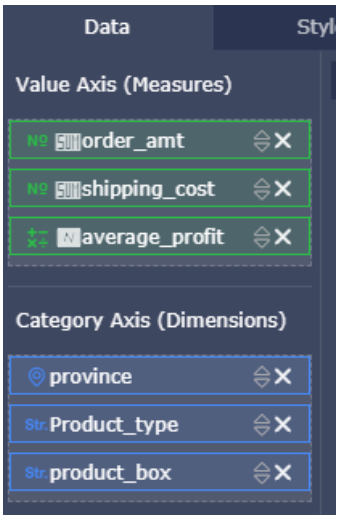
Scenario: Compare multiple types of products with different package designs, transportation costs, order quantities, and profit amounts across multiple provinces

1. Log on to the Quick BI console.

2. Click **Datasets** to open the dataset management page.
3. Select the company_sales_record dataset and click **Create Dashboard**.
4. Click the table icon and the corresponding legend is displayed.
5. Click the **Data** tab to select data dimensions and data measures.

   In the Dimensions list, select **province**, **Product_type**, and **Product_box**, and add them sequentially to Row. In the Measures list, select **order_amt**, **shipping_cost**, and **average_profit**, and add them sequentially to Column, as shown in the following figure:

   > **Note:**
   > Make sure you have changed the data type of Province from String to Location.



6. Click **Update** to generate the table.
7. In the **Style** tab, you can change the title, layout, style, and rules of the table.

   In the **Rules** section, you can change the style of the data so that viewers can quickly find important data. For example, change the font color, add marks to specific data, or highlight cells based on custom rules.
8. Click the **Save** icon to save the dashboard.

To delete the table, move the mouse to the upper-right corner and click **Delete** in the toolbar that appears.

4.6.9 Gauge

This section describes how to create a gauge. For more information, see *Dashboard overview* and *Basic dashboard operations*. If you need to edit or create datasets, see *Create a dataset*.

Similar to the dashboard in your car, a gauge clearly displays the range of a metric. You can view the progress of the current task or if a metric will exceed its range. For example, you can use a gauge to show the inventory status of an item and replenish the item accordingly.

A gauge displays the value of a metric using a pointer that moves along a scale. The angle of the pointer is determined by a data measure, such as discount or profit amount.

Note

For each gauge, one and only one measure must be specified to determine the angle of the pointer.

The following scenario uses the company_sales_record dataset as an example.

Scenario: Use a gauge to display order amounts

1. Log on to the Quick BI console.
2. Click **Datasets** to open the dataset management page.
3. Select the company_sales_record dataset and click **Create Dashboard**.
4. Click the **Gauge** icon and the corresponding legend is displayed.
5. Click the **Data** tab to select the data measure.

   Note:
   The system automatically adjusts the angle of the pointer and the text displayed in the tooltip.

   In the Measures list, select **order_amt** and add it to indicator angle area or tooltip area, as shown in the following figure:

6. Click **Update** to generate the diagram.
7. In the **Style** tab, you can change the title, layout, and tooltip of the diagram and hide the scale.
   - General Configuration: Specify the main title of the diagram, the font color, and the background color.
   - Layout: Specify whether to hide the legend.

- Color Ranges: Configure subranges.
- Series Setting: Specify the alias of the metric and the number of decimal places to keep for the metric value.

8. In the **Color Ranges** section, click **Add** to add a subrange and enter the start and end values of this range.

   For example, you can set the start value to 100 and end value to 1000. The title of the subrange can be set to Net Profit, as shown in the following figure:

9. Click **Update** and the subrange appears in the gauge.
10. Click the **Save** icon to save the dashboard.

To delete the diagram, move the mouse to the upper-right corner and click **Delete** in the toolbar that appears.

4.6.10 Radar chart

This section describes how to create a radar chart. For more information, see *Dashboard overview* and *Basic dashboard operations*. If you need to edit or create datasets, see *Create a dataset*.

Radar charts can be used to compare multiple variables under different metrics. You can easily understand the distribution of metrics across different variables. For example, you can use a radar chart to compare sales across multiple areas.

A radar chart consists of a sequence of radius labels with varying radius. Radius labels are determined by data dimensions, such as product type. Radius are determined by data measures, such as transportation cost.

Note

For each radar chart, one or two dimensions can be specified to determine radius labels. The specified dimensions must contain 3 to 12 variables. At least one measure must be specified to determine Radius.

The following scenario uses the company_sales_record dataset as an example.

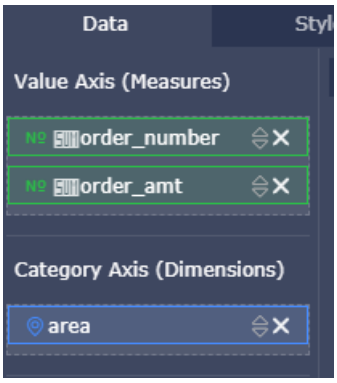
Scenario: Compare the order quantities and order amounts across areas

1. Log on to the Quick BI console.
2. Click **Datasets** to open the dataset management page.
3. Select the company_sales_record dataset and click **Create Dashboard**.
4. Click the Radar icon and the corresponding legend is displayed.

5. Click the **Data** tab to select data dimensions and data measures.

   In the Dimensions list, select **area** and add it to radius label. In the Measures list, select **order_number** and **order_amt**, and add them sequentially to radius, as shown in the following figure:

   > **Note:**
   > Make sure you have changed the data type of Area from String to Location.

6. Click **Update** to generate the chart.
7. In the **Style** tab, you can change the title, layout, and legend of the chart as follows:
8. Click the **Save** icon to save the dashboard.

To delete the chart, move the mouse to the upper-right corner and click **Delete** in the toolbar that appears.

4.6.11 Scatter chart

This section describes how to create a scatter chart. For more information, see *Dashboard overview* and *Basic dashboard operations*. If you need to edit or create datasets, see *Create a dataset*.

Scatter charts display the distribution and correlation of data.

Scatter charts use the X and Y axes to plot data points. The colors of data points are determined by data dimensions, such as product type. The X and Y axes are determined by data measures.

Notes

For each scatter chart, one dimension must be specified to determine the colors of data points. This dimension may contain up to 1,000 variables.

One to three data measures can be specified for the X axis.

One data measure can be specified for the Y axis.

The following scenario uses the company_sales_record dataset as an example.

Scenario: Compare the unit prices and order amounts of different products

1. Log on to the Quick BI console.
2. Click **Datasets** to open the dataset management page.
3. Select the company_sales_record dataset and click **Create Dashboard**.
4. Click the Scatter Chart icon and the corresponding information is displayed.
5. Click the **Data** tab to select the data dimension and data measures.

   In the Dimensions list, select **product_type** and add it to Color. In the Measures list, select **price** and **order_number**, and add them to the Y axis and X axis respectively, as shown in the following figure:

6. Click **Update** to generate the chart.
7. In the **Style** tab, you can change the title, layout, and legend of the chart.
8. Click the **Save** icon to save the dashboard.

To delete the chart, move the mouse to the upper-right corner and click **Delete** in the toolbar that appears.

4.6.12 Funnel chart

This section describes how to create a funnel chart. For more information, see *Dashboard overview* and *Basic dashboard operations*. If you need to edit or create datasets, see *Create a dataset*.

Funnel charts are suitable for analyzing business processes that involve a sequence of activities and span a long period of time. By comparing the business data between different stages, you

can easily identify potential problems in the business process. Funnel charts can be used to show the conversion rates between stages of the business process. For example, you can see the percentage of visitors who became paying customers in a funnel chart easily.

A funnel chart consists of a number of tiers with varying labels and widths. The labels of tiers are determined by data dimensions, such as area. The widths of tiers are determined by data measures, such as order amount.

Note

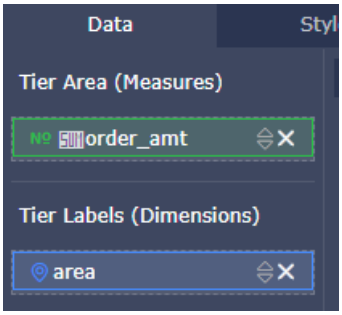
For each funnel chart, one and only one dimension must be specified to determine the labels of tiers. One and only one measure must be specified to determine the widths of tiers.

The following scenario uses the company_sales_record dataset as an example.

Scenario: Compare the order amounts across multiple areas

1. Log on to the Quick BI console.
2. Click **Datasets** to open the dataset management page.
3. Select the company_sales_record dataset and click **Create Dashboard**.
4. Click the Funnel Chart icon and the corresponding legend is displayed.
5. Click the **Data** tab to select the data dimension and data measure.

   In the Dimensions list, select **area** and add it to Tier Labels. In the Measures list, select **order_amt** and add it to Tier Area, as shown in the following figure:



6. Click **Update** to generate the chart.
7. In the **Style** tab, you can change the title, layout, and legend of the chart.
   - General Configuration: Specify the main title of the chart, the font color, and the background color.
   - Layout: Change the position of the legend.
   - Measure: Change the style of the measure and specify the number of decimal places to keep for the value.

- Tier: Specify the color of tiers.

8. Click the **Save** icon to save the dashboard.

To delete the chart, move the mouse to the upper-right corner and click **Delete** in the toolbar that appears.

4.6.13 Card chart

This section describes how to create a card chart. For more information, see *Dashboard overview* and *Basic dashboard operations*. If you need to edit or create datasets, see *Create a dataset*.

A card chart displays business data or sales performance, which enables you to visually gain insight into the business environment and quickly make strategic adjustments to optimize sales processes. It offers an effective and direct solution to discover and fix problems.

A card chart consists of a sequence of cards with multiple labels and metrics. Labels are determined by data dimensions, such as area. Metrics are determined by data measures, such as order quantity and order amount.

Note

For each card chart, one and only one dimension must be specified to determine labels. 1 to 10 measures can be specified to determine metrics.

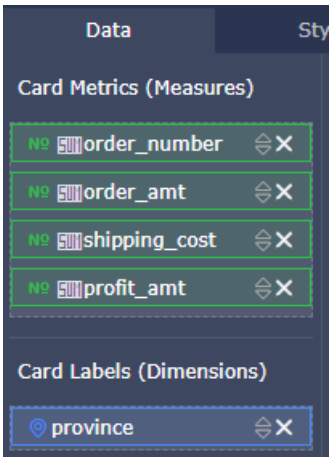
The following scenario uses the company_sales_record dataset as an example.

Scenario: Compare the order quantities, order amounts, transportation costs, and profit amounts across multiple provinces

1. Log on to the Quick BI console.
2. Click **Datasets** to open the dataset management page.
3. Select the company_sales_record dataset and click **Create Dashboard**.
4. Click the **Card Chart** icon, and the corresponding legend is displayed.
5. Click the **Data** tab to select the data dimension and data measures.

   In the Dimensions list, select **province** and add it to Card Labels. In the Measures list, select **order_number**, **order_amt**, **shipping_cost**, and **profit_amt**, and add them to Card Metrics, as shown in the following figure:

   Note:
   Make sure you have changed the data type of Province from String to Location.



6. Click **Update** to generate the chart.
7. In the **Style** tab, you can change the title and style of the chart, and the number of cards in each row.
   - General Configuration: Specify the main title of the chart, the font color, and the background color.
   - Card Setting: Specify the template and style of the card.
   - Series Setting: Specify the alias of the metric and the number of decimal places to keep for the metric value.
8. Click the **Save** icon to save the dashboard.

To delete the chart, move the mouse to the upper-right corner and click **Delete** in the toolbar that appears.

4.6.14 TreeMap

This section describes how to create a treemap. For more information, see *Dashboard overview* and *Basic dashboard operations*. If you need to edit or create datasets, see *Create a dataset*.

Treemaps can be used to compare the proportions between variables easily.

A treemap consists of nested rectangles of multiple different sizes and labels. The labels of rectangles are determined by data dimensions, such as package design. The sizes of rectangles are determined by data measures, such as transportation cost.

Note

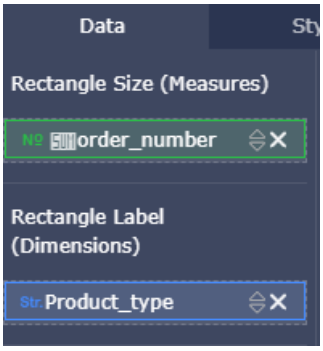
For each treemap, one and only one dimension can be specified to determine the labels of rectangles. This dimension can have a maximum of 12 dimension values. One and only measure can be specified to determine the sizes of rectangles.

The following scenario uses the company_sales_record dataset as an example.

Scenario: Compare the order quantities of different products

1. Log on to the Quick BI console.
2. Click **Datasets** to open the dataset management page.
3. Select the company_sales_record dataset and click **Create Dashboard**.
4. Click the TreeMap icon and the corresponding legend is displayed.
5. Click the **Data** tab to select the data dimension and data measure.

   In the Dimensions list, select **Product_type** and add it to Rectangle Label. In the Measures list, select **order_number** and add it to Rectangle Size, as shown in the following figure:



6. Click **Update** to generate the diagram.
7. In the **Style** tab, you can change the title and legend of the treemap.
8. Click the **Save** icon to save the dashboard.

To delete the diagram, move the mouse to the upper-right corner and click **Delete** in the toolbar that appears.

4.6.15 Polar chart

This section describes how to create a polar chart. For more information, see *Dashboard overview* and *Basic dashboard operations*. If you need to edit or create datasets, see *Create a dataset*.

A polar chart can be used to display data changes over time or compare metric values. It is suitable for enumeration. For example, compare data across different regions.

Similar to *Pie charts*, a polar chart consists of sectors of varying slice labels and arc radiuses. Slice labels are determined by data dimensions, such as area and product type. Arc radiuses are determined by data measures, such as order quantity and order amount.

Note

For each polar chart, one and only one dimension must be specified to determine slice labels. This dimension must contain 3 to 12 variables. One and only one measure must be specified to determine arc radiuses.

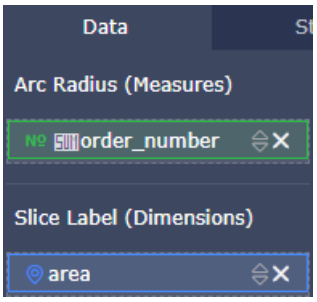
The following scenario uses the company_sales_record dataset as an example.

Scenario: Compare the order quantities across multiple areas

1. Log on to the Quick BI console.
2. Click **Datasets** to open the dataset management page.
3. Select the company_sales_record dataset and click **Create Dashboard**.
4. Click the Polar Chart icon and the corresponding legend is displayed.
5. Click the **Data** tab to select the data dimension and data measure.

   In the Dimensions list, select **area** and add it to Slice Label. In the Measures list, select **order_number** and add it to Arc Radius, as shown in the following figure:

   Note:
   Make sure you have changed the data type of area from String to Location.

6. Click **Update** to generate the chart.
7. In the **Style** tab, you can change the title and legend of the chart, the style of the metric values.
8. Click the **Save** icon to save the dashboard.

To delete the chart, move the mouse to the upper-right corner and click **Delete** in the toolbar that appears.

4.6.16 Word cloud

This section describes how to create a word cloud. For more information, see *Dashboard overview* and *Basic dashboard operations*. If you need to edit or create datasets, see *Create a dataset*.

A word cloud displays the frequency of words clearly. It is suitable for creating user personas and user tags.

A word cloud consists of words of varying sizes. Labels are determined by data dimensions, such as customer name and product name. Metrics are determined by data measures, such as profit amount and unit price.

Note

For each word cloud, one and only one dimension must be specified to determine labels. One and only one measure must be specified to determine metrics.

The following scenario uses the company_sales_record dataset as an example.

Scenario: Compare the order quantities across different provinces

1. Log on to the Quick BI console.
2. Click **Datasets** to open the dataset management page.
3. Select the company_sales_record dataset and click **Create Dashboard**.
4. Click the Word Cloud icon and the corresponding legend is displayed.
5. Click the **Data** tab to select the data dimension and data measure.

   In the Dimensions list, select **province** and add it to Word. In the Measures list, select **order_number** and add it to Word Size, as shown in the following figure:

   Note:
   Make sure you have changed the data type of Province from String to Location.

6. Click **Update** to generate the chart.
7. In the **Style** tab, you can change the title of the chart.
8. Click the **Save** icon to save the dashboard.

To delete the chart, move the mouse to the upper-right corner and click **Delete** in the toolbar that appears.

4.6.17 Tornado Chart

This section describes how to create a tornado chart. For more information, see *Dashboard overview* and *Basic dashboard operations*. If you need to edit or create datasets, see *Create a dataset*.

A tornado chart is the combination of a tornado diagram and a funnel chart. Tornado diagrams can be used to compare different contrast indicators between two objects, for example, the income and education levels between residents in two cities. Funnel charts can be used to show the conversion rates between stages of the business process and are suitable for business process analysis. You can see the percentage of visitors who turned into paying customers in a funnel chart easily.

A tornado chart combines the features of tornado diagrams and funnel charts. For example, when you compare the percentage of the migrant population, employment rate, and commercial housing transactions in Beijing and Shanghai, if a conversion relation exists between two items, the tornado chart can show the difference between multiple contrast indicators, and also display the conversion rates between comparisons.

If no conversion relation exists, the diagram functions the same as a tornado diagram. If a conversion relation exists between two comparisons and only one contrast indicator is defined, the diagram functions the same as a funnel chart.

A tornado chart consists of a comparison and multiple contrast indicators. Comparisons are determined by data dimensions, such as area and product type. Contrast indicators are determined by data measures, such as order quantity and order amount.

Note

For each tornado chart, one and only one dimension must be specified to determine the comparison. At least one measure must be specified to determine contrast indicators.

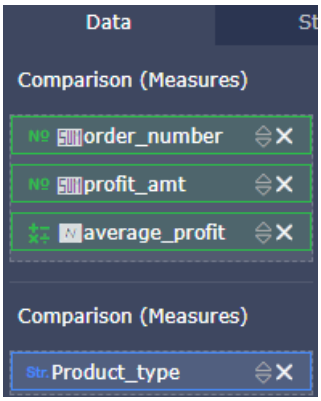
The following scenario uses the company_sales_record dataset as an example.

Scenario: Compare the order quantities, profits, and average profits of different types of products.

1. Log on to the Quick BI console.
2. Click **Datasets** to open the dataset management page.
3. Select the company_sales_record dataset and click **Create Dashboard**.
4. Click the tornado chart icon and the corresponding legend is displayed.

5. Click the **Data** tab to select the data dimension and data measures.

   In the Dimensions list, select **Product_type** and add it to Comparison. In the Measures list, select **order_number**, **profit_amt**, and **average_profit**, and add them sequentially to contrast indicator, as shown in the following figure:



6. Click **Update** to generate the diagram.
7. In the **Style** tab, you can change the title and layout of the diagram and hide the conversion rate.
   - tornado charts offer two types of layouts. You can also change the layout based on your habits.
   - You can also change the position of the legend, adjust the color scheme of the diagram, and hide the conversion rates.
8. Click the **Save** icon to save the dashboard.

To delete the diagram, move the mouse to the upper-right corner and click **Delete** in the toolbar that appears.

4.6.18 Hierarchy chart

This section describes how to create a hierarchy. For more information, see *Dashboard overview* and *Basic dashboard operations*. If you need to edit or create datasets, see *Create a dataset*.

A hierarchy uses the tree structure to display and organize hierarchical data. It is an implementation of the enumeration method. For example, when reviewing the revenues of the prefecture-level cities in one province, the relationships between the province and prefecture-level cities can be displayed as parent-child structures. Hierarchys are used for analyzing hierarchical data and creating staff organization charts and department organization charts.

A hierarchy contains a sequence of nodes with different labels and metrics. Each node label is determined by data dimensions, such as area and product type. Each node metric is determined by data measures, such as order quantity and order amount.

Note

For each hierarchy, at least two dimensions must be specified to determine node labels. These two dimensions should have a parent-child relationship. At least one measure must be specified to determine the node metric.

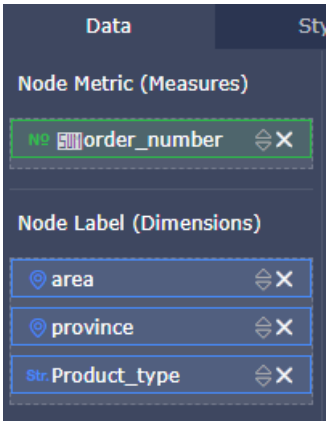
The following scenario uses the company_sales_record dataset as an example.

Scenario: Compare the order quantities of different products across provinces and areas

1. Log on to the Quick BI console.
2. Click **Datasets** to open the dataset management page.
3. Select the company_sales_record dataset and click **Create Dashboard**.
4. Click the hierarchy icon and the corresponding information is displayed.
5. Click the **Data** tab to select data dimensions and data measure.

   In the Dimensions list, select **Area**, **Province**, and **Product Type**, and add them sequentially to Node Label. This order determines their hierarchical relationships in the diagram. In the Measures list, select **Order Quantity** and add it to Node Metric, as shown in the following figure:

   Note:
   Make sure you have changed the data type of Area and Province from String to Location.

6. Click **Update** to generate the diagram.
7. In the **Style** tab, you can change the title, layout, and design of the diagram.

- Hierarchys support three types of layouts. You can also change the style of tree nodes based on your habits. The root nodes are merged together by default.
- You can edit the levels of hierarchy in the menu bar and manually enter the number of levels. You can specify a primary path based on the field information so that the primary path has a different color to other paths. You can also add a toolbar to the diagram so that you can easily edit the diagram in preview or through the dashboard.

8. Click the **Save** icon to save the dashboard.

To delete the diagram, move the mouse to the upper-right corner and click **Delete** in the toolbar that appears.

4.6.19 Conversion path

This section describes how to create a conversion path. For more information, see *Dashboard overview* and *Basic dashboard operations*. If you need to edit or create datasets, see *Create a dataset*.

A conversion path uses metrics such as page visits, page views (PVs) and unique visitors (UVs) to calculate the conversion rates on your website. This helps you understand the overall performance of marketing campaigns and measure the sales volume of certain products. Conversion paths are suitable for analyzing digital marketing campaigns and e-commerce websites. For example, you can use conversion paths to find out which products are in great demand and what are the peak hours of your business.

Currently, conversion paths support the following three dimensions: previous page, current page, and next page, and include the following measures: PV, UV, conversion rate, and bounce rate. You need to specify the PVs or UVs for all three pages.

Note

For each conversion path, one and only one dimension must be specified for each of the three pages. The dimensions must have hierarchical relationship. The order of the dimensions determines the hierarchical relationship in the diagram. One and only one measure must be specified for each of the three PVs or UVs, the conversion rate, and the bounce rate.

The three dimensions, the conversion rate, and the bounce rate are required fields. You can choose to specify only the PVs or UVs for all three pages. Error messages are shown if fields are incorrectly specified when adding the dimensions and measures.

The following uses the page_source_target_state dataset as an example.

Scenario: Use PVs to demonstrate the conversion and bounce rates on different pages

1. Log on to the Quick BI console.
2. Click **Datasets** to open the dataset management page.
3. Select the page_source_target_state dataset and click **Create Dashboard**.
4. Click the Conversion Path icon and the corresponding legend is displayed.
5. Click the **Data** tab to select data dimensions and data measures.

   In the Dimensions list, select the **Previous Page**, **Current Page**, and **Next Page**, and add them to the corresponding fields. This order determines the hierarchical relationship between pages in the diagram. In the Measures list, select the **Conversion Rate** and **Bounce Rate**, and add them to the corresponding fileds. You also need to select three PVs or UVs for the corresponding pages.
6. Click **Update** to generate the diagram.
7. In the **Style** tab, you can change the title and layout of the diagram.

   The conversion path provides three layouts and allows you to highlight the main path or popup windows.
8. Click the **Save** icon to save the diagram.

To delete the diagram, move the mouse to the upper-right corner and click **Delete** in the toolbar that appears.

4.6.20 LBS thermal map

Note:
LBS thermal maps are only available to **Quick BI Pro** users.

This section describes how to create an LBS thermal map. For more information, see *Dashboard overview* and *Basic dashboard operations*. If you need to edit or create datasets, see *Create a dataset*.

Similar to *Geomap*, LBS thermal maps use the gradation of color to reflect data distribution across regions.

An LBS thermal map consists of geographic regions with different colors. Regions are determined by data dimensions, or the latitude and longitude values of the location, such as province. Colors are determined by data measures, such as order amount and profits.

Note

For each LBS thermal map, one and only one dimension must be specified to determine the regions. This dimension must be about geographic information. One to five measures can be specified to determine the colors of regions.

The following scenario uses the company_sales_record dataset as an example.

Scenario: Compare the transportation costs and order quantities across provinces

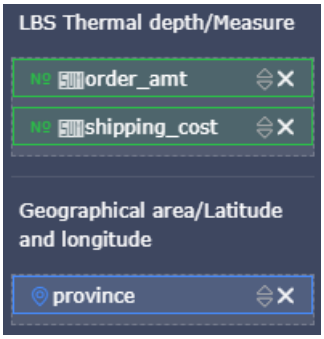
1. Log on to the Quick BI console.
2. Click **Datasets** to open the dataset management page.
3. Select the company_sales_record dataset and click **Create Dashboard**.

> **Note:**
> If you are using the **Professional** edition, you need to select between the **Standand Mode** and **Full Screen Mode**. The following example uses the **Standard Mode**.

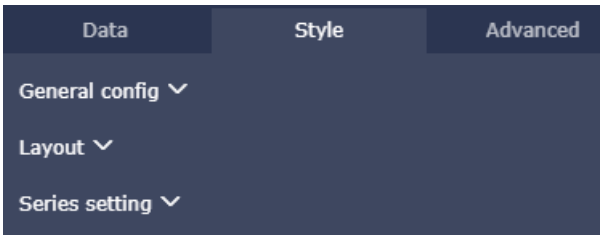
4. Click the **LBS thermal map** icon and the corresponding legend is displayed.
5. Click the **Data** tab to select the data dimension and measures.

   In the Dimensions list, select **province** and add it to Geographical area/Latitude and longitude. In the Measures list, select **order_amt** and **shipping_cost**, and add them to LBS Thermal depth, as shown in the following figure:

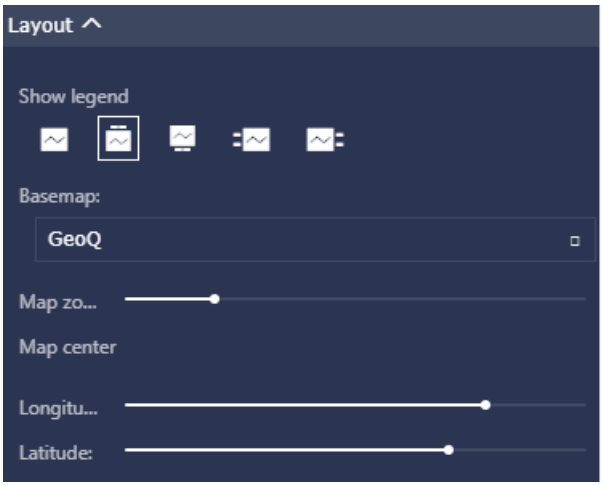
> **Note:**
> Make sure you have changed the data type of Province from String to Location.



6. Click **Update** to generate the diagram.
7. In the **Style** tab, you can change the title and layout of the diagram and the style of specific fields.



- In the **Layout** section, you can set the basemap to **Google Maps** and the updated diagram is as follows:



8. Click the **Save** icon to save the dashboard.

   In the upper right corner, select**More >** > **Delete**to delete the diagram.

For more information about the administrative regions of China, see *Administrative regions of China*.

4.6.21 LBS bubble map

Note:
LBS bubble map is only applied to **Quick BI Professional Edition**.

This section describes how to create an LBS bubble map. For more information, see *Dashboard overview* and *Basic dashboard operations*. If you need to edit or create datasets, see *Create a dataset*.

Similar to *Geo bubble charts*, an LBS bubble map is a map that uses the sizes of bubbles distributed across the map to reflect data. It provides multiple basemaps for you to choose from, such as AMAP, Google Maps, and GeoQ. LBS bubble maps allow you to understand the

distribution and values of metrics across countries and regions in an easy and visual way. For example, LBS bubble maps can display the passenger numbers across tourist attractions or the per capita incomes across regions.

An LBS bubble map consists of geographic regions with bubbles of varying sizes. Regions are determined by data dimensions, such as province. LBS bubble sizes are determined by data measures, such as transportation cost and order quantity.

Note

For each LBS bubble map, you must only specify one dimension to determine the regions. This dimension must be about geographic information, such as area, province, and city. One to five measures can be specified to determine LBS bubble sizes.

The following scenario uses the company_sales_record dataset as an example.

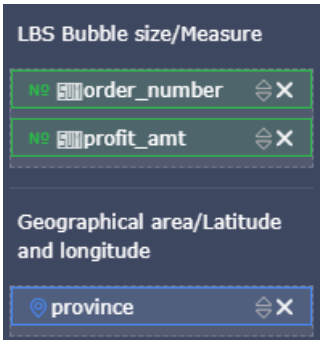
Scenario: Compare the order amounts and profit amounts across provinces

1. Log on to the Quick BI console.
2. Click **Datasets** to open the dataset management page.
3. Select the company_sales_record dataset and click **Create Dashboard**.

> **Note:**
> If you are using the **Professional** edition, you need to select between the **Standand Mode** and **Full Screen Mode**. The following example uses the **Standard Mode**.

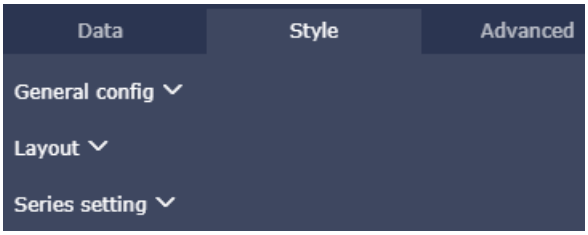
4. Click the **LBS Bubble Map** icon and the corresponding legend is displayed.
5. Click the **Data** tab to select the data dimension and data measures.

   In the Dimensions list, select **province** and add it to Location. In the Measures list, select **order_number** and **profit_amt**, and add them to LBS bubble size, as shown in the following figure:

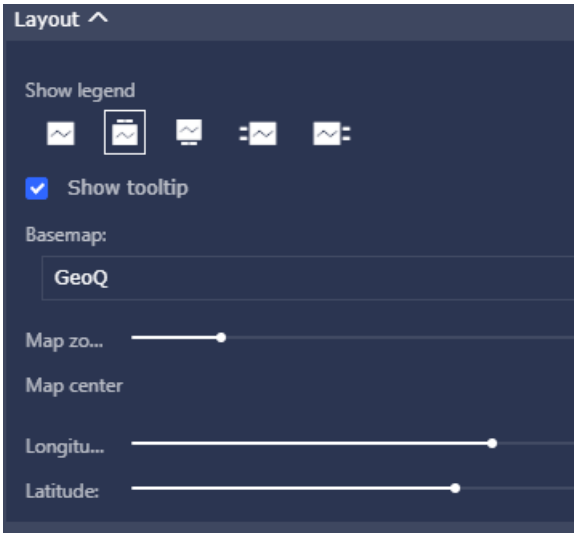


6. Click **Update** to generate the diagram.

7. In the **Style** tab, you can change the title and layout of the diagram and the style of specific fields.



- In the **Layout** section, you can change the basemap, resize the map, and adjust the coordinates of the longitude and latitude. For example, when the basemap is set to **GeoQ**, the updated diagram is as follows:



- In the **Series Settings** section, you can change the number of **`decimal places`** of order amounts to 2. The updated diagram is as follows:

8. Click the **Save** icon to save the dashboard.

In the upper-right corner, select**More >** > **Delete**to delete the diagram.

4.6.22 LBS flying line map

> **Note:**
> LBS flying line map is only applied to **Quick BI Professional Edition**.

This section describes how to create an LBS flying line map. For more information, see *Dashboard overview* and *Basic dashboard operations*. If you need to edit or create datasets, see *Create a dataset*.

An LBS flying line map is a map that uses LBS flying line metrics to display the relations between data across two or more geographic regions.

An LBS flying line map consists of geographic regions connected with LBS flying line metrics. Regions are determined by data dimensions, such as province and city. LBS flying line metrics are determined by data measures, such as transportation cost and order quantity.

Note

For each LBS flying line map, two dimensions must be specified to determine regions. This dimension must be about geographic information, such as area, province, and city. One and only one measure must be specified to determine LBS flying line metrics.

The following scenario uses the company_sales_record dataset as an example.

Scenario: Display the costs of transportation from areas to provinces

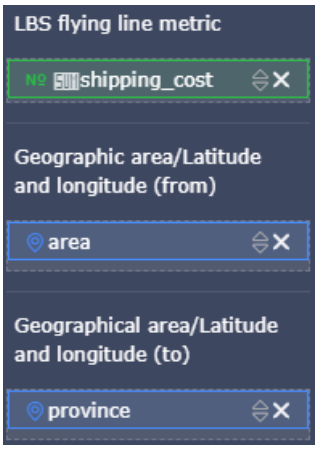
1. Log on to the Quick BI console.
2. Click **Datasets** to open the dataset management page.
3. Select the company_sales_record dataset and click **Create Dashboard**.

   > **Note:**
   > If you are using the **Pro** edition, you need to select between the **Standand Mode** and **Full Screen Mode**. The following example uses the **Standard Mode**.
4. Click the **LBS flying line map** icon and the corresponding legend is displayed.
5. Click the **Data** tab to select data dimensions and data measure.

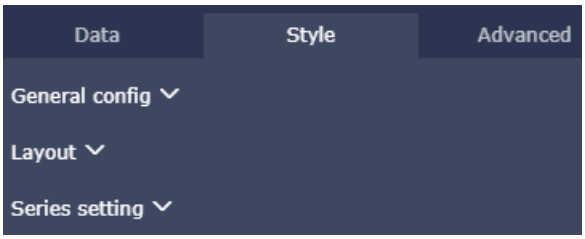
   In the Dimensions list, select **area** and add it to Geographic area/Latitude and longitude (from). Select **province** and add it to Geographical area/Latitude and longitude (to). In the Measures list, select **shipping_cost** and add it to LBS flying line metric, as shown in the following figure:

Note:

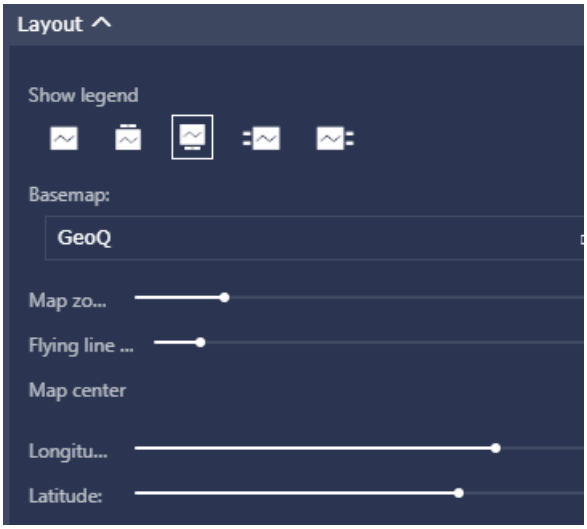
Make sure you have changed the data type of Area and Province from String to Location.



6. Click **Update** to generate the diagram.
7. In the **Style** tab, you can change the title and layout of the diagram, and change series settings as follows:



In the **Layout** section, you can set the **basemap** to AMAP and move the **Legend** to the bottom of the map. The updated diagram is as follows:



Note:

A dot is moving along each LBS flying line metric to indicate the direction of traffic. You can set **Time** to adjust its speed. A greater value indicates a lower speed.

8. Click the **Save** icon to save the dashboard.

   To delete the diagram, move the mouse to the upper-right corner and click **More** > **Delete** in the toolbar that appears.

4.6.23 Pivot table

Note:
Pivot tables are only applied to **Quick BI Professional Edition**.

This section describes how to create a pivot table. For more information, see *Dashboard overview* and *Basic dashboard operations*. If you need to edit or create datasets, see *Create a dataset*.

A pivot table can be used to display the summary statistics of variables and allows you to drill into data in a tree structure. One variable defines the values in the header row and the other variable defines the values in the header column. The intersections of rows and columns contain the results of calculations on the data, such as the sum, average, maximum, minimum, or count of the data.

Similar to *Table*, a pivot table consists of rows and columns. Rows are determined by data dimensions, such as province and product type. Columns are determined by data measures, such as order quantity and profit amount.

Note

For each pivot table, the numbers of dimensions and measures are unlimited.

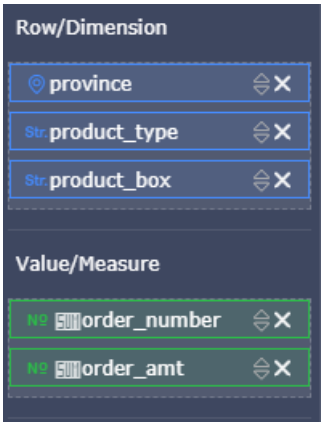
The following scenario uses the company_sales_record dataset as an example.

Scenario: Compare multiple types of products with different package designs, order quantities, and order amounts across multiple provinces

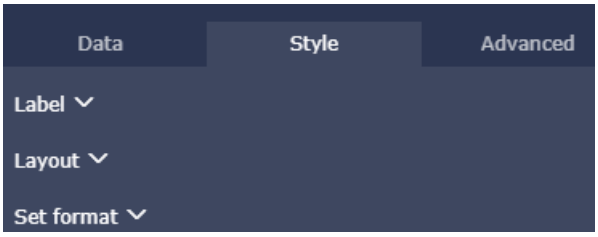
1. Log on to the Quick BI console.
2. Click **Datasets** to open the dataset management page.
3. Select the company_sales_record dataset and click **Create Dashboard**.
   - If you are using the **Professional Edition**, you need to select between the **Standand Mode** and **Full Screen Mode**. The following scenario uses the **Standard Mode** as an example.
4. Click the **Pivot Table** icon and the corresponding legend is displayed.
5. Click the **Data** tab to select data dimensions and data measures.

In the Dimensions list, select **province**, **product_type**, and **product_box**, and add them sequentially to Row. In the Measures list, select **order_number** and **order_amt**, and add them sequentially to Column, as shown in the following figure:

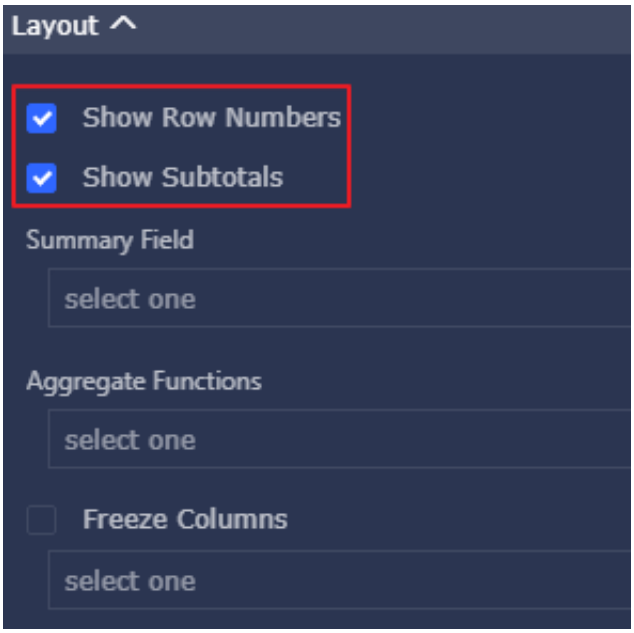
> **Note:**
> Make sure you have changed the data type of Province from String to Location.

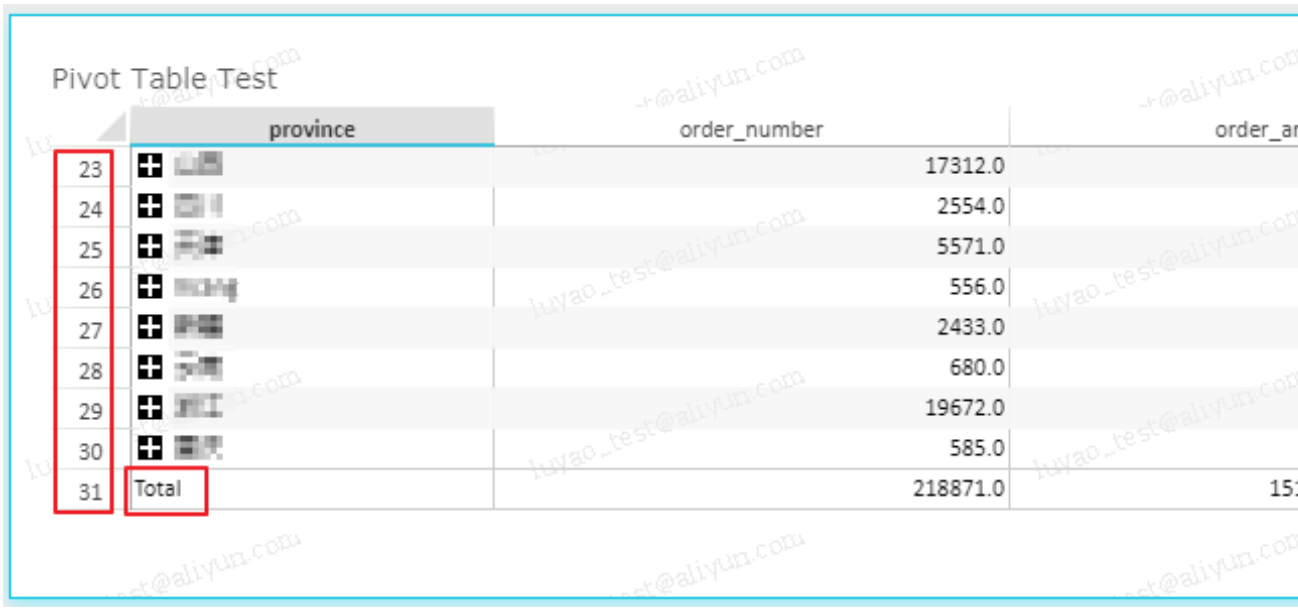


6. Click **Update** to generate the table.
7. In the **Style** tab, you can change the title, layout, and style of the table as follows:

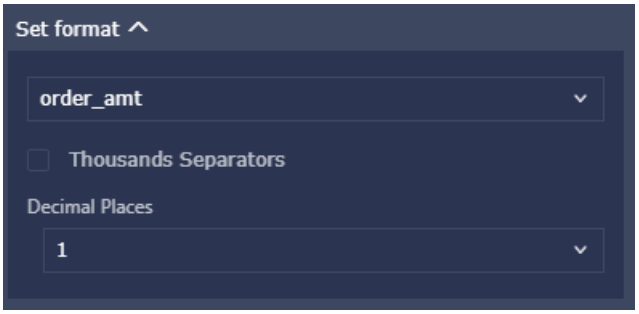


- In the **Layout** section, select **`Show Row Numbers`** and **`Add Summary Statistics`**. The updated table is as follows:



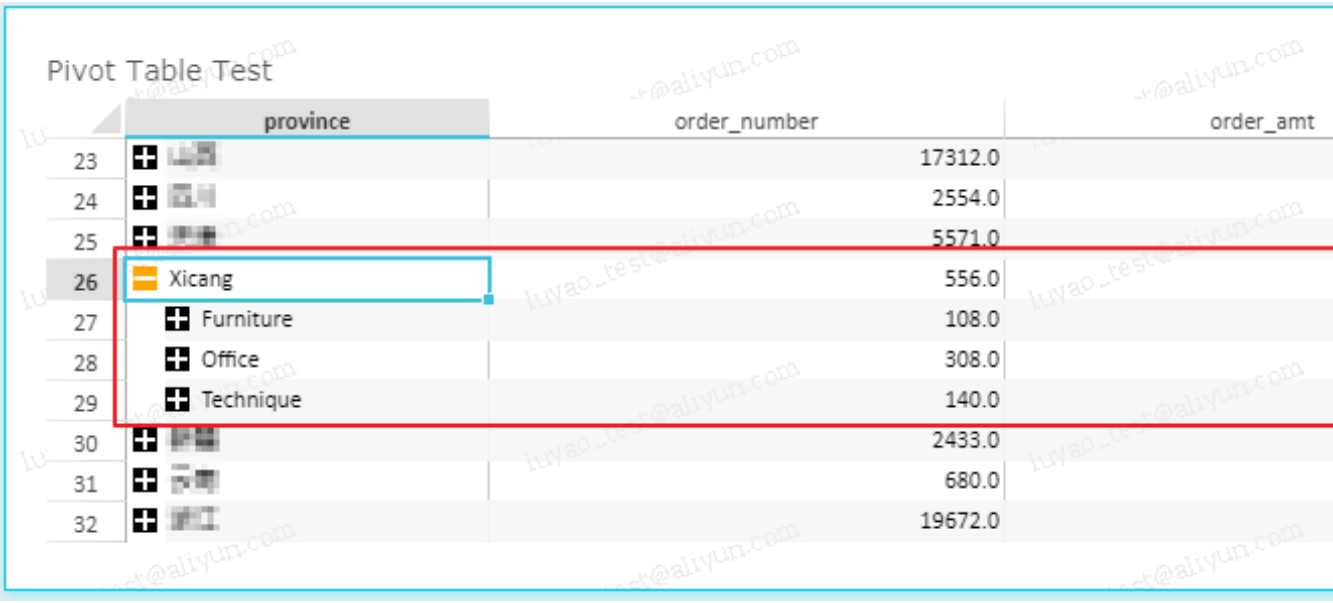


- In the **Set Format** section, set the number of decimal places of `order_amt` to 1. The updated table is as follows:



8. Click the **Plus** sign ahead of a value to drill into the data in a tree structure.

For example, when you click the plus sign ahead of **Shanghai**, data about product types and packet designs are displayed in a tree structure.



9. Click the **Save** icon to save the dashboard.

   In the upper-right corner, select **More** > **Delete** to delete the table.

4.6.24 Progress bar

This section describes how to create a progress bar. For more information, see *Dashboard overview* and *Basic dashboard operations*. If you need to edit or create datasets, see *Create a dataset*.

A progress bar displays the progress of the current task.

A progress bar consists of multiple progress metrics. Progress metrics are determined by data measures, such as order quantity.

Note

- For each progress bar, one to five measures can be specified to determine the progress metrics.
- To use progress bars, you need to click **Style** > **Series Setting** to specify the maximum and minimum values of progress metrics.

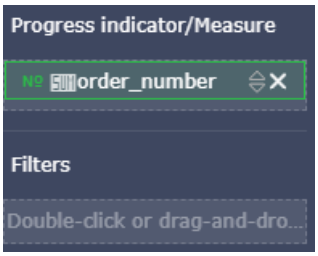
The following scenario uses the company_sales_record dataset as an example.

Scenario: Use a progress bar to display the order quantity

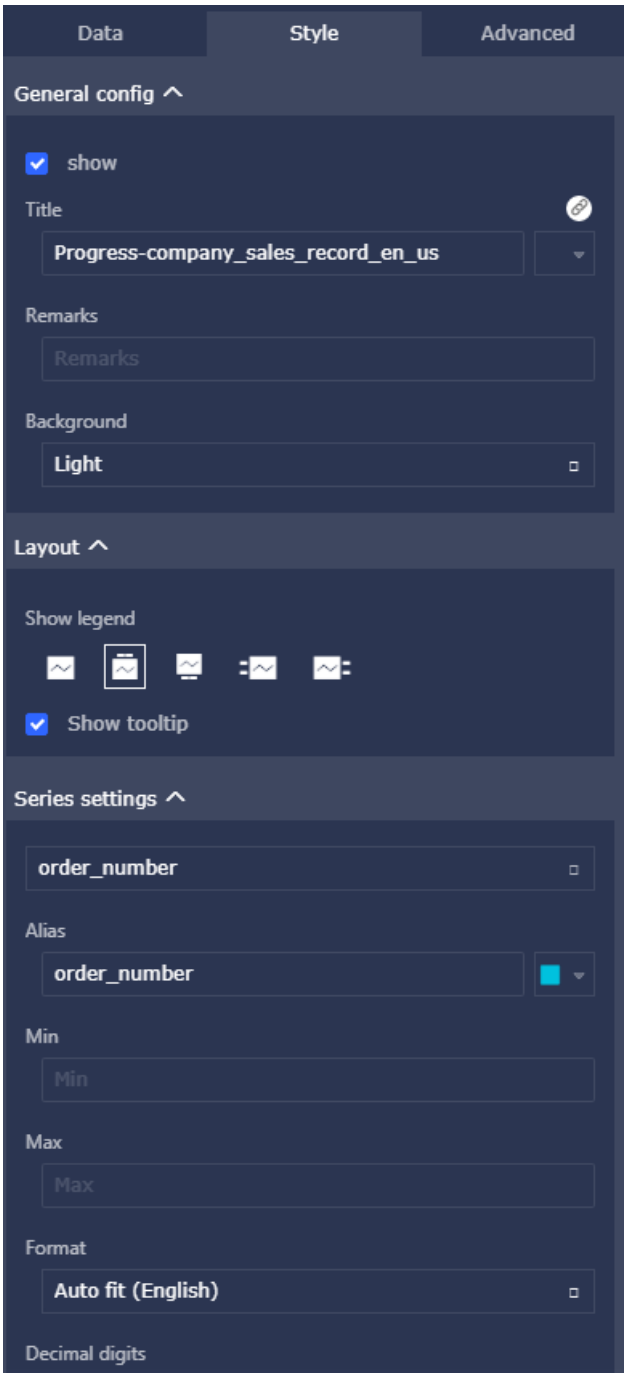
1. Log on to the Quick BI console.

2. Click **Datasets** to open the dataset management page.
3. Select the company_sales_record dataset and click **Create Dashboard**.
4. Click the **Progress bar** icon and the corresponding legend is displayed.
5. Click the **Data** tab to select data measures.

   In the Measures list, select **order_number** and add it to Progress indicator/Measure, as shown in the following figure:



6. Click **Update** to generate the chart.
7. In the **Style** tab, you can change the title and legend of the diagram, and set an alias for the metric, as follows.



8. Click the **Save** icon to save the dashboard.

To delete the chart, move the mouse to the upper-right corner and click **Delete** in the toolbar that appears.