

# Alibaba Cloud Quick BI

Quick Start

Issue: 20181212

# Legal disclaimer

---

Alibaba Cloud reminds you to carefully read and fully understand the terms and conditions of this legal disclaimer before you read or use this document. If you have read or used this document, it shall be deemed as your total acceptance of this legal disclaimer.

1. You shall download and obtain this document from the Alibaba Cloud website or other Alibaba Cloud-authorized channels, and use this document for your own legal business activities only. The content of this document is considered confidential information of Alibaba Cloud. You shall strictly abide by the confidentiality obligations. No part of this document shall be disclosed or provided to any third party for use without the prior written consent of Alibaba Cloud.
2. No part of this document shall be excerpted, translated, reproduced, transmitted, or disseminated by any organization, company, or individual in any form or by any means without the prior written consent of Alibaba Cloud.
3. The content of this document may be changed due to product version upgrades, adjustments, or other reasons. Alibaba Cloud reserves the right to modify the content of this document without notice and the updated versions of this document will be occasionally released through Alibaba Cloud-authorized channels. You shall pay attention to the version changes of this document as they occur and download and obtain the most up-to-date version of this document from Alibaba Cloud-authorized channels.
4. This document serves only as a reference guide for your use of Alibaba Cloud products and services. Alibaba Cloud provides the document in the context that Alibaba Cloud products and services are provided on an "as is", "with all faults" and "as available" basis. Alibaba Cloud makes every effort to provide relevant operational guidance based on existing technologies. However, Alibaba Cloud hereby makes a clear statement that it in no way guarantees the accuracy, integrity, applicability, and reliability of the content of this document, either explicitly or implicitly. Alibaba Cloud shall not bear any liability for any errors or financial losses incurred by any organizations, companies, or individuals arising from their download, use, or trust in this document. Alibaba Cloud shall not, under any circumstances, bear responsibility for any indirect, consequential, exemplary, incidental, special, or punitive damages, including lost profits arising from the use or trust in this document, even if Alibaba Cloud has been notified of the possibility of such a loss.
5. By law, all the content of the Alibaba Cloud website, including but not limited to works, products, images, archives, information, materials, website architecture, website graphic layout, and webpage design, are intellectual property of Alibaba Cloud and/or its affiliates. This intellectual property includes, but is not limited to, trademark rights, patent rights, copyrights, and trade

secrets. No part of the Alibaba Cloud website, product programs, or content shall be used, modified, reproduced, publicly transmitted, changed, disseminated, distributed, or published without the prior written consent of Alibaba Cloud and/or its affiliates. The names owned by Alibaba Cloud shall not be used, published, or reproduced for marketing, advertising, promotion, or other purposes without the prior written consent of Alibaba Cloud. The names owned by Alibaba Cloud include, but are not limited to, "Alibaba Cloud", "Aliyun", "HiChina", and other brands of Alibaba Cloud and/or its affiliates, which appear separately or in combination, as well as the auxiliary signs and patterns of the preceding brands, or anything similar to the company names, trade names, trademarks, product or service names, domain names, patterns, logos, marks, signs, or special descriptions that third parties identify as Alibaba Cloud and/or its affiliates).

6. Please contact Alibaba Cloud directly if you discover any errors in this document.



# 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.	 <b>Danger:</b> 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.	 <b>Warning:</b> 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.	 <b>Note:</b> 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.	 <b>Note:</b> You can use <b>Ctrl + A</b> to select all files.
>	Multi-level menu cascade.	<b>Settings &gt; Network &gt; Set network type</b>
<b>Bold</b>	It is used for buttons, menus, page names, and other UI elements.	Click <b>OK</b> .
Courier font	It is used for commands.	Run the <code>cd /d C:/windows</code> command to enter the Windows system folder.
<i>Italics</i>	It is used for parameters and variables.	<code>bae log list --instanceid Instance_ID</code>
[] or [a b]	It indicates that it is a optional value, and only one item can be selected.	<code>ipconfig [-all -t]</code>
{ } or {a b}	It indicates that it is a required value, and only one item can be selected.	<code>swich {stand / slave}</code>

# Contents

---

<b>Legal disclaimer.....</b>	<b>I</b>
<b>Generic conventions.....</b>	<b>I</b>
<b>1 Setup Quick BI with ApsaraDB for RDS.....</b>	<b>1</b>
<b>2 Example: Create a dashboard.....</b>	<b>7</b>
<b>3 Example: Create a workbook.....</b>	<b>27</b>
Log on to Quick BI main page.....	27
Add a data source.....	27
Create a data set.....	29
Create a workbook.....	29
Insert Chart (Quick BI Professional edition).....	30
Insert query editor (Quick BI Professional edition).....	31
<b>4 Create a report.....</b>	<b>32</b>
4.1 Files management.....	32
4.2 Workbook overview.....	34
4.3 Dashboard overview.....	36
4.4 Dashboard basic operations.....	40
4.4.1 Switch datasets.....	40
4.4.2 Search for the dimensions field and the measures field.....	41
4.4.3 Set chart data.....	41
4.4.4 Filter fields.....	43
4.4.5 Sort data.....	46
4.4.6 Associate multiple charts.....	47
4.4.7 Common widgets.....	48
4.4.8 Standard dashboard.....	55
4.4.9 Fullscreen mode.....	57
4.5 Create charts.....	62
4.5.1 Line chart.....	62
4.5.2 Bar chart.....	64
4.5.3 Pie chart.....	66
4.5.4 Geo bubble map.....	68
4.5.5 Geo map.....	69
4.5.6 Table.....	70
4.5.7 Gauge.....	72
4.5.8 Radar chart.....	73
4.5.9 Scatter chart.....	75
4.5.10 Funnel chart.....	76
4.5.11 Card chart.....	77
4.5.12 Tree map.....	79
4.5.13 Polar chart.....	80
4.5.14 Word cloud.....	81

4.5.15 Tornado chart.....	83
4.5.16 Hierarchy chart.....	84
4.5.17 Conversion path.....	86
4.5.18 LBS thermal map.....	87
4.5.19 LBS flying line map.....	90
4.5.20 Progress chart.....	92





# 1 Setup Quick BI with ApsaraDB for RDS

---

This chapter shows how to configure Quick BI to render data from ApsaraDB for RDS. The following information uses a MySQL database as an example.

Assume that you already have an existing MySQL database running and data to render.

The configuration includes the following three parts.

- Configure Quick BI
- Create a dashboard
- Publish a dashboard

## Prerequisites

- Obtain MySQL credentials.

For more information, see [Create account and database for MySQL 5.7 High-availability Edition/5.5/5.6 instances](#), [Create account and database for MySQL 5.7 Basic Edition](#), and [Create master account](#).

- Obtain a free trial Quick BI or a purchased version.

For more information, see [Purchase, upgrade, and renew](#).

## Configure Quick BI

### Copy IP ranges from the Quick BI

1. Log on to the Quick BI console.
2. Select **Workbench** > **Data sources**, to enter the data source management page
3. Select **Create** > **From Cloud Database** > **MySQL**, to create a new data source from the Cloud database.
4. Copy IP ranges, which are displayed in the blue area. See the following figure.

### Add Data Source

\*Name:

Display name in the data source list

\*Database Endpoint:

Hostname

\*Port:

3306

\*Database:

Database name

\*Username:

Hostname or IP

\*Password:

Password

ⓘ Note: Add the following IP ranges to the whitelist of your databases.

11.193.158.0/24, 11.193.162.0/24,  
47.74.161.0/24, 47.74.162.0/24

Add

Close

Test Connection

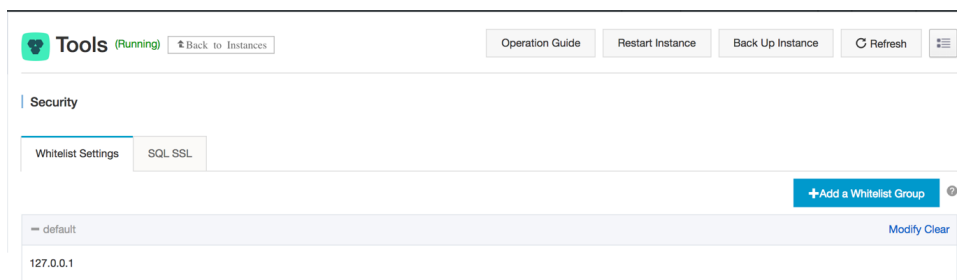
## Obtain database endpoint from the RDS

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

The Internet Address is the database endpoint.

## Set whitelist on RDS

1. Select **Security** in the left-side navigation pane to visit the Security 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 a Whitelist Group** to add a new whitelist group.
5. Enter a new group name and paste IP ranges in the whitelist area.
6. Click **OK** to complete the whitelist settings.

For more information, see [Set whitelist](#).

### Verify the data source connection

1. Go back to the Quick BI data sources management page.
2. Select **Create > From Cloud Database > MySQL**.
3. Enter the required information for connecting to a data source, as shown in the following figure.

### Add Data Source

\*Name:

Display name in the data source list

\*Database Endpoint:

Hostname

\*Port:

3306

\*Database:

Database name

\*Username:

Hostname or IP

\*Password:

Password

ⓘ Note: Add the following IP ranges to the whitelist of your databases.11.193.158.0/24, 11.193.162.0/24, 47.74.161.0/24, 47.74.162.0/24

Add

Close

Test Connection

- Name: The name of the data source.
- Database Endpoint: Enter the host name or Internet address.
- Port: Enter the correct port number.
- Database: The name of the database to be connected to.
- User Name: The user name of the database.
- Password: The password of the database.

4. Click **Test Connection** to perform the data source connectivity test.

If the connection goes well, a successful information is displayed.

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

For more information, see [Create a cloud data source](#) and [Upload local files](#).

## Create a dashboard

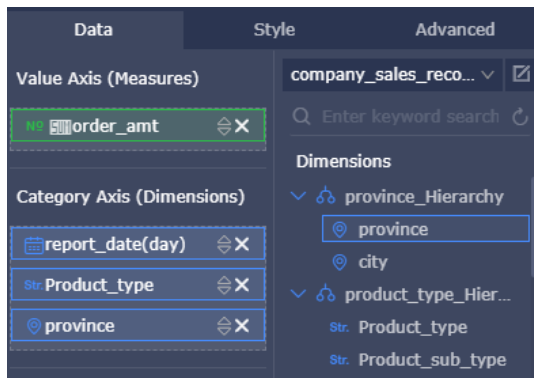
1. Select a data table in the data source management page.

2. Click **Create Dataset** next to the data table.
3. Click **Dashboards** to enter the dashboard management page.
4. Select **Create > Dashboard** to enter the dashboard editing page.
5. Select or search for the dataset that you want to analyze, as shown in following figure.



For more information about dashboard basic operations, see [Dashboard basic operations](#).

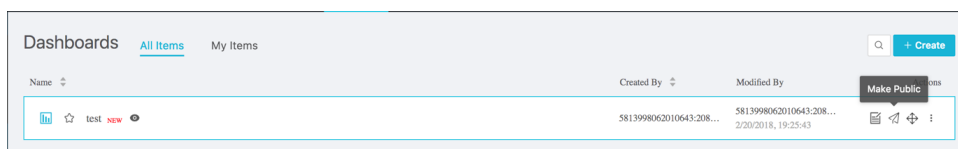
6. Double-click a chart icon, for example, the line chart. The line chart sample is displayed.
7. Select required dimension fields and measurement fields.



8. Click **Update** to complete the line chart creation.
9. Click **Save** to save current dashboard.

## Make public a dashboard

1. Select a dashboard in the dashboard management page.
2. Click **Make Public** icon next to the selected dashboard.



3. Select an expiration date, and select Regenerate URL.
4. Copy the generated URL to your browser to view the dashboard contents.

## Further reading

You can get further detailed information from the following addresses.

- [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 [Dashboard basic operations](#) and [Charts overview](#).

The dashboard supports the following two modes.

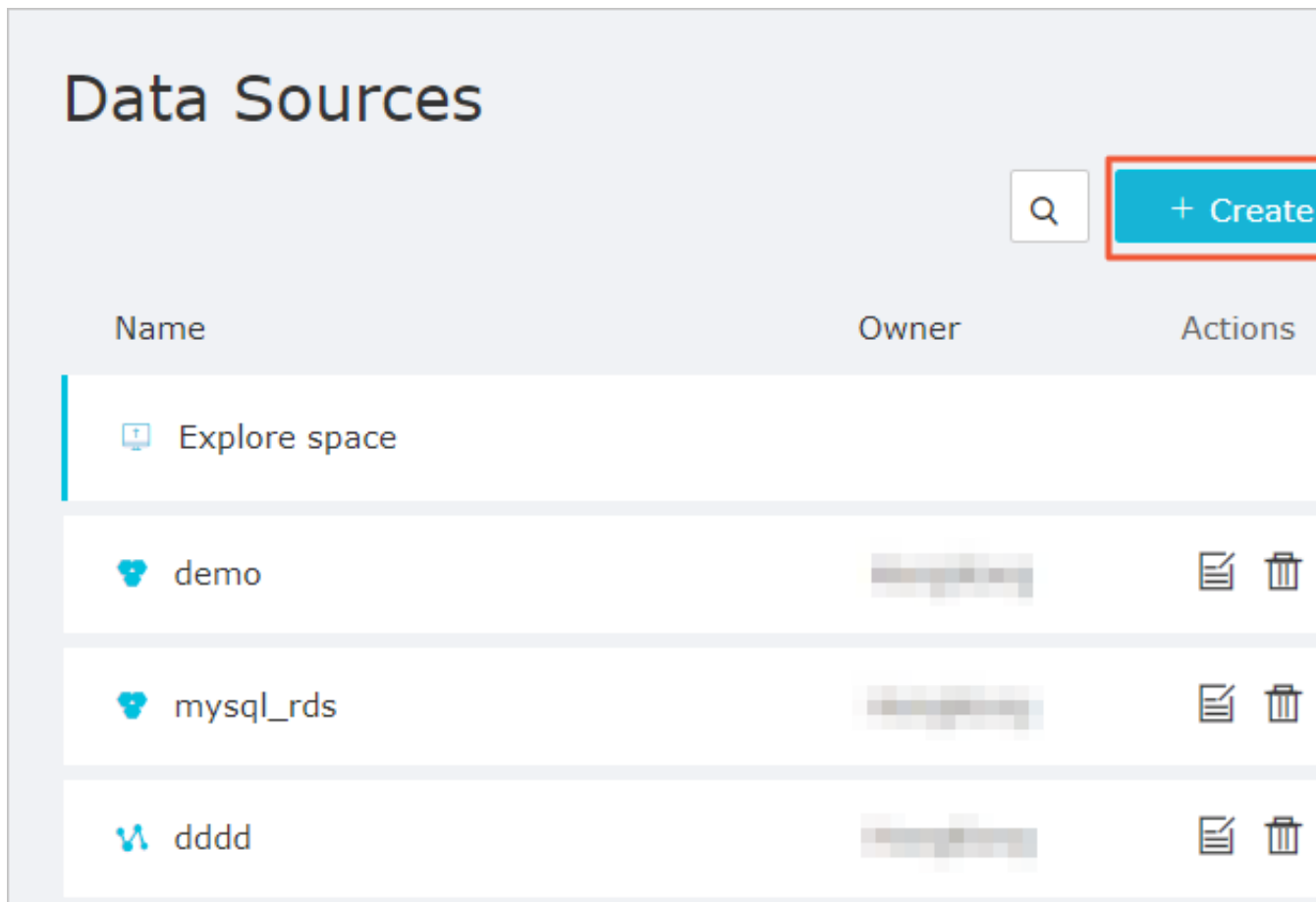
- Standard dashboard
- Full-Screen mode (Quick BI pro only)

### 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 a workbook](#).



Add Data Source

\*Name:

Display name in the data source list

\*Database Endpoint:

Hostname

\*Port:

3306

\*Database:

Database name

\*User Name:

User name

\*Password:

Password

ⓘ

Note: Add the following IP ranges to the whitelist of your databases.11.193.11.0/24,10.152.162.0/24,47.91.171.0/24,47.89.61.0/24,11.193.200.0/24,47.52.215.0/24

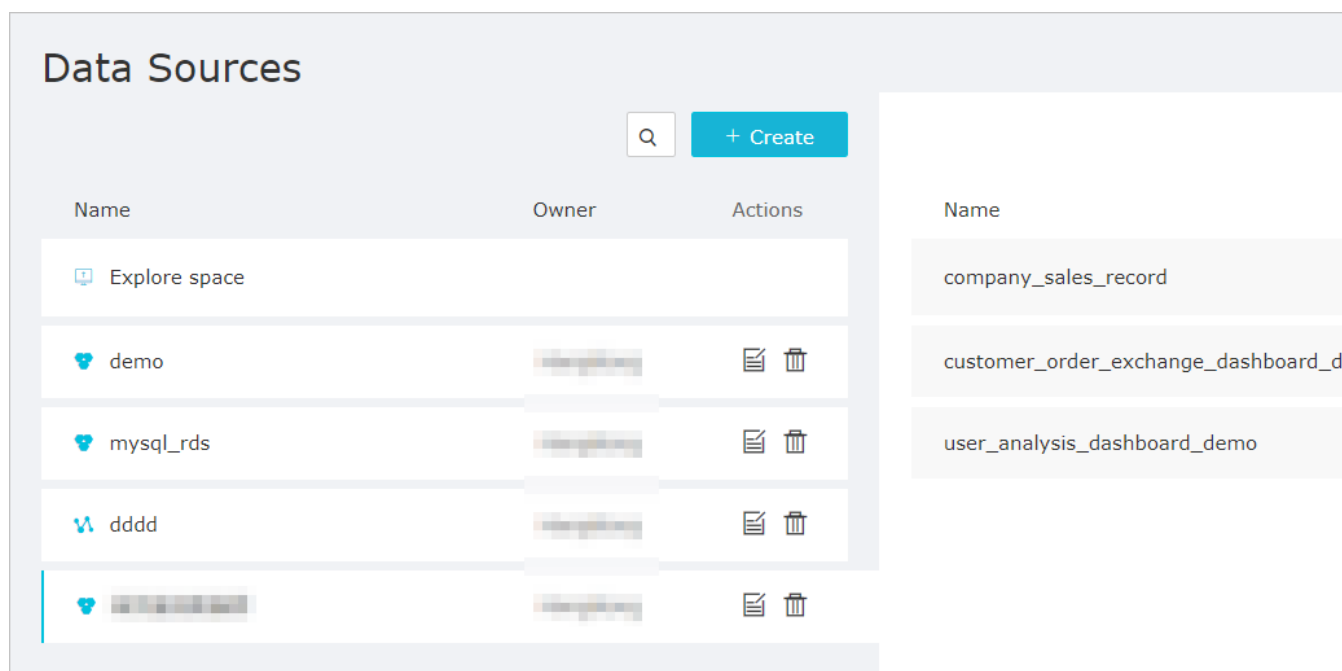
Add

Close

Test Connection

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.



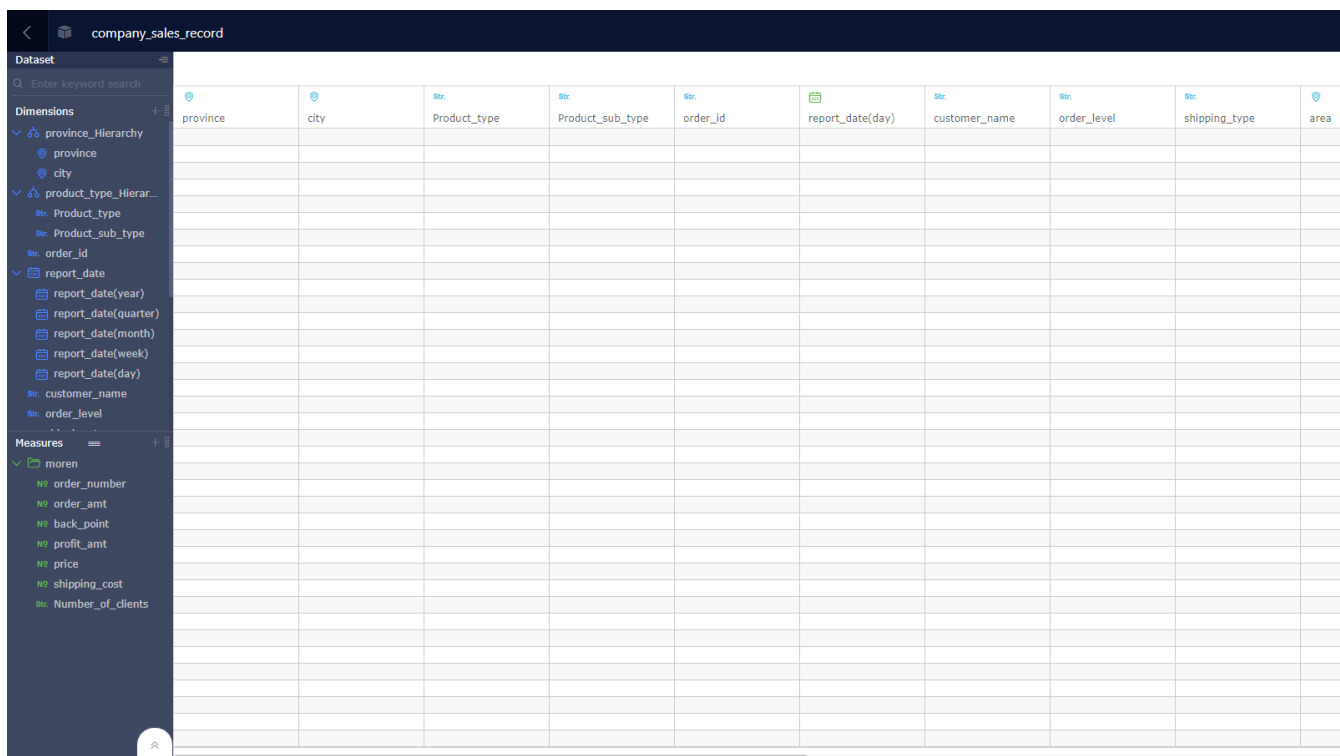
After the dataset is created, it is automatically saved to the **My Dataset** folder. New is displayed for the newly created dataset, which allows you to fast locate the dataset.

### 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.



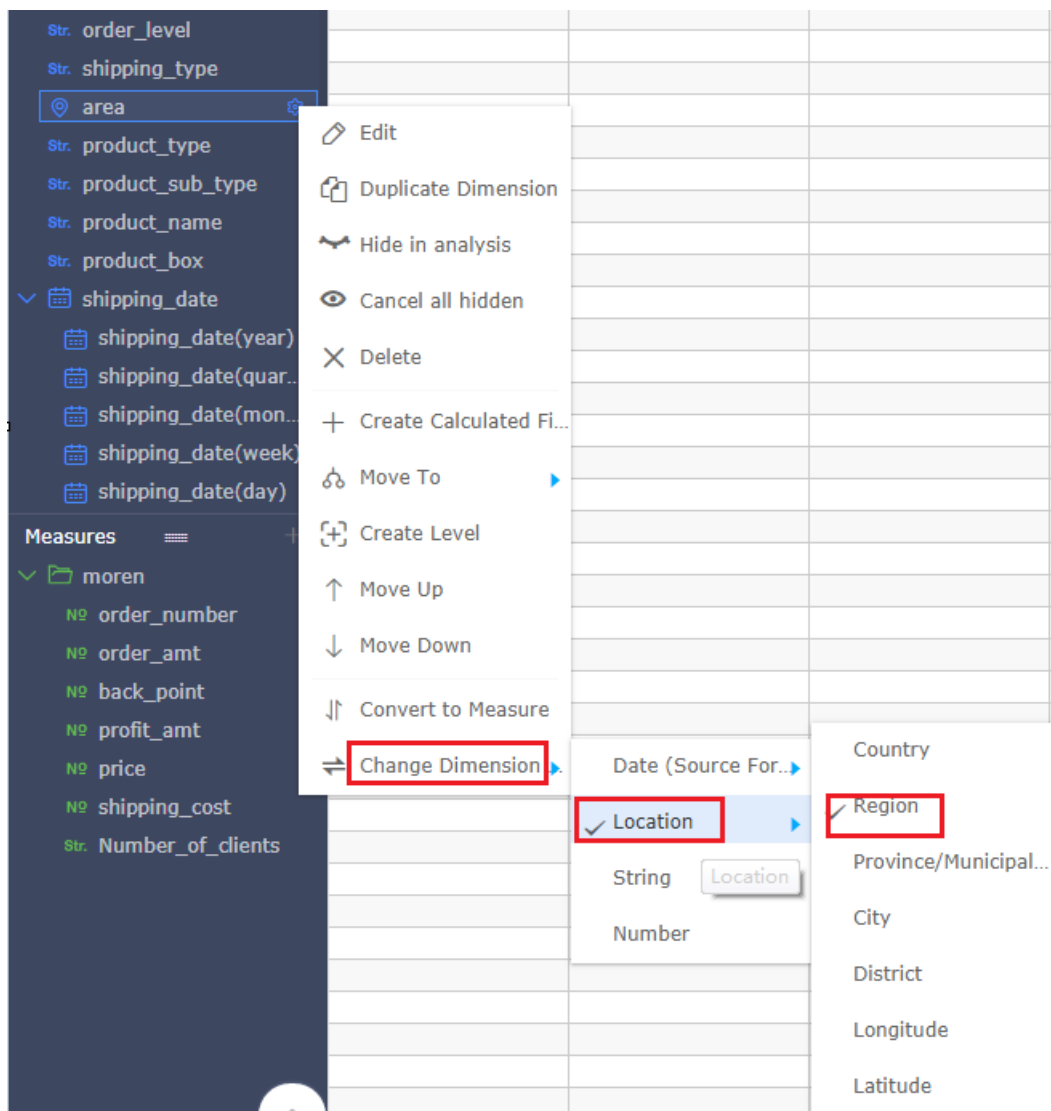
To create a map chart, such as a geo bubble or geo map, select dimension fields that contain geographical information, and then switch their field type from String to Geographical Information. Otherwise, the map cannot be displayed.

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

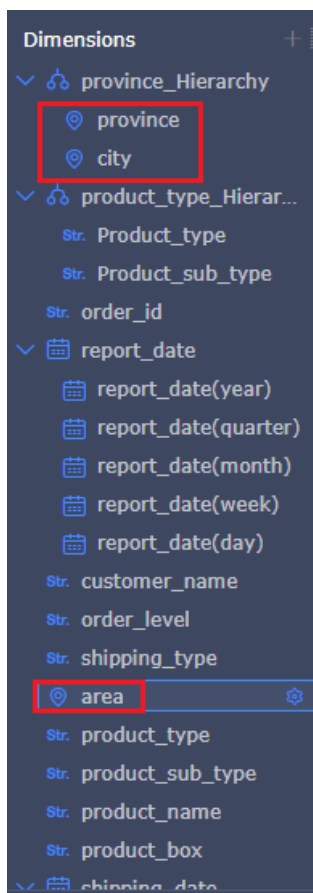


#### Note:

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**.

province	city	Str. Product_type	Str. Product_sub_type	Str. order_id	report_date(day)	Str. customer_name	Str. order_level	Str. shipping_type
Box	13729	20130101	Clark	L1	Plain	South	Office	Box

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

Str. Product_sub_type	Str. order_id	report_date(day)	Str. customer_name	Str. order_level	Str. shipping_type	area	Str. product_type	Str. product_sub_type
Box	13729	20130101	Clark	L1	Plain	South	Office	Box

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.



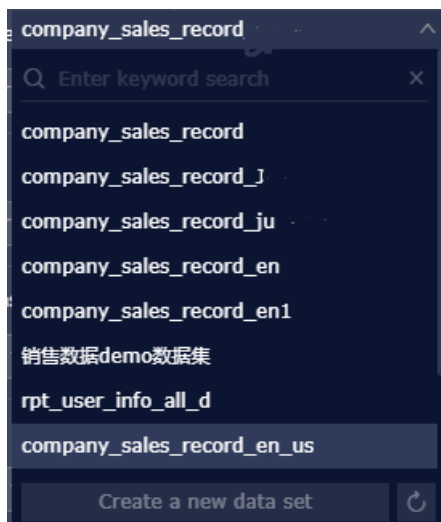
#### Note:

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.

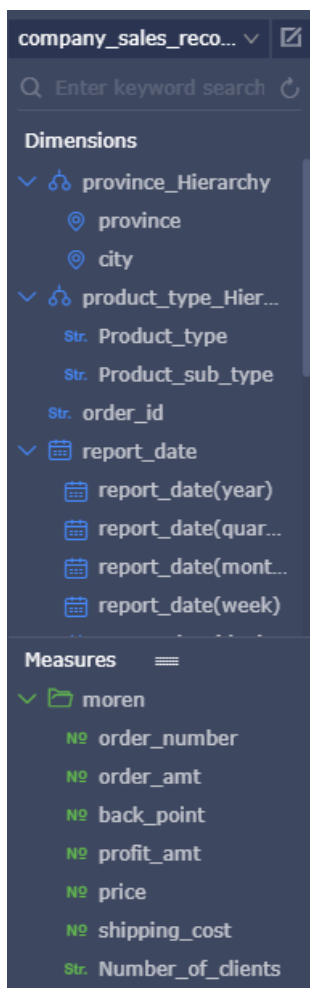


### Add a dataset to a dashboard

#### 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.

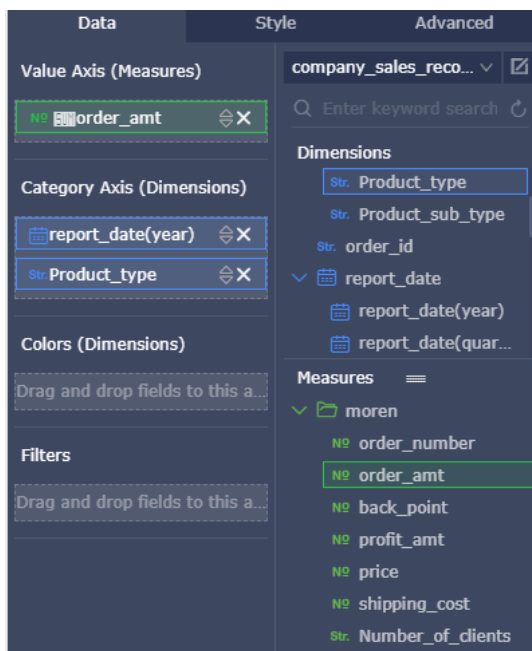
### Create a data chart (Standard dashboard)

This section only describes how to create a bar chart. For more information about how to create other types of charts, see [Charts overview](#).

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 [Dashboard basic 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.

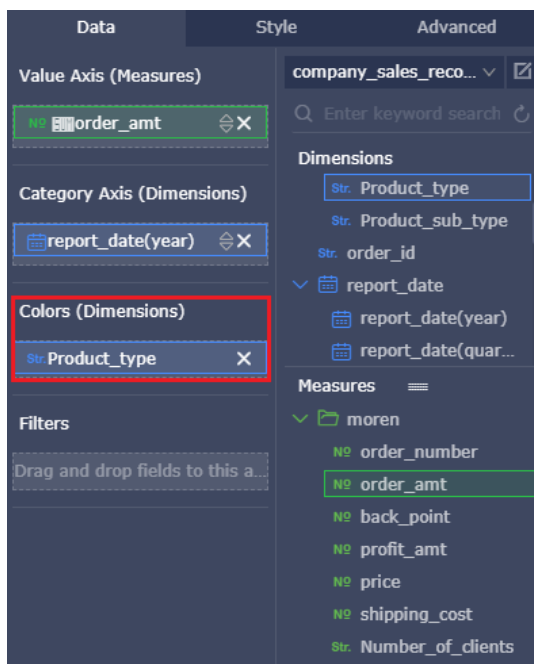
If too much data is displayed, you can enable color legend. Drag and drop a dimension field to the color legend area. Information of this field is displayed in different colors in the chart.



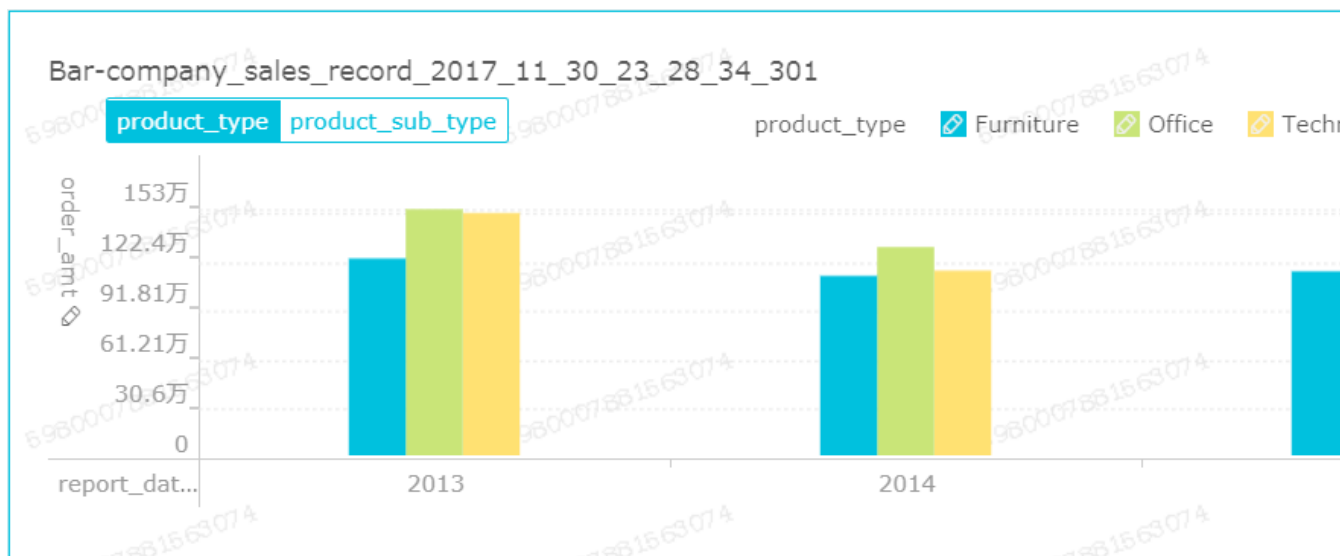
**Note:**

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.



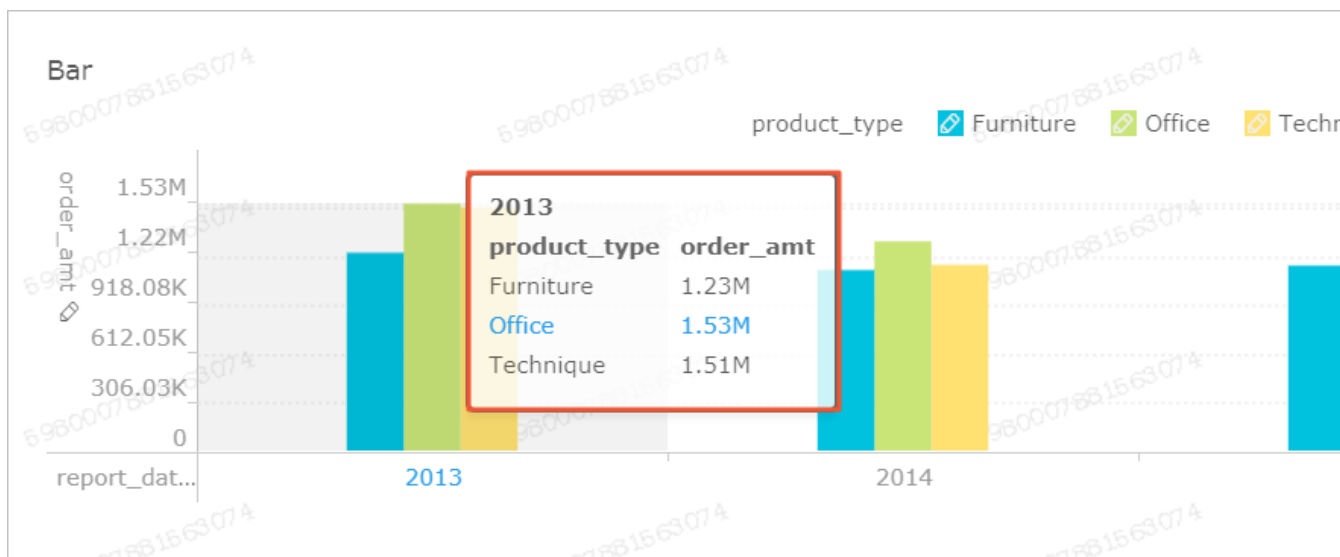


4. Click **Update**. The following figure shows the updated chart.

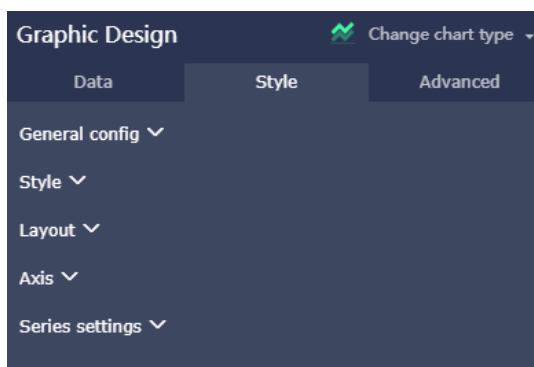


5. When mouse points to a set of data, the data details are automatically listed by using the tooltip function, as shown in the following figure.

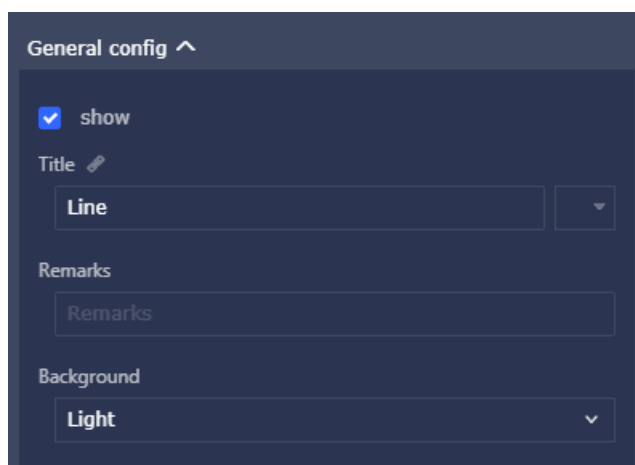
Choose **Style > Style > Tooltip**, to disable this function.



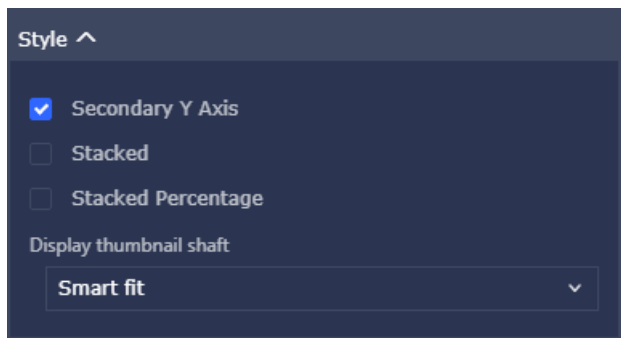
6. On the **Style** tab, edit the title, layout, and legend of the chart.



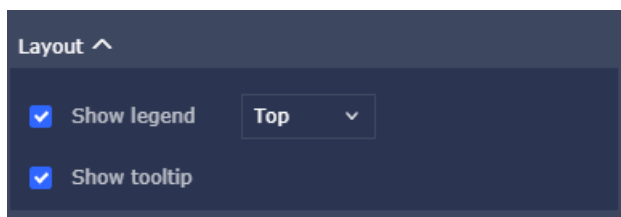
- Common Settings: you can set the title, the font color, and the background color, as shown in the following illustration.



- 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.

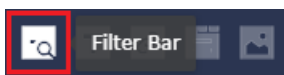
### Add a widget

A dashboard supports the following widgets.

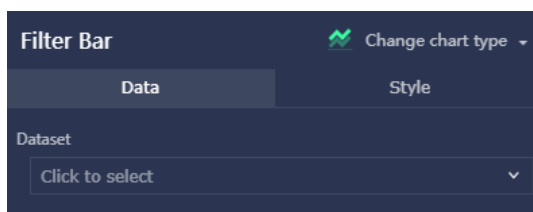
- Standard dashboard
  - Filter bar
  - Text box
  - IFrame
  - TAB
  - Image
- Full-screen dashboard
  - Text area
  - IFrame
  - Image
- **Add query conditions**

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

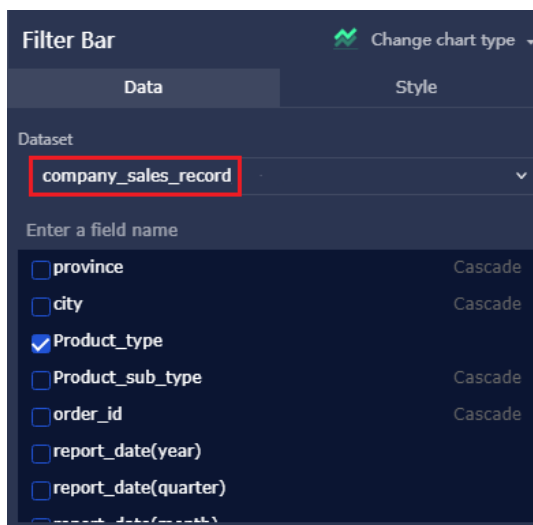
1. Click the **Filter bar** icon, as shown in the following figure.



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



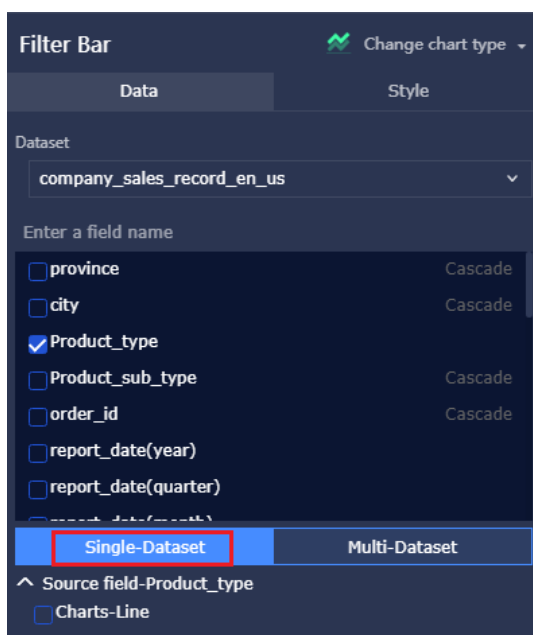
3. Select the expected dataset, as shown in the following figure.



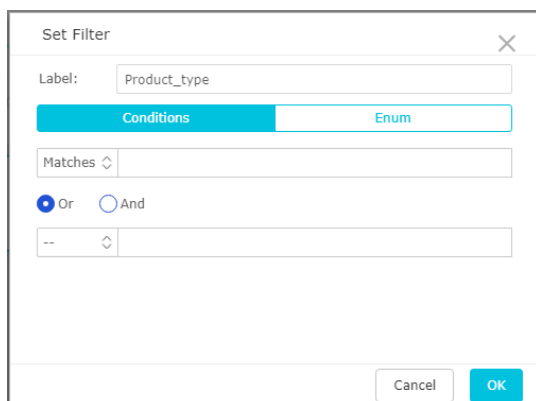
4. Select a field to be queried, for example, product\_type field.

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.

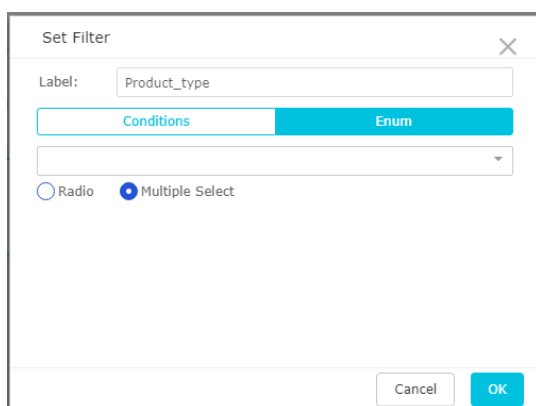


6. Click **Style** to edit the Filter bar title.
7. Point to the field to be queried. A blue dashed line box is automatically displayed for the field. Click the dashed line box. The editing page of the field to be queried is displayed, as shown in the following figure.



The 'Set Filter' dialog box is shown with the 'Conditions' tab selected. The 'Label' field contains 'Product\_type'. Below the tabs, there is a 'Matches' dropdown menu. Underneath, there are two radio buttons: 'Or' (selected) and 'And'. At the bottom, there is a '--' dropdown menu. The 'Cancel' and 'OK' buttons are at the bottom right.

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



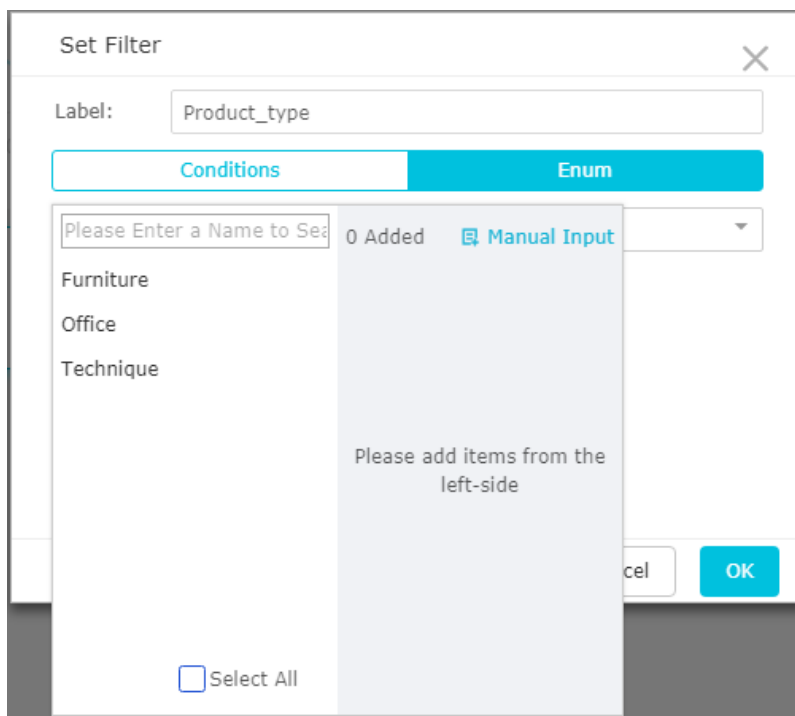
The 'Set Filter' dialog box is shown with the 'Enum' tab selected. The 'Label' field contains 'Product\_type'. Below the tabs, there is a dropdown menu. Underneath, there are two radio buttons: 'Radio' and 'Multiple Select' (selected). The 'Cancel' and 'OK' buttons are at the bottom right.

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:**

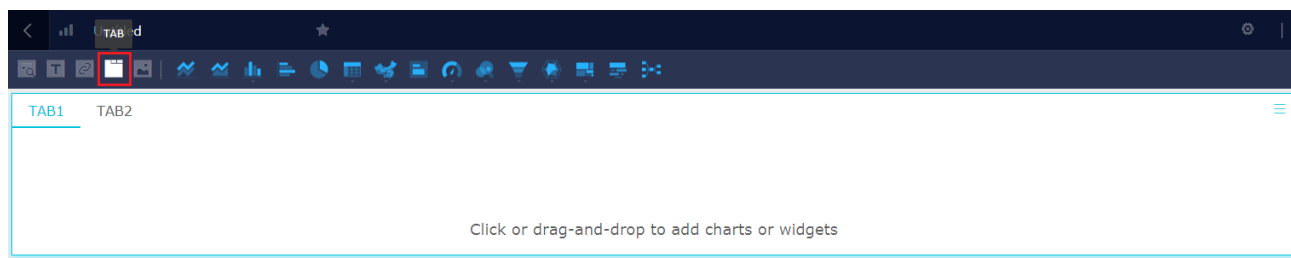
The webpage addresses must start with **https**.

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.



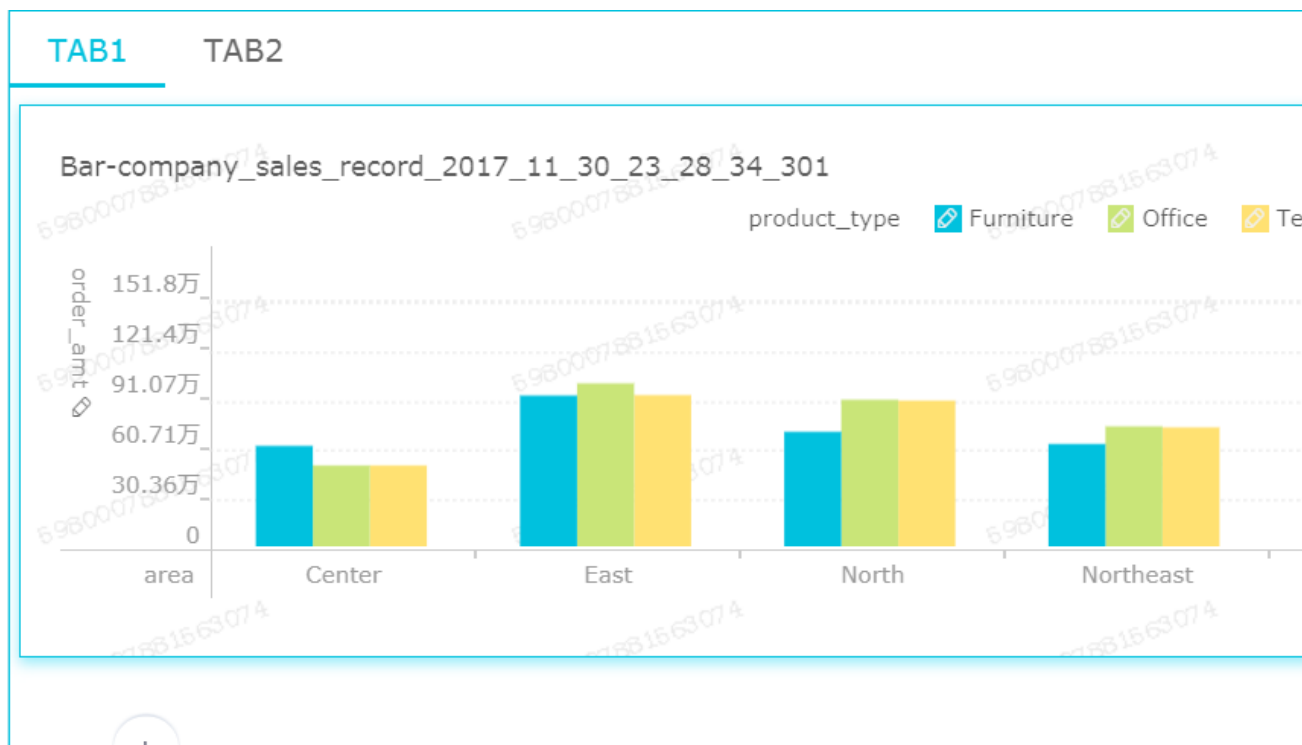
3. Click a tab and insert a chart in it. For example, click TAB1. TAB1 then becomes blue, as shown in the following figure.



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.

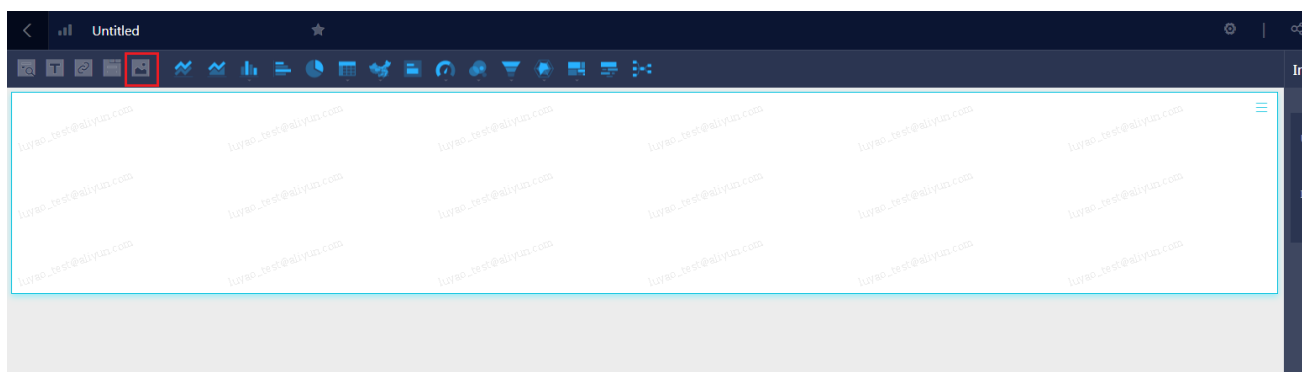


To delete the current widget, select **More operations** > **Delete** in the upper-right corner of the widget.

- **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.

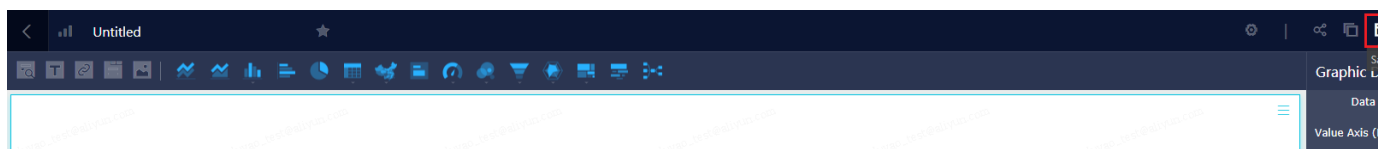
Choose **Preview** > **PC or Mobile**, as shown in the following figure.



### 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

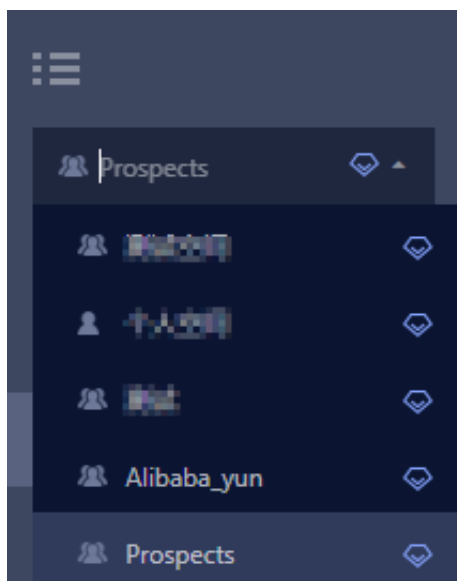
1. Click **Console > Workspace** to go to Quick BI.
2. Select a workspace to enter a workspace workbench.

### 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.

**Add Data Source**

\*Name: Display name in the data source list

\*Database Endpoint: Hostname

\*Port: 3306

\*Database: Database name

\*Username: Hostname or IP

\*Password: Password

ⓘ Note: Add the following IP ranges to the whitelist of your databases. 11.193.158.0/24, 11.193.162.0/24, 47.74.161.0/24, 47.74.162.0/24

Add Close Test Connection

- Name: Enter a display name
- Host name: rm-bp180925lcrm7xtc6.mysql.rds.aliyuncs.com (To obtain the host name, see [Setup Quick BI with ApsaraDB for RDS.](#))
- 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

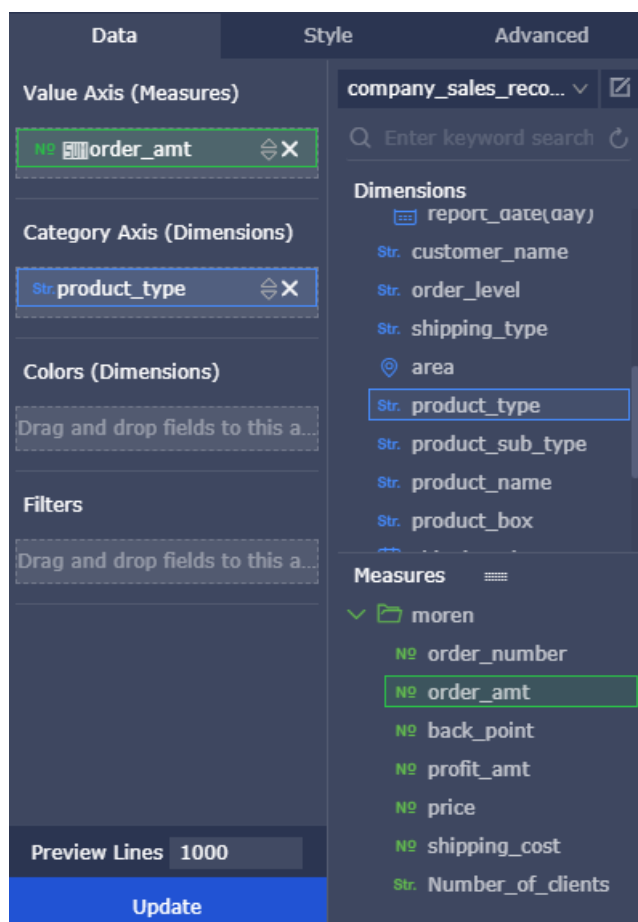
The columns in the workbook are classified into dimensions and measurements based on certain rules. Generally, columns of the String type are in the dimension category, while columns of the Double or Bigint type are in the measurement category. You can select columns from the dimension and measurement 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 [Area show](#).

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 [Area show](#) and [Add query tools](#).

## 4 Create a report

### 4.1 Files management

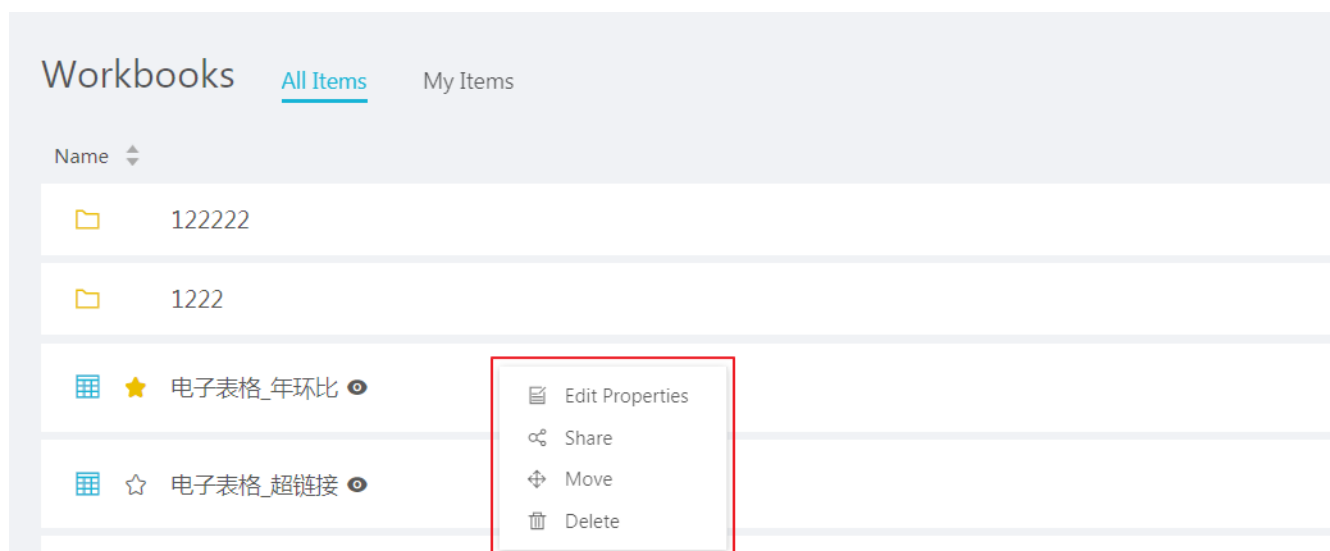
All the worksheets, dashboards, and data portals that have been created in the system are report files. A data portal can be also called a data file. You can query and edit your own report files.

#### 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.

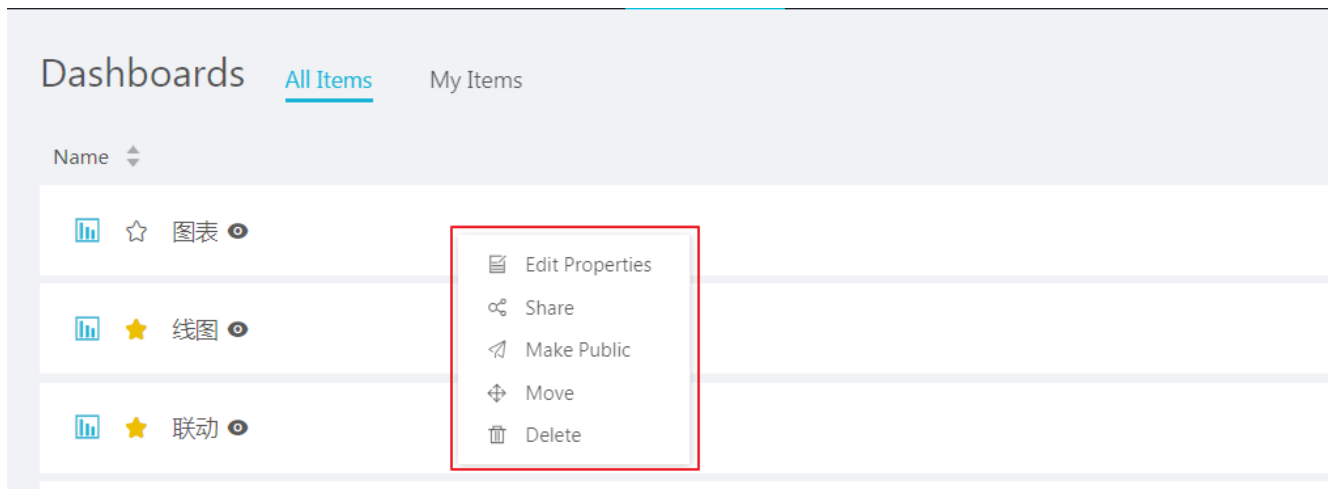
**Note:**

A shared workbook is read-only and it cannot be edited.

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



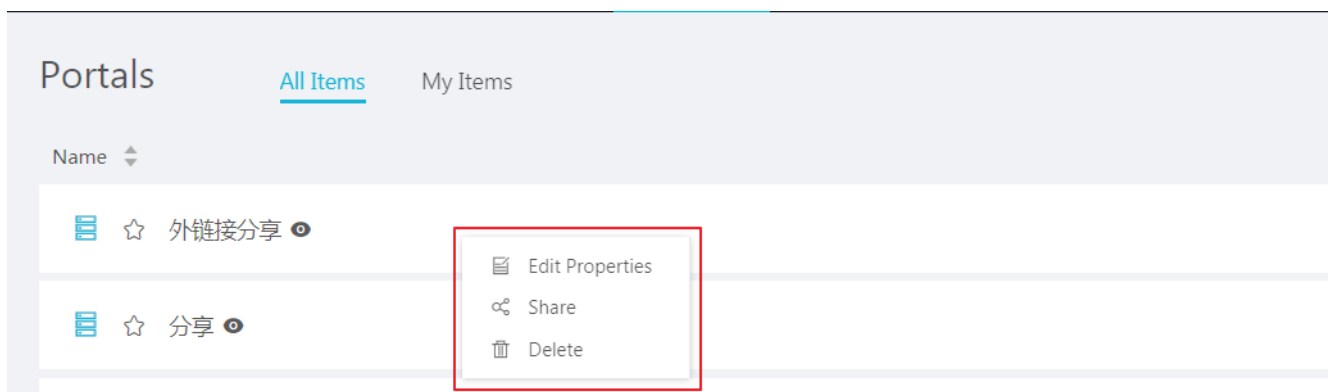
5. Select and right-click a dashboard, as shown in the following figure.



- 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.

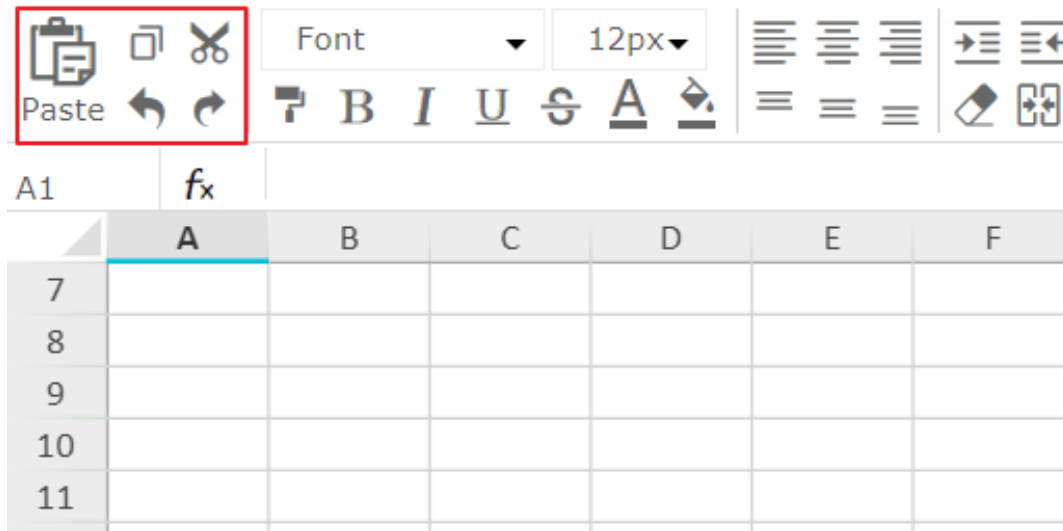


- Edit Properties: Modify the data portal name.
- Share: Share the data portal with other users within the specified period of time.
- Delete: Delete the data portal.

## 4.2 Workbook overview

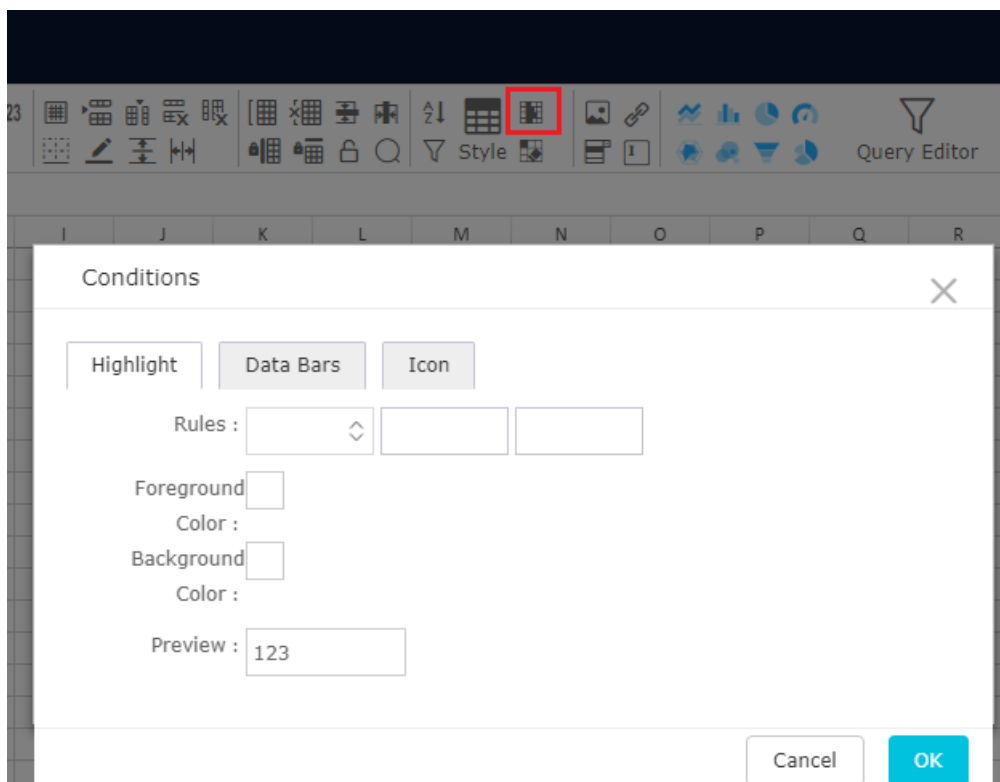
### Common features

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.



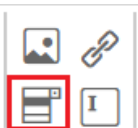
## Add drop-down lists

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 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 [Dashboard basic operations](#).

To learn how to create other types of charts, see [Charts overview](#).

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.

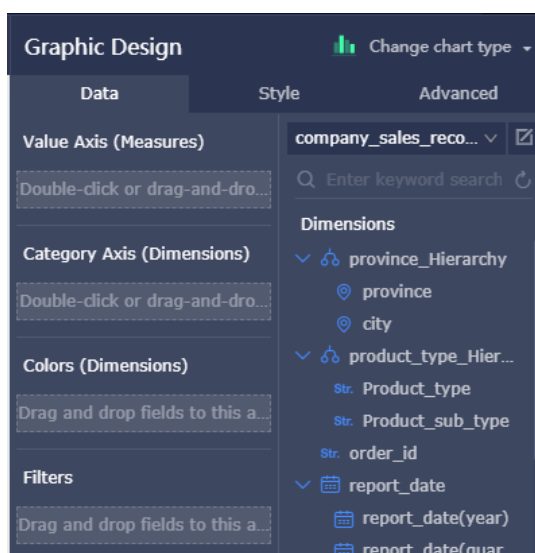
The following table lists the analysis type and common application scenarios of each type of chart.

Analysis type	Description	Scenario	Applicable chart
Comparison	Compare the differences between each value or display a simple comparison of measurements between different categories.	Compare the sales/income differences of different countries or regions.	Bar chart, radar chart , funnel chart, table, 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	View the relativity between two values and display the affect	Scatter chart, tree chart, card chart,

Analysis type	Description	Scenario	Applicable chart
	or compare multiple measurement values.	of the first value on the second value.	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 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.

Chart name	Data elements	Composition of data elements
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.
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

Chart name	Data elements	Composition of data elements
		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 conversion rate, and page bounce rate	Each data element has only one dimension or measurement.
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.

## 4.4 Dashboard basic operations

### 4.4.1 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.

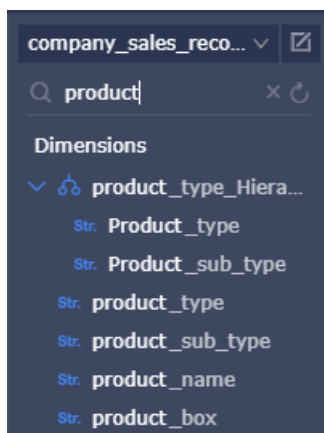
For more information about how to create datasets, see [Create a dataset](#) Create datasets.

## 4.4.2 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.



## 4.4.3 Set chart data

In the dashboard configuration area, you can select a chart and configure attributes for it.

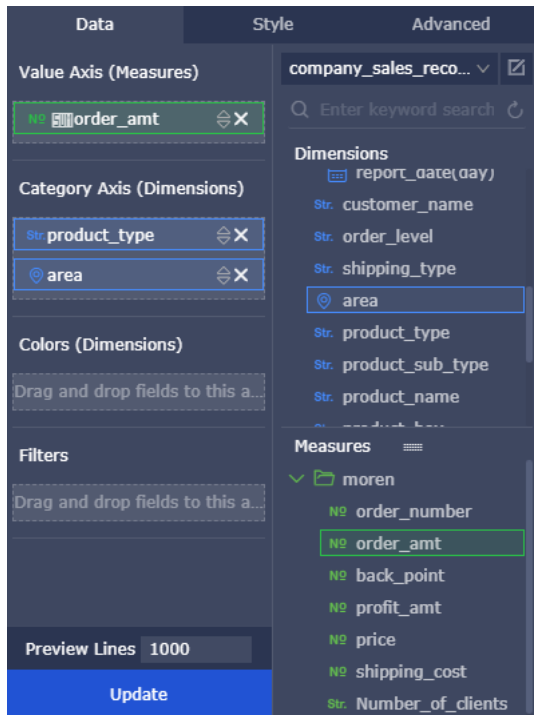
Before creating a chart, make sure that you have selected a dataset in the dataset selection area and finished editing dimension and measurement types.

To edit dimension and measurement types, see [Example: Create a dashboard](#).

1. Double-click a chart type icon, a chart of this type is displayed in the dashboard display area.

To switch to a chart of another type, click another chart type icon.

2. On the **Data** tab, select the expected dimension and measurement fields. See the following figure.



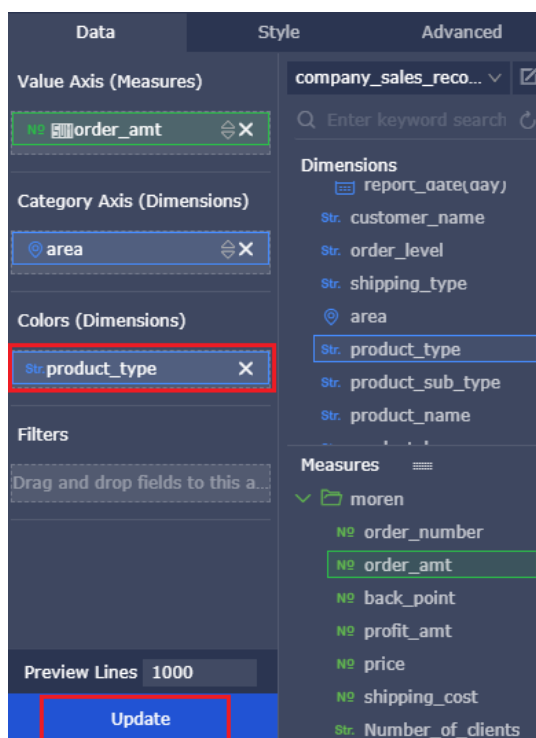
- To delete a field from the data element area, click **Delete** behind the field.
- To sort the values of a field in ascending or descending order in the chart, click the **up or down arrow** behind the field.

3. Drag a dimension field to the Color Legend area.

The values of this field are marked by different colors in the chart. If a dimension field cannot be dragged to the Color Legend area, the system reports an error message. Add or delete dimension or measurement fields according to the error message.

The following procedure uses the **Product\_Type** field as an example.

1. Drag the **Product Type** field from the dimension list to the **Color Legend** area and click **Update**.



2. Select **Style > Settings** , you can change the color scheme.
4. Click **Refresh** to select a time interval to automatically refresh the data.
5. On the **Style** tab, you can change the display style, layout, axis, and settings through the Common Settings.

You can set **Coefficient** to change the conversion unit of the original value. The Coefficient parameter supports only multiplication.

For example, if the unit of the original value is centimeter and you want the value to be expressed in units of meters, you must divide the original value by 100. To achieve this, enter 0.01 in the Coefficient text box. Reversely, if the unit of the original value is meter and you want the value to be expressed in units of centimeters, enter 100 in the Coefficient text box.

6. Click the **More** tab, you can associate the chart with other charts.

Before associating charts, ensure that at least two charts are available in the dashboard display area.

#### 4.4.4 Filter fields

If you have a large amount of data, you can enable the filter function to filter out data from a dataset.

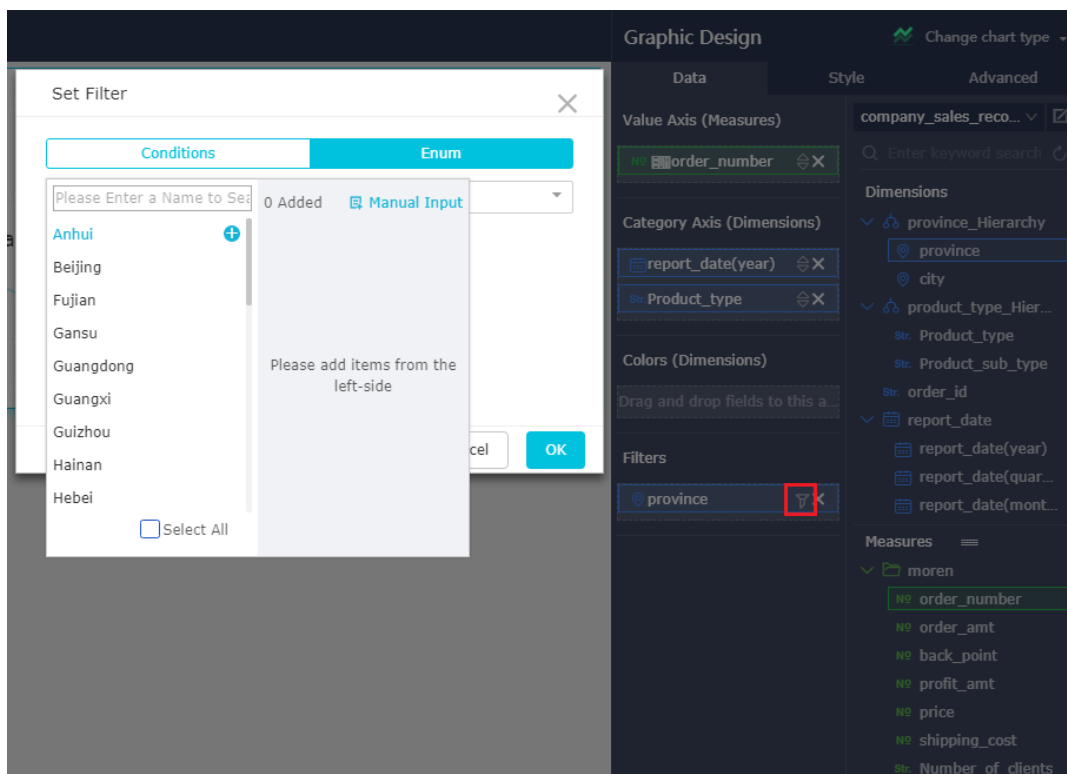
Filters can filter data from character classes, numeric classes, and date classes.

## Character classes

You can filter the municipalities from the province field through the filter function.

**You can filter the municipalities from the province field through the filter function.**

1. Drag **Province** field to the **Filters** area, as shown in the following figure.
2. Click **Filter** icon
3. Select **Enum** option. All the items are automatically listed in the dialog window. See the following figure.



4. Enter the field name manually, or select the required city names from the list.
5. After the settings, click **OK**.
6. Click **Update**. The system then re-creates a chart based on the filter settings.

## Numeric classes

You can set a numeric range to filter data. For example, you can set the range of the number of orders to 50,000 to 100,000. Then the chart displays data within the specified range.

**The following procedure uses the profit\_amt field as an example to describe how to filter data.**

1. Drag the **profit\_amt** field from the measurement list to the **Filters** area.

2. Click the **Filter** icon, and set filter conditions.
3. Select the expected filter conditions from the drop-down lists, such as Greater Than, Less Than, or Equal To. See the following figure.

Set Filter

×

>=

↕

--

>

>=

<

<=

≠

=

and

OK

Cancel

4. Click **OK**.
5. Click **Update**. The system then re-creates a chart based on the filter settings.

## Date classes

You can filter the data in a time period by using the filter function. For example, filter the order amount from 2013 to 2015.

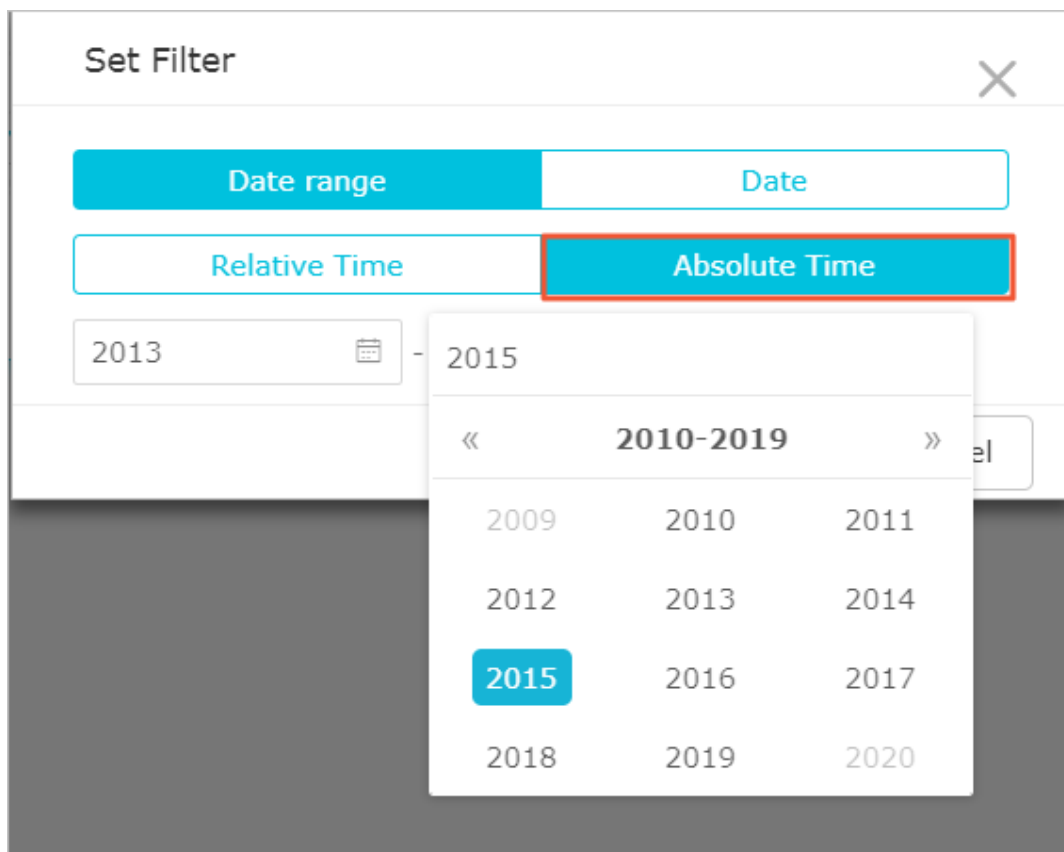


**Note:**

Time data can be accurate to seconds.

The following procedure uses the `report_date(year)` field as an example

1. Drag the **report\_date(year)** field from the measurement list to the **Filters** area. Click the **Filter** icon, and set filter conditions.
2. Select a time period, for example, select Absolute Time, and set the time range from 2013 to 2015. See the following figure.



3. After the settings, click **OK**.

4. Click **Update**. The system then re-creates a chart based on the filter settings.

### 4.4.5 Sort data

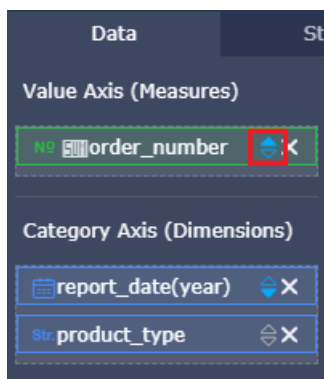
On the **Data** tab, you can sort data based on the specified dimension and measurement fields.

The chart shows the data based on the selected sort result.

#### Procedure

1. Select a field, such as **order\_number**, and click the up or down arrow behind the field. See the following figure.

The up arrow indicates the ascending order, and the down arrow indicates the descending order.



2. Click **Update**.

### 4.4.6 Associate multiple charts

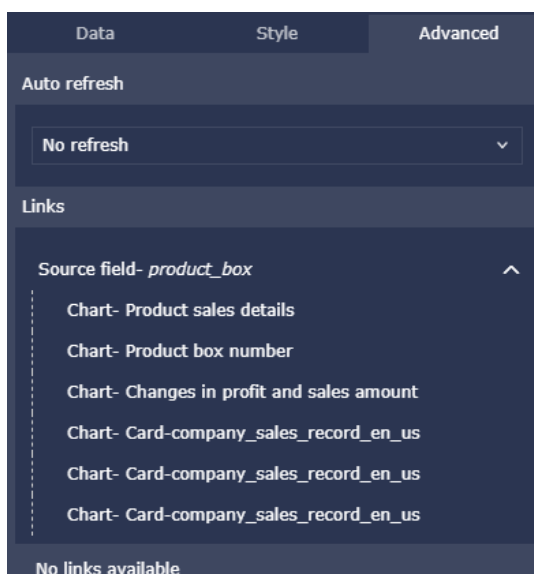


#### Note:

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.

## 4.4.7 Common widgets

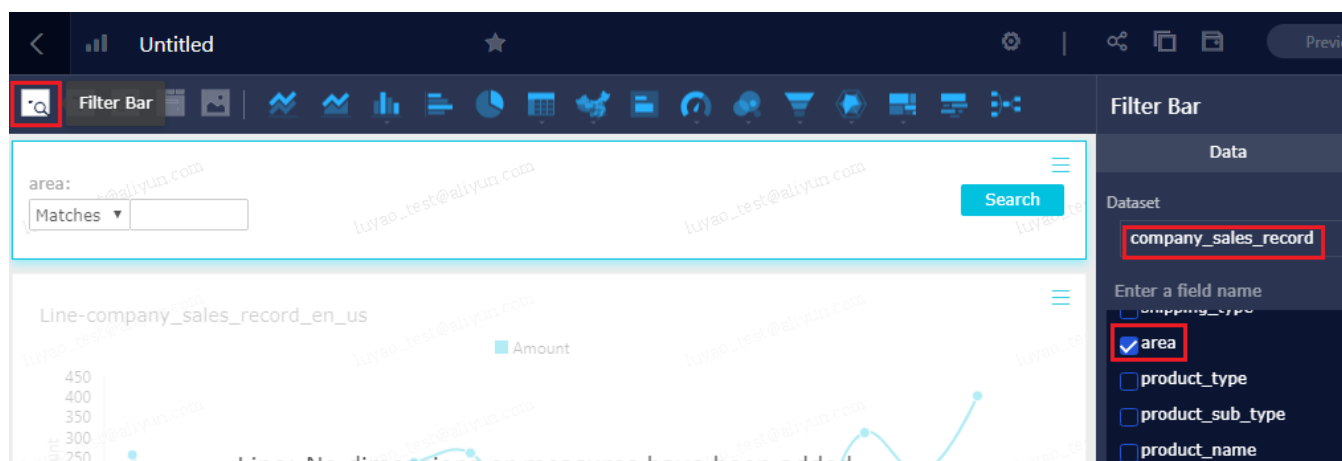
The dashboard display area supports the following widgets.

- 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.

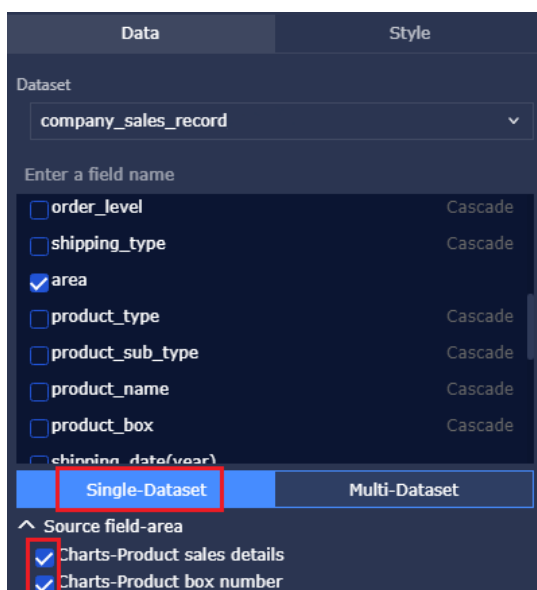


Currently, the Filter Bar supports Single-Dataset association and Multi-Dataset association.

### 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.

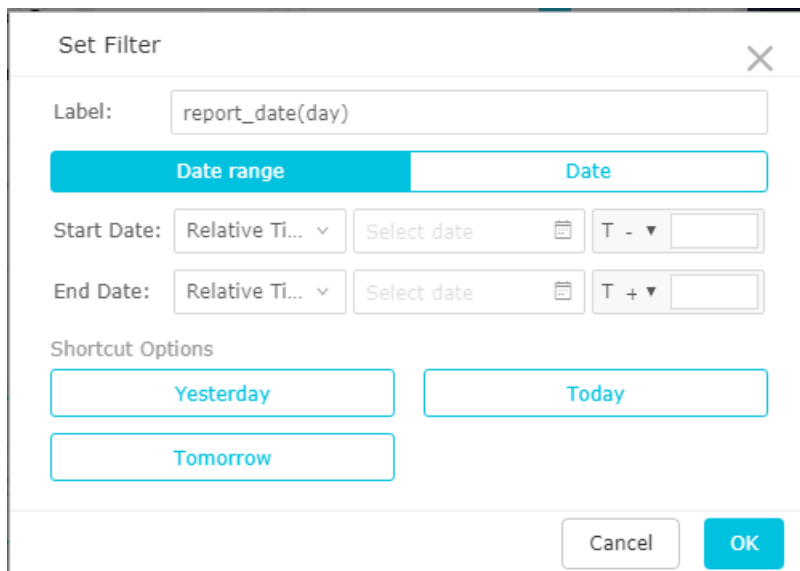
### Example of Multi-Dataset

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 label 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 label 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.

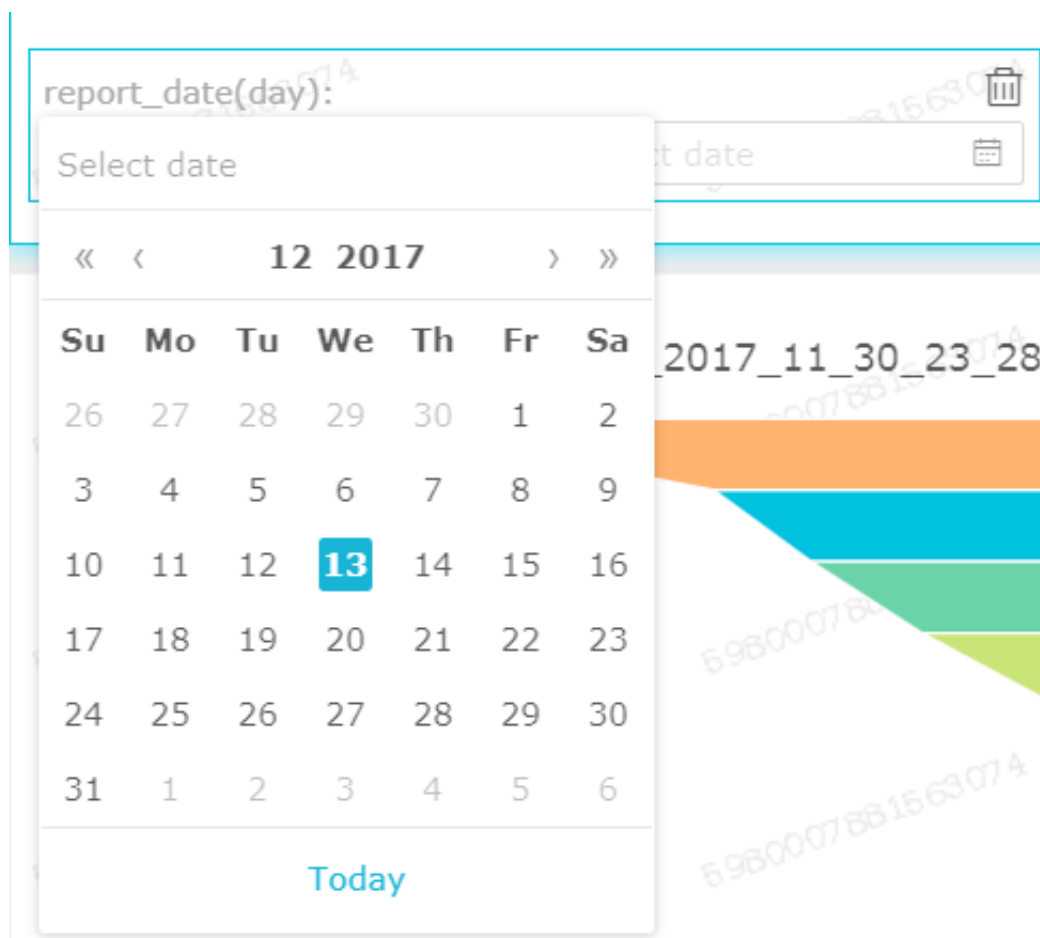


The image shows a 'Set Filter' dialog box with a close button (X) in the top right corner. It contains the following elements:

- Label:** A text input field containing 'report\_date(day)'.
- Filter Type:** Two tabs, 'Date range' (selected) and 'Date'.
- Start Date:** A dropdown menu with 'Relative Ti...' selected, followed by a 'Select date' button with a calendar icon, and a 'T -' dropdown with an arrow.
- End Date:** A dropdown menu with 'Relative Ti...' selected, followed by a 'Select date' button with a calendar icon, and a 'T +' dropdown with an arrow.
- Shortcut Options:** Three buttons labeled 'Yesterday', 'Today', and 'Tomorrow'.
- Buttons:** 'Cancel' and 'OK' buttons at the bottom right.

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

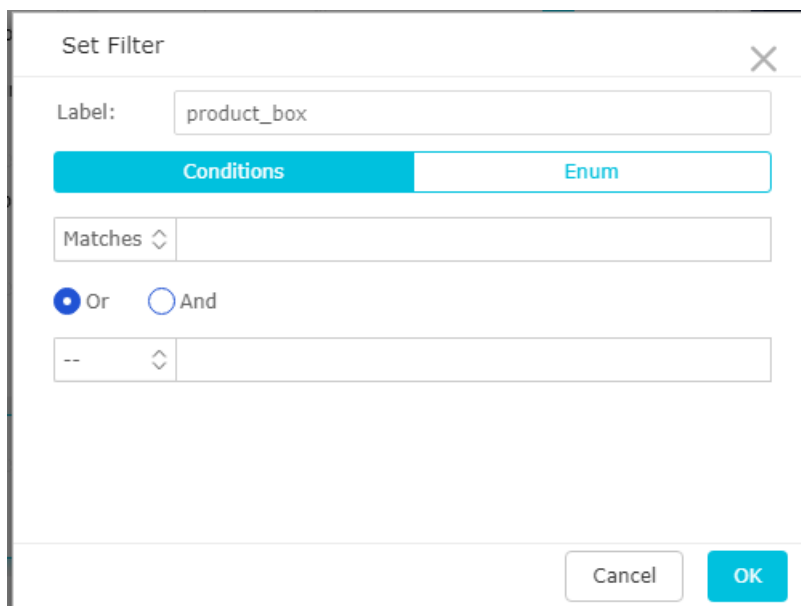
The detailed time range for a month is automatically displayed, as shown in the following figure.



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

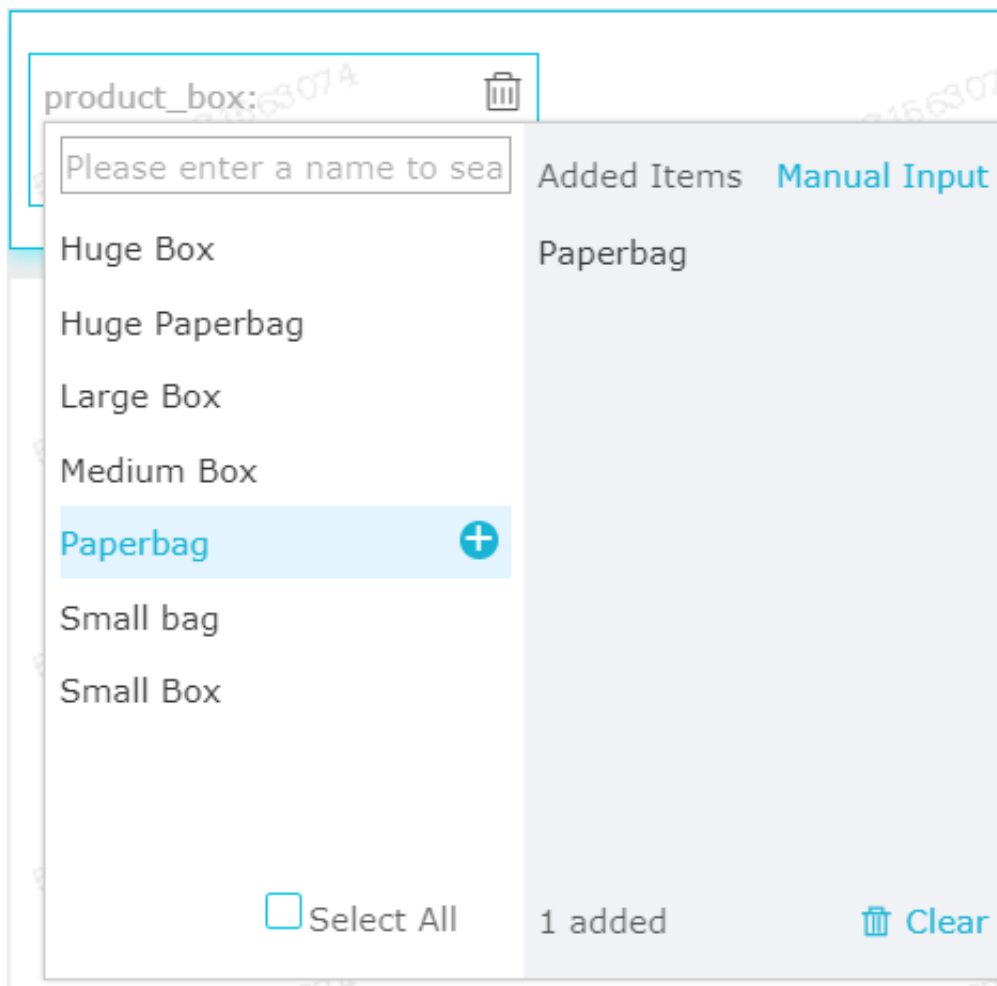
### Query data based on text

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.



The image shows a 'Set Filter' dialog box with a close button (X) in the top right corner. It contains a 'Label' field with the text 'product\_box'. Below this are two tabs: 'Conditions' (highlighted in blue) and 'Enum'. Under the 'Enum' tab, there is a 'Matches' dropdown menu. Below the 'Matches' menu are two radio buttons: 'Or' (selected) and 'And'. At the bottom of the dialog are 'Cancel' and 'OK' buttons.

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.



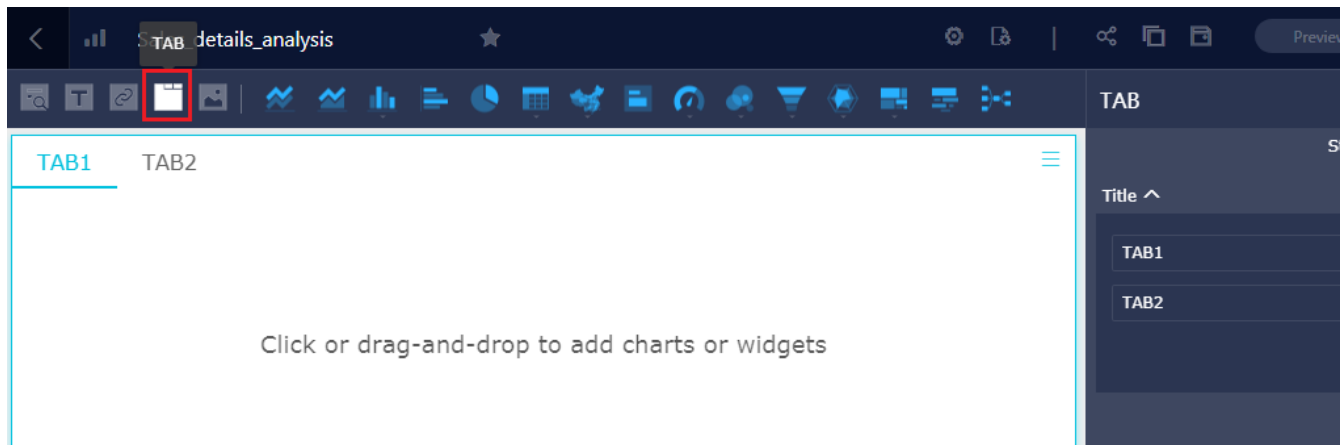
#### Note:

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.



## 4.4.8 Standard dashboard

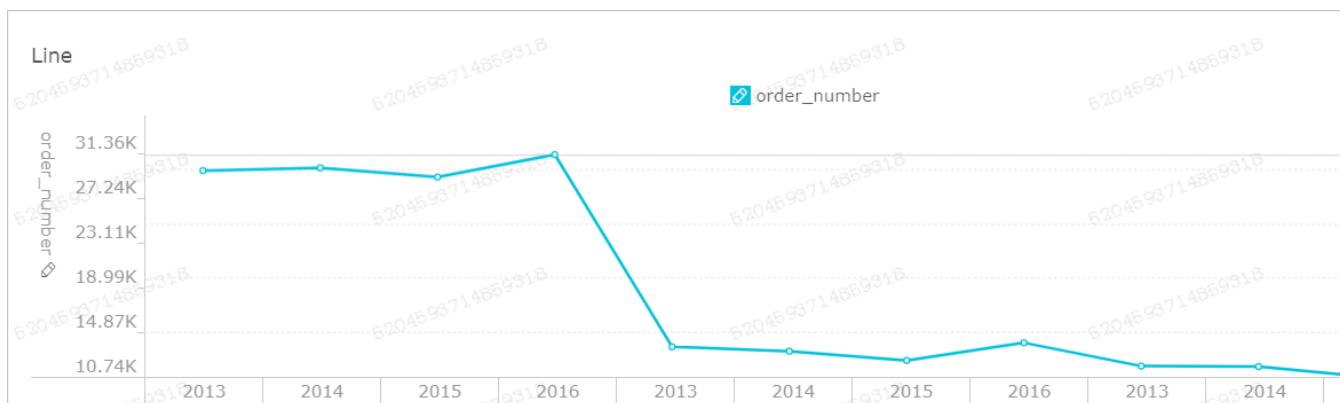
In the standard dashboard, you can perform the following operations in dashboard display area.

- Adjust the chart locations
- View chart data
- Delete a chart
- Switch to another chart
- Guide function
- Global settings

If you are using the Quick BI dashboard for the first time, the dashboard display area provides a guide function to you. With the guiding feature, you can learn how to create a dashboard.

### View chart data

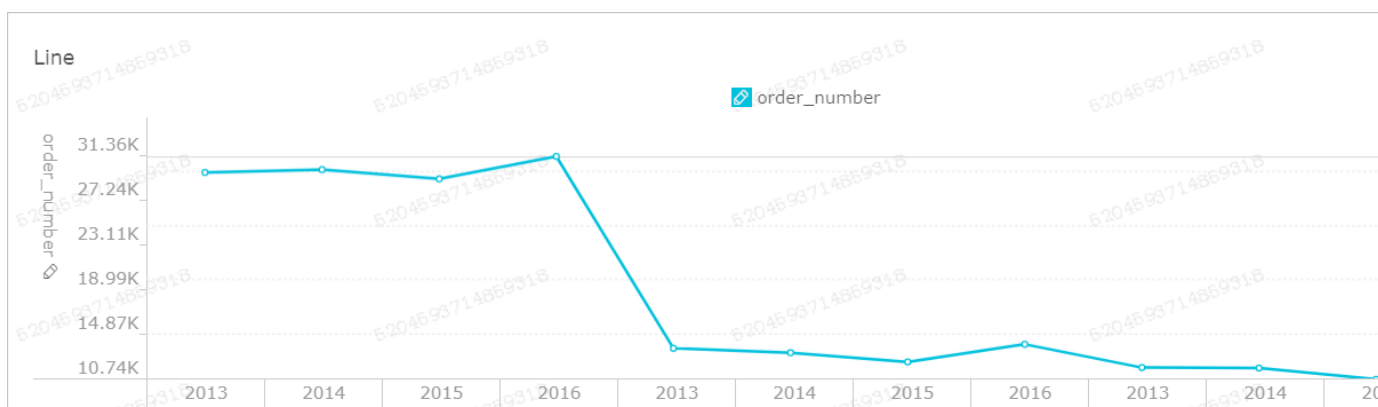
1. In the upper right corner, select **More > View data**, as shown in the following figure.



2. Click **Export** to download the data to the local directory.

### Delete a chart

In the upper right corner, select **More > Delete**, the current chart can be deleted. See the following figure.



### Switch to another chart

In the dashboard display area, switch between chart types as follows:

Select a chart in the dashboard display area, and then click the expected chart type icon in the dashboard configuration area.

1. Select a chart in the dashboard display area.
2. Click a chart icon that you want to switch to. For example, switch the pie chart to a radar chart.
3. The chart automatically switches to a new display type.

If you cannot switch normally, it means that the selected chart fields do not match the current chart fields.

The system prompts the chart element according to the chart switching style. According to the message displayed by the system, select proper fields in the dimension and measurement lists, and add them to the chart element area to finish the switching.

### Guide function

At the top of dashboard display area, click **Question Mark** icon to enable the guide function.

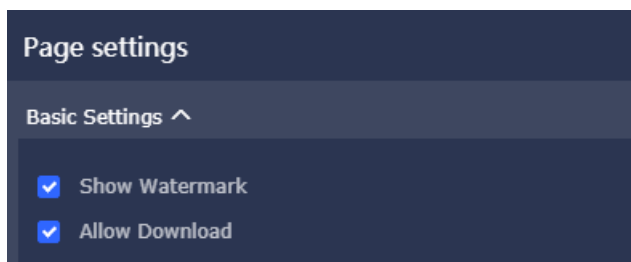
The system automatically demonstrates how to create a dashboard and you can create a dashboard accordingly.

When the guide function is valid, the part of the prompt is automatically brightened. You can click **Previous**, **Next**, and **Close** to learn how to create a dashboard.

### Global settings

Select **Settings > Global settings**, to set whether the dashboard can be downloaded, and whether the watermark is displayed.





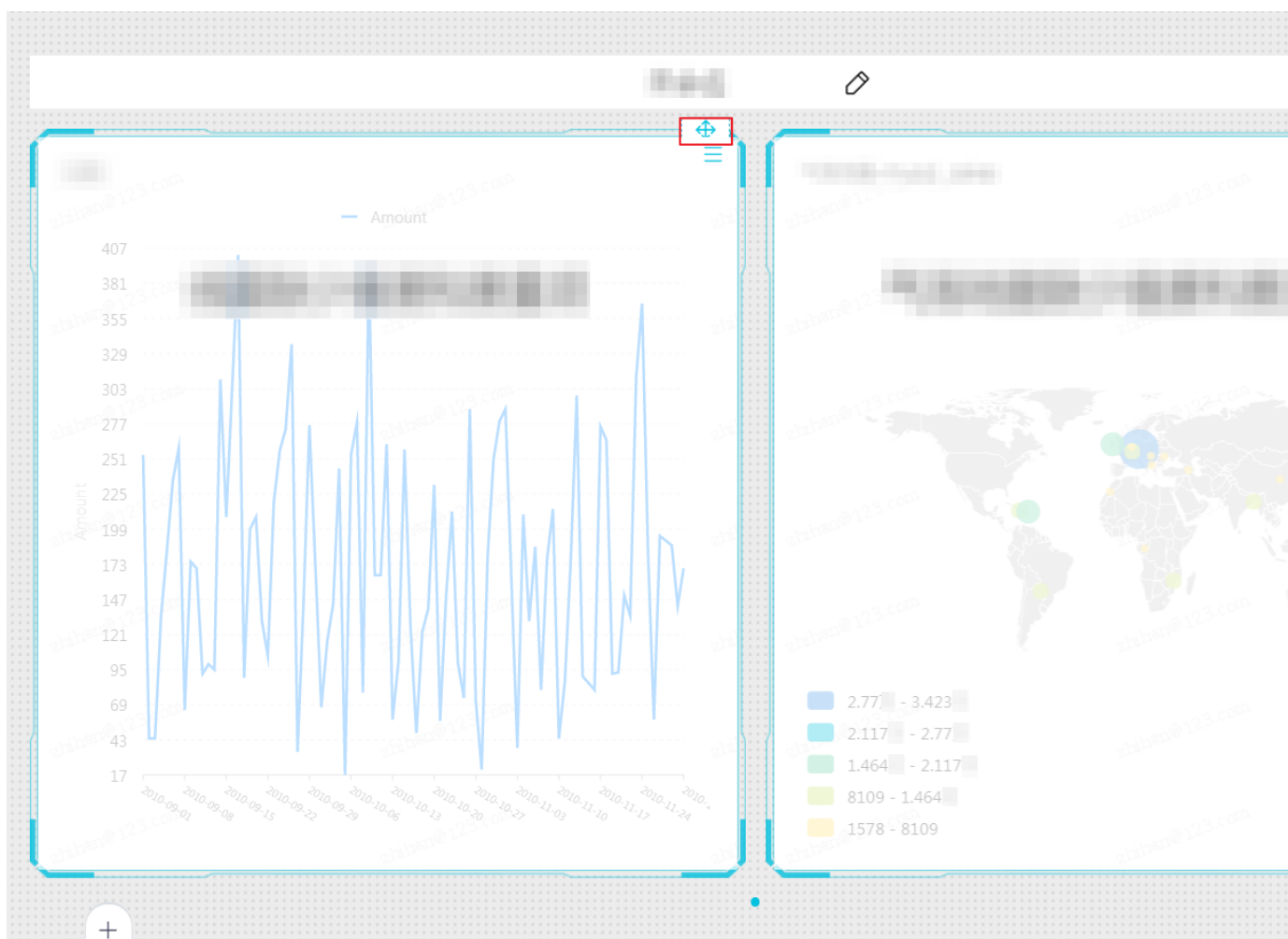
## 4.4.9 Fullscreen mode

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.

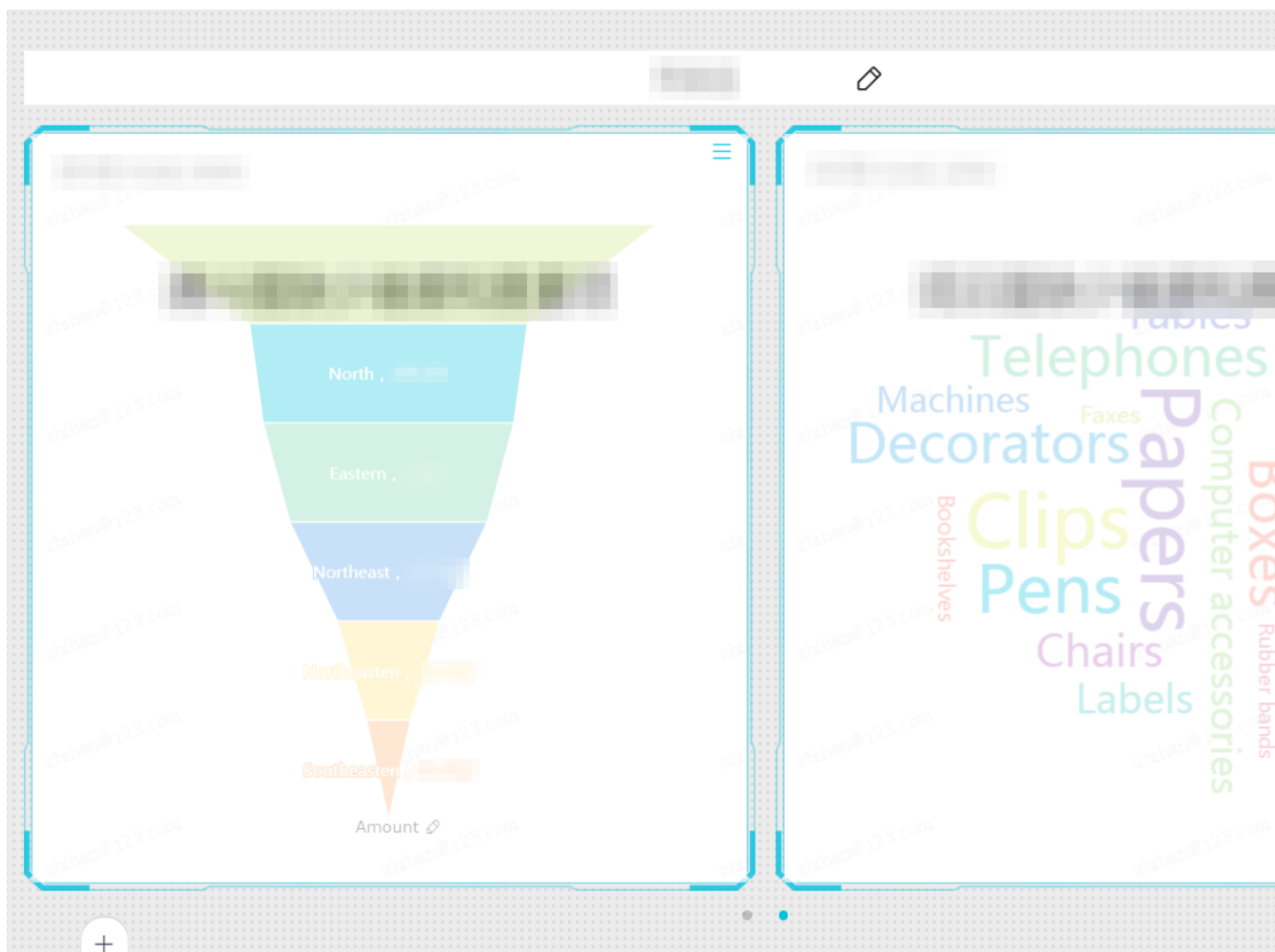


### Add a subscreen

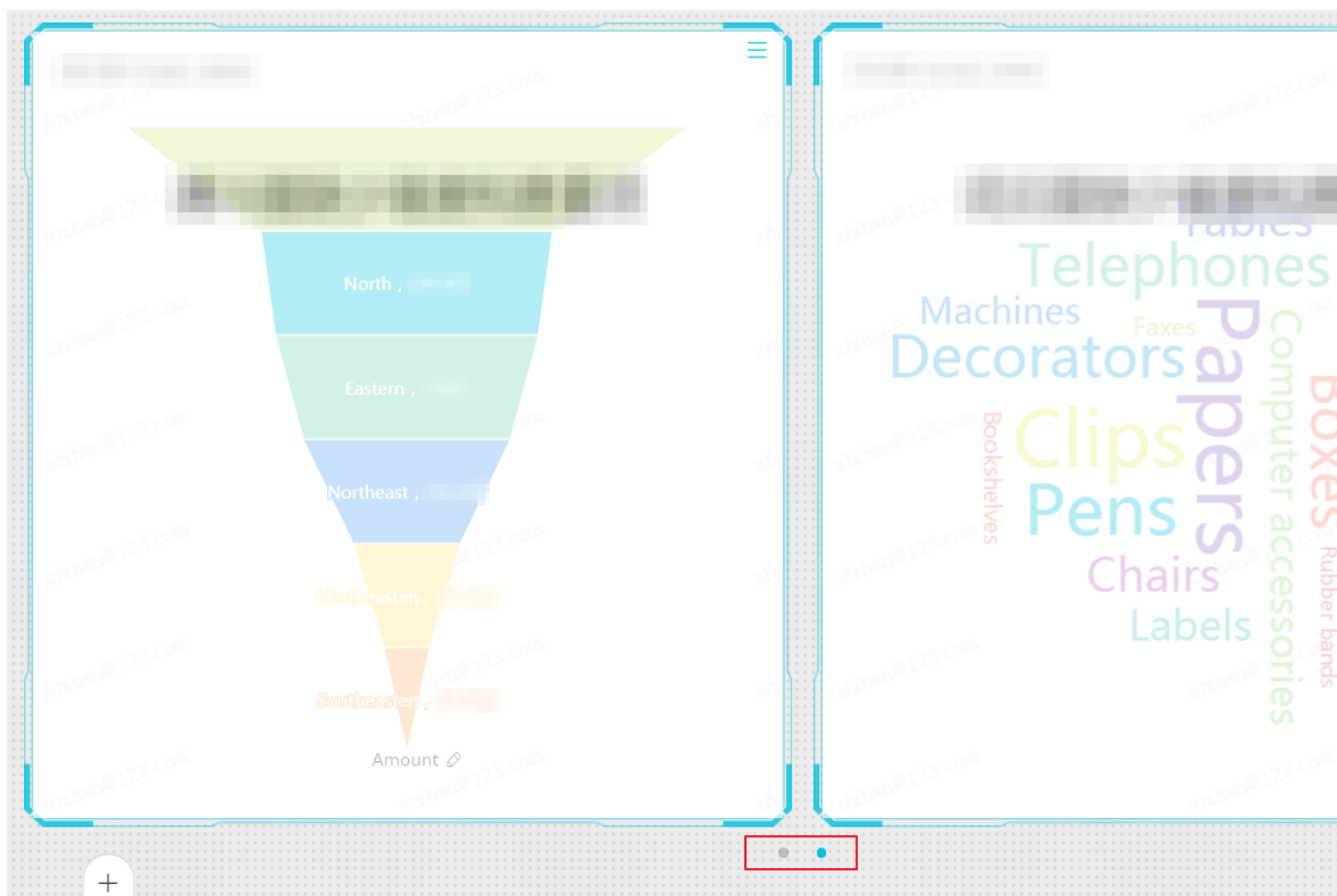
1. Click the plus icon in the lower-right corner as shown in the following figure.



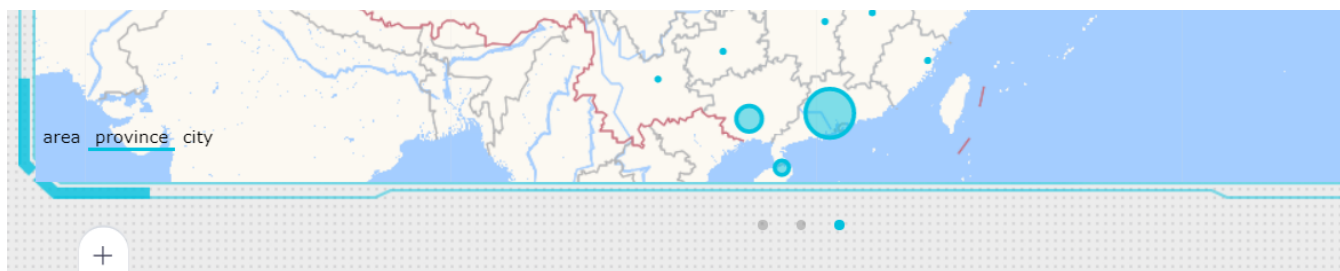
2. In a subscreen, you can add a chart as shown in the following figure.



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.

## 4.5 Create charts

### 4.5.1 Line chart

If you have read [Dashboard overview](#) and [Dashboard basic operations](#), read this section to learn about how to create a line chart. If you need to recreate a data set, see [Create a dataset](#).

A line chart shows the trend of data changes using lines and displays the continuous time-varying data. It can be used to analyze and display the data trend at equal time intervals. A line chart also can be used to analyze the changing mutual affect between multiple groups of data in a period of time. For example, use a line chart to show how the sales volume of a type of or some types of products changes with time, and further predict the future sales performance.

A line chart consists of a category axis and a value axis. A category axis is horizontal and contains only dimension fields such as the date, province, and product type. The value axis is vertical and contains only measurement fields, such as the business indicator of the analysis object and order quantity.

In the dashboard, the system automatically matches the category axis, value axis, and dimension field, measure field of the line diagram, as shown in the following figure. You only need to follow the system prompts and select the expected fields from the dimension and measurement lists.

### Notice on creating a line chart

Select at least one dimension for the category axis and at least one measurement for the value axis. If you want to use the color legend function, select a maximum of one measurement for the color legend.

**Note:**

The color legend can be used when only one measurement field is set for the value axis. Otherwise, this feature is unavailable.

The following uses the company\_sales\_record dataset as an example.

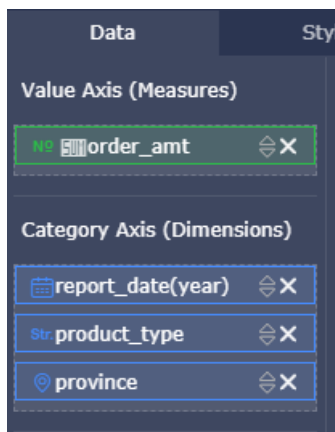
#### Scenario: Order amount of each type of products in each province in each year

1. Log on to the Quick BI console.
2. Click **Datasets** to enter the dataset management page.
3. Select the company\_sales\_record dataset , and click **Create Dashboard**. The dashboard editing page is displayed.
4. Click **line chart** icon. The line chart sample is displayed.
5. Select required dimension fields and measurement fields.

In the dimension list, locate the order date (year), province, and product type options and add them to the category axis area in sequence. In the measurement list, locate the order quantity option and add it to the value axis area, as shown in the following figure.

**Note:**

Make sure that the dimension type of the province field has been switched from string to geographical information. For details about how to switch the dimension field type, see [Example: Create a dashboard](#).



6. On the **Style** tab, you can edit the title, layout, and legends of the chart.

**Note:**

For more information about Styles, see [Configure a chart](#).

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

To delete the current chart, point to the upper-right corner of the chart, and choose **Delete** from the shortcut menu.

## 4.5.2 Bar chart

If you have read [Dashboard overview](#) and [Dashboard basic operations](#), read this section to learn about how to create a bar chart. If you need to recreate a dataset, see [Create a dataset](#).

For its clear demonstration of the differences among multiple groups of data, a bar chart can be used to show data variations in a specific period of time or to compare different items, for example , to compare the traffic flows of a road crossing during different periods.

The bar chart and [Line chart](#) have similar components. They both include a category axis and a value axis.

### Notice on creating a bar chart

Set at least one dimension for the category axis of a bar chart, such as a province or a product type. Set at least one measurement for the value axis, such as the order quantity or profit amount. Color legends only support dimension fields, and a maximum of one dimension can be set for each color legend.

**Note:**

The color legend can be used when only one measurement field is set for the value axis. Otherwise, this feature is unavailable.

The following uses the company\_sales\_record dataset as an example.

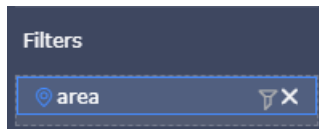
### Scenario: Compare the transportation costs of different products in provinces of China East.

1. Log on to the Quick BI console.
2. Click **Datasets** to enter the dataset management page.
3. Select company\_sales\_record dataset, and click **Create Dashboard**.
4. Click **Bar chart** icon.

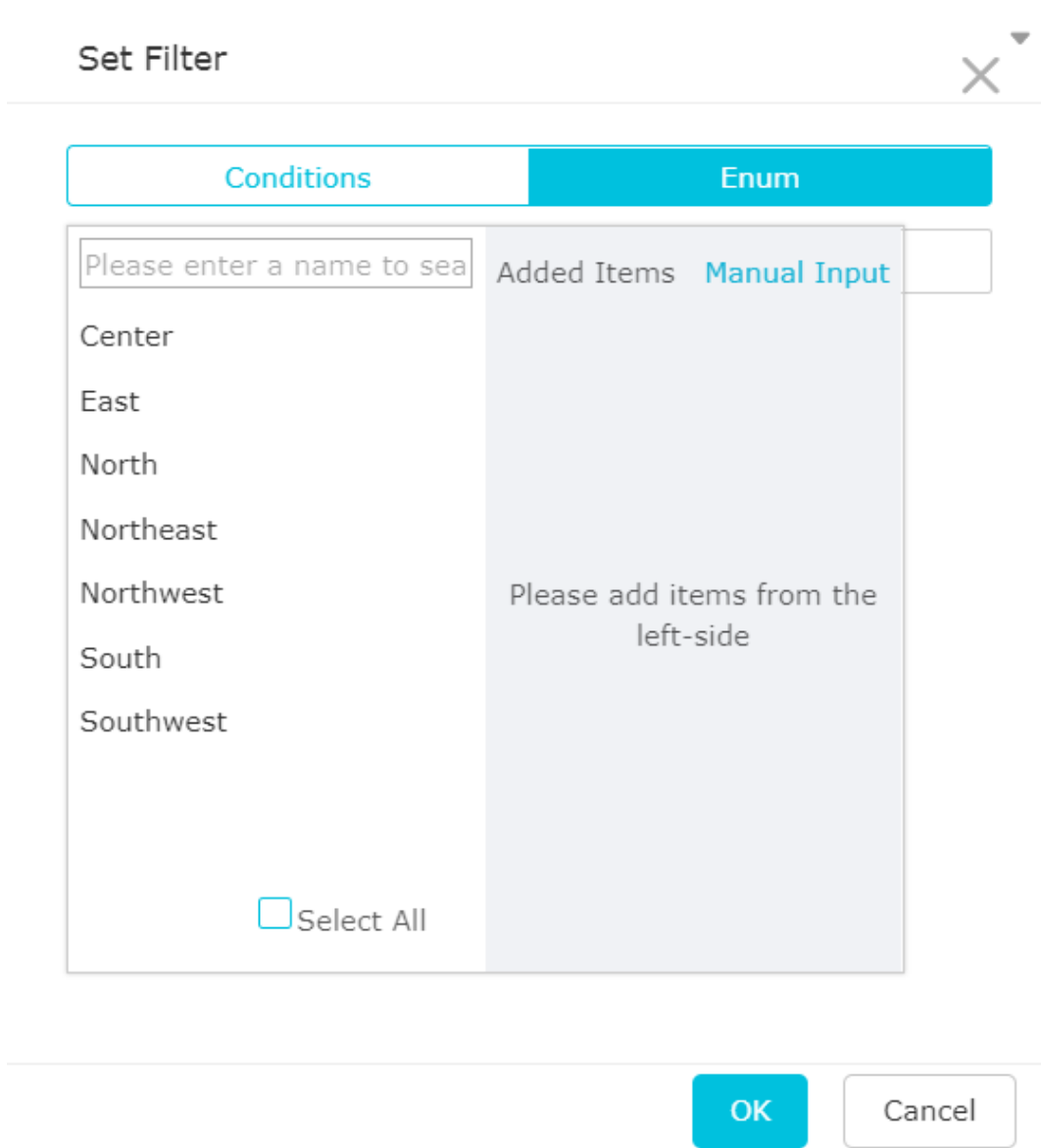


5. In the dimension list, select **area** field, and add it to the filter.

We need to use the filter to select China East from the region list, as shown in the following figure.



6. Click the filter icon and select **Enum** from the displayed dialog box.



7. Select East and click **OK**.
8. In the dimension list, locate the **province** and **product\_type** options, and add them to the category axis area in sequence.

**Note:**

Make sure that the dimension type of the region and province fields have been switched from string to geological information.

9. In the measurement list, locate the **shipping\_cost** option, and add it to the value axis area.

10. You can add the **product\_type** field to the color legend.

**Note:**

The color legend can be used when only one measurement field is set for the value axis. Otherwise, this feature is unavailable.

11. Click **Update**. The system automatically updates the chart.

12. On the **Style** tab, you can edit the title, layout, and design of the chart.

**Note:**

For more information about Styles, see [Configure a chart](#).

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

To delete the current chart, point to the upper-right corner of the chart, and choose **Delete** from the shortcut menu.

### 4.5.3 Pie chart

If you have read [Dashboard overview](#) and [Dashboard basic operations](#), read this section to learn about how to create a pie chart. If you need to edit the dataset or create a new dataset, see [Create a dataset](#).

A pie chart shows a data series. Each data series has a unique color or pattern. A pie chart can be used to show the volume of each item and the percentage of an item in the total amount. For example, you can use a pie chart to show the ratio of the expense of five insurances (endowment, medical, unemployment, employment injury, and maternity insurances) and housing fund to the personal income, or the sales of a car brand to the total car sales.

A pie chart consists of multiple slices. The label of each slice is determined by the data dimension, such as the region or product type. The angle (size) of each slice is determined by the data measurement, such as the order quantity or order amount.

### Notice on creating a pie chart

The slice label area of a pie chart has at most one measurement, such as the region or product type, and the measurement value must be less than or equal to 12. The slice angle area has at most one measurement, such as the order quantity or profit amount.

The following example uses the company\_sales\_record dataset as an example.

#### Scenario: Compare the transportation costs of different regions.

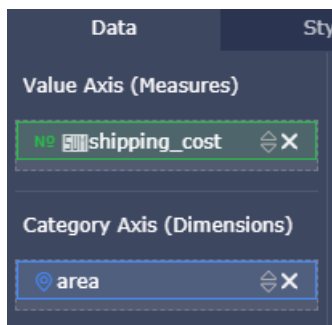
1. Log on to the Quick BI console.
2. Click **Datasets** to enter the dataset management page.
3. Select the company\_sales\_record dataset, and click **Create Dashboard**.
4. Click Pie chart icon.
5. On the **Data** tab, select a required dimension field and measurement fields.

In the dimension list, locate the **area** option and add it to the slice label area. In the measurement list, locate the **shipping\_cost** option, and add it to the slice size area, as shown in the following figure.



#### Note:

Make sure that the dimension type of the region field has been switched from string to geographical information.



6. Click **Update**. The system automatically updates the chart.
7. In the style tab, you can change the title, layout, display legend, measure, and series settings of the chart, as shown in the following illustration.
8. Click **Save** to save current dashboard.

To delete the current chart, point to the upper-right corner of the chart, and choose **Delete** from the shortcut menu.

## 4.5.4 Geo bubble map

If you have read [Dashboard overview](#) and [Dashboard basic operations](#), read this section to learn about how to create a geo bubble map. If you need to edit the dataset or create a new dataset, see [Create a dataset](#).

A bubble map uses a map profile as its background and attaches bubbles to the map to indicate data values. It intuitively shows the related data indexes and data ranges of a country or region. For example, a bubble map can be used to show the passenger flows of multiple tourist sites or the per capita incomes of multiple regions.

A bubble map consists of a geological region and a bubble size. The geological region is determined by the data dimension, such as a province. The bubble size is determined by the data measurement, such as a transportation cost or an order quantity.

### Notice on creating a geo bubble map

You can set only one dimension for the geological region of a bubble map, and the dimension type must be of geological information, such as a region, a province, or a city. Set at least one bubble size and a maximum of five measurements.

The following uses the `company_sales_record` dataset as an example.

### Scenario: Compare the order amount and average profits of multiple provinces.

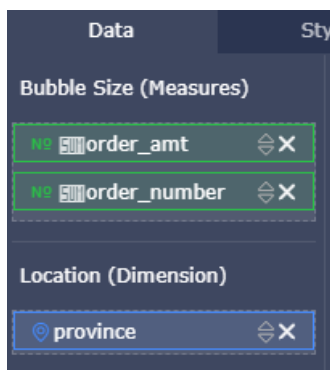
1. Log on to the Quick BI console.
2. Click **Datasets** to enter the dataset management page.
3. Select `company_sales_record` dataset, and click **Create Dashboard**.
4. Click Geo bubble icon.
5. On the **Data** tab, select a required dimension field and measurement fields.

In the dimension list, locate the **province** option and add it to the geological area. In the measurement list, locate the **order\_amt** and **order\_number** options and add them to the bubble size area in sequence, as shown in the following figure.



#### Note:

Make sure that the dimension type of the region and province fields have been switched from string to geological information.



6. Click **Update**. The system automatically updates the chart.
7. On the **Style** tab, you can edit the title and legends of the chart.
8. Click **Save** to save current dashboard.

To delete the current chart, point to the upper-right corner of the chart, and choose **Delete** from the shortcut menu.

## 4.5.5 Geo map

If you have read [Dashboard overview](#) and [Dashboard basic operations](#), read this section to learn about how to create a geo map. If you need to edit the dataset or create a new dataset, see [Create a dataset](#).

Similar to a [Geo bubble](#), a geo map uses different colors to demonstrate the data values and ranges.

A Geo map consists of a geological region and a color saturation. The geological region is determined by the data dimension, such as a province. The color saturation is determined by the data measurement, such as an order amount or a profit amount.

### Notice on creating a geo map

You can set only one dimension for the geological region of a color map, and the dimension type must be of geological information. Set at least one color saturation and a maximum of five measurements.

The following uses the company\_sales\_record dataset as an example.

**Scenario: Compare the transportation costs, order amounts, and profit amounts of multiple regions.**

1. Log on to the Quick BI console.
2. Click **Datasets** to enter the dataset management page.

3. Select `company_sales_record` dataset, and click **Create Dashboard**.
4. Click Geo map icon.
5. On the **Data** tab, select a required dimension field and measurement fields.

In the dimension list, locate the **area** option and add it to the location area. In the measurement list, locate the **order\_amt**, **profit\_amount**, and **shipping\_cost** options and add them to the colorscale area in sequence, as shown in the following figure.



**Note:**

Make sure that the dimension type of the region field has been switched from string to geological information.



6. Click **Update**. The system automatically updates the chart.
7. On the **Style** tab, you can edit the title and legend of the chart.
8. Click the **Save** icon to save the dashboard.

To delete the current chart, point to the upper-right corner of the chart, and choose **Delete** from the shortcut menu.

## 4.5.6 Table

If you have read [Dashboard overview](#) and [Dashboard basic operations](#), read this section to learn about how to create a table. If you need to edit the dataset or create a new dataset, see [Create a dataset](#).

A table is used to show the values of a table field and divide the values into two groups. One group is listed on the left of the data table, and the other is listed on the top of the data table. Multiple calculations can be performed in the intersection between a column and a row, for example, sum, average, count, maximum, or minimum.

A table consists of rows and columns. The horizontal rows are determined by the data dimension , such as a province or a product type. The vertical columns are determined by the data measurement, such as an order quantity or a profit amount.

### Notice on creating a table

No restrictions are imposed on the values of the dimension and measurement to define the rows and columns of a table.

The following uses the company\_sales\_record dataset as an example.

**Scenario: Compare the packages, transportation costs, order quantities, and average profits of different types of products in multiple provinces.**

1. Log on to the Quick BI console.
2. Click **Datasets** to enter the dataset management page.
3. Select company\_sales\_record dataset, and click **Create Dashboard**.
4. Click table icon.
5. On the **Data** tab, select a required dimension field and measurement field.

In the dimension list, locate the **province**, **product\_type**, and **product\_box** options and add them to the row area in sequence. In the measurement list, locate the **order\_amt**, **shipping\_cost**, and **average\_profit** options and add them to the column area in sequence, as shown in the following figure.



#### Note:

Make sure that the dimension type of the region and province fields have been switched from string to geological information.



6. Click **Update**. The system automatically updates the chart.

7. On the **Style** tab, you can edit the title and layout.

In the **Rule** menu, you can edit the data display effect for the table, for example, you can change the font color, add a data identifier, or highlight a data area, to help readers efficiently locate their expected data.

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

To delete the current chart, point to the upper-right corner of the chart, and choose **Delete** from the shortcut menu.

## 4.5.7 Gauge

If you have read [Dashboard overview](#) and [Dashboard basic operations](#), read this section to learn about how to create a gauge chart. If you need to edit the dataset or create a new dataset, see [Create a dataset](#).

Like a dashboard on a car, the gauge on Quick BI distinctly shows the range of a specific indicator. You can intuitively see the progress of your task and whether data is under control or exceeds expectation. For example, you can use a gauge to show whether the stock of a kind of commodities is sufficient or requires replenishment.

A dashboard consists of pointer angles and tooltips. Pointer angles and tooltips are determined by the data measurements, such as the discount or profit amount.

### Notice on creating a gauge

Both the pointer angle and the tooltip can have only one measurement.

The following uses the company\_sales\_record dataset as an example.

#### Scenario: Use a gauge to show the order amount.

1. Log on to the Quick BI console.
2. Click **Datasets** to enter the dataset management page.
3. Locate the company\_sales\_record dataset, and click **Create Dashboard**. The dashboard editing page is displayed.
4. Click **gauge** icon.
5. On the **Data** tab, select a required measurement field.

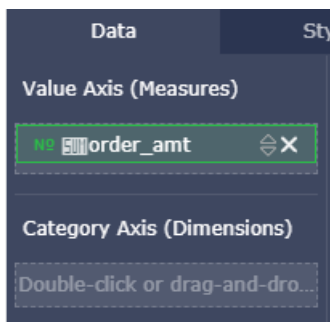


**Note:**



The system automatically adjusts the number of fields of pointer angles and tooltips according to the selection order of fields.

In the measurement list, locate the **order\_amt** option and add it to the pointer angle area or tooltip area, as shown in the following figure.



6. Click **Update**. The system automatically updates the chart.
7. On the **Style** tab, you can edit the title, layout, and legends of the gauge and set whether to display scales.
  - General config: Configure the title of the chart, the color of the font, and the background color.
  - Layout: Configure where the legend is displayed in the chart.
  - Interval Settings: Set the display interval and color of the dashboard.
  - Series settings: Set the alias of the relevant field and the number of decimal places that the numeric values need to retain.
8. Under the Interval Settings menu, click Add to enter the start and end values for the interval.
 

For example, you can set the start value to 100, end value to 1000, and range title to Net Profit.
9. Click **Update**. The display range is displayed on the dashboard.
10. Click the **Save** icon to save the dashboard.

To delete the current chart, point to the upper-right corner of the chart, and choose **Delete** from the shortcut menu.

## 4.5.8 Radar chart

If you have read [Dashboard overview](#) and [Dashboard basic operations](#), read this section to learn about how to create a radar chart. If you need to edit the dataset or create a new dataset, see [Create a dataset](#).

A radar chart can be used to show analyzed numbers or ratios. People can intuitively know the changes and trend of each indicator. For example, you can use a radar chart to show the sales of each region.

A radar chart consists of branch labels and the branch length. Radius labels are determined by the data dimension, such as the product type. The radius is determined by the data measurement, such as the shipping costs.

### Notice on creating a radar chart

Branch labels of a radar chart have one to two dimensions, and a dimension value must be greater than three and smaller than or equal to 12. The branch length must have at least one measurement.

The following uses the `company_sales_record` dataset as an example.

#### Scenario: Compare the order quantity and order amount of different regions.

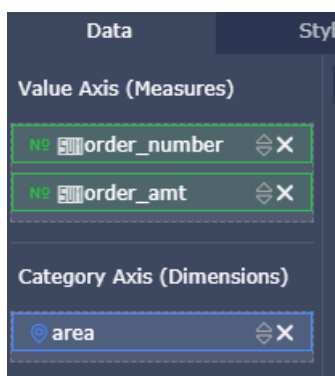
1. Log on to the Quick BI console.
2. Click **Datasets** to enter the dataset management page.
3. Select `company_sales_record` dataset, and click **Create Dashboard**.
4. Click radar chart icon.
5. On the **Data** tab, select a required dimension field and measurement fields.

In the dimension list, locate the **area** option and add it to the radius label area. In the measurement list, locate the **order\_amt** and **order\_number** options, and add them to the radius area in sequence, as shown in the following figure.



#### Note:

Make sure that the dimension type of the region field has been switched from string to geographical information.



6. Click **Update**. The system automatically updates the chart.
7. On the **Style** tab, you can edit the title, layout, and legends of the radar chart.
8. Click the **Save** icon to save the dashboard.

To delete the current chart, point to the upper-right corner of the chart, and choose **Delete** from the shortcut menu.

## 4.5.9 Scatter chart

If you have read [Dashboard overview](#) and [Dashboard basic operations](#), read this section to learn about how to create a scatter chart. If you need to edit the dataset or create a new dataset, see [Create a dataset](#).

A scatter chart shows distribution and convergence of data.

A scatter chart consists of the X axis and Y axis. Color legends of a scatter chart are determined by the data dimension, such as the product type. The X axis and Y axis are determined by the data measurements.

### Notice on creating a scatter chart

Color legends of a scatter chart can have only one dimension, and the maximum number of dimension members is 1000.

X axis: Has one to three measurements.

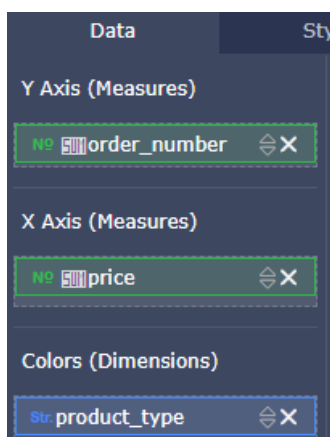
Y axis: Has only one measurement.

The following uses the company\_sales\_record dataset as an example.

**Scenario: Compare the unit price and order quantity of different types of product.**  
**Scenario example: unit price and order quantity for different types of products.**

1. Log on to the Quick BI console.
2. Click **Datasets** to enter the dataset management page.
3. Select company\_sales\_record dataset, and click **Create Dashboard**.
4. Click scatter chart icon.
5. On the **Data** tab, select a required dimension field and measurement fields.

In the dimension list, locate the **product\_type** option, and add it to the color legend area. In the measurement list, locate the **price** and **order\_number** options, and add them to the Y axis and X axis in sequence, as shown in the following figure.



6. Click **Update**. The system automatically updates the chart.
7. On the **Style** tab, you can edit the title, layout, and legends of the scatter chart.
8. Click the **Save** icon to save the dashboard.

To delete the current chart, point to the upper-right corner of the chart, and choose **Delete** from the shortcut menu.

## 4.5.10 Funnel chart

If you have read [Dashboard overview](#) and [Dashboard basic operations](#), read this section to learn about how to create a funnel chart. If you need to edit the dataset or create a new dataset, see [Create a dataset](#).

The funnel chart can be used to analyze business procedure that is relatively standard and has a long cycle and many phases. By comparing business data at each phase using a funnel chart, you can intuitively locate the problem and find the cause. The funnel chart can also be used to show the conversion rate between each phase. It can apply to analysis of complex business procedures. For example, a funnel chart can intuitively show the rate of visitors that finally buy any product after accessing the website.

A funnel chart consists of funnel layer labels and the funnel layer width. A funnel layer label is determined by the data dimension, such as the region. A funnel layer width is determined by the data measurement, such as the order amount.

### Notice on creating a funnel chart

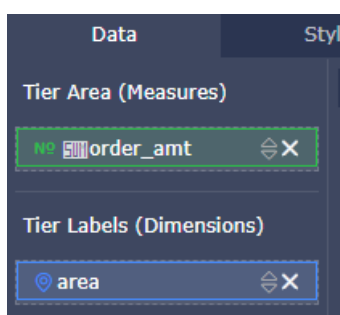
Both the tier label and the tier area can have only one measurement.

The following uses the company\_sales\_record dataset as an example.

**Scenario: Compare the order amount of different regions.**

1. Log on to the Quick BI console.
2. Click **Datasets** to enter the dataset management page.
3. Select the `company_sales_record` dataset, and click **Create Dashboard**.
4. Click funnel chart icon.
5. On the **Data** tab, select a required dimension field and measurement fields.

In the dimension list, locate the **area** option and add it to the tier label area. In the measurement list, locate the **order\_amt** option and add it to the tier area, as shown in the following figure.



6. Click **Update**. The system automatically updates the chart.
7. On the **Style** tab, you can edit the title, layout, and legends of the funnel chart.
  - General config: Configure the title of the chart, the color of the font, and the background color.
  - Layout: Configure where the legend is displayed in the chart.
  - Measure: Format the related measure and set the number of digits displayed for the decimal.
  - Block: Set the display color of the block.
8. Click the **Save** icon to save the dashboard.

To delete the current chart, point to the upper-right corner of the chart, and choose **Delete** from the shortcut menu.

## 4.5.11 Card chart

If you have read [Dashboard overview](#) and [Dashboard basic operations](#), read this section to learn about how to create a card chart. If you need to create a new dataset, see [Create a dataset](#).

An indicator panel can intuitively show the data or sales performance so that participants of a project can promptly know the sales information or management status and quickly take

countermeasures. Therefore, indicator panels are one of the most efficient and intuitive methods of discovering and solving problems.

An indicator panel consists of panel labels and panel indicators. Card labels are determined by the data dimension, such as the region. Card metrics are determined by the data measurement, such as the order quantity or order amount.

### Notice on creating a card chart

Card labels have up to one dimension. Card metrics have at least one, and up to 10 measurements.

The following uses the `company_sales_record` dataset as an example.

### Scenario: Compare order quantity, order amount, transportation costs, and profit amount of different provinces.

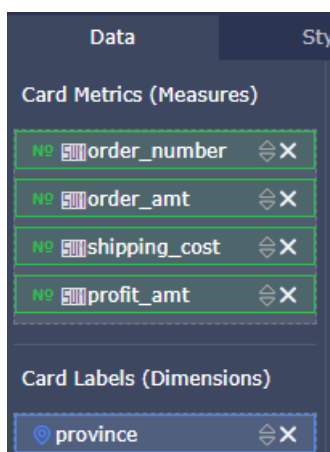
1. Log on to the Quick BI console.
2. Click **Datasets** to enter the dataset management page.
3. Select the `company_sales_record` dataset, and click **Create Dashboard**.
4. Click card chart icon.
5. On the **Data** tab, select a required dimension field and measurement fields.

In the dimension list, locate the **province** option and add it to the card label area. In the measurement list, locate the **order\_number**, **order\_amt**, **shipping\_cost**, and **profit\_amt** options, and add them to the card metrics area in sequence, as shown in the following figure.



#### Note:

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



6. Click **Update**.

7. On the **Style** tab, you can edit the title and template of the card chart and set the number of labels displayed on each line.

- General config: configure the title of the chart, the color of the font, and the background color.
- Card settings: sets the template type and display style.
- Series settings: sets the alias of the relevant field and the number of decimal places that the numeric values need to retain.

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

To delete the current chart, point to the upper-right corner of the chart, and choose **Delete** from the shortcut menu.

## 4.5.12 Tree map

If you have read [Dashboard overview](#) and [Dashboard basic operations](#), read this section to learn about how to create a tree map. If you need to edit the dataset or create a new dataset, see [Create a dataset](#).

A matrix tree describes the relative proportions of multiple data indicators of a specific object.

A matrix tree consists of color block labels and the color block size. Color block labels are determined by the data dimension, such as the product packaging box. The color block size is determined by the data measurement, such as the transportation costs.

### Notice on creating a tree map

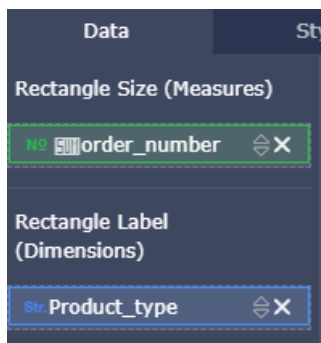
Rectangle labels of a tree map can have only one dimension, and the dimension value must be smaller than or equal to 12. The rectangle size can have only one measurement.

The following uses the company\_sales\_record dataset as an example.

#### Scenario: Compare the order quantity of different types of products.

1. Log on to the Quick BI console.
2. Click **Datasets** to enter the dataset management page.
3. Select company\_sales\_record dataset, and click **Create Dashboard**.
4. Click tree map icon.
5. On the **Data** tab, select a required dimension field and measurement fields.

In the dimension list, locate the **product\_type** option and add it to the rectangle label area. In the measurement list, locate the **order\_number** option and add it to the rectangle size area, as shown in the following figure.



6. Click **Update**. The system automatically updates the chart.
7. On the **Style** tab, you can edit the title and legends of the tree map.
8. Click the **Save** icon to save the dashboard.

To delete the current chart, point to the upper-right corner of the chart, and choose **Delete** from the shortcut menu.

### 4.5.13 Polar chart

If you have read [Dashboard overview](#) and [Dashboard basic operations](#), read this section to learn about how to create a polar chart. If you need to edit the dataset or create a new dataset, see [Create a dataset](#).

A polar chart can be used to show data changes in a period of time or comparison between multiple items. Polar charts apply to enumerated values, for example, comparison between data of different regions.

Similar to a Pie chart, a polar chart consists of multiple slices. The label of each slice is determined by the data dimension, such as the region or product type. The length of each slice is determined by the data measurement, such as the order quantity or order amount.

#### Notice on creating a polar chart

Slice labels of a polar chart can have only one dimension, and the number of dimension members must be greater than 3 and smaller than or equal to 12. The slice length can have only one measurement.

The following uses the company\_sales\_record dataset as an example.



**Scenario: Compare the order quantity of different regions. (The number of regions must be greater than three and smaller than or equal to 12.)**

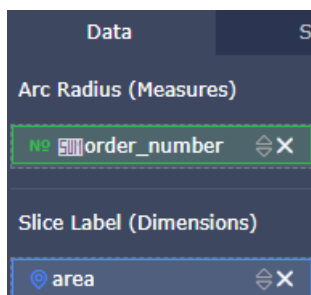
1. Log on to the Quick BI console.
2. Click **Datasets** to enter the dataset management page.
3. Select `company_sales_record` dataset, and click **Create Dashboard**.
4. Click polar chart icon.
5. On the **Data** tab, select a required dimension field and measurement fields.

In the dimension list, locate the **area** option and add it to the slice label area. In the measurement list, locate the **order\_number** option, and add it to the arc radius area, as shown in the following figure.



**Note:**

Make sure that the dimension type of the region field has been switched from string to geographical information.



6. Click **Update**. The system automatically updates the chart.
7. On the **Style** tab, you can change the title and legends of the chart.
8. Click the **Save** icon to save the dashboard.

To delete the current chart, point to the upper-right corner of the chart, and choose **Delete** from the shortcut menu.

## 4.5.14 Word cloud

If you have read [Dashboard overview](#) and [Dashboard basic operations](#), read this section to learn about how to create a word cloud. If you need to edit the dataset or create a new dataset, see [Create a dataset](#).

A word cloud intuitively shows the word frequency. It can be used to prepare user persona and user labels.

A word cloud consists of word labels and the word size. The word is determined by the data dimension, such as the customer name or product type. The word size is determined by the data measurement, such as the profit or unit price.

### Notice on creating a word cloud

Word of a word cloud can have only one dimension, and the word size can have only one measurement.

The following uses the company\_sales\_record dataset as an example.

### Scenario: Compare the order quantity of different provinces.

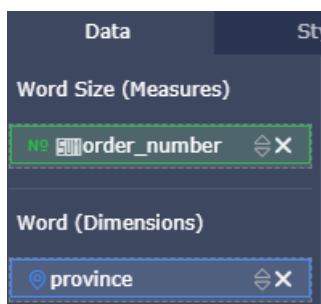
1. Log on to the Quick BI console.
2. Click **Datasets** to enter the dataset management page.
3. Select company\_sales\_record dataset, and click **Create Dashboard**.
4. Click word cloud icon.
5. On the **Data** tab, select a required dimension field and measurement fields.

In the dimension list, locate the province option and add it to the word area. In the measurement list, locate the **order\_number** option and add it to the word size area, as shown in the following figure.



#### Note:

Make sure that the dimension type of the region and province fields have been switched from string to geographical information.



6. Click **Update**. The system automatically updates the chart.
7. On the **Style** tab, you can set the title and legends of the chart.
8. Click the **Save** icon to save the dashboard.

To delete the current chart, point to the upper-right corner of the chart, and choose **Delete** from the shortcut menu.

## 4.5.15 Tornado chart

If you have read [Dashboard overview](#) and [Dashboard basic operations](#), read this section to learn about how to create a tornado chart. If you need to edit the dataset or create a new dataset, see [Create a dataset](#).

A tornado chart is a combination of a tornado chart and a funnel chart. A tornado can be used to compare the data of different indicators of two objects, for example, the salary and education degree of citizens in two cities. A funnel chart can also be used to show the conversion rate between each phase. It can apply to analysis of complex business procedures. For example, a funnel chart can intuitively show the rate of visitors that finally buy any product after accessing the website.

A tornado chart combines the features of the tornado chart and funnel chart. For example, when you compare the migrant population ratio, employment rate, and transaction volume of commercial residential buildings in Beijing and Shanghai, if there is a funneling between compared , you can use a tornado funnel chart to show the data difference of each indicator between two cities and display the funnel hierarchy of the compared items.

If there is no funneling effect between compared items, a common tornado chart is displayed. If there is a funneling effect between compared items, but these items belong to only one object, a common funnel chart is displayed.

A tornado chart consists of a comparison subject and comparison indicators. Each comparison subject is determined by the data dimension, such as the region or product type. Each comparison indicator is determined by the data measurement, such as the order quantity or order amount.

### Notice on creating a tornado chart

The comparison subject of a tornado chart can have only one dimension. Comparison indicators must have at least one measurement.

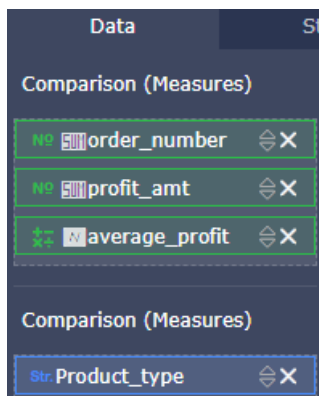
The following uses the company\_sales\_record dataset as an example.

**Scenario: Compare the order quantity, profit amount, and average profit of different types of project.**

1. Log on to the Quick BI console.
2. Click **Datasets** to enter the dataset management page.
3. Select the company\_sales\_record dataset, and click **Create Dashboard**.
4. Click tornado chart icon.

5. On the **Data** tab, select a required dimension field and measurement fields.

In the dimension list, locate the **product\_type** option and add it to the comparison area. In the measurement list, locate the **order\_number**, **profit\_amt**, and **average\_profit** options and add them to the comparison area in sequence, as shown in the following figure.



6. Click **Update**. The system automatically updates the chart.
7. On the **Style** tab, you can edit the chart title, layout, and legend positions and set the color scheme and whether to display the conversion rate.
- A tornado chart provides two chart layouts for your choice.
  - In the Style menu, you can change legend positions, set the color scheme of the chart, and set whether to display the conversion rate on the chart.
8. Click the **Save** icon to save the dashboard.

To delete the current chart, point to the upper-right corner of the chart, and choose **Delete** from the shortcut menu.

## 4.5.16 Hierarchy chart

If you have read [Dashboard overview](#) and [Dashboard basic operations](#), read this section to learn about how to create a hierarchy chart. If you need to edit the dataset or create a new dataset, see [Create a dataset](#).

A hierarchy chart displays the organizational relationship of hierarchical data using a tree structure and organizes objects using a parent-child structure. It can be used for enumeration. For example, if you want to view the income of each prefecture-level city in a province, you can use a hierarchychart to show the parent-child relationship of the province and its prefecture-level cities. Hierarchy charts apply to analysis related to organizational structures, for example, staff structure of a company or department structure of a hospital.

A hierarchy chart consists of node metrics and node labels. The node label is determined by the data dimension, such as the region or product type. The node metrics is determined by the data measurement, such as the order quantity or order amount.

### Notice on creating a hierarchy chart

The node labels must have at least two dimensions, and the dimension fields have parent-child relationship. The node metrics must have at least one measurement.

The following uses the company\_sales\_record dataset as an example.

### Scenario: Compare the order quantity of different products in provinces in different regions

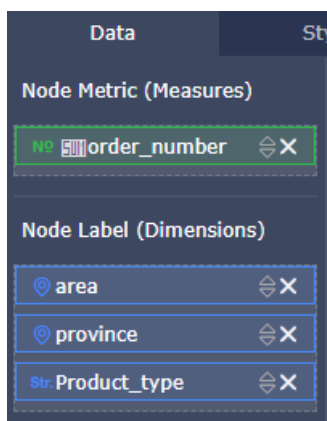
1. Log on to the Quick BI console.
2. Click **Datasets** to enter the dataset management page.
3. Select company\_sales\_record dataset, and click **Create Dashboard**. The dashboard editing page is displayed.
4. Click hierarchy chart icon
5. On the **Data** tab, select a required dimension field and measurement fields.

In the dimension list, locate the **area**, **province**, and **product\_type** options and add them to the node label area in sequence. The sequence of these options is the parent-child relationship displayed on the chart. In the measurement list, locate the **order\_number** option and add it to the node metrics area, as shown in the following figure.



#### Note:

Make sure that the dimension type of the region and province fields have been switched from string to geological information.



6. Click **Update**. The system automatically updates the chart.

7. On the **Style** tab, you can set the title, layout, and design of the chart.

- A hierarchy chart supports three layouts. You can select the expansion mode (root nodes are merged by default) and display mode of parent and child nodes based on your needs.
- You can edit the display hierarchy of the chart in the design menu and manually enter the number of hierarchy levels. You can select a main path through the corresponding field. The main path is displayed in a different color from other paths. You can load the toolbar to the chart so that you can edit the chart in preview mode or on the dashboard.

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

To delete the current chart, point to the upper-right corner of the chart, and choose **Delete** from the shortcut menu.

## 4.5.17 Conversion path

If you have read [Dashboard overview](#) and [Dashboard basic operations](#), read this section to learn about how to create a conversion chart. If you need to edit the dataset or create a new dataset, see [Create a dataset](#).

A conversion chart illustrates the conversion rate of a webpage by comparing its page traffic or page views (PV) and the number of its unique visitors (UV), so that users can know the overall operation status of the website and the final transaction volume of a type of products. Visitor) to determine the conversion rate of the web page, then you can know the overall operating effect of the website and the final volume of a certain kind of merchandise. Source direction charts apply to analysis related to e-commerce or marketing. For example, you can use a source direction chart to analyze which products are the bestsellers and which time periods are traffic peaks.

A source direction chart now only supports three levels of dimensions, which are the previous page, current page, and the next page. The measurements of a source direction chart are PV, UV, the path conversion rate, and the page bounce rate, among which PV and UV are collected from the previous, current, and next pages.

### Notice on creating a conversion chart

The previous, current, and next pages in a conversion chart each can have a maximum of one dimension. The dimension fields must be hierarchical. The sequence of dimensions fields determines their hierarchy displayed on the chart. PV (for the previous, current, and next page), UV (for the previous, current, and next page), the path conversion rate, and the page bounce rate can have a maximum of one measurement, respectively.

When you create a source direction chart, the three dimensions (each for the previous, current, and next pages) and two conversion rates (path conversion rate and page bounce rate) are mandatory. However, you can select either the three PV items or three UV items. If an entered dimension or measurement field is incorrect, the system prompts you accordingly.

The following uses the page\_source\_target\_state dataset as an example.

**Scenario: Display the conversion rate and bounce rate between each page based on PV.**

1. Log on to the Quick BI console.
2. Click **Datasets** to enter the dataset management page.
3. Select page\_source\_target\_state, and click **Create Dashboard**. The dashboard editing page is displayed.
4. Click conversion chart icon.
5. On the **Data** tab, select a required dimension field and measurement fields.

In the dimension list, locate the names of the **previous**, **current**, and **next page**, and enter the names in the corresponding fields in sequence. The sequence of these pages is the hierarchy displayed on the chart. In the measurement list, locate the page path conversion rate and page bounce rate, enter them in the corresponding fields in sequence, locate the three PV values and/or three UV values, and enter them in the corresponding fields in sequence.

6. Click **Update**. The system automatically updates the chart.
7. On the **Style** tab, you can edit the title and layout of the chart.

The conversion chart provides three layouts, including highlight of the main path or prompted windows. For example, if you select Highlight Top Path for the layout, the top path is displayed in a different color on the chart.

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

To delete the current chart, point to the upper-right corner of the chart, and choose **Delete** from the shortcut menu.

## 4.5.18 LBS thermal map



**Note:**

LBS thermal map is only applied to **Quick BI Professional Edition**.

If you have read [Dashboard overview](#) and [Dashboard basic operations](#), read this section to learn about how to create an LBS thermal map. For more information about dataset, see [Create a dataset](#).

Similar to a [Geo map](#), an LBS thermal map uses different colors to demonstrate the data values and ranges.

An LBS thermal map consists of geographical areas and LBS thermal depths. Geographical areas are determined by data dimension, longitude, and latitude, such as province. LBS thermal depths are determined by data measures, such as order amount or profit amount.

### Limitations on creating an LBS thermal map

You can set only one dimension for the geographical region of a LBS thermal map and the dimension type must be the geographical information. You can set up to five LBS Thermal depths (measures).

The following scenario uses the company\_sales\_record dataset and standard dashboard mode as an example.

**Scenario: Create an LBS thermal map to show shipping cost and order amount of each province.**

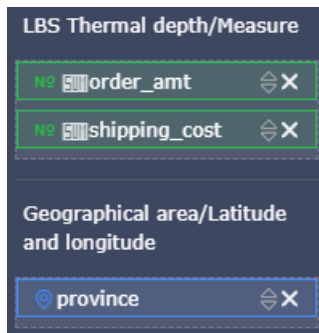
1. Log on to the Quick BI console.
2. Click **Datasets** to enter the dataset management page.
3. Select the company\_sales\_record dataset, and click **Create Dashboard** to go to the dashboard editing page.
  - If you are using **Standard** or **Advanced** edition, the page automatically jumps to the **Standard** edit page.
  - If you are using **Professional Edition**, you need to manually select either **Standard** or **Fullscreen** mode. The following takes the **Standard** as an example.
4. Click the **LBS thermal map** icon, and the legend of the LBS fly line map is automatically displayed in the dashboard display area.
5. On the **Data** tab, select a required dimension field and measurement fields.

In the dimension list, locate the **province** option and add it to the Geographical area/Latitude and longitude. In the measurement list, locate the **shipping\_cost** and **order\_amt** options and add them to the bubble size area in sequence, as shown in the following figure.



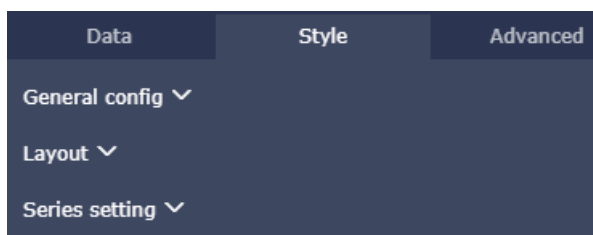
**Note:**

Make sure that the dimension type of the area field has been switched from string to geographical information.

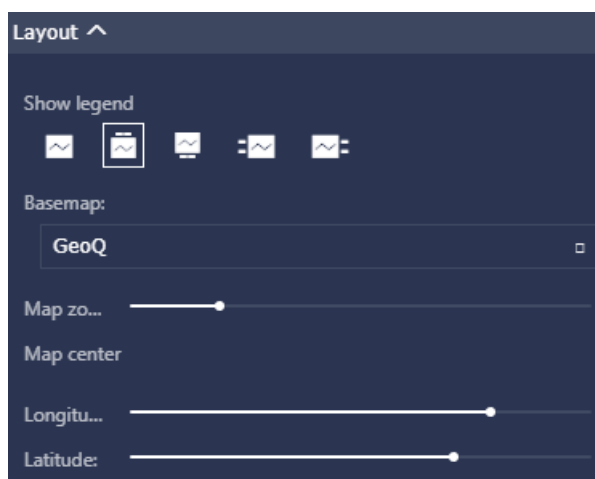


6. Click **Update**.

7. On the **Style** tab, you can edit the title, layout, and series setting of a chart, as shown in the following figure.



- In the **Layout** configuration, set the Basemap to **GeoQ**.



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

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

## 4.5.19 LBS flying line map

If you have read [Dashboard overview](#) and [Dashboard basic operations](#), read this section to learn about how to create a LBS bubble map. If you need to edit a dataset or create a new dataset, see [Create a dataset](#).

An LBS flying line map uses a map profile as its background. Dynamic flying lines reflect data values between two or more regions.

An LBS flying line consists of two geographical regions and LBS flying line measures. Geographical regions are determined by data dimension, such as province or city. The LBS flying line size is determined by a data metric, such as transportation cost or order amount.

### Limitations on creating an LBS flying line map

You can set up to two dimensions for the geographical region of an LBS flying line map, and the dimension type must be of geographical information (such as province and city). You can create only one LBS flying line metric.

The following uses the `company_sales_record` dataset as an example.

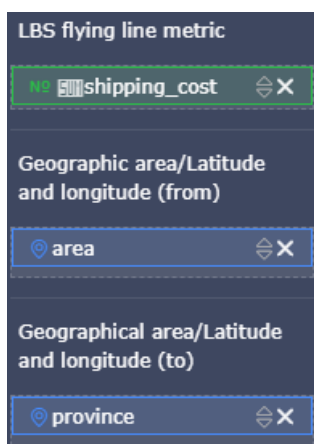
**Scenario: Create an LBS flying line map to show the transportation cost between regions.**

1. Log on to the Quick BI console.
2. Click **Datasets** to enter the dataset management page.
3. Select `company_sales_record` dataset, and click **Create Dashboard**. The dashboard editing page is displayed.
  - If you are using **Standard** or **Advanced** edition, the page automatically jumps to the **Standard** edit page.
  - If you are using **Professional Edition**, you need to manually select either **Standard** or **Fullscreen** mode. The following takes the **Standard** as an example.
4. Click the **LBS fly line map** icon, and the legend of the LBS fly line map is automatically displayed in the dashboard display area.
5. On the **Data** tab, select a required dimension field and measurement field.

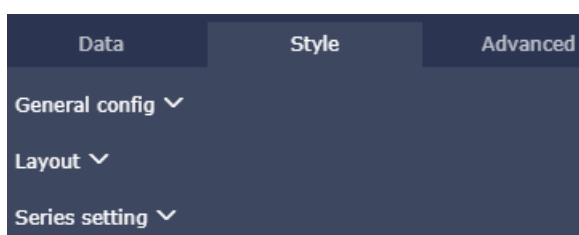
In the dimension list, locate the **area** and add it to the Geographic area/Latitude and longitude (from) field in the region. Locate the **province** and add it to the Geographic are/Latitude and longitude (to) field. In the metric list, locate the shipping cost and add it to the LBS line metric area, as shown in the following illustration.

**Note:**

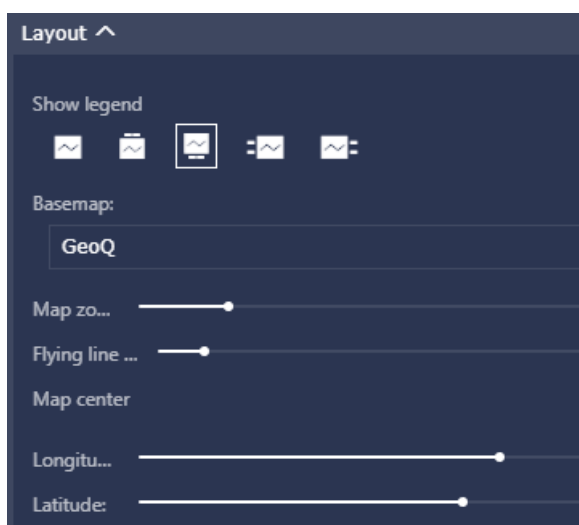
Make sure that the dimension type of the region and province fields have been switched from string to geographical information.



6. Click **Update**. The system automatically updates the chart.
7. On the **Style** tab, you can edit the title, layout, and series settings, as shown in the following figure (optional).



In the **Layout** configuration, set the **Basemap** to **GeoQ** and set the **Show legend** to **Bottom**, as shown in the following figure.



**Note:**

You can adjust the speed of LBS flying lines by setting the LBS flying line time. The higher the value, the slower the flying line will be.

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

In the upper right corner, select **More > Delete** To delete the current chart.

## 4.5.20 Progress chart

If you have read [Dashboard overview](#) and [Dashboard basic operations](#), read this section to learn about how to create a Progress chart. For more information about datasets, see [Create a dataset](#).

A Progress chart shows targeted progress of a specific task.

It consists of progress indicators that are based on measurements, for example, order\_number.

### Limitations on creating a Progress chart

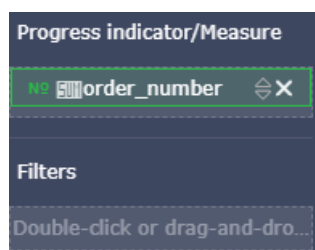
The progress indicator/measure must have at least one measurement, and at most five measurements.

The following scenario uses the company\_sales\_record dataset as an example.

#### Scenario: Show order number with Progress chart.

1. Log on to the Quick BI console.
2. Click **Datasets** to enter the dataset management page.
3. Select company\_sales\_record dataset, and click **Create Dashboard**. The dashboard editing page is displayed.
4. Click Progress chart icon.
5. On the **Data** tab, select a required measurement field.

Select **order\_number** in the measurement list and add it to the progress indicator area as follows



6. Click **Update**.

7. On the **Style** tab, you can edit the title, layout, and design of the chart.

The image shows the 'Style' configuration panel in Quick BI, which is divided into three tabs: 'Data', 'Style', and 'Advanced'. The 'Style' tab is currently selected. The panel is organized into three main sections: 'General config', 'Layout', and 'Series settings'. In the 'General config' section, there is a 'show' checkbox that is checked, a 'Title' field with the value 'Progress-company\_sales\_record\_en\_us', a 'Remarks' text area, and a 'Background' dropdown set to 'Light'. The 'Layout' section includes a 'Show legend' area with five icons, where the second icon (a line chart with a legend) is selected, and a 'Show tooltip' checkbox that is also checked. The 'Series settings' section contains a dropdown for 'order\_number', an 'Alias' field with 'order\_number' and a color selection (cyan), and fields for 'Min' and 'Max' values. At the bottom, there is a 'Format' dropdown set to 'Auto fit (English)' and a 'Decimal digits' field.

**Style** | Data | Advanced

General config ^

☒ show

Title

Progress-company\_sales\_record\_en\_us

Remarks

Remarks

Background

Light

Layout ^

Show legend

☒ Show tooltip

Series settings ^

order\_number

Alias

order\_number

Min

Min

Max

Max

Format

Auto fit (English)

Decimal digits

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

In the upper right corner, select **More > Delete** To delete the current chart.