

Alibaba Cloud Quick BI

User Guide

Issue: 20190520

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Generic conventions

Table -1: Style conventions

Style	Description	Example
	This warning information indicates a situation that will cause major system changes, faults, physical injuries, and other adverse results.	 Danger: Resetting will result in the loss of user configuration data.
	This warning information indicates a situation that may cause major system changes, faults, physical injuries, and other adverse results.	 Warning: Restarting will cause business interruption. About 10 minutes are required to restore business.
	This indicates warning information, supplementary instructions, and other content that the user must understand.	 Notice: Take the necessary precautions to save exported data containing sensitive information.
	This indicates supplemental instructions, best practices, tips, and other content that is good to know for the user.	 Note: You can use Ctrl + A to select all files.
>	Multi-level menu cascade.	Settings > Network > Set network type
Bold	It is used for buttons, menus, page names, and other UI elements.	Click OK.
Courier font	It is used for commands.	Run the <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 an optional value, and only one item can be selected.	<code>ipconfig [-all -t]</code>

Style	Description	Example
{} or {a b}	It indicates that it is a required value, and only one item can be selected.	<code>swich {stand slave}</code>

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1 Organization management

1.1 Manage the organization

1.1.1 Basic concepts about organization management

Organization management is a feature provided by Quick BI Pro and Quick BI Enterprise Standard that allows you to develop data collaboratively with other members in the organization. Quick BI Pro and Quick BI Enterprise Standard are officially released. Users can upgrade Quick BI Basic to a higher Quick BI version in the Quick BI console. The system automatically creates an organization for you after the upgrade.

What is an organization?

Generally, organizations refer to small and medium-sized enterprises (SMEs), public institutions, schools, or departments of large companies.

If your organization values data security highly and data analysis needs to be performed collaboratively by more than 10 members, we recommend that you purchase Quick BI Pro. Quick BI Pro brings the following benefits:

- Members have different access permissions to reports based on the departments that they belong to.
- Members have different access permissions to a report based on their roles.

We recommend that you use Quick BI Basic if the number of users is fewer than 10.

Organization member management refers to adding Alibaba Cloud users that need to work collaboratively into the same organization.

Organization management includes:

- Managing organizational information
- Managing member information
- Managing workspaces

Only administrators of an organization have permissions to manage the members of the organization. The creator of an organization is set as an administrator by default.

The roles of members in an organization include administrator and user.

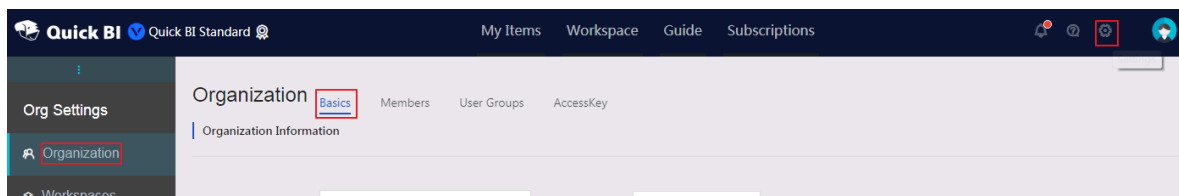
1.1.2 Modify the information of an organization

Administrators of an organization can modify the information of an organization.

Context

Procedure

1. Log on to the Quick BI console.
2. Select Settings > Organization > Basics.



3. Modify the information of the organization manually as shown in the following figure.

A screenshot of the 'Organization Basics' page in the Quick BI console. The page title is 'Organization Basics' with tabs for 'Basics', 'Members', 'User Groups', and 'AccessKey'. The 'Basics' tab is selected, and the sub-section is 'Organization Information'. The form contains the following fields:

- Name:** A text input field with the value 'Org_2017'. Below it is a note: 'The name must be 1 to 50 characters in length and can contain letters, numbers, Chinese characters, underscores (_), forward slashes (/), backslashes (\), vertical bars (|), parentheses (()), and square brackets ([]).'.
- Description:** A text input field with the value 'DefaultOrganization'.
- Created At:** A text input field with the value '11/29/2017, 21:52:45'.
- Owner:** A text input field with the value 'HongKong'.

At the bottom of the form are two buttons: 'Save' and 'Leave Organization'.

4. Click Save to complete the modifying of the information of the organization.

1.1.3 Add, search, edit, and remove members

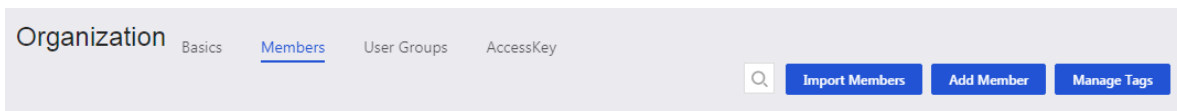
You can add a member to an organization by adding an Alibaba Cloud account or RAM user. You can use the import members function to add multiple members to an organization. You can also search for or remove members.

Add a member

Add an Alibaba Cloud account

1. Log on to the Quick BI console.

2. Choose Settings > Organization > Members.
3. Click Add Member as shown in the following figure:



4. On the Add Member page, click the Tenant Account tab.

**Note:**

Make sure that you enter an account ID. An account ID is a numeric string.

5. Enter the Alibaba Cloud account and an alias for the member. You can select Set As Admin to specify the member as an administrator, as shown in the following figure:

The 'Add Member' dialog box has a title bar with 'Add Member' and a close button. It contains two tabs: 'Tenant Account' (selected) and 'RAM User'. Under the 'Tenant Account' tab, there are two required fields: '* Tenant Account' and '* Alias'. The '* Tenant Account' field has a placeholder text 'Enter a valid Apsara Stack tenant account.' and a note 'The account name cannot contain colons (:).' The '* Alias' field has a placeholder text 'Enter a unique alias.' and a detailed note: 'The alias must be 1 to 50 characters in length and can contain letters, numbers, Chinese characters, underscores (_), forward slashes (/), backslashes (\), vertical bars (|), parentheses (()), and square brackets ([]).' At the bottom of the form, there is a checkbox labeled 'Set as Admin'. At the bottom right of the dialog, there are 'Cancel' and 'OK' buttons.

6. Click OK to add the member.

Add a RAM user

1. Log on to the Quick BI console.
2. Choose Settings > Organization > Members > Add Member.
3. Click the RAM User tab.

4. Enter the Alibaba Cloud account, the RAM user, and an alias. You can select Set As Admin to specify the member as an administrator, as shown in the following figure:

**Note:**

Make sure that you enter an account ID. An account ID is a numeric string. For RAM users, enter the RAM username in "RAM username@Default domain or enterprise alias.onaliyun.com". For example, if your RAM user account is zhangsan@test.onaliyun.com, enter zhangsan.

Add Member

×

Tenant Account

RAM User

* Tenant Account

Enter a valid Apsara Stack tenant account.

The account name cannot contain colons (:).

* RAM User

Enter a valid RAM user.

The account name cannot contain colons (:).

* Alias

Enter a unique alias.

The alias must be 1 to 50 characters in length and can contain letters, numbers, Chinese characters, underscores (_), forward slashes (/), backslashes (\), vertical bars (|), parentheses (()), and square brackets ([]).

☐ Set as Admin

Cancel

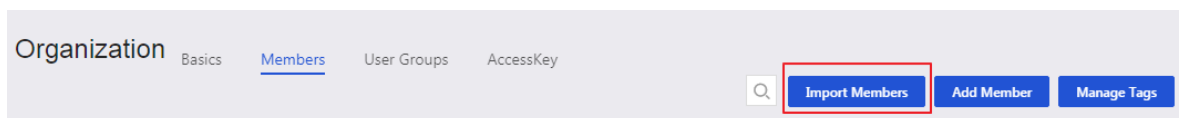
OK

5. Click OK to add the member.

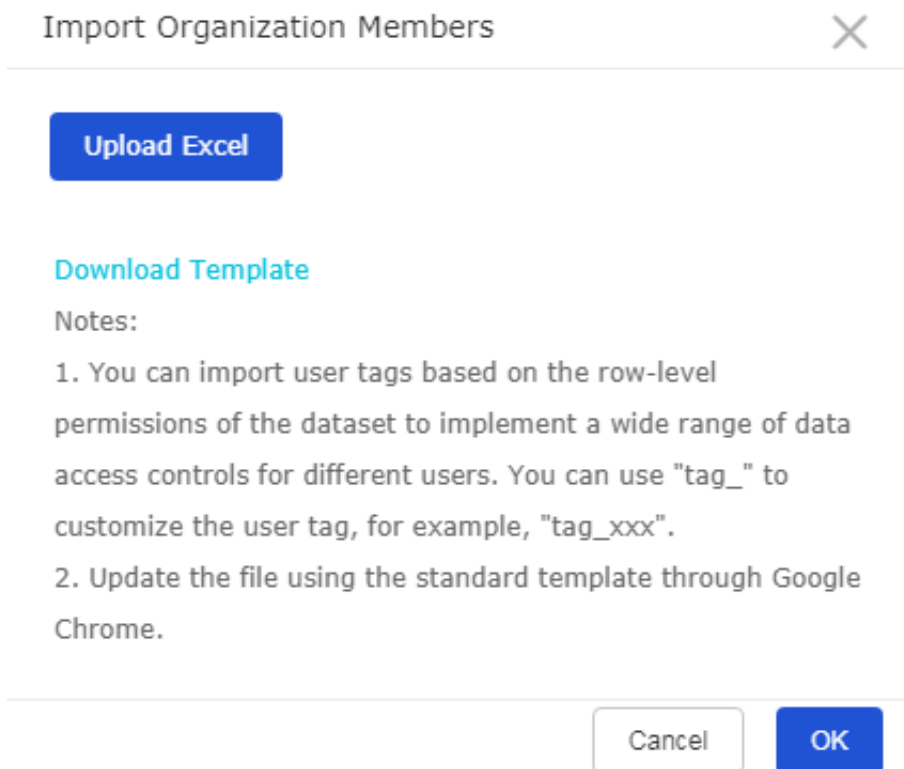
Import members

1. Log on to the Quick BI console.
2. Choose Settings > Organization > Members.

3. Click Import Members, as shown in the following figure:



4. Click Upload Excel to upload a list of members from the local disk, as shown in the following figure:

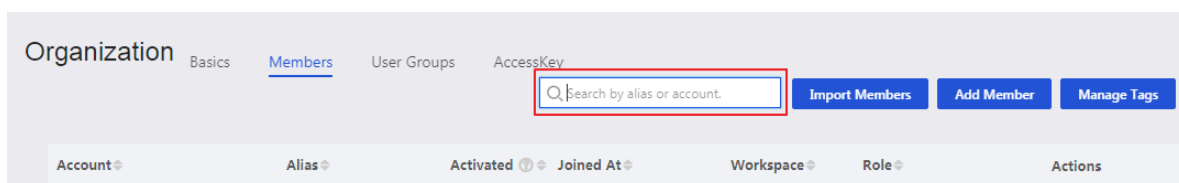


5. Click OK to import the members.

Search members

You can search for members by alias or Alibaba Cloud account.

1. Log on to the Quick BI console.
2. Choose Settings > Organization > Members.
3. Enter an alias or Alibaba Cloud account into the search bar, as shown in the following figure:

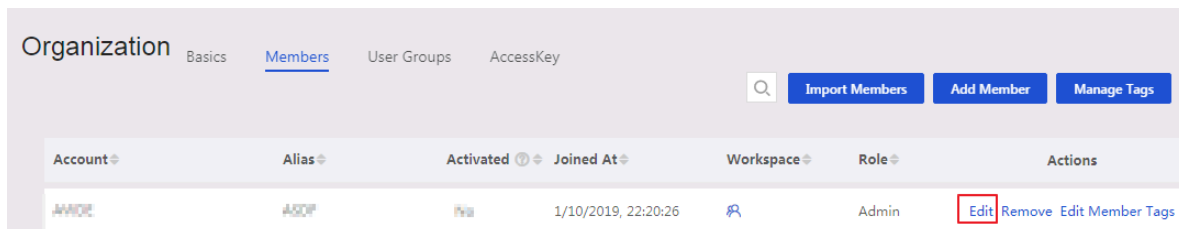


4. Click the Search icon to search for the member.

Edit a member

Administrators can edit the information of members.

1. Log on to the Quick BI console.
2. Choose Settings > Organization > Members.
3. Select a member, and click Edit in the Actions column.



4. You can edit the alias of the member, and choose whether to specify the member as an administrator by setting the Set as Admin option.


The 'Edit User Info' dialog box is shown. It has a title bar with a close button. Inside, there are two main fields: 'Tenant Account' and 'Alias'. The 'Tenant Account' field is disabled (grayed out) and contains the value '5094112108153120'. The 'Alias' field is active and also contains '5094112108153120'. Below the 'Alias' field, there is a text block explaining the alias requirements: 'The alias must be 1 to 50 characters in length and can contain letters, numbers, Chinese characters, underscores (_), forward slashes (/), backslashes (\), vertical bars (|), parentheses (()), and square brackets ([]).' Below this text is a checkbox labeled 'Set as Admin' which is checked. At the bottom right of the dialog are 'Cancel' and 'OK' buttons.

5. Click OK to submit the changes.

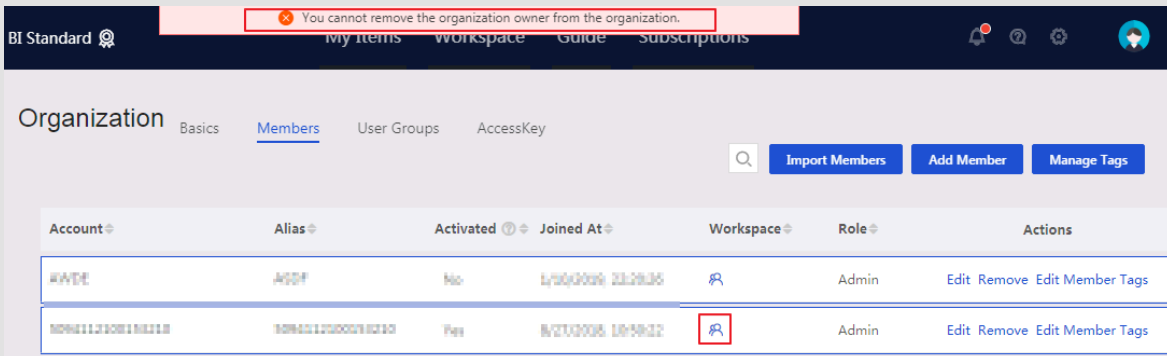
Remove a member

Administrators can remove members. The remove operation is irreversible. Use with caution. To rejoin an organization, you must contact an administrator to add you to the organization as a member.

1. Log on to the Quick BI console.
2. Choose Settings > Organization > Members.
3. Select a member, and click Remove in the Actions column.

 **Note:**

If the member is in a workspace, the system prompts the following error message:



You cannot remove a user who is a member of a group workspace. For more information about removing a member from a workspace, see [Delete a member](#).

4. Click OK to remove the member.

1.1.4 View the workspaces that a member belongs to

You can view the workspaces that a member belongs to by clicking the corresponding Workspace icon.

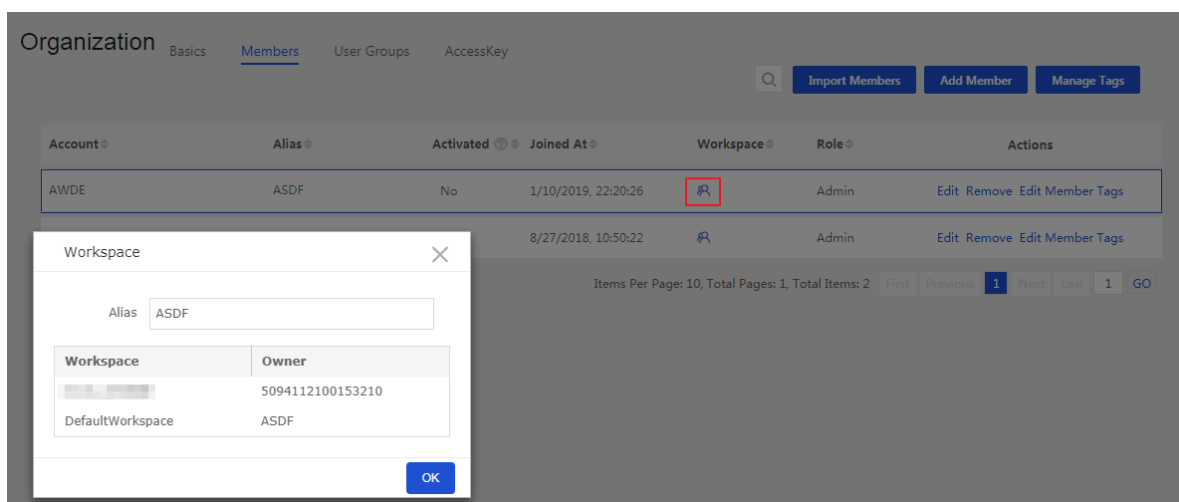
Context

A blue icon indicates that the member belongs to at least one workspace. A grey icon indicates that the member does not belong to any workspaces.

Procedure

1. Log on to the Quick BI console.
2. Choose Settings > Org Units > Members.
3. Select a member and click the Workspace icon (blue) in the Workspace column.

4. View the workspaces that the member belongs to as shown in the following figure.



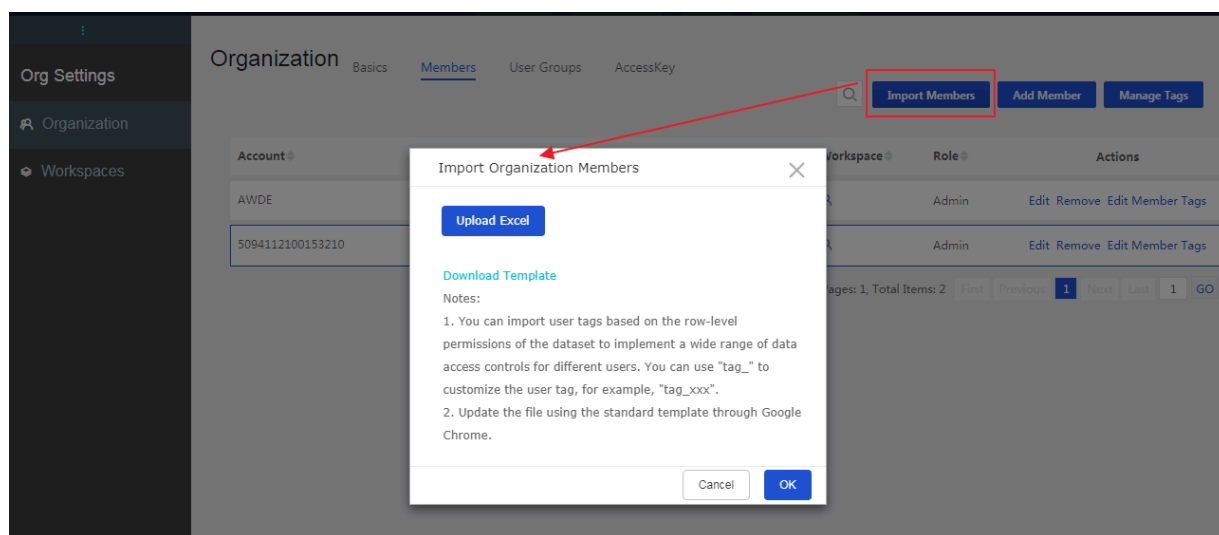
5. Click OK to close the dialog box.

1.1.5 Tags

Member tags are used to set dataset row-level permissions. This topic describes how to manage member tags. For more information about the row-level permission setting, see [Configure row-level permissions](#).

Add a tag

You can use the import members function to add tags, as shown in the following figure:



Click Download Template to download the member template. In this example, the member information is as follows:

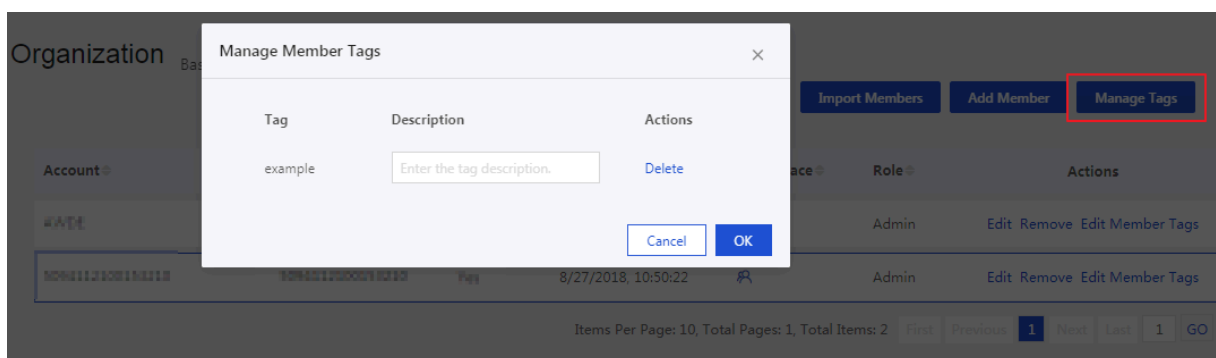
Account	Nickname	tag_tagArea	tag_tagProvince
example1@aliyun.com	example1	East	Anhui
example2@aliyun.com	example2	East	Anhui

**Note:**

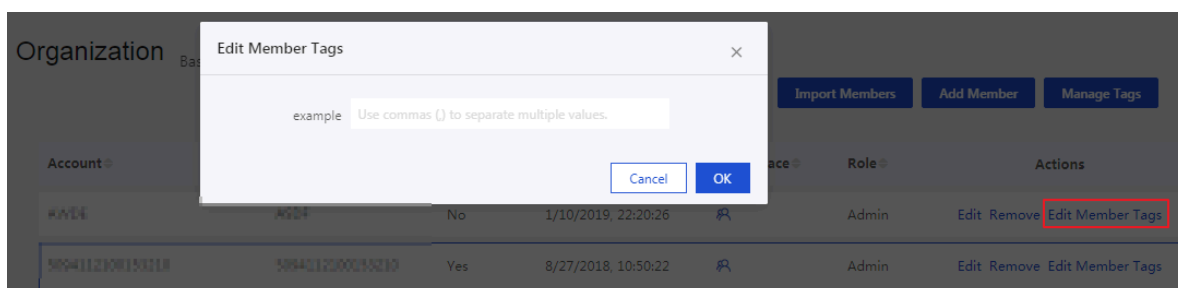
For members that do not need the row-level permission setting, set their tags to \$ ALL_MEMBERS\$.

Manage tags

You can manage tags as shown in the following figure:

**Edit a tag**

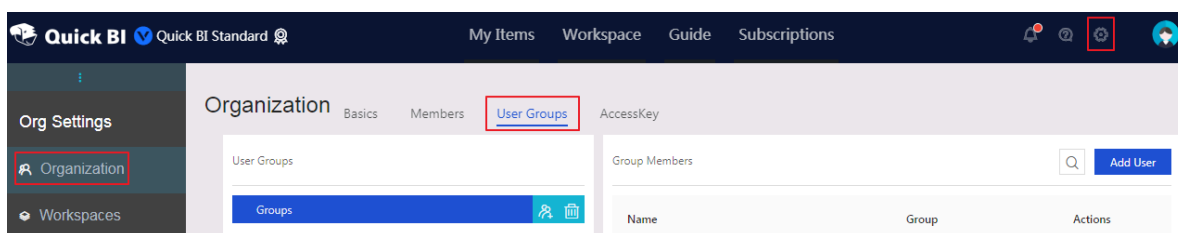
1. Select a member that you need to set the row-level permission for, and click Edit Member Tags.
2. On the edit member tags page, enter the tag values, and then click OK, as shown in the following figure:

**1.1.6 Create a user group**

Members in an organization may belong to different departments, such as the sales, operations, and technology departments. They may also have different roles, such as analysts, project managers, and project directors. You can create multiple user groups for these members. A member can be added to multiple user groups. You can then grant these user groups the access permission to datasets and BI portals as needed.

1. Log on to the Quick BI console.
2. Choose Settings > Organization > User Groups.

3. On the user groups page, click the Add Child Group icon.



4. On the child group page, enter a group name and then click OK.

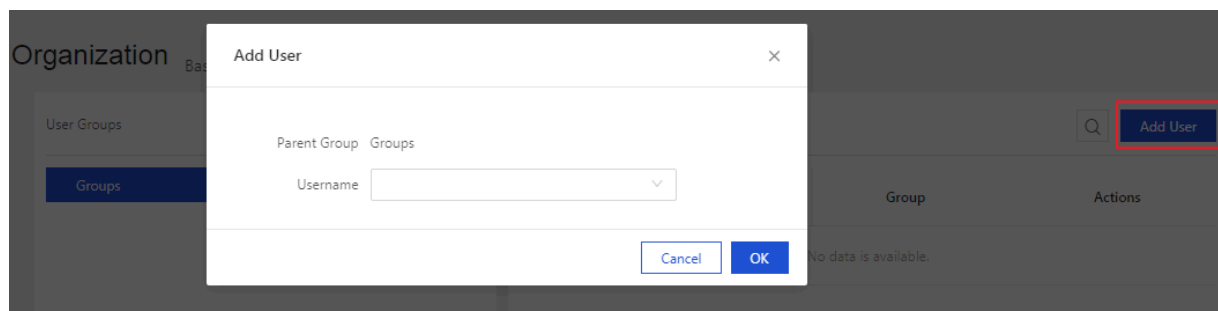
Add Child Group
×

Parent Group Groups

Name

Cancel OK

After creating the child group, you can click Add User to add users to this group.



1.2 Manage workspaces

1.2.1 Concepts

In Quick BI Basic, a user's workspace is called personal space. In Quick BI Pro and Enterprise Standard, a user's workspace is divided into personal space and group space.

What is a group space?

A group space is a workspace where organization unit members collaborate on development. In a group space, group members can collaborate to create and modify

data sources, cubes, worksheets, dashboards, and data portals based on their roles. These data objects exist in the group space they belong to. Different group spaces have different data objects.

In group space management, the organizational unit administrator adds members in the organizational unit to different group spaces based on their work scope and responsibilities.

Group spaces can correspond to actual business departments of the organizational unit. For example, administrators can create workspaces for the sales department and the HR department of the organization and then add the employees as members to the corresponding workspaces.

Workspaces are similar to DingTalk groups. For example, employees can share information and communicate with each other through the DingTalk group that is corresponding to the department that they belong to.

Manage workspaces

A group space is managed by the group space administrator. Members of a workspace are appointed to be administrators by the administrator of the organization that creates the workspace. Administrators of a workspace have permission to set other members in the workspace to be administrators.

Workspace management includes:

- Creating a workspace
- Modifying a workspace
- Setting a default workspace

Differences between a personal space and a group space

Main differences between a personal space and a group space are as follows:

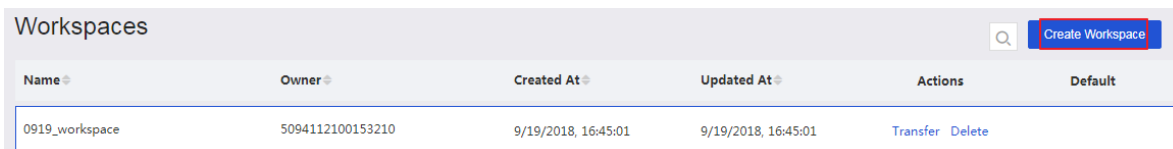
- A personal workspace is created automatically after the first logon. A workspace is created manually by an administrator of the organization.
- The personal space cannot be deleted, and a new personal space cannot be created.
- You are not allowed to add other members to a personal workspace. Therefore, a personal workspace does not support collaboration or transfer.
- Workspaces can be transferred to users in a group space, and can be shared with users in an organization. Personal spaces can be shared with Alibaba Cloud users.

1.2.2 Create a workspace

You can perform the following steps to create a workspace.

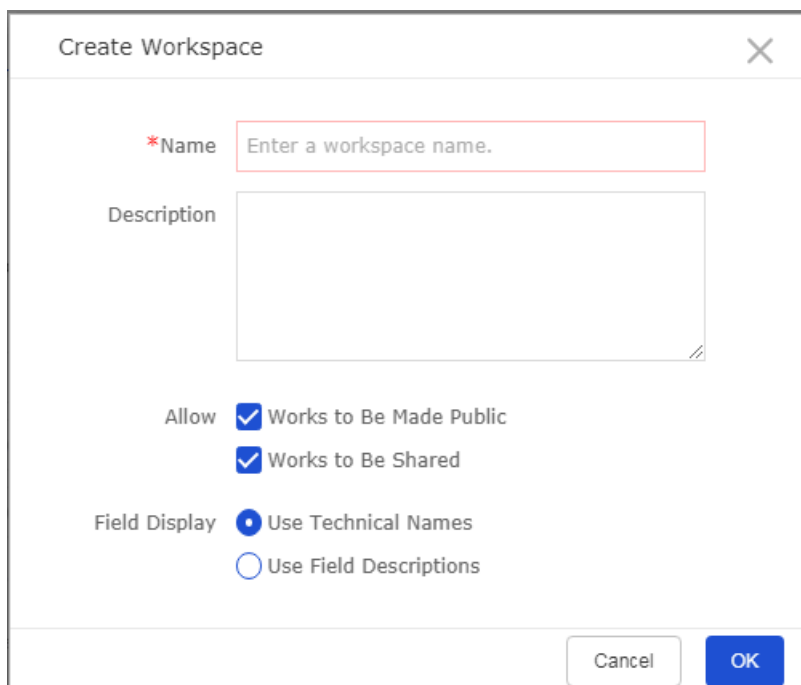
Procedure

1. Log on to the Quick BI console.
2. Choose Settings > Workspaces.
3. Click Create Workspace as shown in the following figure.



Name	Owner	Created At	Updated At	Actions	Default
0919_workspace	5094112100153210	9/19/2018, 16:45:01	9/19/2018, 16:45:01	Transfer Delete	

4. In the Name field, enter a name for the workspace as shown in the following figure.



Create Workspace

*Name

Description

Allow ☒ Works to Be Made Public
☒ Works to Be Shared

Field Display ☒ Use Technical Names
☐ Use Field Descriptions

5. Click OK to complete the creating of the workspace.

1.2.3 Modify the information of a workspace

Only the owner of a personal workspace is allowed to modify the information of the personal workspace. Oppositely, only the administrators of a workspace are allowed to modify the information of the workspace.

Procedure

1. Log on to the Quick BI console.
2. Choose Settings > Workspaces.
3. Click the Settings tab to jump to the Settings tab page.

4. Click Edit Workspace as shown in the following figure.

5. Click OK to finish the modification.

1.2.4 Set a default workspace

When a member is added to an organization, the member is added to the default workspace.

Procedure

1. Log on to the Quick BI console.
2. Choose Settings > Workspaces.
3. Hover your mouse over a workspace. Click Set as Default as shown in the following figure.

Workspaces					
Name	Owner	Created At	Updated At	Actions	Default
0919_workspace	5094112100153210	9/19/2018, 16:45:01	9/19/2018, 16:45:01	Transfer Delete	Set as Default

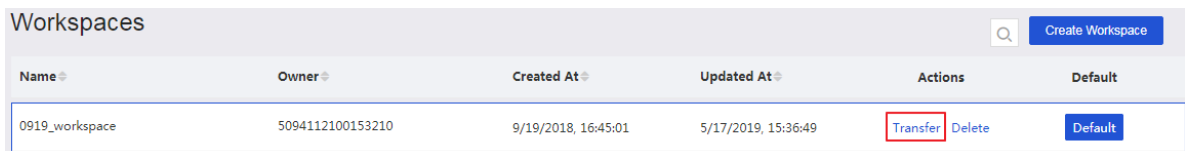
After you do that, the Default button is displayed in the Default column. Click the button to cancel the operation of setting the workspace as a default one.

1.2.5 Transfer a workspace

Before leaving an organization, the owner of a workspace can transfer the workspace to another member of the organization. The new owner can be any member, not required to be an administrator.

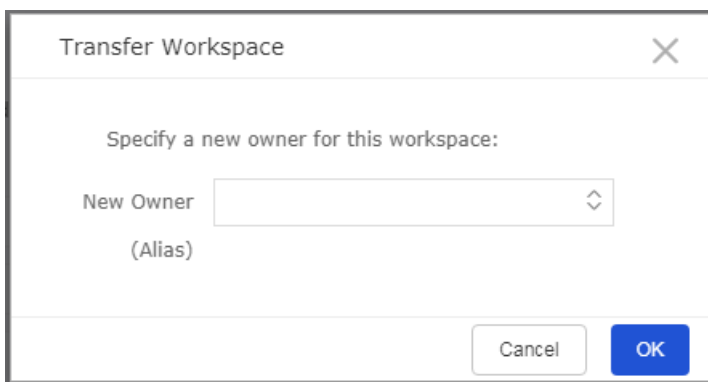
Procedure

1. Log on to the Quick BI console.
2. Choose Settings > Workspaces.
3. Click Transfer in the Actions column for the workspace to transfer as shown in the following figure.



Name	Owner	Created At	Updated At	Actions	Default
0919_workspace	5094112100153210	9/19/2018, 16:45:01	5/17/2019, 15:36:49	Transfer Delete	Default

4. Click the drop-down arrow and select a new owner of the workspace by the nickname as shown in the following figure.



Transfer Workspace

Specify a new owner for this workspace:

New Owner

(Alias)

Cancel OK

5. Click OK to complete the transferring of the workspace.

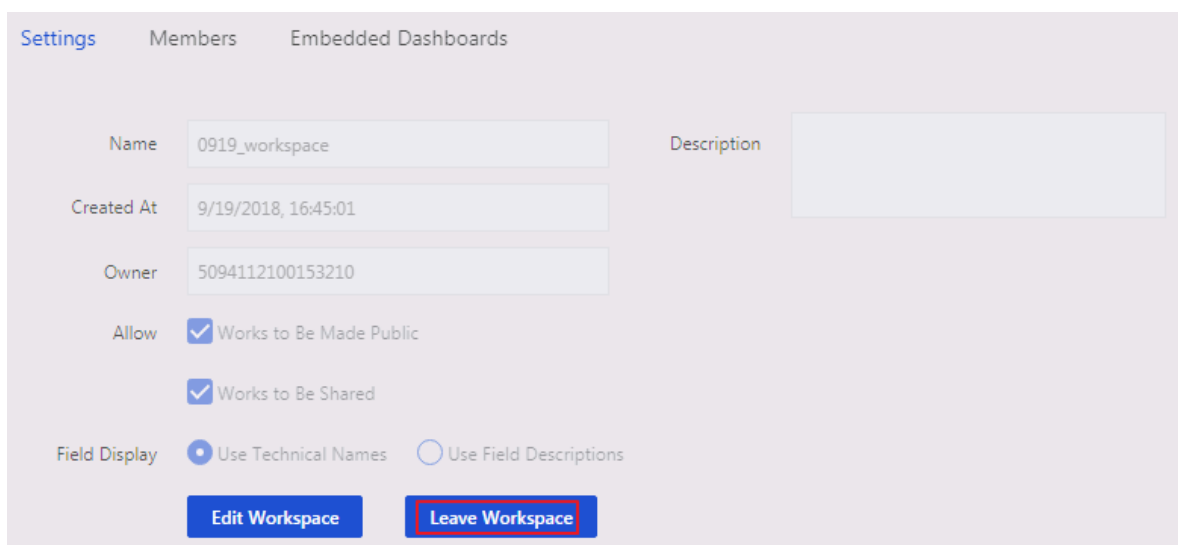
1.2.6 Leave a workspace

You can perform the following steps to leave a workspace.

Procedure

1. Log on to the Quick BI console.
2. Choose Settings > Workspaces.
3. Click the Settings tab to jump to the settings tab page.

4. Click Leave Workspace as shown in the following figure.



5. Click the drop-down arrow to select a new owner of your data objects by the nickname.

6. Click OK to leave the workspace.

1.2.7 Workspace member overview

You need to assign a role to the member after you add it to a workspace . Roles have different permissions. Each member can be assigned a maximum of one role.

Roles include Space Manager, Developer, Analyst, and Viewer.

Mappings for roles and permissions

Mappings for roles and permissions are fixed and not modifiable. To grant permission to the member of a workspace, you only need to specify the role for the member.



Note:

The classic workbook feature is in beta and will not be supported in future versions. A classic workbook does not support custom grouping fields, data type conversions, dataset joins based on snowflake schemas, and joins for databases from different data sources.

Table 1-1: Function navigation entry

Permission	Developer	Analyst	Viewer
Datasets/Data sources	Supported	Not supported	Yes

Permission	Developer	Analyst	Viewer
Classic Workbooks/ Workbooks	Supported	Supported	Supported
Dashboards	Supported	Supported	Supported
BI Portals	Supported	Supported	Supported

Table 1-2: Datasets/Data sources

Permission	Developer	Analyst	Viewer
Create data sources	Supported	Not supported	Not supported
Modify data sources	Only modifying own data sources is supported	Not supported	Not supported
Delete data sources	Only deleting own data sources is supported	Not supported	Not supported
Use data sources	Supported	Not supported	Not supported
Create datasets	Supported	Not supported	Not supported
Modify datasets	Only modifying own datasets is supported	Not supported	Not supported
Delete Datasets	Only deleting own datasets is supported	Not supported	Not supported
Use datasets	Supported	Supported	Not supported

Table 1-3: Classic workbooks

Permission	Developer	Analyst	Viewer
Create classic workbooks	Supported	Supported	Not supported
Modify classic workbooks	Only modifying own classic workbooks is supported	Only modifying own classic workbooks is supported	Not supported

Permission	Developer	Analyst	Viewer
Delete classic workbooks	Only deleting own classic workbooks is supported	Only deleting own classic workbooks is supported	Not supported
View classic workbooks	Supported	Supported	Supported
Share classic workbooks	Only sharing own classic workbooks is supported	Only sharing own classic workbooks is supported	Not supported
Reference classic workbooks	Supported	Supported	Not supported

Table 1-4: Workbooks

Permission	Developer	Analyst	Viewer
Create workbooks	Supported	Supported	Not supported
Modify workbooks	Only modifying own workbooks is supported	Only modifying own workbooks is supported	Not supported
Delete workbooks	Only deleting own workbooks is supported	Only deleting own workbooks is supported	Not supported
View workbooks	Supported	Supported	Supported
Share workbooks	Only sharing own workbooks is supported	Only sharing own workbooks is supported	Not supported
Reference workbooks	Supported	Supported	Not supported

Table 1-5: Dashboards

Permission	Developer	Analyst	Viewer
Create dashboards	Supported	Supported	Not supported
Modify dashboards	Only modifying own dashboards is supported	Only modifying own dashboards is supported	Not supported

Permission	Developer	Analyst	Viewer
Delete dashboards	Only deleting own dashboards is supported	Only deleting own dashboards is supported	Not supported
View dashboards	Supported	Supported	Supported
Share dashboards	Only sharing own dashboards is supported	Only sharing own dashboards is supported	Not supported
Reference dashboards	Supported	Supported	Not supported
Publish dashboards	Only publishing own dashboards is supported	Only publishing own dashboards is supported	Not supported

Table 1-6: BI portals

Permission	Developer	Analyst	Viewer
Create BI portals	Supported	Supported	Not supported
Modify BI portals	Only modifying own BI portals is supported	Only modifying own BI portals is supported	Not supported
Delete BI portals	Only deleting own BI portals is supported	Only deleting own BI portals is supported	Not supported
View BI portals	Supported	Supported	Supported
Share BI portals	Only sharing own BI portals is supported	Only sharing own BI portals is supported	Not supported

1.2.8 Add, edit, search, and delete workspace members

On the workspaces page, you can add, edit, search, and delete workspace members.

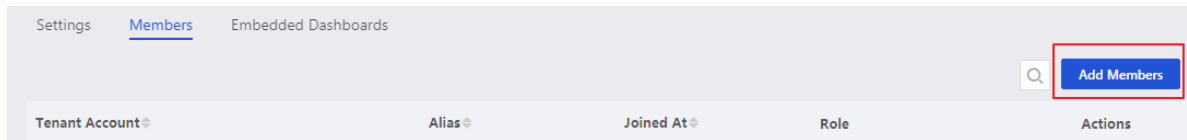
To perform these actions, you must first go to the workspaces page.

Go to the workspaces page

1. Log on to the Quick BI console.
2. Click Settings > Workspaces in the upper-right corner of the page.
3. Click the Members tab to show the Members tab page.

Add members to a workspace

1. On the workspaces page, click the workspace that you want to add members to.
2. Click the Members tab, and then click Add Members on the members tab page, as shown in the following figure:



3. Search members by alias and select a role for the members, as shown in the following figure:

A screenshot of the 'Add Members' dialog box. The title bar says 'Add Members' with a close button (X). Below the title bar, there's a search bar labeled 'Members'. Underneath, there's a 'Role' section with four radio buttons: 'Admin', 'Developer', 'Analyst', and 'Viewer'. The 'Viewer' radio button is selected. At the bottom, there are two buttons: 'Cancel' and 'OK'.

4. Click OK to add the members.

Modify the member role

1. On the workspaces page, click the workspace that the member belongs to.
2. Click the Members tab, and click Edit in the Actions column for the target member.
3. Change the role of the member.

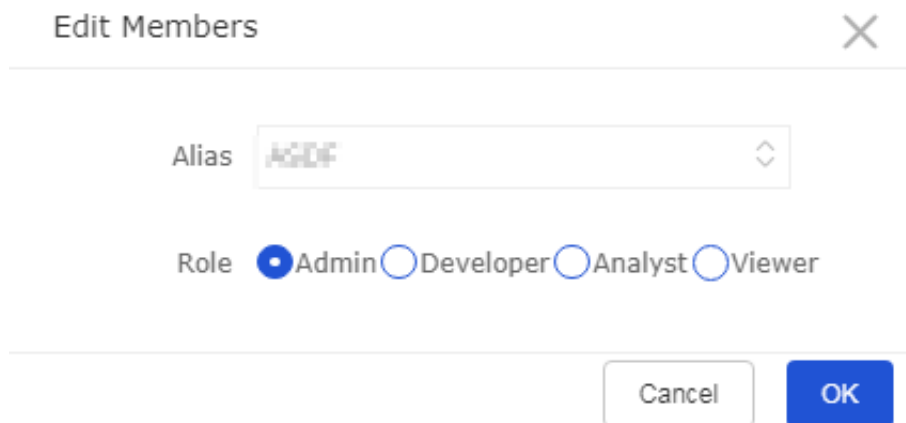
A screenshot of the 'Edit Members' dialog box. The title bar says 'Edit Members' with a close button (X). Below the title bar, there's a search bar labeled 'Alias' with the value 'AGDF'. Underneath, there's a 'Role' section with four radio buttons: 'Admin', 'Developer', 'Analyst', and 'Viewer'. The 'Admin' radio button is selected. At the bottom, there are two buttons: 'Cancel' and 'OK'.

Different roles are granted different permissions. For more information, see [Workspace member overview](#).

4. Click OK to submit the change.

Search members

1. On the workspaces page, click a workspace to search members.
2. Click the Members tab, enter an alias into the search box on the members tab page.



Edit Members

Alias AGDEF

Role ☒ Admin ☐ Developer ☐ Analyst ☐ Viewer

Cancel OK

3. Click the Search icon to search for the member.

Delete a member

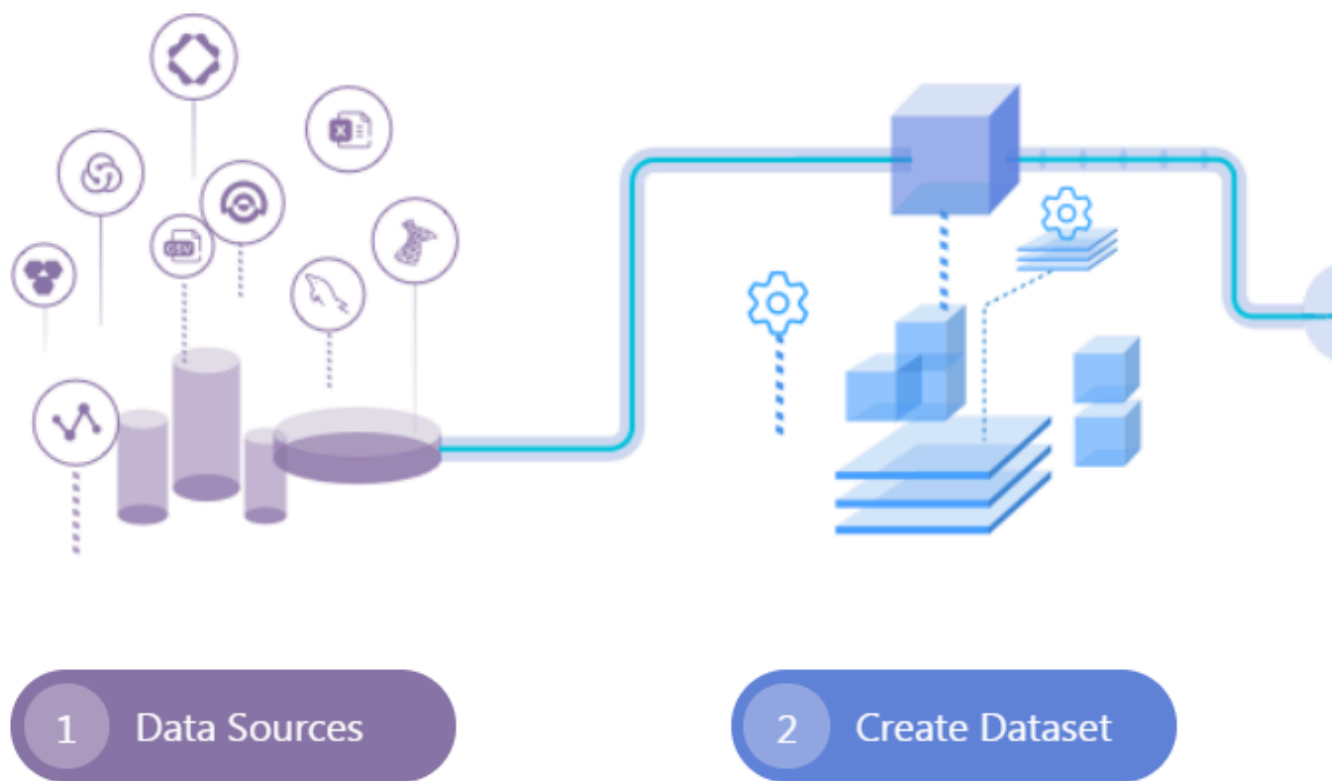
1. On the workspaces page, click the workspace that the target member belongs to.
2. Click the Members tab, and click Delete in the Actions column for the target member.
3. Select a new owner from the drop-down list. Items under the member to be deleted will be transferred to the new owner.
4. Click OK to delete the member.

2 Data modeling

2.1 Overview of data modeling

Data modeling is used to visualize data and allows you to quickly identify and extract information. Furthermore, it helps you to make correct decisions based on the trend represented by the data.

The basic process of data modeling is shown in the following figure.



1. Add data sources: a required step. Operations on datasets, workbooks, dashboards, and portals are all based on data sources. For more information about data sources, see [Data sources management overview](#).

2. Create datasets: a required step. You can create a dataset by using any one of the following three methods:

- **Tables in a data source:** You can create dashboards and workbooks based on datasets. For more information about operations on datasets, see [Datasets management overview](#).
- **Local files:** You can only create datasets based on local files in Personal Workspace. You can create datasets based on CSV files uploaded from your local disk. For more information about operations on CSV files, see [Upload local files](#).
- **Custom SQL queries:** You can create datasets based on custom SQL queries in MaxCompute. For more information about operations on custom SQL queries, see [SQL overview](#).

2.2 Data source management

2.2.1 Manage data sources

Quick BI supports the following types of data sources.

Cloud data sources

- MaxCompute
- MySQL
- SQL Server
- AnalyticDB
- HybridDB for MySQL
- HybridDB for PostgreSQL
- PostgreSQL
- PPAS
- Hive (Quick BI Enterprise Standard)
- Data Lake Analytics (Quick BI Enterprise Standard and Pro)
- OSS (Quick BI Enterprise Standard)
- DRDS (Quick BI Enterprise Standard)

User-created data sources

- MySQL
- SQL Server

- Oracle
- PostgreSQL
- Hive (Quick BI Enterprise Standard)
- Vertica (Quick BI Enterprise Standard)
- IBM DB2 LUW (Quick BI Enterprise Standard)
- SAP IQ (Sybase IQ) (Quick BI Enterprise Standard)
- SAP HANA (Quick BI Enterprise Standard)

User space

- CSV files
- Excel files
- Data IDE

Local files are uploaded and stored in the user space. Only Quick BI provides user spaces. Currently, each user has a user space of 1 GB.

Network requirements for data sources

Quick BI has the following network requirements for data sources.

1. Quick BI can connect to RDS instances in a VPC by using public IP addresses. MySQL and SQL Server instances can be connected by using private IP addresses.
2. Quick BI can connect to instances in a classic network by using both public and private IP addresses. When Quick BI connects to RDS instances by using public IP addresses, set a whitelist of IP addresses that are allowed to access RDS instances in the RDS console. For more information, see [Set a whitelist](#).
3. Quick BI can be accessed on the public network.
4. Quick BI can connect to user-created MySQL and SQL Server databases on ECS instances in a VPC by using private IP addresses.

More operations

For more operations on data sources, see:

- [Create cloud data sources](#)
- [Create a user-created data source](#)
- [Upload local files](#)
- [Edit, search, and delete data sources](#)
- [Search tables in a data source](#)

- [View table details in a data source](#)
- [Synchronize data sources](#)

2.2.2 Create cloud data sources

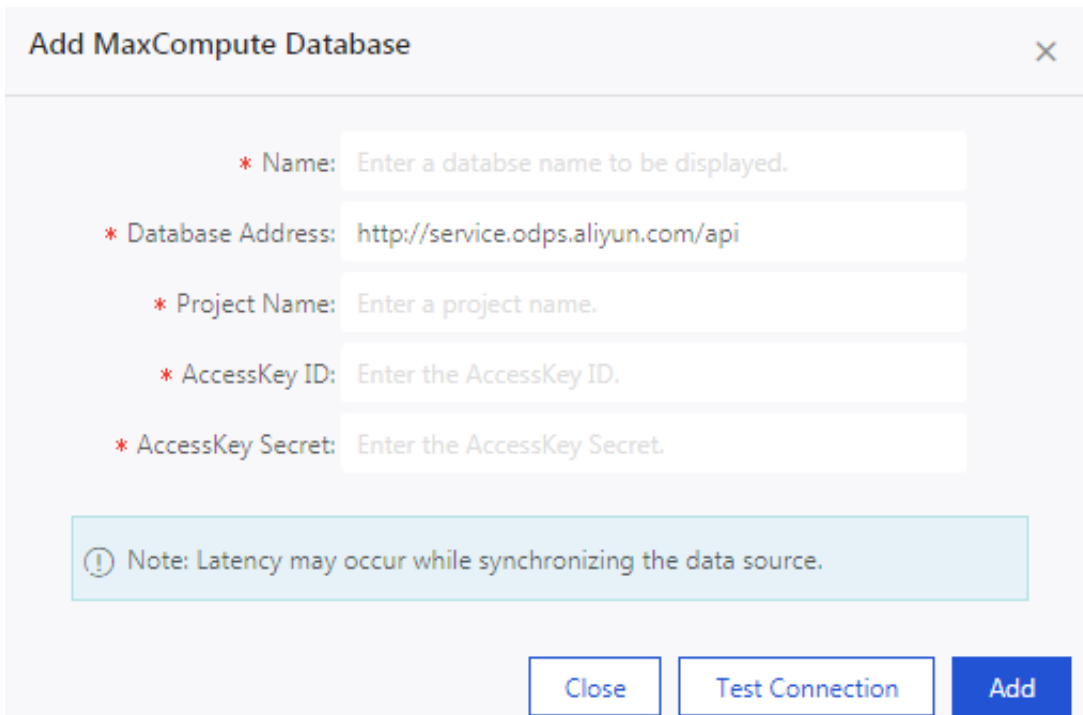
Operations on datasets, workbooks, dashboards, and BI portals are based on data sources. This topic describes how to create a cloud data source.

You need to go to the Add Data Source page before adding a cloud data source.

1. Log on to the Quick BI console.
2. Click Data Sources to go to the Data Sources page.
3. Click Create Data Source.
4. Click the Cloud Data Sources tab.

MaxCompute

1. Click the MaxCompute icon.
2. Enter the fields for connecting to the data source.



- **Name:** the data source name.
- **Database Address:** the default address is displayed. For modification, see [Configure endpoints](#).



Note:

The database address is based on the region where the database instance is deployed. For example, if you choose a classic network as the network type for your database instance that is deployed in the Hong Kong region, the database address is `http://service.cn-hongkong.maxcompute.aliyun-inc.com/api`. If the database instance is deployed in the Asia Pacific SE 1 (Singapore) region, the database address is `http://service.ap-southeast-1.maxcompute.aliyun-inc.com/api`. For more information, see [Configure endpoints](#).

- Project: the project name.
- AccessKey ID: the AccessKey ID.
- AccessKey Secret: the AccessKey Secret.



Note:

Make sure that the AccessKey is valid. The corresponding account is an administrator of the project, the owner of the project, or a user that has List, Select, and CreateInstance permissions.

3. Click Test Connection to perform a data source connectivity test.



Note:

If the connection is successful, a message that indicates success is displayed.

4. Click Add to add the data source.

After the data source is added, the Data Sources page is redirected automatically. All tables that are contained in the data source are listed in the right section.

MaxCompute data sources use asynchronous loading. Creating a MaxCompute data source takes one to five minutes to synchronize data.

MySQL

You need to add IP addresses or security groups to the whitelist of the RDS instance in the ApsaraDB for RDS console before you add an RDS data source.

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

1. Click the MySQL icon.

2. Enter the fields for connecting to the data source.

Add MySQL Database [X]

* Name: Enter a database name to be displayed.

* Database Address: Enter a hostname or an IP address.

* Port Number: 3306

* Database: Enter a database name.

* Username: Enter a username.

* Password: Enter the password.

ⓘ Note: Add the following IP addresses to the whitelist:
10.152.69.0/24, 10.152.163.0/24, and 139.224.4.0/24.

Close Test Connection Add

- Name: the data source name.
- Database Address: the IP address or the hostname of the database.
- Port Number: the port number.
- Database: the database name.
- Username: the database username.
- Password: the database password.

Contact the administrator of your data warehouse if you forget the username and password.

3. Click Test Connection to perform a data source connectivity test.
4. Click Add to add the data source.

If a data source with the same configurations exists, a message that indicates conflict is displayed. You do not need to create the same data source again.

SQL Server

Adding an RDS (SQL Server) data source is similar to adding an RDS (MySQL) data source. However, you need to specify the Schema configuration item for an RDS (SQL Server) data source. The default port number for an SQL Server data source is 1433.

1. Click the SQL Server icon.
2. Enter the fields for connecting to the data source.

Add SQL Server Database [X]

* Name: Enter a database name to be displayed.

* Database Address: Enter a hostname or an IP address.

* Port Number: 1433

* Database: Enter a database name.

Schema: dbo

* Username: Enter a username.

* Password: Enter the password.

ⓘ Note: Add the following IP addresses to the whitelist:
10.152.69.0/24, 10.152.163.0/24, and 139.224.4.0/24.

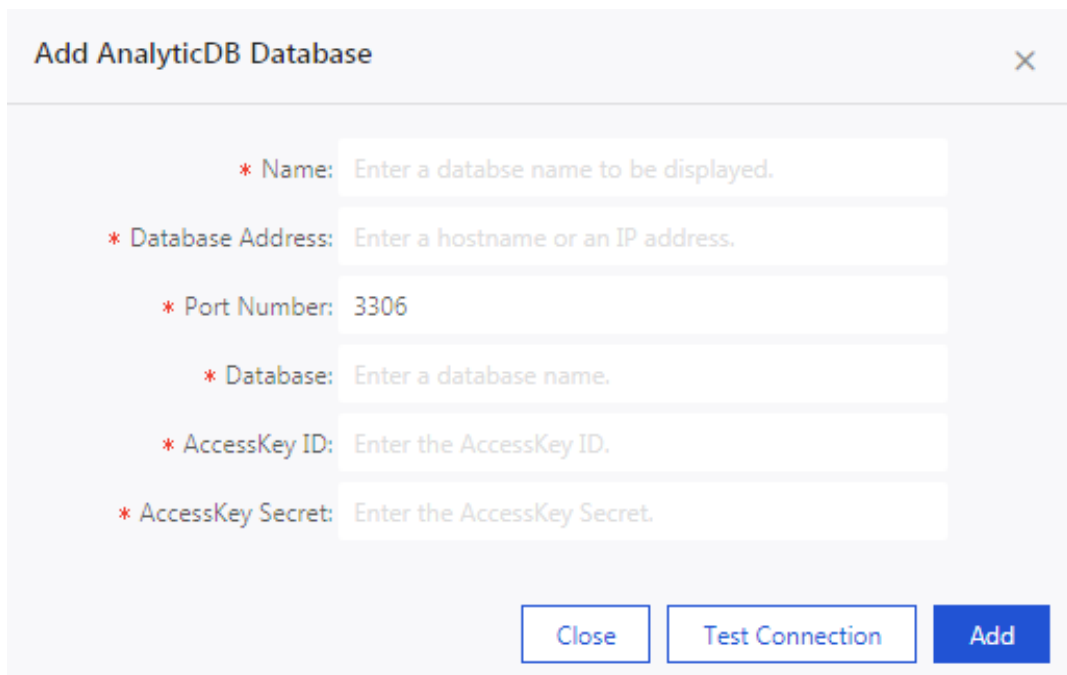
[Close] [Test Connection] [Add]

- Name: the data source name.
 - Database Address: the IP address or the hostname of the database.
 - Port Number: the port number.
 - Database: the database name.
 - Schema: the database schema. The default schema is dbo.
 - Username: the database username.
 - Password: the database password.
3. Click Test Connection to perform a data source connectivity test.
 4. Click Add to add the data source.

AnalyticDB

1. Click the AnalyticDB icon.

2. Enter the fields for connecting to the data source.



Add AnalyticDB Database [X]

* Name: Enter a database name to be displayed.

* Database Address: Enter a hostname or an IP address.

* Port Number: 3306

* Database: Enter a database name.

* AccessKey ID: Enter the AccessKey ID.

* AccessKey Secret: Enter the AccessKey Secret.

[Close] [Test Connection] [Add]

- Name: the data source name.
- Database Address: the IP address or the hostname of the database.
- Port Number: the port number.
- Database: the database name.
- Access ID: the AccessKey ID.
- Access Key: the AccessKey Secret.

3. Click Test Connection to perform a data source connectivity test.

4. Click Add to add the data source.

HybridDB for MySQL

Adding a HybridDB for MySQL data source is similar to adding a MySQL data source.

1. Click the HybridDB for MySQL icon.

2. Enter the fields for connecting to the data source.

Add Data Source [X]

* Name:

* Database Endpoint:

* Port:

* Database:

* Username:

* 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

- Name: the data source name.
- Database Address: the IP address or the hostname of the database.
- Port Number: the port number. The default port number is 3306.
- Database: the database name.
- Username: the database username.
- Password: the database password.

3. Click Test Connection to perform a data source connectivity test.

4. Click Add to add the data source.

HybirdDB for PostgreSQL

Adding a HybridDB for PostgreSQL data source is similar to adding a SQL Server data source. The default port number for a HybridDB for PostgreSQL database is displayed .

1. Click the HybridDB for PostgreSQL icon.

2. Enter the fields for connecting to the data source.

Add Data Source [X]

* Name:

* Database Endpoint:

* Port:

* Database:

Schema:

* Username:

* Password:

① 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

- Name: the data source name.
 - Database Address: the IP address or the hostname of the database.
 - Port Number: the port number.
 - Database: the database name.
 - Schema: the database schema. The default schema is public.
 - Username: the database username.
 - Password: the database password.
3. Click Test Connection to perform a data source connectivity test.
 4. Click Add to add the data source.

PostgreSQL

1. Click the PostgreSQL icon.

2. Enter the fields for connecting to the data source.

Add Data Source

* Name: Display name in the data source list

* Database Endpoint: Hostname or IP

* Port: 5432

* Database: Database name

Schema: public

* Username: User name

* Password: Please enter your 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

Close Test Connection Add

- Name: the data source name.
 - Database Address: the IP address or the hostname of the database.
 - Port Number: the port number.
 - Database: the database name.
 - Schema: the database schema. The default schema is public.
 - Username: the database username.
 - Password: the database password.
3. Click Test Connection to perform a data source connectivity test.
 4. Click Add to add the data source.

PPAS

Adding a PPAS data source is similar to adding a PostgreSQL data source.

1. Click the PPAS icon.

2. Enter the fields for connecting to the data source.

Add PPAS Database [X]

* Name: Enter a database name to be displayed.

* Database Address: Enter a hostname or an IP address.

* Port Number: 5432

* Database: Enter a database name.

Schema: public

* Username: Enter a username.

* Password: Enter the password.

ⓘ Note: Add the following IP addresses to the whitelist:
10.152.69.0/24, 10.152.163.0/24, and 139.224.4.0/24.

Close Test Connection Add

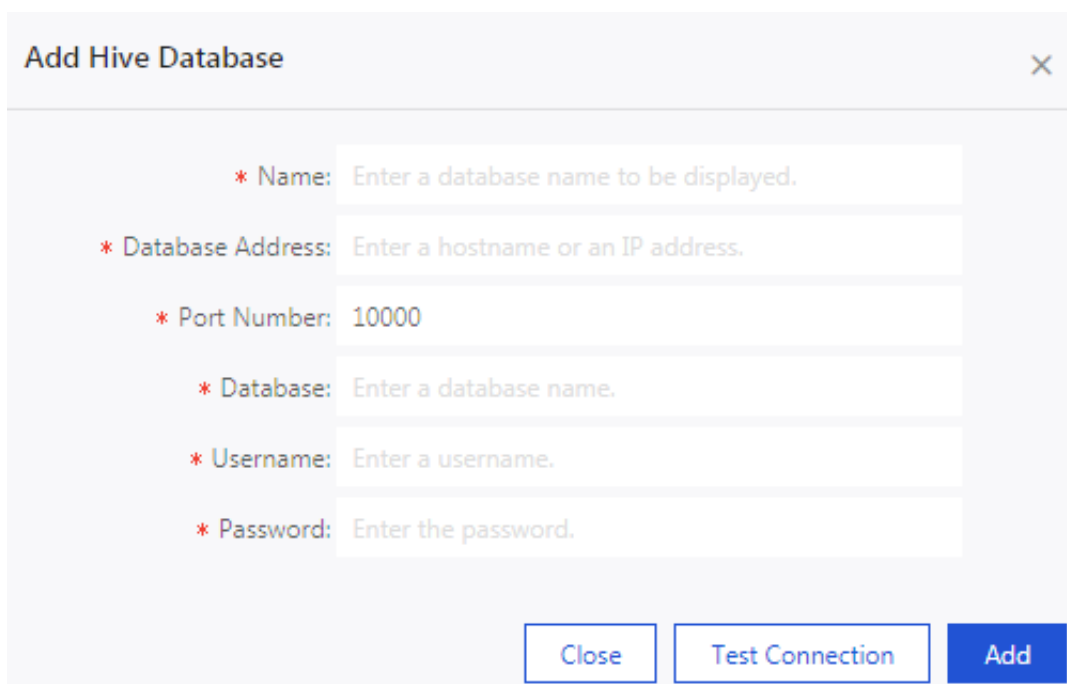
- Name: the data source name.
 - Database Address: the IP address or the hostname of the database.
 - Port Number: the port number.
 - Database: the database name.
 - Schema: the database schema. The default schema is public.
 - Username: the database username.
 - Password: the database password.
3. Click Test Connection to perform a data source connectivity test.
 4. Click Add to add the data source.

Hive (Quick BI Enterprise Standard)

If you use Quick BI Enterprise Standard, you can add a Hive data source.

1. Click the Hive icon.

2. Enter the fields for connecting to the data source.



Add Hive Database [X]

* Name: Enter a database name to be displayed.

* Database Address: Enter a hostname or an IP address.

* Port Number: 10000

* Database: Enter a database name.

* Username: Enter a username.

* Password: Enter the password.

[Close] [Test Connection] [Add]

- Name: the data source name.
- Database Address: the IP address or the hostname of the database.
- Port Number: the port number.
- Database: the database name.
- Username: the database username.
- Password: the database password.

3. Click Test Connection to perform a data source connectivity test.

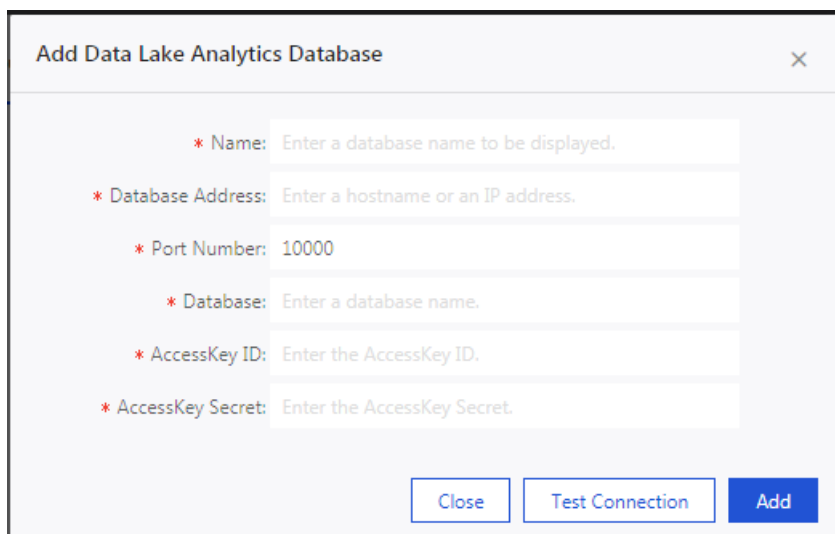
4. Click Add to add the data source.

Data Lake Analytics (Quick BI Pro and Quick BI Enterprise Standard)

If you use Quick BI Enterprise Standard or Quick BI Pro, you can add a Data Lake Analytics data source.

1. Click the Data Lake Analytics icon.

2. Enter the fields for connecting to the data source.



Add Data Lake Analytics Database [X]

* Name: Enter a database name to be displayed.

* Database Address: Enter a hostname or an IP address.

* Port Number: 10000

* Database: Enter a database name.

* AccessKey ID: Enter the AccessKey ID.

* AccessKey Secret: Enter the AccessKey Secret.

[Close] [Test Connection] [Add]

- **Name:** the data source name.
- **Database Address:** the IP address or the hostname of the database.
- **Port:** 10000
- **Database:** the database name.
- **Access ID:** the AccessKey ID.
- **Access Key:** the AccessKey Secret.

3. Click Test Connection to perform a data source connectivity test.

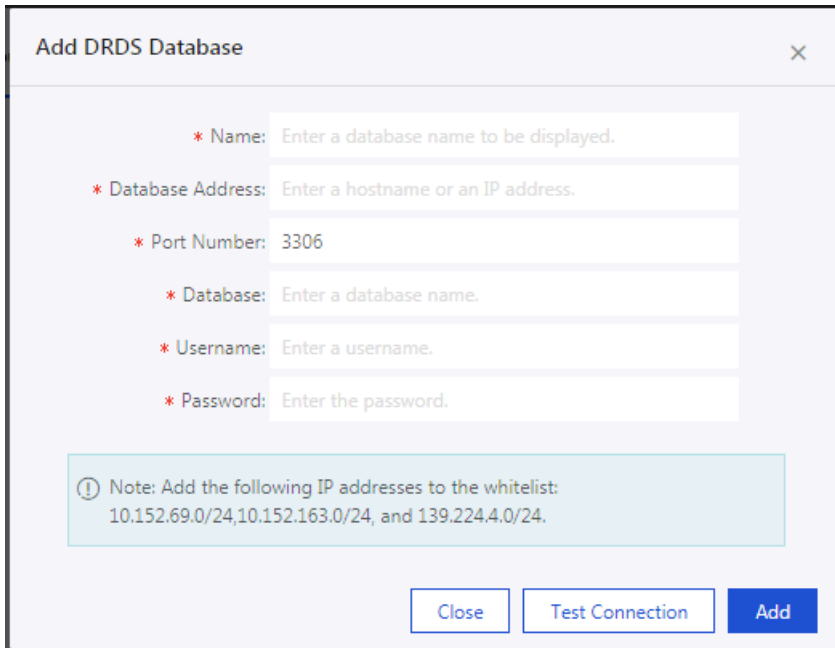
4. Click Add to add the data source.

DRDS

If you use Quick BI Enterprise Standard, you can add a DRDS data source.

1. Click the DRDS icon.

2. Enter the fields for connecting to the data source.



Add DRDS Database

* Name: Enter a database name to be displayed.

* Database Address: Enter a hostname or an IP address.

* Port Number: 3306

* Database: Enter a database name.

* Username: Enter a username.

* Password: Enter the password.

ⓘ Note: Add the following IP addresses to the whitelist:
10.152.69.0/24, 10.152.163.0/24, and 139.224.4.0/24.

Close Test Connection Add

- Name: the data source name.
 - Database Address: the IP address or the hostname of the database.
 - Port Number: the port number.
 - Database: the name of a database that you connect to.
 - Username: the database username.
 - Password: the database password.
3. Click Test Connection to perform a data source connectivity test.
 4. Click Add to add the data source.

2.2.3 Create a user-created data source

This topic describes how to create a user-created data source. You can access all data sources that are created in Quick BI Enterprise Standard by using SSH tunnels.

MySQL

1. Log on to the Quick BI console.
2. Click Data Sources to go to the Data Sources page.
3. Choose Create Data Source > User-created Data Sources > MySQL
4. Enter the fields for connecting to the data source as shown in the following figure.



Note:

Select ECS (VPC) User-created Data Source and enter the required fields when you connect to an ECS (VPC) user-created data source.

Add MySQL Database

* Name:

Enter a database name to be displayed.

* Database Address:

IP

* Port Number:

3306

* Database:

Enter a database name.

* Username:

Enter a username.

* Password:

Enter the password.

ECS (VPC) User-created Data Source:

☒ ⓘ

* AccessKey ID:

Enter the AccessKey ID.

* AccessKey Secret:

Enter the AccessKey Secret.

* Instance ID:

Enter the instance ID.

* ECS Instance Region:

cn-qingdao

ssh:

☒

SSH Host:

Enter a hostname or an IP address.

SSH Username:

Enter a username.

SSH Password:

Enter the password.

SSH Port Number:

22

ⓘ Note: Add the following IP addresses to the whitelist:
10.152.69.0/24,10.152.163.0/24, and 139.224.4.0/24.

Close

Test Connection

Add

- **Name:** the data source name.
- **Database Address:** the IP address or hostname of the database.
- **Port Number:** the port number. The default port number is 3306.
- **Database:** the database name.

- **Username:** the database username.
- **Password:** the database password.
- **AccessKey ID:** the AccessKey ID for the account that purchased the ECS instance for housing the database.
- **AccessKey Secret:** the AccessKey Secret.
- **Instance ID:** the ECS instance ID.
- **ECS Instance Region:** the region location ID of the ECS instance.
- **SSH Host:** The host name or IP address.
- **SSH Username:** The username for logon through SSH.
- **SSH Password:** The password for logon through SSH.
- **SSH Port:** The default SSH port number 22.

5. Click Test Connection to perform a data source connectivity test.

6. Click Add to add the data source.

You need to remove the firewall of the user-created database for allowing users to access MySQL through the Internet.

1. Run the following command to open the configuration file for the firewall.

```
vi / etc / sysconfig / iptables
```

2. Add the following command to the configuration file.

```
- A    RH - Firewall - 1 - INPUT - m    state - state    NEW - m
tcp - p    tcp - dport    3306 - j
      ACCEPT
```

3. Restart iptables.

```
service iptables restart
```

SQL Server

1. Click the SQL Server icon.
2. Enter the fields for connecting to the data source as shown in the following figure.



Note:

Select ECS (VPC) User-created Data Source and enter the required fields when you connect to an ECS (VPC) user-created data source.

Add SQL Server Database

* Name:

Enter a database name to be displayed.

* Database Address:

IP

* Port Number:

1433

* Database:

Enter a database name.

Schema:

dbo

* Username:

Enter a username.

* Password:

Enter the password.

ECS (VPC) User-created Data Source:

☒ ⓘ

* AccessKey ID:

Enter the AccessKey ID.

* AccessKey Secret:

Enter the AccessKey Secret.

* Instance ID:

Enter the instance ID.

* ECS Instance Region:

cn-qingdao

ssh:

☒

SSH Host:

Enter a hostname or an IP address.

SSH Username:

Enter a username.

SSH Password:

Enter the password.

SSH Port Number:

22

ⓘ Note: Add the following IP addresses to the whitelist:
10.152.69.0/24,10.152.163.0/24, and 139.224.4.0/24.

Close

Test Connection

Add

- **Name:** the data source name.
- **Database Address:** the IP address or hostname of the database.
- **Port Number:** the port number. The default port number is 1433.

- Database: the database name.
 - Schema: the database schema. The default schema is dbo.
 - Username: the database username.
 - Password: the database password.
 - AccessKey ID: the AccessKey ID for the account that purchased the ECS instance for housing the database.
 - AccessKey Secret: the AccessKey Secret.
 - Instance ID: the ECS instance ID.
 - ECS Instance Region: the region location ID of the ECS instance.
 - SSH Host: The host name or IP address.
 - SSH Username: The username for logon through SSH.
 - SSH Password: The password for logon through SSH.
 - SSH Port: The default SSH port number 22.
3. Click Test Connection to perform a data source connectivity test.
 4. Click Add to add the data source.

PostgreSQL

1. Click the PostgreSQL icon.

2. Enter the fields for connecting to the data source.

Add PostgreSQL Database

* Name:

Enter a database name to be displayed.

* Database Address:

IP

* Port Number:

5432

* Database:

Enter a database name.

Schema:

public

* Username:

Enter a username.

* Password:

Enter the password.

SSL:

☒

ssh:

☒

SSH Host:

Enter a hostname or an IP address.

SSH Username:

Enter a username.

SSH Password:

Enter the password.

SSH Port Number:

22

!

Note: Add the following IP addresses to the whitelist:
10.152.69.0/24,10.152.163.0/24, and 139.224.4.0/24.

Close

Test Connection

Add

- **Name:** the data source name.
- **Database Address:** the IP address or hostname of the database.
- **Port Number:** the port number. The default port number is 5432.
- **Database:** the database name.
- **Schema:** the database schema. The default schema is public.
- **Username:** the database username.
- **Password:** the database password.
- **SSH Host:** The host name or IP address.
- **SSH Username:** The username for logon through SSH.

- **SSH Password:** The password for logon through SSH.
- **SSH Port:** The default SSH port number 22.

**Note:**

After you select ssh, interactive query services that are provided by MaxCompute Lightning are supported.

3. Click **Test Connection** to perform a data source connectivity test.
4. Click **Add** to add the data source.

Oracle

1. Click the **Oracle** icon.

2. Enter the fields for connecting to the data source.

Add Oracle Database

* Name: Enter a database name to be displayed.

* Database Address: IP

* Port Number: 1521

* Database: Enter a database name.

Schema: The current username is used by default.

* Username: Enter a username.

* Password: Enter the password.

ssh: ☒

SSH Host: Enter a hostname or an IP address.

SSH Username: Enter a username.

SSH Password: Enter the password.

SSH Port Number: 22

Close Test Connection Add

- Name: the data source name.
- Database Address: the IP address or hostname of the database.
- Port Number: the port number. The default port number is 1521.
- Database: the database name.
- Schema: the database schema. The default schema is public.
- Username: the database username.
- Password: the database password.
- SSH Host: The host name or IP address.
- SSH Username: The username for logon through SSH.
- SSH Password: The password for logon through SSH.
- SSH Port: The default SSH port number 22.

3. Click Test Connection to perform a data source connectivity test.

4. Click Add to add the data source.

Hive (Quick BI Enterprise Standard)

If you use Quick BI Enterprise Standard, you can add a Hive data source.

1. Click the Hive icon.

2. Enter the fields for connecting to the data source.

Add Hive Database

* Name: Enter a database name to be displayed.

* Database Address: IP

* Port Number: 10000

* Database: Enter a database name.

* Username: Enter a username.

* Password: Enter the password.

ssh: ☒

SSH Host: Enter a hostname or an IP address.

SSH Username: Enter a username.

SSH Password: Enter the password.

SSH Port Number: 22

Close Test Connection Add

- Name: the data source name.
- Database Address: the IP address or hostname of the database.
- Port Number: the port number.
- Database: the database name.
- Username: the database username.
- Password: the database password.
- SSH Host: The host name or IP address.
- SSH Username: The username for logon through SSH.
- SSH Password: The password for logon through SSH.
- SSH Port: The default SSH port number 22.

3. Click Test Connection to perform a data source connectivity test.

4. Click Add to add the data source.

Vertica (Quick BI Standard)

If you use Quick BI Enterprise Standard, you can add a Vertica data source.

1. Click the Vertica icon.

2. Enter the fields for connecting to the data source.

Add Vertica Database [X]

* Name: Enter a database name to be displayed.

* Database Address: IP

* Port Number: 5433

* Database: Enter a database name.

Schema: public

* Username: Enter a username.

* Password: Enter the password.

ssh: ☒

SSH Host: Enter a hostname or an IP address.

SSH Username: Enter a username.

SSH Password: Enter the password.

SSH Port Number: 22

[Close] [Test Connection] [Add]

- Name: the data source name.
- Database Address: the IP address or hostname of the database.
- Port Number: the port number. The default port number is 5433.
- Database: the database name.
- Schema: the database schema. The default schema is public.
- Username: the database username.
- Password: the database password.
- SSH Host: The host name or IP address.
- SSH Username: The username for logon through SSH.
- SSH Password: The password for logon through SSH.
- SSH Port: The default SSH port number 22.

3. Click Test Connection to perform a data source connectivity test.

4. Click Add to add the data source.

IBM DB2 LUW (Quick BI Enterprise Standard)

If you use Quick BI Enterprise Standard, you can add an IBM DB2 LUW data source.

1. Click the IBM DB2 LUW icon.

2. Enter the fields for connecting to the data source.

Add IBM DB2 LUW Database [X]

* Name: Enter a database name to be displayed.

* Database Address: IP

* Port Number: 50000

* Database: Enter a database name.

Schema: DB2INST1

* Username: Enter a username.

* Password: Enter the password.

ssh: ☒

SSH Host: Enter a hostname or an IP address.

SSH Username: Enter a username.

SSH Password: Enter the password.

SSH Port Number: 22

[Close] [Test Connection] [Add]

- Name: the data source name.
- Database Address: the IP address or hostname of the database.
- Port Number: the port number. The default port number is 50000.
- Database: the database name.
- Schema: the database schema. The default schema is DB2INST1.
- Username: the database username.
- Password: the database password.
- SSH Host: The host name or IP address.
- SSH Username: The username for logon through SSH.
- SSH Password: The password for logon through SSH.
- SSH Port: The default SSH port number 22.

3. Click Test Connection to perform a data source connectivity test.

4. Click Add to add the data source.

SAP IQ (Sybase IQ) (Quick BI Enterprise Standard)

If you use Quick BI Enterprise Standard, you can add an SAP IQ (Sybase IQ) data source.

1. Click the SAP IQ(Sybase IQ) icon.

2. Enter the fields for connecting to the data source.

Add SAP IQ (Sybase IQ) Database [X]

* Name: Enter a database name to be displayed.

* Database Address: IP

* Port Number: 2638

* Database: Enter a database name.

Schema: sybase

* Username: Enter a username.

* Password: Enter the password.

ssh: ☒

SSH Host: Enter a hostname or an IP address.

SSH Username: Enter a username.

SSH Password: Enter the password.

SSH Port Number: 22

[Close] [Test Connection] [Add]

- Name: the data source name.
- Database Address: the IP address or hostname of the database.
- Port Number: the port number. The default port number is 2638.
- Database: the database name.
- Schema: the database schema. The default schema is sybase.
- Username: the database username.
- Password: the database password.
- SSH Host: The host name or IP address.
- SSH Username: The username for logon through SSH.
- SSH Password: The password for logon through SSH.
- SSH Port: The default SSH port number 22.

3. Click Test Connection to perform a data source connectivity test.

4. Click Add to add the data source.

SAP HANA (Quick BI Enterprise Standard)

If you use Quick BI Enterprise Standard, you can add an SAP HANA data source.

1. Click the SAP HANA icon.

2. Enter the fields for connecting to the data source.

Add SAP HANA Database [X]

* Name: Enter a database name to be displayed.

* Database Address: IP

* Port Number: 30015

* Database: Enter a database name.

Schema: public

* Username: Enter a username.

* Password: Enter the password.

ssh: ☒

SSH Host: Enter a hostname or an IP address.

SSH Username: Enter a username.

SSH Password: Enter the password.

SSH Port Number: 22

Close Test Connection Add

- **Name:** the data source name.
- **Database Address:** the IP address or hostname of the database.
- **Port Number:** the port number. The default port number is 30015.
- **Database:** the database name.
- **Schema:** the database schema. The default schema is public.
- **Username:** the database username.
- **Password:** the database password.
- **SSH Host:** The host name or IP address.
- **SSH Username:** The username for logon through SSH.
- **SSH Password:** The password for logon through SSH.
- **SSH Port:** The default SSH port number 22.

3. Click Test Connection to perform a data source connectivity test.

4. Click Add to add the data source.

2.2.4 Upload local files

You can upload local CSV files and Excel files (.xls and .xlsx files) to the explore space as a data source.

The explore space is a data source type that is used only in the personal workspace. Each user has 1 GB storage space.

In addition, you can import data resources from the Data IDE.



Note:

The method that you upload local files through Create Data Source > Local Files is only available in personal workspaces.

CSV file

CSV files in UTF-8 format are decoded without errors. CSV files in GBK or GB2312 format are automatically decoded, but the decoding may fail in some special cases.

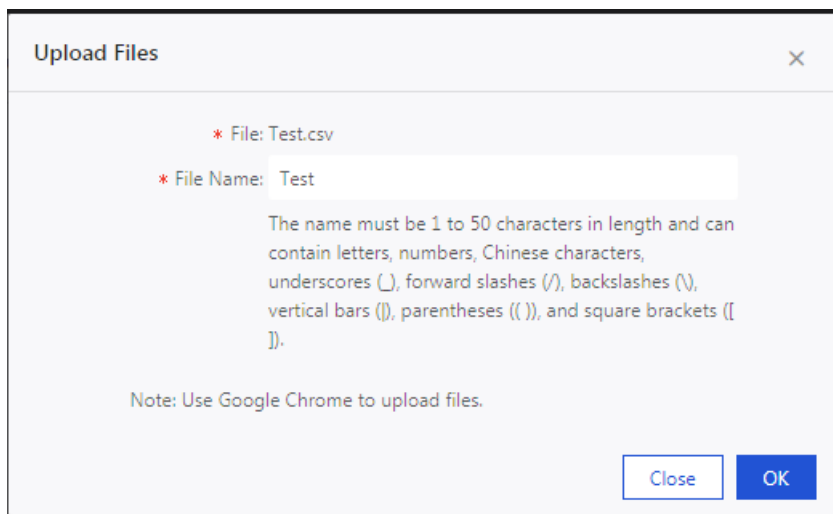
If your CSV files cannot be decoded correctly, use text editors such as Notepad to convert the encoding of the files to UTF-8. Otherwise, the content of the uploaded files is shown as gibberish.

1. Use Notepad to open a CSV file.
2. Choose File > Save As.
3. Click the drop-down arrow of Encoding.
4. Select UTF-8.

After you have changed the encoding, upload the CSV file to the explore space.

1. Log on to the Quick BI console.
2. Click Data Source to enter the Data Sources page.
3. Choose Create > Local Upload > CSV file.
4. Enter a display name for the file.

5. Click Select a file to select the file to upload, as shown in the following figure.

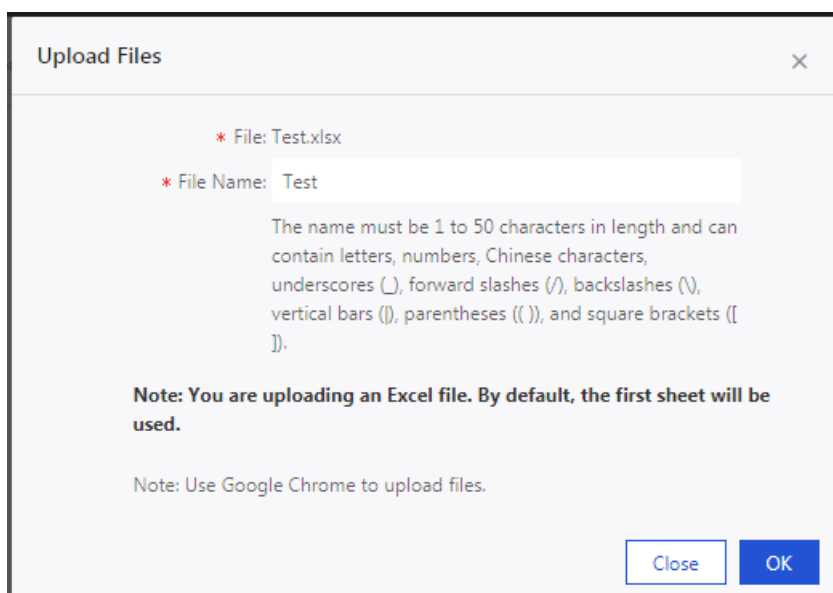


6. Click OK to upload the file.

Excel file

When you upload Excel files, the first sheet in each excel file is uploaded by default. To make the editing and maintenance more flexible, you can only select one sheet in one Excel file at a time.

1. Choose Create > Local Upload > EXCEL file.
2. Enter a display name for the file.
3. Click Select a file to select the file to upload, as shown in the following figure.



4. Click OK to complete uploading the file.

Data IDE



Note:

Only supports importing data sources from the China (Shanghai) region, and you must add your account to the project.

1. Choose Create > From Other > Data IDE.
2. Select the data source from the list.
3. Click Import to complete the importing of the data source.

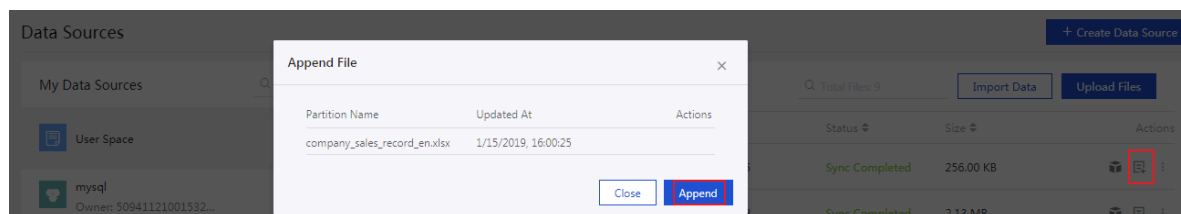
Update table data according to the local data source

The local data source feature of Quick BI is designed to meet the analysis requirements for your changing and growing business.

After you have uploaded a file, new files are generated as the business grows. You can append the new files to the table corresponding to the previously uploaded file to analyze business data consistently over a long period of time.

The new file can be in a format different from the previously uploaded file. For example, if you have uploaded a CSV file, you can import data from a sheet in an Excel file. Make sure that the field names and the field types in the files to be uploaded are the same as those in the previously uploaded file.

1. Click Data Source to enter the Data Sources page.
2. Click Explore Space to enter the Explore Space page.
3. Select a file, and then click Update.
4. Click Append to upload the file that needs to be appended, as shown in the following figure.



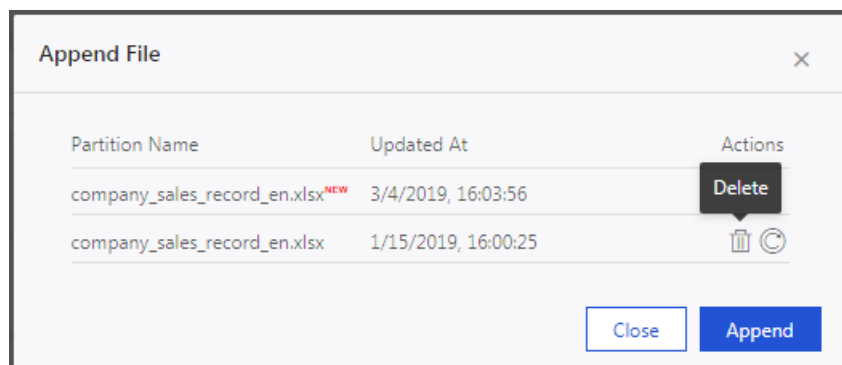
5. Click OK to append the data.

Delete the data of the table corresponding to a local data source

If a file that you have appended contains dirty data, which decreases the accuracy of the data, you can delete the file with dirty data that is corresponding to the table in

the uploaded file list. The corresponding dashboard displays corrected data without any manual changes. Therefore, the analysis results of data are accurate at all times.

1. Click Data Source to enter the Data Sources page.
2. Click Explore Space to enter the Explore Space page.
3. Select a file, and then click Update.
4. Locate the file that needs to be deleted, and then click the Delete icon, as shown in the following figure.



Example of local files

To help you learn to use local data source files, we provide a sample CSV file here:
[Sales data examples](#).

The structure of the sales data is shown in the following table.

Field	Field type	Description
order_id	varchar	Order ID
report_date	datetime	Order date
customer_name	varchar	Customer name
order_level	varchar	Order grade
order_number	double	Order quantity
order_amt	double	Order amount
back_point	double	Discount
shipping_type	varchar	Shipping type
profit_amt	double	Profit amount
price	double	Unit price
shipping_cost	double	Shipping cost
area	varchar	Region

Field	Field type	Description
province	varchar	Province
city	varchar	City
product_type	varchar	Product type
product_sub_type	varchar	Product subtype
product_name	varchar	Product name
product_box	varchar	Product packing box
shipping_date	Datetime	Shipping date

2.2.5 Edit, search, and delete data sources

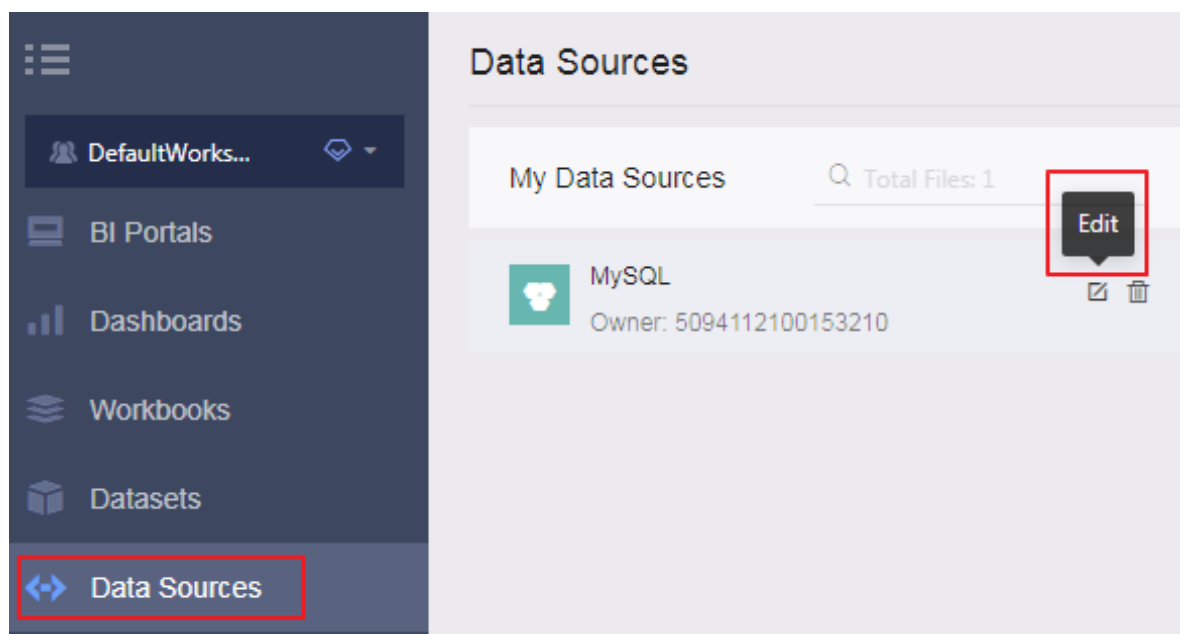
On the data sources page, you can view all created data sources, and edit, search, and delete data sources. To perform these actions, go to the data sources page first.

Go to the data sources page

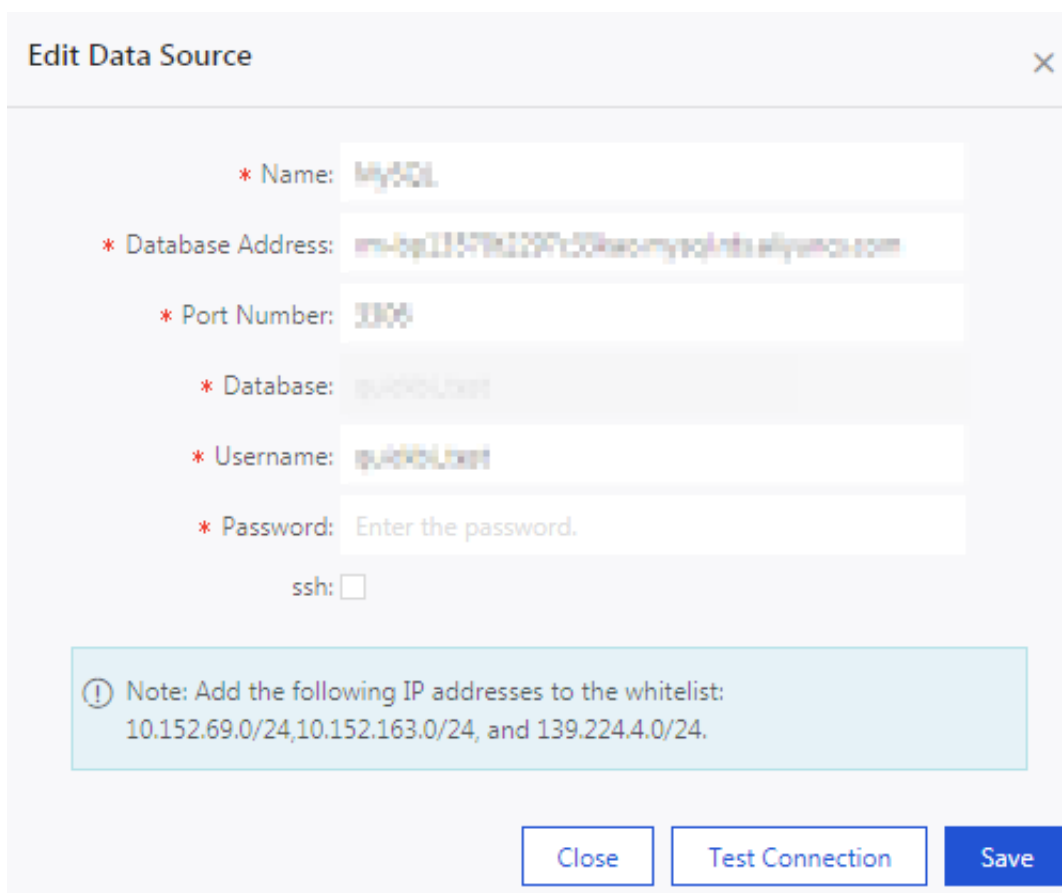
1. Log on to the Quick BI console.
2. In the left-side navigation pane, select Data Sources.

Edit a data source

1. On the data sources page, select a data source, and click the Edit icon.



2. Edit the following information in the dialog box. Click Save to save the changes.



The screenshot shows a dialog box titled "Edit Data Source" with a close button (X) in the top right corner. The dialog contains several input fields, each preceded by a red asterisk indicating it is required:

- Name:** MySQL
- Database Address:** rm-bp13579d229fc50kwo.mysql.rds.aliyuncs.com
- Port Number:** 3306
- Database:** quickbi_test
- Username:** quickbi_test
- Password:** Enter the password.

Below these fields is a checkbox labeled "ssh:" which is currently unchecked.

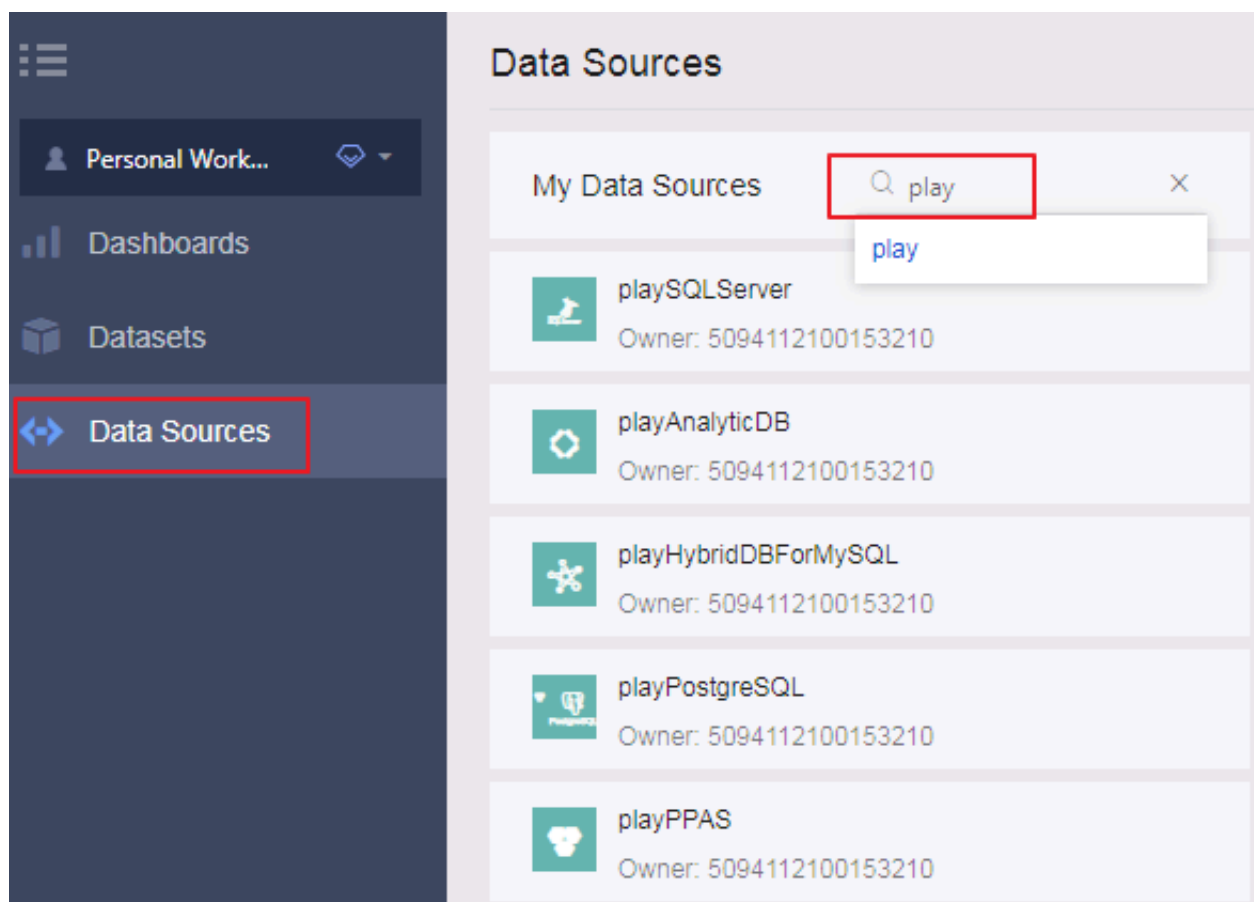
A light blue note box contains the following text:

ⓘ Note: Add the following IP addresses to the whitelist:
10.152.69.0/24, 10.152.163.0/24, and 139.224.4.0/24.

At the bottom right of the dialog are three buttons: "Close", "Test Connection", and "Save". The "Save" button is highlighted in blue.

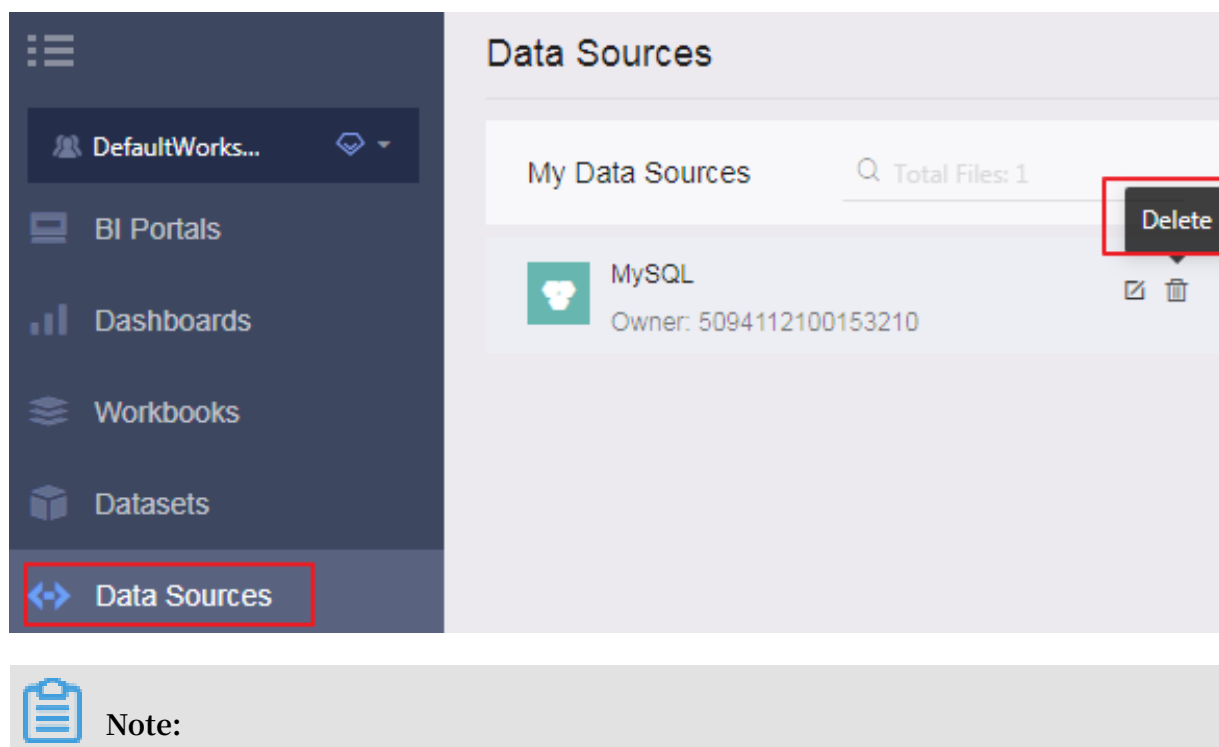
Search data sources

On the data sources page, enter a data source name into the search box and then click the Search icon to search for the data source.



Delete a data source

On the data sources page, select a data source, and click the Delete icon to delete the data source.

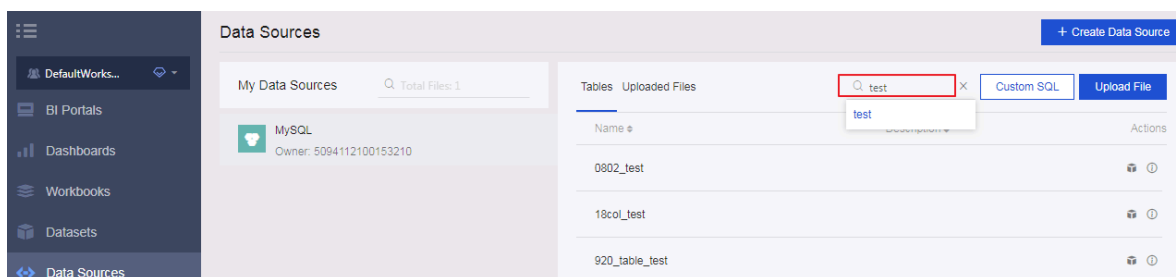


If a dataset is created on the data source, then you cannot delete the data source. The system will prompt an error message when you delete the data source.

2.2.6 Search tables in a data source

Procedure

1. Log on to the Quick BI console.
2. In the left-side navigation pane, select Data Sources.
3. Enter a table name into the search box and click the Search icon to search for the table.



2.2.7 View table details in a data source

Procedure

1. Log on to the Quick BI console.
2. In the left-side navigation pane, select Data Sources.
3. Select a data source, all tables contained in the data source are then shown in the right-side list.

4. Select a table, and click the View Details icon to view details about the table.

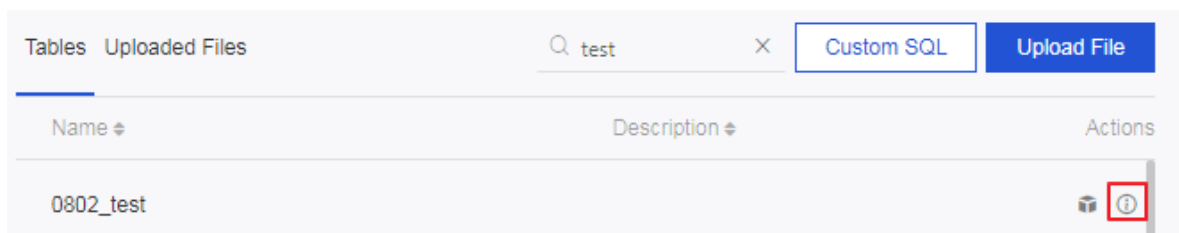


Table Information ×

Table Name: 0802_test

Description:

Field Name	Type	Description
a	bigint	
b	int	
id	bigint	

.

2.2.8 Synchronize data sources

In the Personal Space of Quick BI, you can synchronize MaxCompute and MySQL data sources to Exploration Space.

1. On the Data Sources page, click Import Data.
2. Select a MaxCompute data source or a MySQL data source.



Note:

- You must add the following IP addresses to the RDS whitelist before synchronizing the MySQL data source.
11.193.158.0/24,11.193.162.0/24,47.74.161.0/24,47.74.162.0/24
- You must switch to a classic network to synchronize MySQL data sources. A VPC network does not support the synchronization of MySQL data sources.
- This function is a one-time synchronization. If the data source is updated, you must synchronize the data source again.

2.3 Dataset management

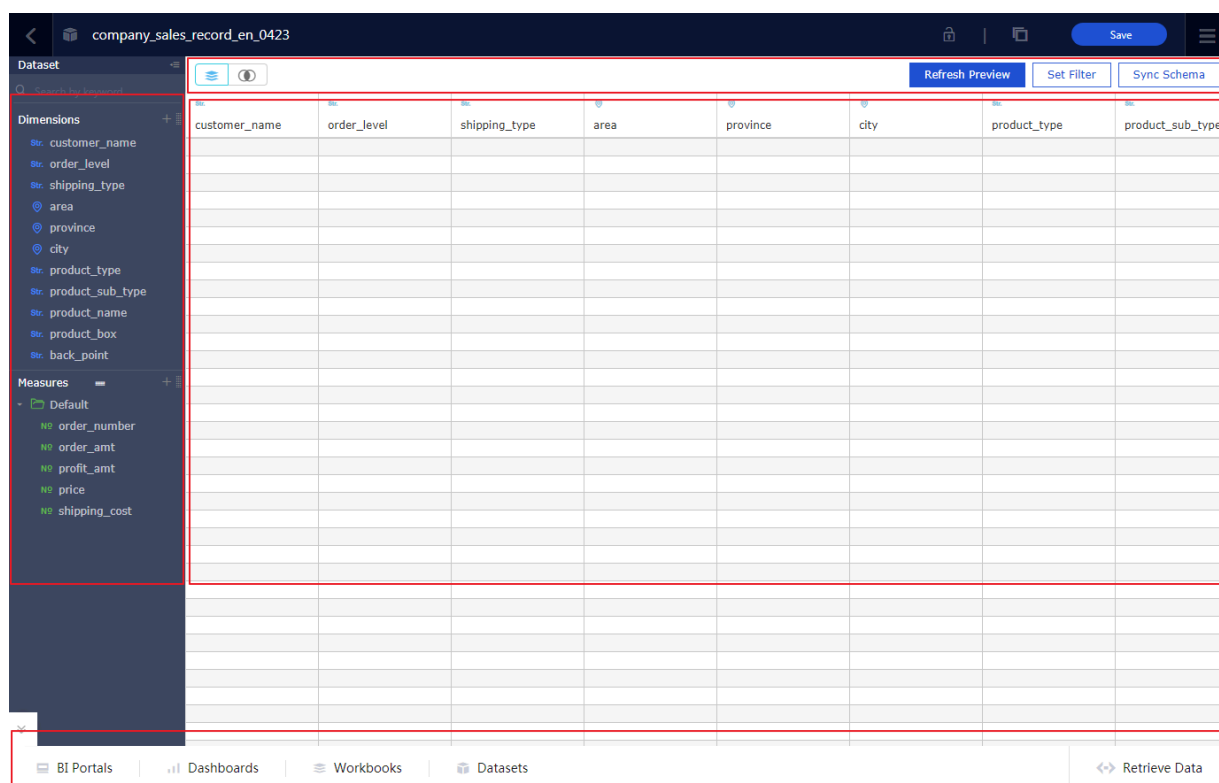
2.3.1 Manage datasets

You can create datasets based on the data sources that you add or import. For adding and importing data sources, see [Create cloud data sources](#), [Create a user-created data source](#), and [Upload local files](#).

After creating a dataset, you can create a dashboard as needed. For creating dashboards, see [Create charts in a dashboard](#).

On the edit page of a dataset, you can analyze, edit, and rename the dataset.

The edit page of a dataset consists of the following sections.



On the edit page of a dataset, you can perform the following operations on the dataset.

- [Edit dimensions and measures](#)
- [Add a grouping field](#)
- [Join data tables](#)
- [Enable table scan](#)

2.3.2 Create a dataset

Prerequisites

Ensure that data sources have been successfully added or uploaded before you create a dataset.

Context

For more information about how to add and import a data source, see [Create a cloud data source](#), [Create a data source from external database](#), and [Upload local files](#).

Procedure

1. Log on to the Quick BI console.
2. Click Data Source to enter the Data Sources page.
3. On the right side of this page, select a table.
4. Click Create Dataset next to the table as the following figure shows.

After you create a dataset, you are automatically directed to the Datasets page. The newly created dataset is labeled with the New icon. This helps you quickly find the newly created dataset.

2.3.3 Edit dimensions and measures

To edit a dimension or a measure, you can click the operations icon. Or you can right-click the dimension or measure and select an operation from the drop-down list that appears. For example, you need to change the dimension type to Geo when you create a bubble map or a colored map. Otherwise, the map charts cannot be displayed properly.

Edit a dimension

1. Select a dimension. For example, `order_level`.

2. Right-click `order_level` and a drop-down list appears.

- **Edit:** edits the dimension name and description.
- **Duplicate Dimension:** duplicates a dimension. Name of the duplicate dimension contains `_Duplicate`.
- **Hide When Analyze:** hides a dimension.
- **Show All:** shows all dimensions.
- **Delete:** deletes a dimension.
- **Create Calculated Field (Dimensions):** creates a dimension and customizes the expression.
- **Move To:** moves a dimension to a hierarchy for drilling.
- **Create Hierarchy:** creates a hierarchy for a dimension.
- **Move Up/Move Down:** moves a dimension. You can also do this with drag and drop.
- **Convert to Measure:** converts a dimension to a measure.
- **Change Dimension Type:** changes the dimension type. Dimension types include Date/Time, Geo, String, and Number.

Edit a measure

1. Select a measure. For example, `order_number`.

2. Right-click `order_number` and a drop-down list appears.

- **Edit:** edits the measure name and description.
- **Duplicate Measure:** duplicates a measure. Name of the duplicate measure contains `_Duplicate`.
- **Hide When Analyze:** hides a measure.
- **Show All:** shows all measures.
- **Delete:** deletes a measure.
- **Create Calculated Field (Measures):** creates a measure and customizes the expression.
- **Move To:** moves a measure to a hierarchy.
- **Move Up/Move Down:** moves a dimension. You can also do this with drag and drop.
- **Convert to Dimension:** converts a measure to a dimension.
- **Format:** specifies the number format to display.
- **Default Aggregates:** specifies the aggregate function. Aggregate functions include Sum, Count, Count Distinct, Maximum, Minimum, and Average.
- **Change Measure Type:** changes the measure type. Measure types include String and Number.

2.3.4 Toolbar

You can save, refresh, synchronize, and enable the protected security level for a dataset by using the toolbar.

- **Lock mechanism:** protects data when the protected security level is enabled.
- **Sync Schema:** detects changes of fact tables such as field adding and the dataset is synchronized with the changes. Deleting or renaming fields does not cause deleting dimensions or measures of a dataset
- **Refresh Preview:** refreshes a dataset and displays the data preview. Save before refreshing a dataset to view the latest data.
- **Set Filter:** sets filters for a dataset to avoid full table scan.
- **Save:** saves a dataset.
- **Save as:** saves a copy of a dataset.

2.3.5 Add a grouping field

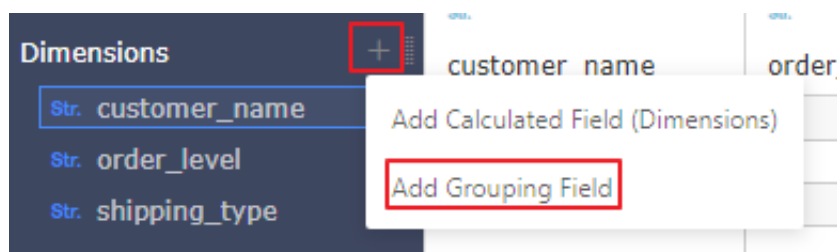
On the dataset edit page, you can select Add Grouping Field to classify values in a field into different groups, and create a new field to store the grouping information.



Note:

- This function is only available in Quick BI Pro.
- Classic workbooks do not support the grouping function. Classic workbook is a feature of the beta version. It will be deprecated soon. We recommend that you use workbooks.

1. On the Datasets page, click a dataset name.
2. On the Datasets page, choose + > Add Grouping Field next to Dimensions.



3. In the Edit Grouping Field dialog box, enter the required information and click OK.

Field Name: ⓘ

The field name must be 1 to 50 characters in length and can contain letters, numbers, Chinese characters, underscores (_), forward slashes (/), backslashes (\), vertical bars (|), parentheses (()), and square brackets ([]).

Grouping Field: Group By:

Groups: +
Group1
Ungrouped

Select an item or manually enter an item.

Cancel OK

4. Click Save and then click Refresh Preview. The dimension list shows the grouping field.

2.3.6 Join data tables

If you have multiple tables based on the same data source, you can use the Table Joinb function to join multiple tables by using the snowflake model. For example, when you join Table A with Table B and join Table B with Table C, Quick BI automatically adds join fields involved in hierarchies to the dimension and measure lists of Table A.

Description of joined data tables



Note:

- You cannot associate multiple datasets with charts in Quick BI Basic and Quick BI Pro.

- You can associate multiple datasets with charts in Quick BI Enterprise Standard . Now, this feature is only available when the data source type is MaxCompute, MySQL, and Oracle.
- The associated data table can only be the original table in the database. Currently, it cannot be associated with created datasets.

Currently, you can use the following three joins in Quick BI:

- Inner join
- Left outer join
- Full join



Note:

You cannot use a full join on a MySQL data source.

Example of joining data tables

1. Click the Join icon to enter the Table Join page as the following figure shows.

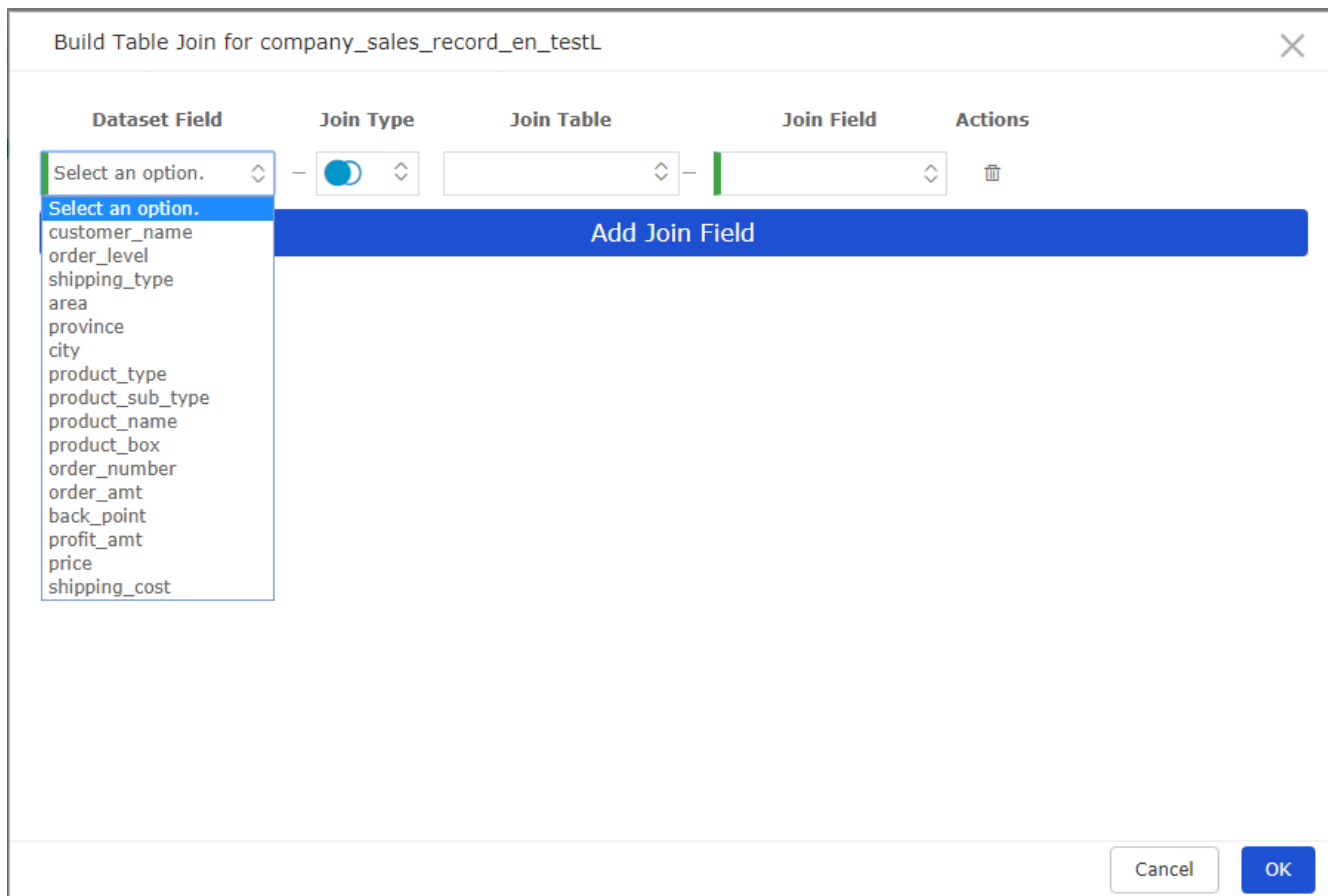


company_sales_record_en_testL

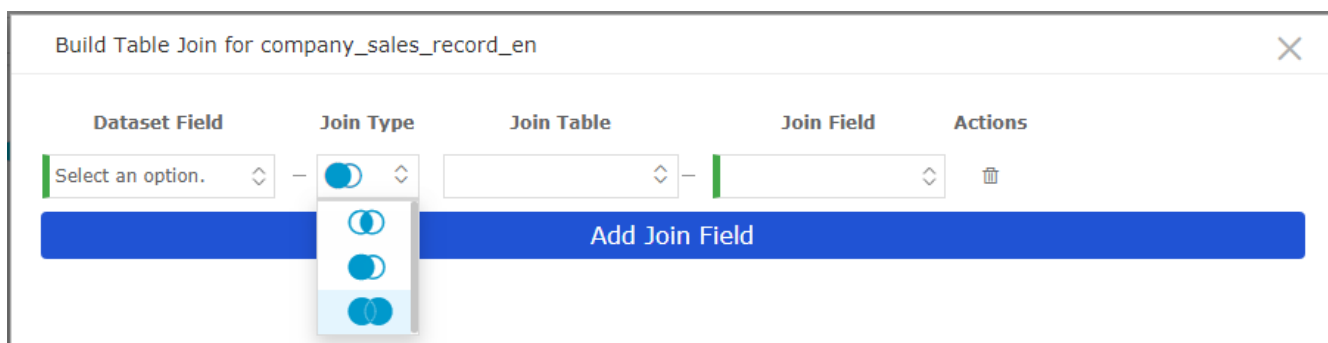


2. Click the + icon to add a table that you want to join.

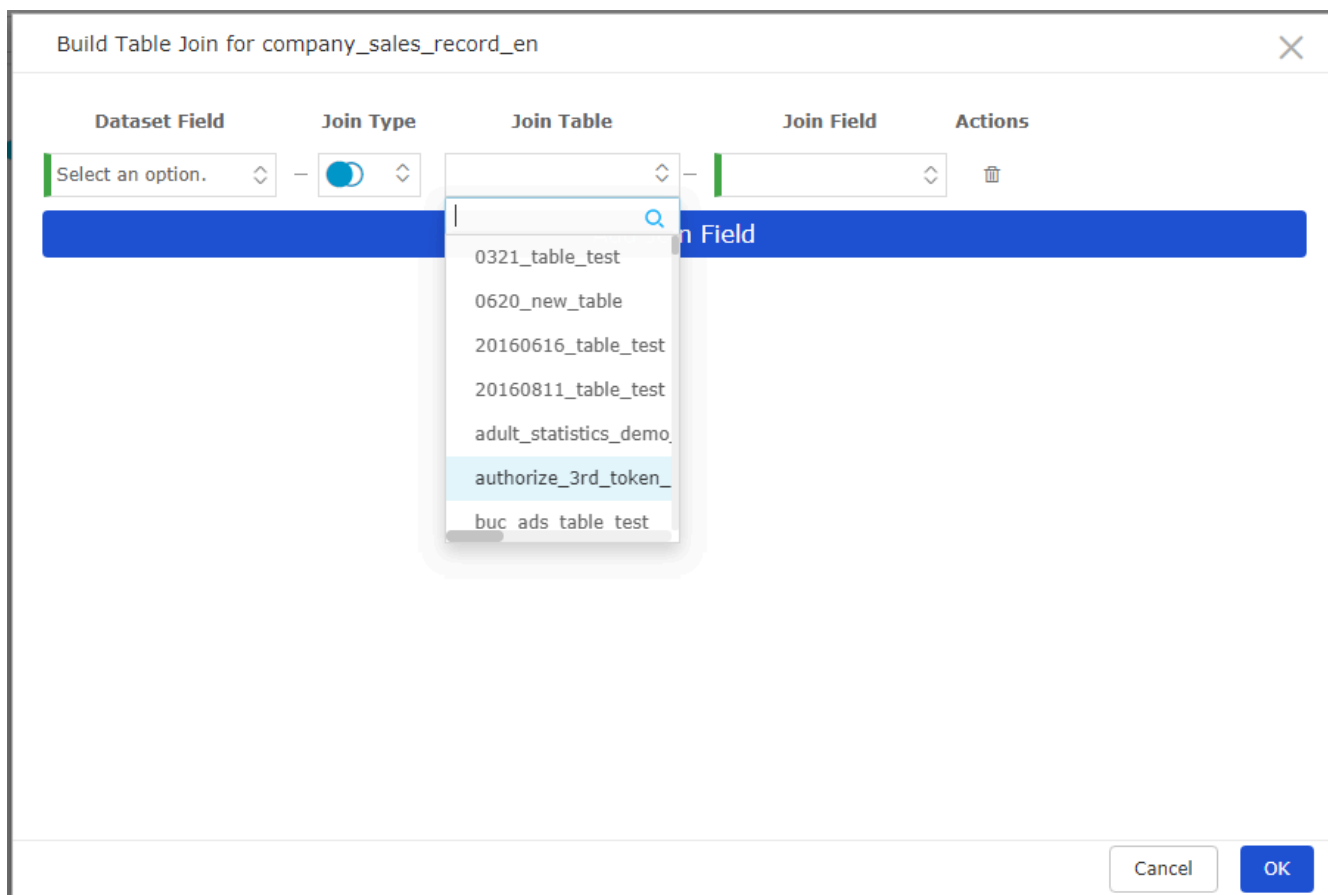
- Click the drop-down arrow for Dataset Field to select a field as the following figure shows.



- Click the drop-down arrow for Join Type to select a type as the following figure shows.



5. Click the drop-down arrow for Associate Table to select a table as the following figure shows.



6. Click the drop-down arrow for Join On to select a field.
7. Click OK to add a join table.



- Click the + icon at position 1 to join the third table with the second table.
- Click the + icon at position 2 to join the third table with the first table.

8. Click the Preview icon to switch to the preview mode as the following figure shows.

Dataset

Search by keyword

Dimensions

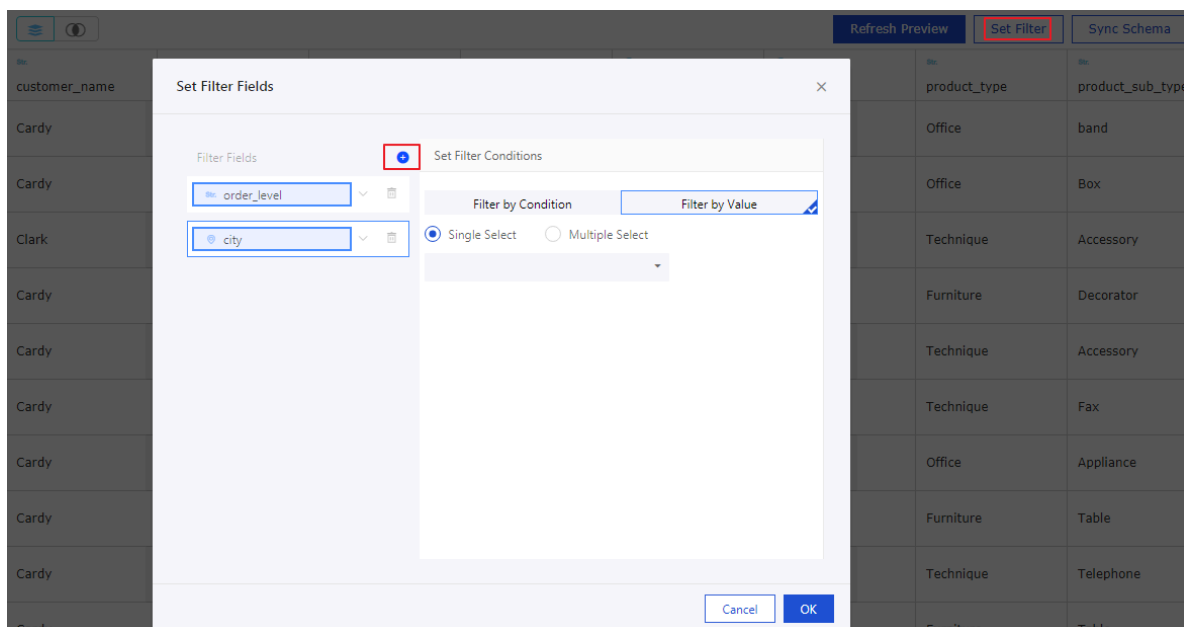
customer_name	order_level	shipping_type	area	province	city	product_type	product_sub_type
Cardy	L1	Plain	North	北京	Beijing	Office	band

9. Click Save to save the dataset.



Note:

Before saving the dataset, you can click Set filter conditions to filter the data in the current dataset to reduce searches for non-relevant data when using this dataset.



2.3.7 Enable table scan

Enable table scan

You can enable the table scan function for MaxCompute (formerly known as ODPS) datasets. Follow these steps to enable table scan:

1. On the Datasets page, right-click a MaxCompute dataset, and select Edit Properties.
2. On the Properties page, select the Table Scan option to enable this function.

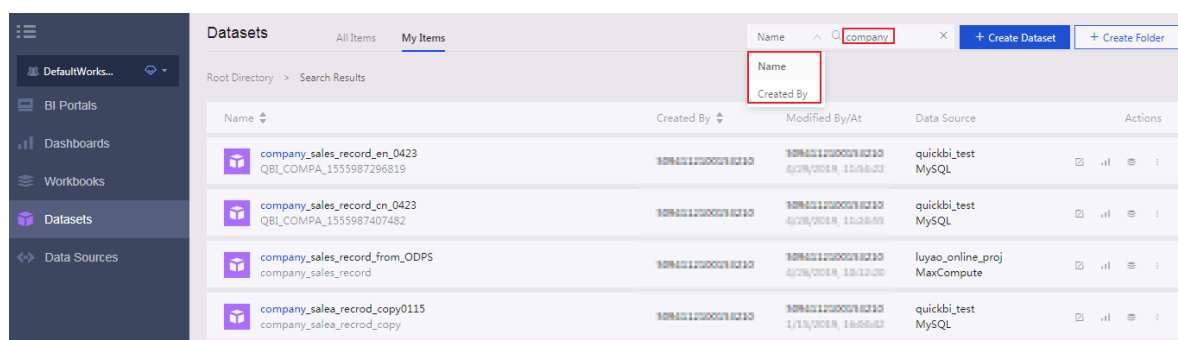
2.3.8 Search for and delete datasets

After you create a dataset, you can search for and delete the dataset.

Search for a dataset

1. Log on to the Quick BI console.
2. Click Datasets to go to the Datasets page.

3. In the search box, enter a dataset name or the creator's name.



4. Click the search icon to search for the dataset.

Delete a dataset

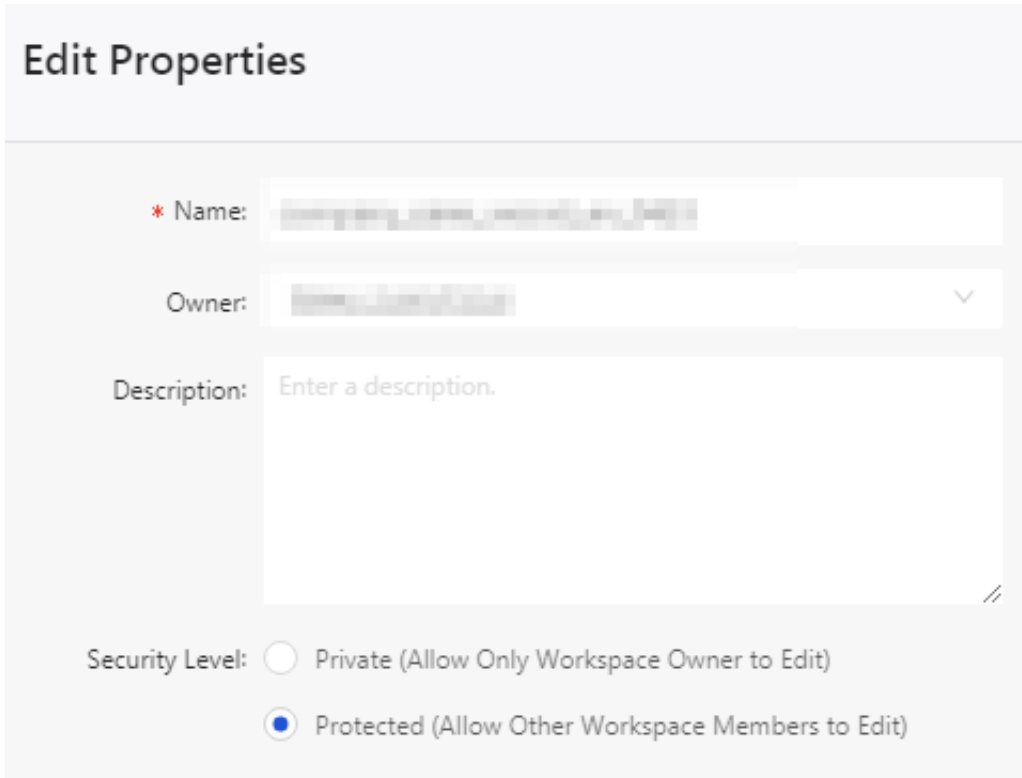
1. Log on to the Quick BI console.
2. Click Datasets to go to the Datasets page.
3. Select a dataset. Click More in the Actions column or right-click the dataset.
4. Select Delete to delete the dataset.

2.3.9 Rename, transfer, and set security levels

You can rename, transfer, and set the security level for a dataset by editing the properties of the dataset.

1. Log on to the Quick BI console.
2. Click Datasets to go to the Datasets page.
3. Select a dataset, click the More icon in the Actions column and select the Edit Properties icon from the drop-down list.

4. On the Edit Properties page, you can perform the following operations on the dataset.



- Change the dataset name.
- Change the dataset owner.
- Change the security level. If you choose Protected as the security level, you need to lock the data object first before editing it. For more information, see [Protected](#).
- Scan Full Table: Enables this feature to scan the full table.



Note:

This feature only applies to MaxCompute data sources.

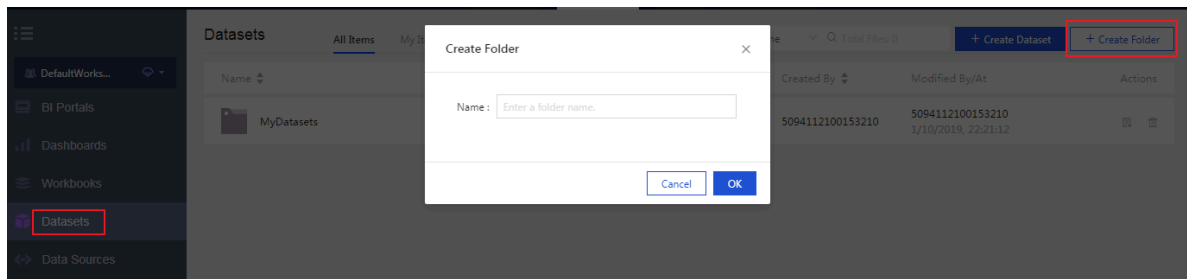
2.3.10 Manage datasets

On the datasets page, you can create, rename, and delete dataset folders.

Create a dataset folder

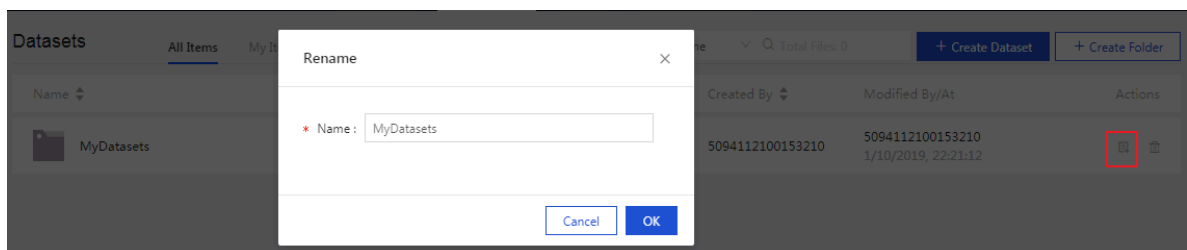
1. Log on to the Quick BI console.
2. In the left-side navigation pane, select Datasets.
3. Click Create Folder and enter a folder name.

4. Click OK.



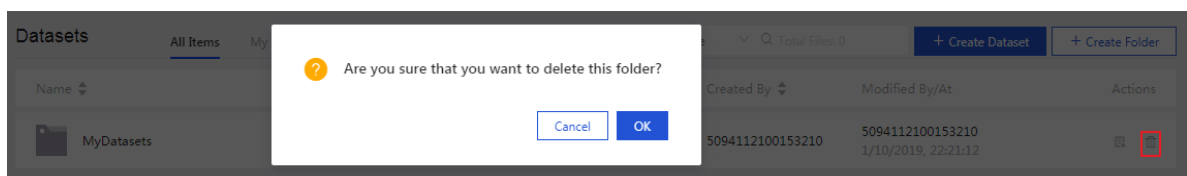
Rename a dataset folder

1. Log on to the Quick BI console.
2. In the left-side navigation pane, select Datasets.
3. Select a dataset folder. Click the Rename icon, or right-click the folder and select Rename.
4. Enter a new folder name, and click OK.



Delete a dataset folder

1. Log on to the Quick BI console.
2. In the left-side navigation pane, select Datasets.
3. Select a dataset folder. Click the Delete icon, or right-click the dataset folder and select Delete.
4. Click OK to delete the dataset folder.



2.3.11 Dataset row-level permissions

For more information about row-level permissions of datasets, see [Configure row-level permissions](#).

3 Create dashboards

3.1 Dashboard overview

This topic describes the basic concepts of the dashboard, including the dashboard data types, scenarios, and data that composes the charts.

For more information about basic operations of the dashboard, see [Basic dashboard operations](#).

For more information about the procedure of creating various charts, see [Create charts in a dashboard](#).

The dashboard provides a flexible tile view to show the interaction between data. It renders data visually and supports filtering and querying a variety of data types. It displays data in various ways and highlights the keyword segments in data.

In terms of data visualization, the dashboard guides you and allows you to drag or double-click a field to display data explicitly. In terms of data analysis, the dashboard utilizes user-friendly notifications to improve user interaction.

Data visualization performance has been improved significantly. In the editing page of the dashboard, you can filter dynamic data.

Data chart types and scenarios

You need to use the corresponding charts to display different types of data. Quick BI currently supports 21 types of data charts, including line charts, bars, bubble maps, and funnels.

The following table describes the analysis types and scenarios for each chart.

Analysis types	Description	Scenarios	Applicable chart
Comparison	Compares the differences between values, or compares the measures based on the dimensions.	Compares the sales /income difference s between different countries or regions.	Bar, stripe, radar , funnel, table, pivot table, polar, tornado, and word cloud.

Analysis types	Description	Scenarios	Applicable chart
Percentage	Displays the percentage of a part in the whole, or the proportion of a certain value compared to the whole.	Displays the sales of the salesperson who has the greatest percentage of total sales.	Pie, funnel, dashboard, and treemap.
Relation	Displays the relation between values, or between measures.	You can view the relation between two measures and learn the influence the first measure has on the second measure.	Gauge, treemap, card, hierarchy, conversion path, and progress.
Trends	Displays data trends (especially trends based on the date such as year/month/day), or the progress of data indicator and other possible patterns.	You can view trends in sales or revenue for a product over a period of time.	Line and area.
Regional map	Displays the relevant data and the distribution range for a country or region on the map. The datasets used must include geographic data.	You can view income information for each region in a country.	Geo bubble and geo .

The data elements of a data chart

Each chart has three tabs, which are Data, Style, and Advanced, as shown in the following figure.

- Settings in the Data tab determine the data shown on the chart.
- Settings in the Style tab determine the appearance of the chart and the details to be displayed.

- Settings in the Advanced tab determine whether the data and multiple charts can be linked, and dynamically display the interaction and comparison of the data as needed.

The charts provided by Quick BI present distinct perspectives and data elements for different visualization scenarios. Take the geographic chart as an example. A core data element is latitude. Otherwise, the map cannot display data.

The following table describes the core data elements of each chart.

Graph name	Data element	Data element description
Line	Category axis and value axis	The category axis must have at least one dimension. The value axis must have at least one measure.
Area	Category axis and value axis	The category axis must have at least one dimension. The value axis must have at least one measure.
Bar	Category axis and value axis	The category axis must have at least one dimension. The value axis must have at least one measure.
Stripe	Category axis and value axis	The category axis must have at least one dimension. The value axis must have at least one measure.
Pie	Slice label and arc angle	The slice label contains only one dimension, and the value of the dimension must be less than or equal to 12. The arc angle has only one measure.

Graph name	Data element	Data element description
Geo bubble	Location and the bubble size	The location contains only one dimension, which is the geographic dimension . The bubble size element can have 1-5 measures.
Geo	Location and colorscale	The location contains only one dimension, which is the geographic dimension . The colorscale element can have 1-5 measures.
Table	Row and column	The row has unlimited dimensions. The column has unlimited measures.
Gauge	Indicator angle and tooltip	The indicator angle has only one measure.
Radar	Radius label and radius	The radius label contains either one or two dimensions. The radius has at least one measure.
Scatter	Colors, X-axis, and Y-axis.	The colors element has only one dimension and the member number of the dimension can be up to 1000. The X-axis has at least one and at most three measures. The Y-axis has only one measure.
Funnel	Tier labels and tier area	The tier labels element has only one dimension. The tier area element has only one measure.
Card	Card labels and card metrics	The card labels element has at most one dimension . The card metrics element has at least one measure and at most ten measures.

Graph name	Data element	Data element description
TreeMap	Rectangle label and rectangle size	The rectangle size element has only one dimension, with a value less than or equal to 12. The rectangle size element has only one measure.
LBS map	Geographical area and LBS bubble size	The geographical area has only one dimension, which is the latitude. The LBS bubble size element can have at least one and at most five measures.
Polar	Slice label and arc radius	The slice label element has only one dimension, with a value greater than or equal to three and less than or equal to 12. The arc radius element has only one measure.
Word cloud	Word size and word	The word size element has only one dimension. The word element has only one measure.
Tornado	Comparison and contrast indicator	The comparison element has only one dimension. The contrast indicator has at least one measure.
Hierarchy	Node label and node metric	The node label has at least two dimensions. The node metric has at least one dimension.
Conversion path	Previous Page, Current Page, and Next Page. Previous Page PV, Previous Page UV, Current PV, Current UV, Next Page PV, Next Page UV, Conversion Rate, and Bounce Rate.	Each data element has only one dimension and one measure.

Graph name	Data element	Data element description
Progress	Progress Indicator	The progress indicator has at least one measure and at most five measures.
Pivot	Row and value	The row has unlimited dimensions. The value has unlimited measures.

3.2 Dashboard basic operations

3.2.1 Basic dashboard operations

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

For more information about dashboards, see [Dashboard overview](#).

To learn how to create charts, see [Create charts in a dashboard](#).

Go to the Dashboards page

Quick BI Quick BI Pro

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

Quick BI Professional edition

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

For more information about how to create standard dashboards, see [Standard dashboards](#).

For more information about how to create full-screen dashboards, see [Full-screen dashboards](#).

Areas of a dashboard

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

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

Dataset selection area

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

Dashboard configuration area

In the dashboard configuration area, you can select a chart type, and edit the title, layout, and legend pattern of the chart. In Advanced Settings, you can relate multiple charts and display analysis results from multiple perspectives. You can filter data using Filters. You can also insert a filter bar to search any key metric in a chart.

Dashboard display area

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

3.2.2 Switch datasets

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

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

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

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

3.2.3 Search for the dimensions field and the measures field

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

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

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

3.2.4 Configure a chart

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

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

For more information about dimensions and measures, see [#unique_72](#).

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

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

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

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

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

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

Take the `product_type` field as an example.

- a. Drag the `product_type` field to the Colors (Dimensions) area, and then click Update.
 - b. Select Style > Series settings to change your color matching themes.
4. Select the time interval that data automatically refreshes on the Auto refresh list.
 5. On the Style tab, you can change the visual format of a chart by setting options in General config, Style, Layout, Axis, and Series settings.

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

Assume that the previous unit is centimeter. If you want to display data in meters, you must divide the previous unit by 100. In the Unit area, you can enter 0.01 in this case. For a multiplication operation, you can enter 100.

6. On the Advanced tab, you can associate the current chart with other charts.

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

3.2.5 Filter by fields

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

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

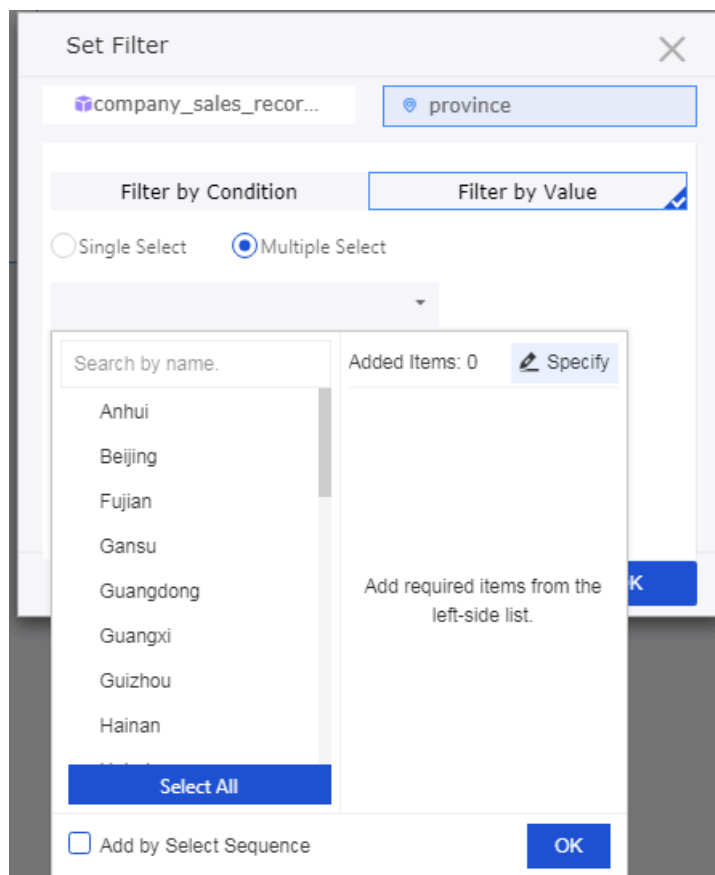
Filter data in string type

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

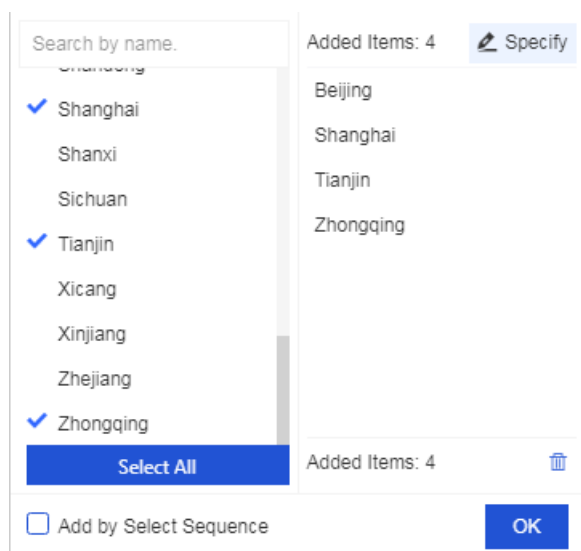
Take filtering municipalities as an example.

1. Drag the province field to the Filter Bar area, as shown in the following figure.
2. Click the Set Filter icon, and set filtering criteria.

3. Select the required filtering criteria. For example, select Filter by Enumeration, as shown in the following figure.



4. Manually enter the field names or select the city names from the list.



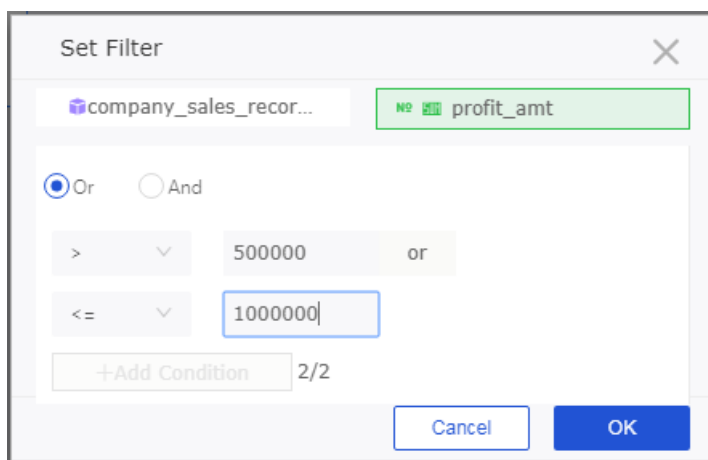
5. After you have specified the fields, click OK.
6. Click Update. The system automatically redraws the chart based on the filters.

Filter numerical data

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

Take filtering profit amount as an example.

1. Drag the profit amount field to the Filter Bar area.
2. Click the Set Filter icon, and set filtering criteria.
3. Select the filters as needed, such as greater than, less than, or equal to, as shown in the following figure.



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

Filter data in date type

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



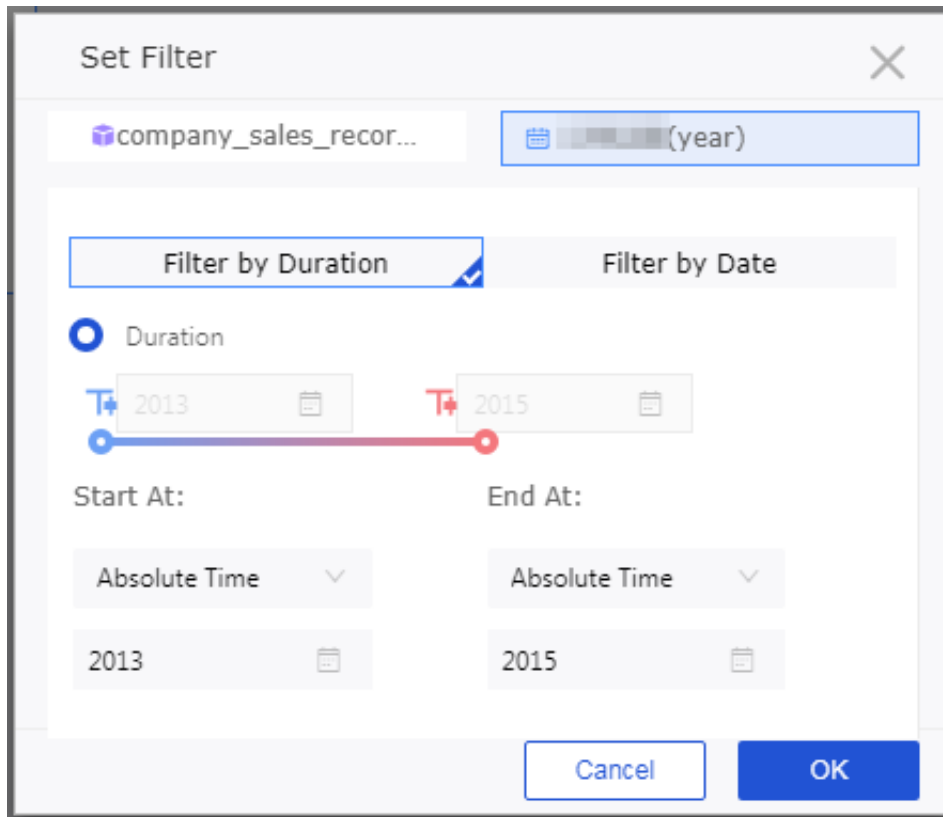
Note:

You can filter data in date type exact to seconds.

Take filtering order dates (year) as an example.

1. Drag the order date (year) field to the Filter Bar area. Click the Set Filter icon, and set filtering criteria.

2. Select the filters as needed. For example, specify the Absolute Time with the range from 2013 to 2015, as shown in the following figure.



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

3.2.6 Sort data

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

Procedure

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

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

2. Click Update.

3.2.7 Standard

In Standard mode, you can perform the following operations in a dashboard.

- Adjust the chart position
- View the chart data
- Delete a chart
- Change the chart type
- Add to favorites
- Global variables

The Dashboards wizard is displayed when you use Quick BI Dashboards for the first time. You can learn operations on a dashboard by following the wizard.

More operations

In the upper-right corner of a chart, click the More Actions icon. Then you can perform the following operations.

- **Move To:** moves the chart to a tab container.
- **View Data:** views the data of the chart.
- **Export:** exports the data of the chart in Excel format.
- **View SQL Statements:** views the SQL statements of the chart.
- **Copy:** copies the chart.
- **Delete:** deletes the chart.



Change the chart type

On the dashboard page, you can change the chart type.

Select a chart, click Change Chart Type in the Graphic Design panel, and select a chart type to change the chart type.

1. Select a chart in the dashboard.
2. Click Change Chart Type as shown in the following figure. Change the chart type to Radar Chart as shown in the following figure.

3. The chart updates as shown in the following figure.

A failed change of the chart type indicates that the chart elements for the two chart types do not match. You need to manually modify the fields used for chart elements to change the chart type.

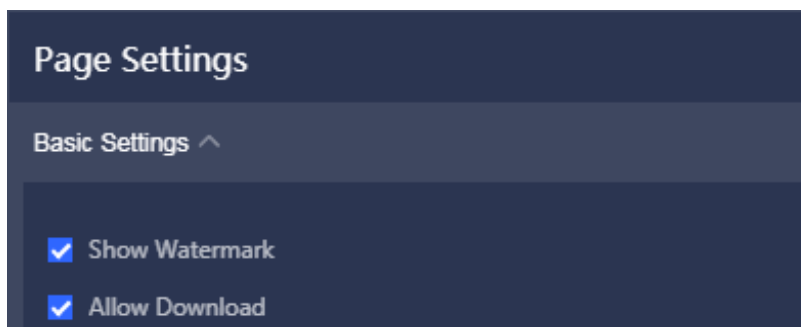
The chart elements for which you need to modify the fields are displayed based on the target chart type. Select the fields from the Dimensions and Measures lists as needed and add them to the corresponding sections of chart elements to change the chart type.

Add to favorites

Click the Add to Favorites icon next to the dashboard name to add a dashboard to the favorites.

Page settings

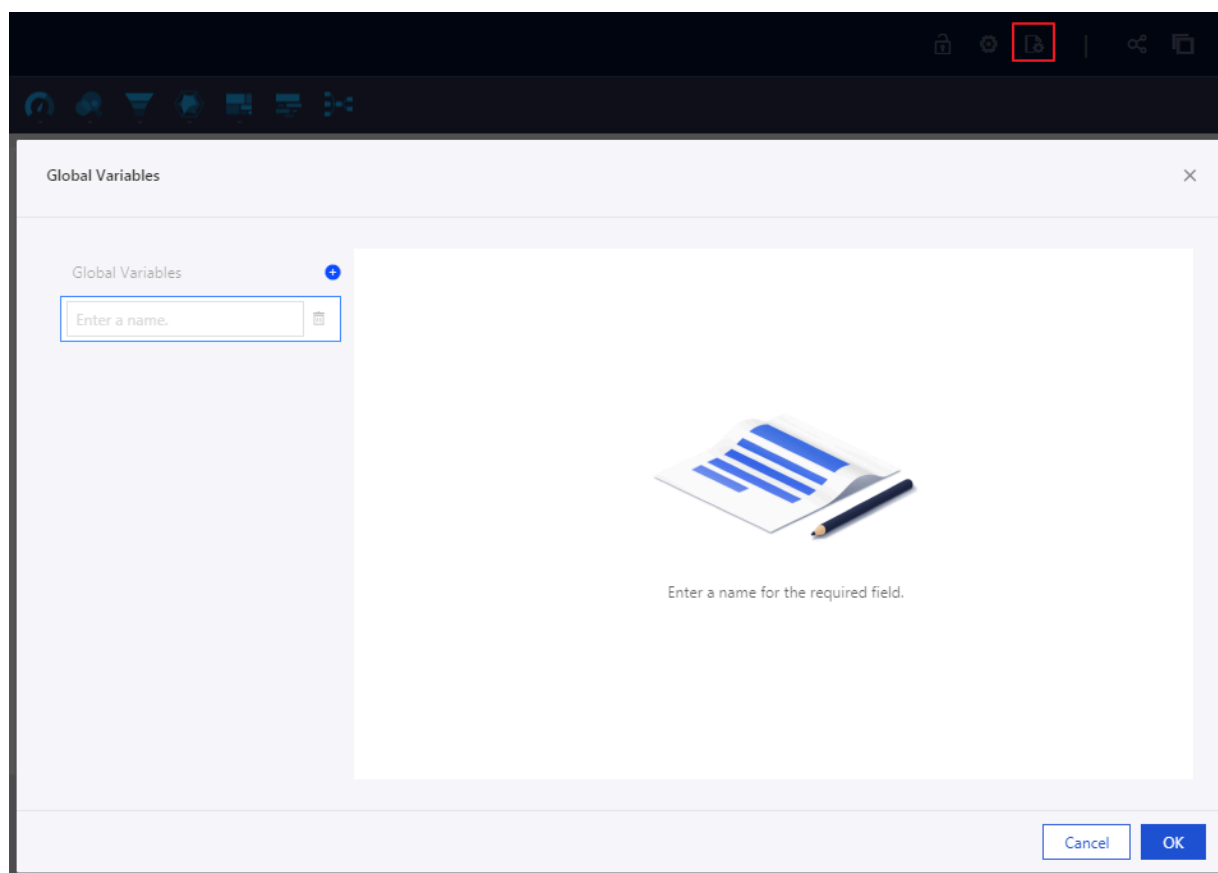
Click the Page Settings icon to configure whether to allow downloads of the dashboard and whether to add watermarks.



Global variables

After creating a dashboard and clicking Save, you can configure global variables.

You can use global variables for page jumping. For more information, see [Drilling, filter interaction, and hyperlink](#).



3.2.8 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 upper-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.

3.3 Visualization analysis

3.3.1 Drilling, filter interaction, and hyperlink

Quick BI supports drilling, filter interaction, and hyperlinks for multi-dimension data analysis. This topic describes the scenarios and instructions about these features.

Overview

- **Drilling:** In the dashboard, click a section in a chart or a field in a table in the dashboard. The granularity of analysis changes as the dimension level changes.
- **Filter interaction:** In the dashboard, click a section in a chart. Other charts related to the chart change accordingly.
- **Hyperlink:** In the dashboard, click a field in a chart and you are taken to the linked page. You can use global parameters and URLs for page jumping.



Note:

Hyperlinks only apply to cross tables and scatter charts. Using global parameters for page jumping only applies to group workspaces. For more information about group workspaces, see [Concepts](#).

Scenarios

The following example describes how to perform filter interactions among charts, drill through a hierarchy to change the granularity of data analysis, and jump to the Order information pages by using hyperlinks in Quick BI.

The example uses the `company_sales_record` dataset. You can click [sample sales data](#) and create the same dataset based on the downloaded CSV file. For more information about datasets, see [Upload local files](#) and [Create a dataset](#).

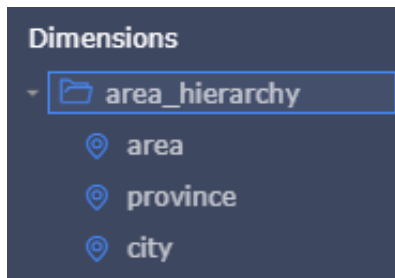
Procedure:

1. [Edit a dataset](#)
2. [Create a dashboard](#)
3. [Set drilling](#)

4. [Set filter interactions](#)
5. [Set hyperlinks](#)

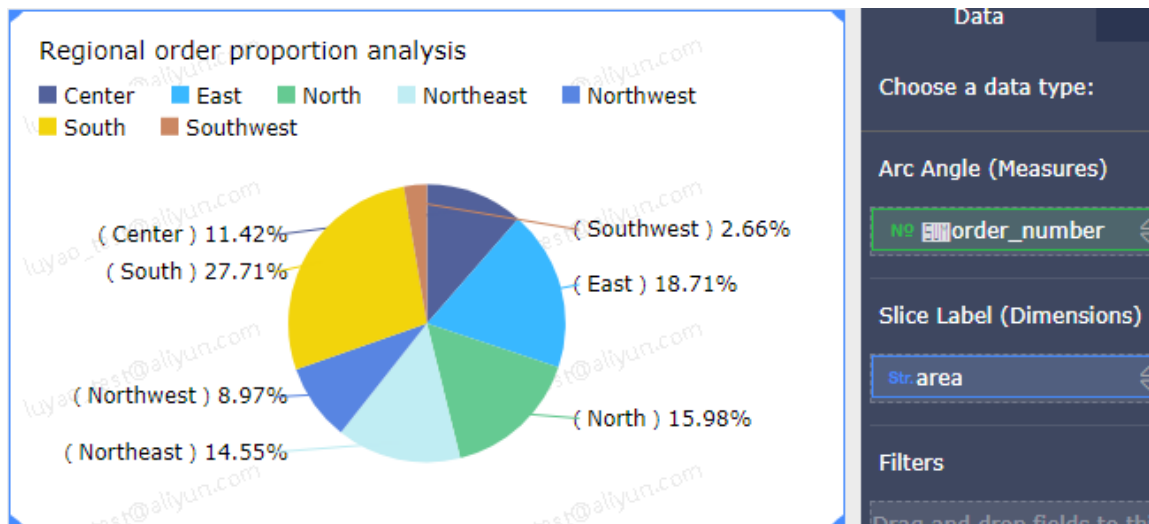
Edit a dataset

Make sure that you have converted the dimension type of the area, province, and city fields to Geo and have added them to the same hierarchy.

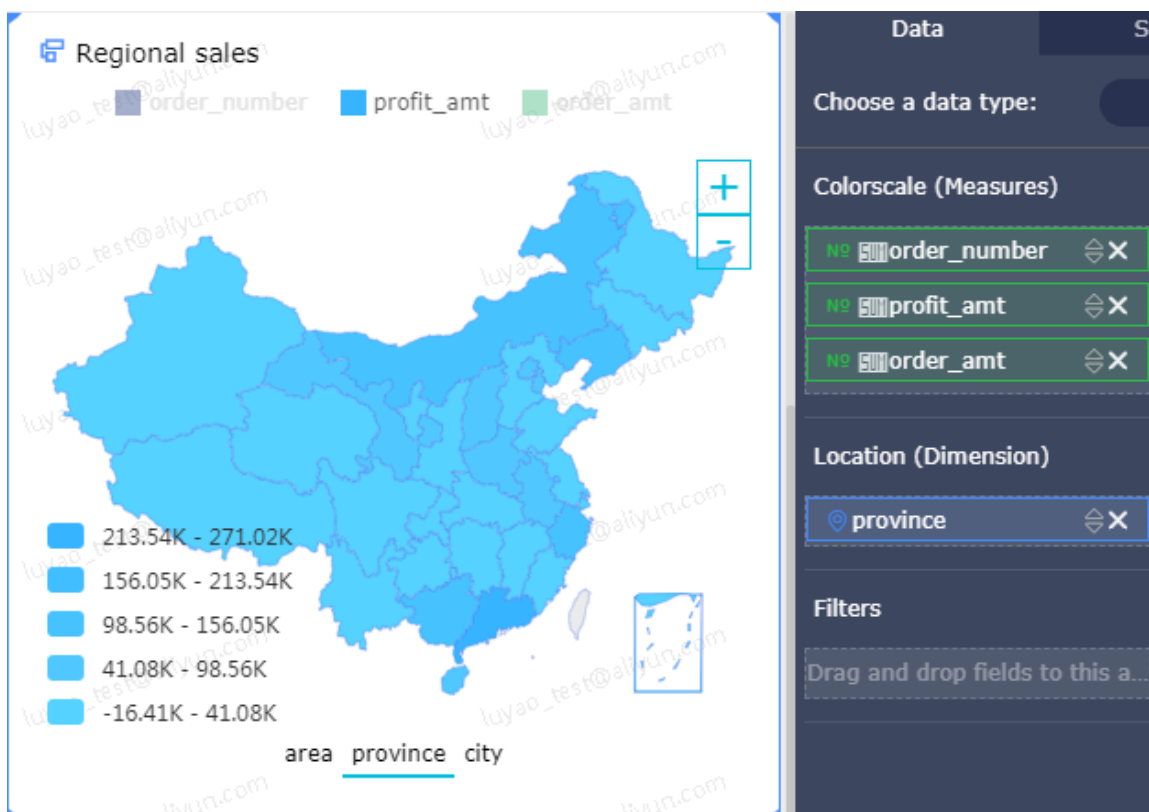


Create a dashboard

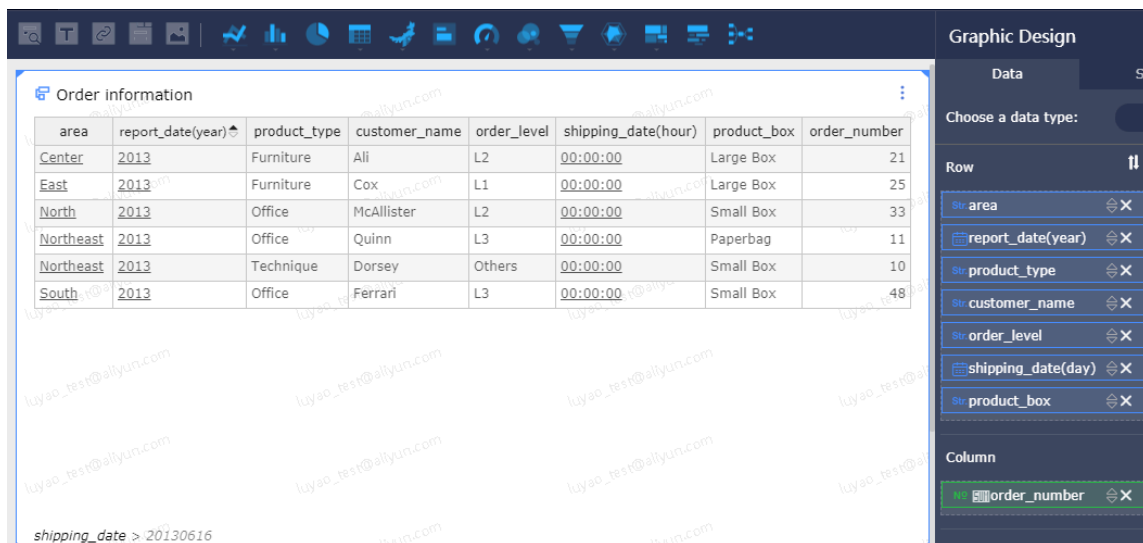
- Create the company's market data dashboard
 1. Create a dashboard named company's market data based on the company_sales_record dataset.
 2. Create a pie chart as shown in the following figure and name it Regional order proportion analysis.



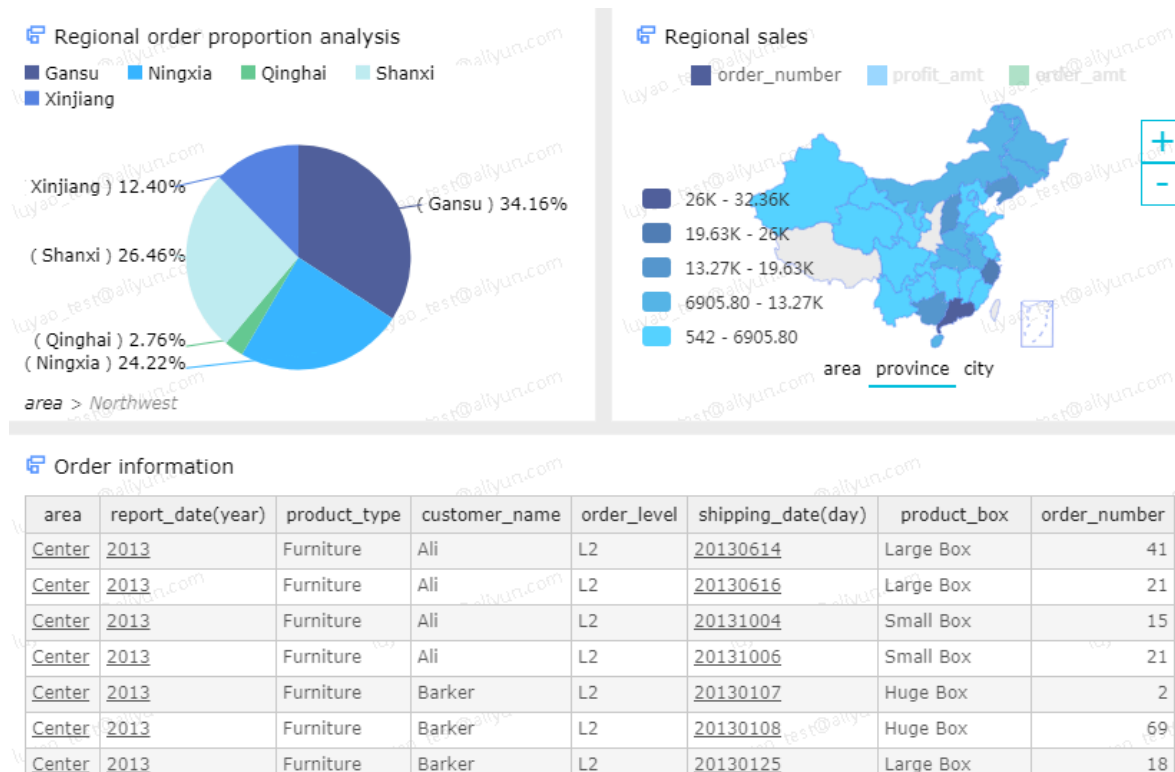
3. Create a colored map as shown in the following figure and name it Regional sales.



4. Create a cross table as shown in the following figure and name it Order information.

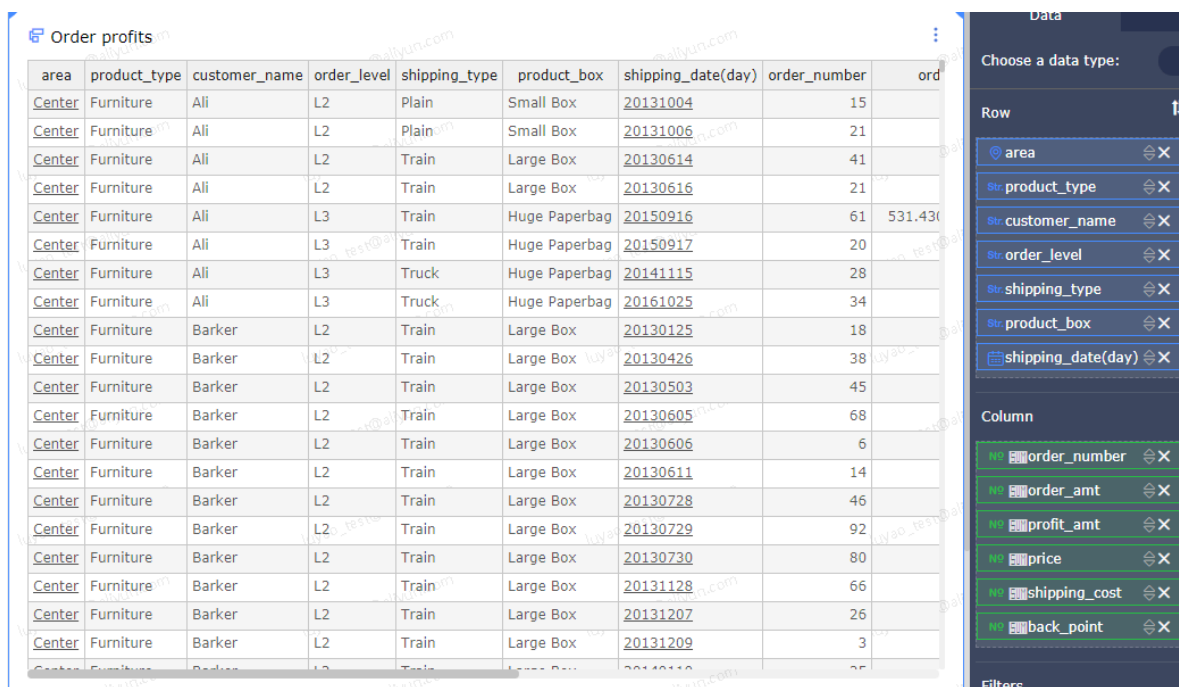


After the creation, the company's market data dashboard is as follows.



- Create the Order profits dashboard

Create a dashboard to show order profits. Name the dashboard Order profits and create a cross table called Order profits.



The screenshot shows a dashboard titled "Order profits" with a cross table and a data panel on the right.

Order profits

area	product_type	customer_name	order_level	shipping_type	product_box	shipping_date(day)	order_number	ord
Center	Furniture	Ali	L2	Plain	Small Box	20131004	15	
Center	Furniture	Ali	L2	Plain	Small Box	20131006	21	
Center	Furniture	Ali	L2	Train	Large Box	20130614	41	
Center	Furniture	Ali	L2	Train	Large Box	20130616	21	
Center	Furniture	Ali	L3	Train	Huge Paperbag	20150916	61	531.430
Center	Furniture	Ali	L3	Train	Huge Paperbag	20150917	20	
Center	Furniture	Ali	L3	Truck	Huge Paperbag	20141115	28	
Center	Furniture	Ali	L3	Truck	Huge Paperbag	20161025	34	
Center	Furniture	Barker	L2	Train	Large Box	20130125	18	
Center	Furniture	Barker	L2	Train	Large Box	20130426	38	
Center	Furniture	Barker	L2	Train	Large Box	20130503	45	
Center	Furniture	Barker	L2	Train	Large Box	20130605	68	
Center	Furniture	Barker	L2	Train	Large Box	20130606	6	
Center	Furniture	Barker	L2	Train	Large Box	20130611	14	
Center	Furniture	Barker	L2	Train	Large Box	20130728	46	
Center	Furniture	Barker	L2	Train	Large Box	20130729	92	
Center	Furniture	Barker	L2	Train	Large Box	20130730	80	
Center	Furniture	Barker	L2	Train	Large Box	20131128	66	
Center	Furniture	Barker	L2	Train	Large Box	20131207	26	
Center	Furniture	Barker	L2	Train	Large Box	20131209	3	
Center	Furniture	Barker	L2	Train	Large Box	20140118	25	

Data

Choose a data type:

Row

- area
- Str. product_type
- Str. customer_name
- Str. order_level
- Str. shipping_type
- Str. product_box
- shipping_date(day)

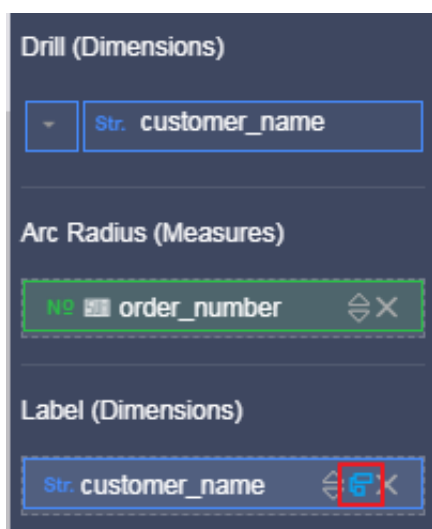
Column

- order_number
- order_amt
- profit_amt
- price
- shipping_cost
- back_point

Filters

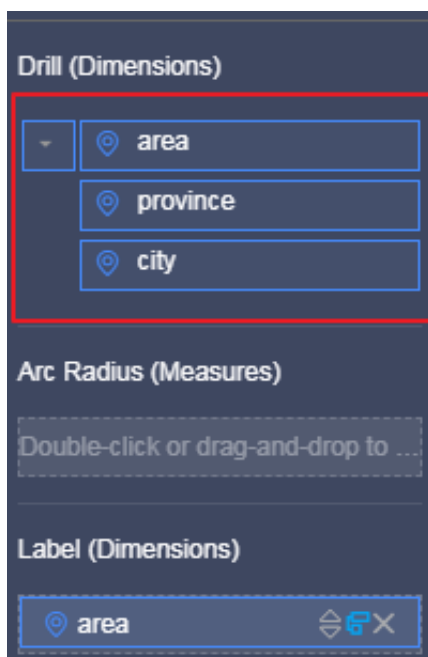
Set drilling

You need to manually enable the drilling feature. Click the Drilling icon as shown in the following figure.



You can set a drilling hierarchy as follows.

- Use the hierarchy in the dataset: When the selected dimension of a dataset contains a hierarchy, the hierarchy is displayed by default. You can modify the hierarchy as shown in the following figure.



- Customize the hierarchy: When the selected dimension of a dataset does not contain a hierarchy, you can customize the hierarchy and drag the drill dimension to the Drill (Dimensions) section.



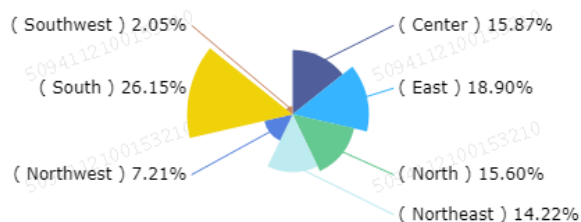
Note:

You can enable drilling for a maximum of three dimensions in a cross table. Other charts support a maximum of one drill dimension. You can set a maximum of six levels of a hierarchy.

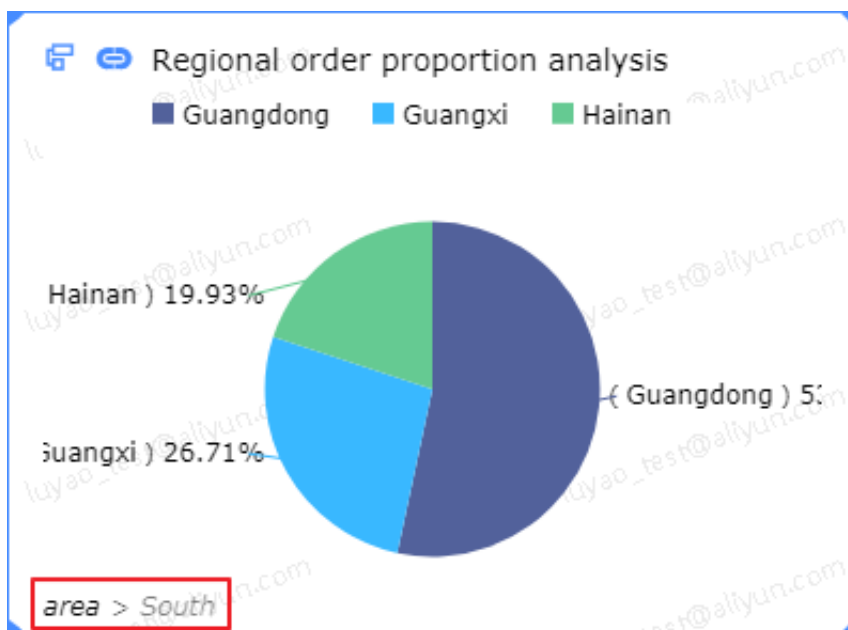
After the settings are complete, the drill icon appears on the left of the chart title as shown in the following figure.

Polar Diagram

■ Center ■ East ■ North ■ Northeast ■ Northwest ■ South ■ Southwest



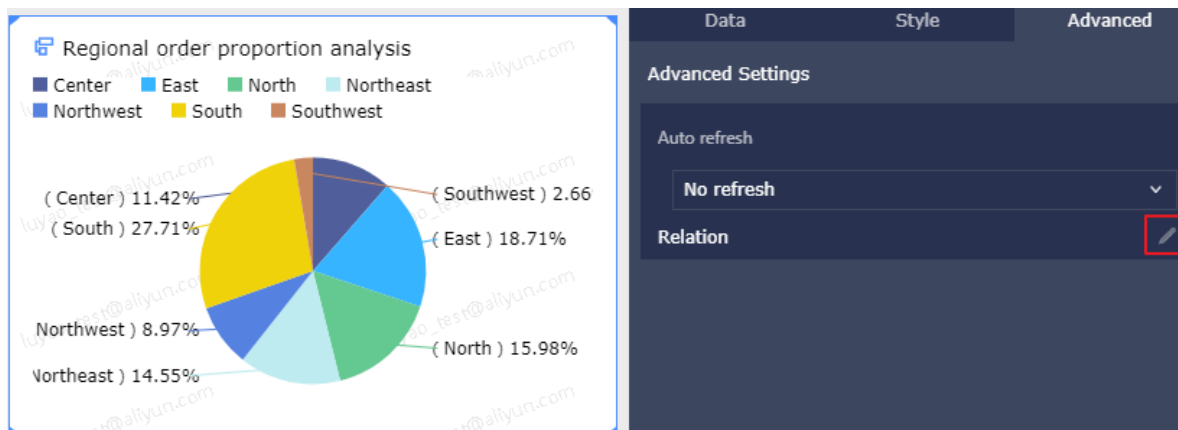
- **Drill down:** In the Regional order proportion analysis pie chart, click the South slice and the pie chart based on the provinces of South appears. In the lower-left corner of the chart, the values of drill dimensions with higher levels are displayed.



- **Drill up:** Click area to drill up to the area-level data.

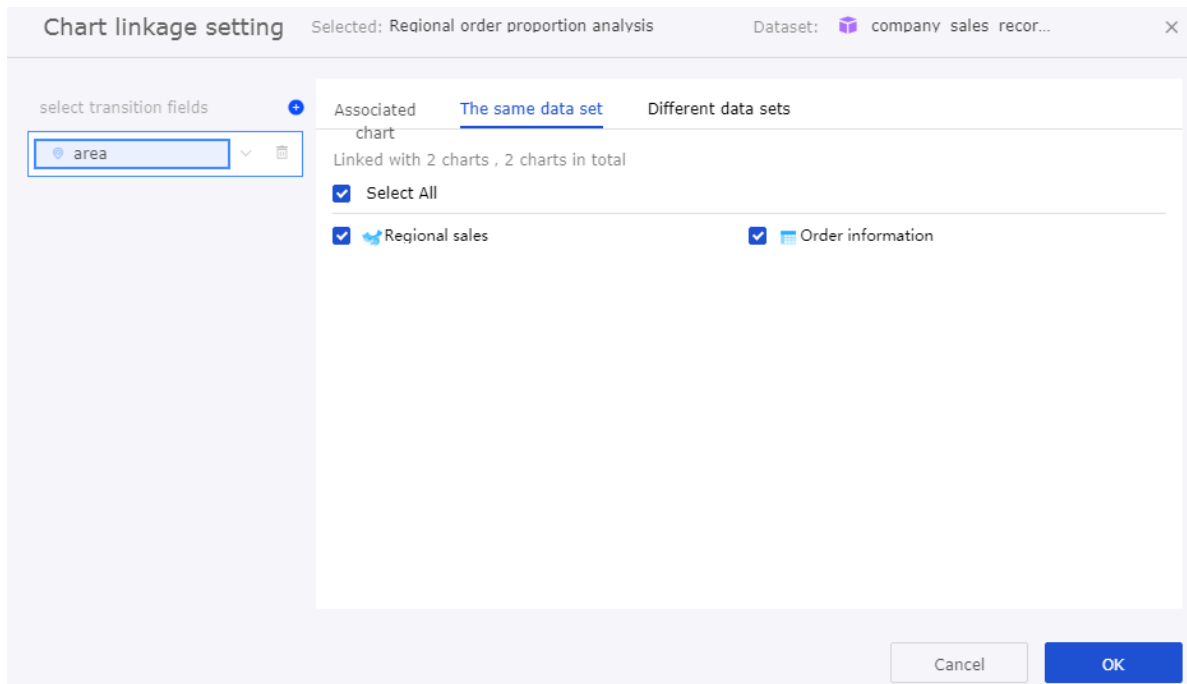
Filter interactions

1. In the company's market data dashboard, select the Regional order proportion pie chart and click the Advanced tab in the Graphic Design panel .



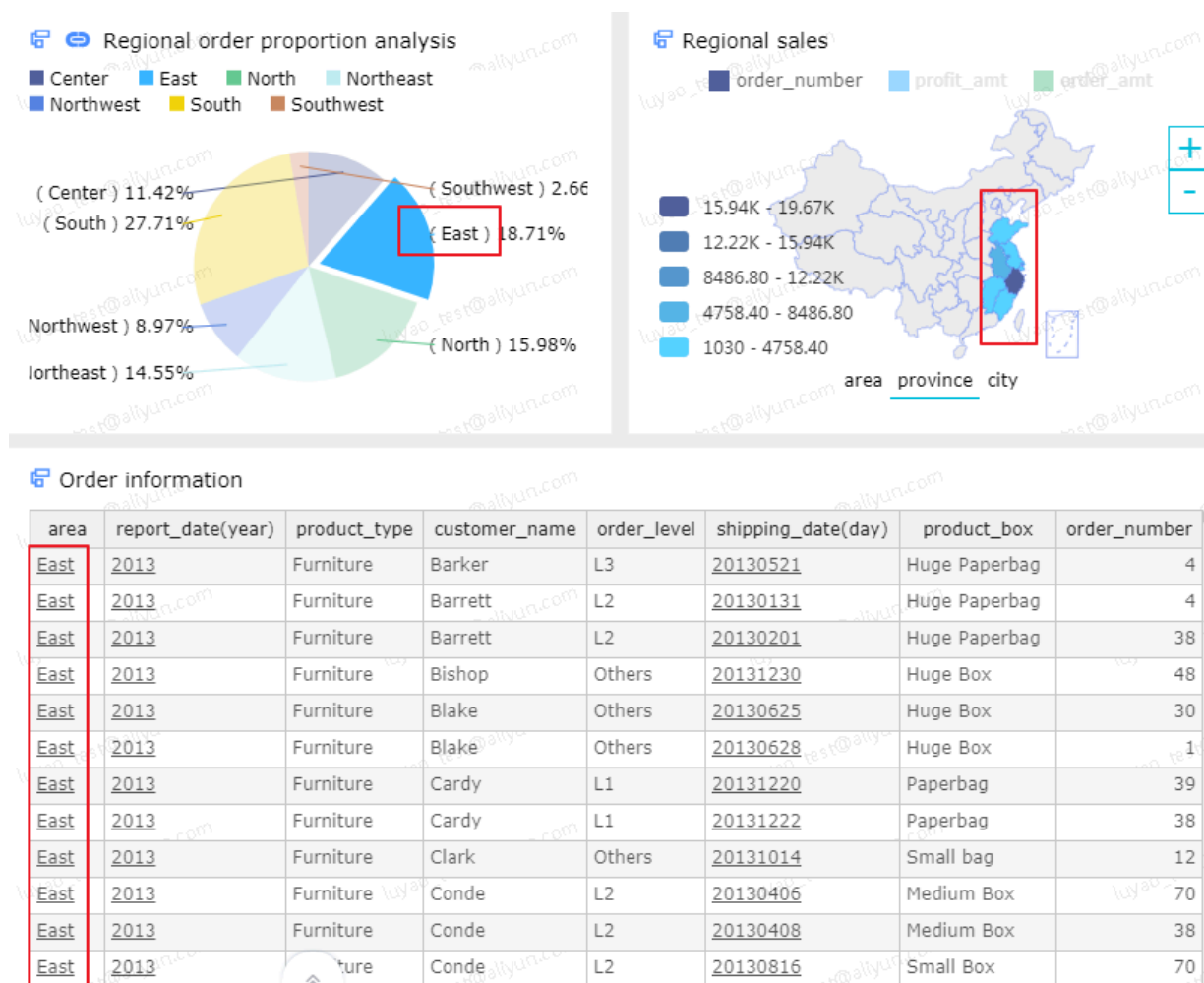
2. Click the pen icon next to Filter Interaction .

3. In the Filter Interaction dialog box that appears, select the linked field area, the cross table Order information, and the colored map Regional sales. Click OK.



4. In the Regional order proportion analysis pie chart, click a slice. Click the South slice and click Filter Interaction.

Both the Order information cross table and the Regional sales colored map show the sales details in the Se area. Move the pointer over the upper-right corner of the colored map and the filter value appears.



Hyperlinks

Parameter

Scenario: Click Office in the Order information cross table and the Order profits dashboard is jumped to automatically. All Office orders are displayed.

- Configure global parameters



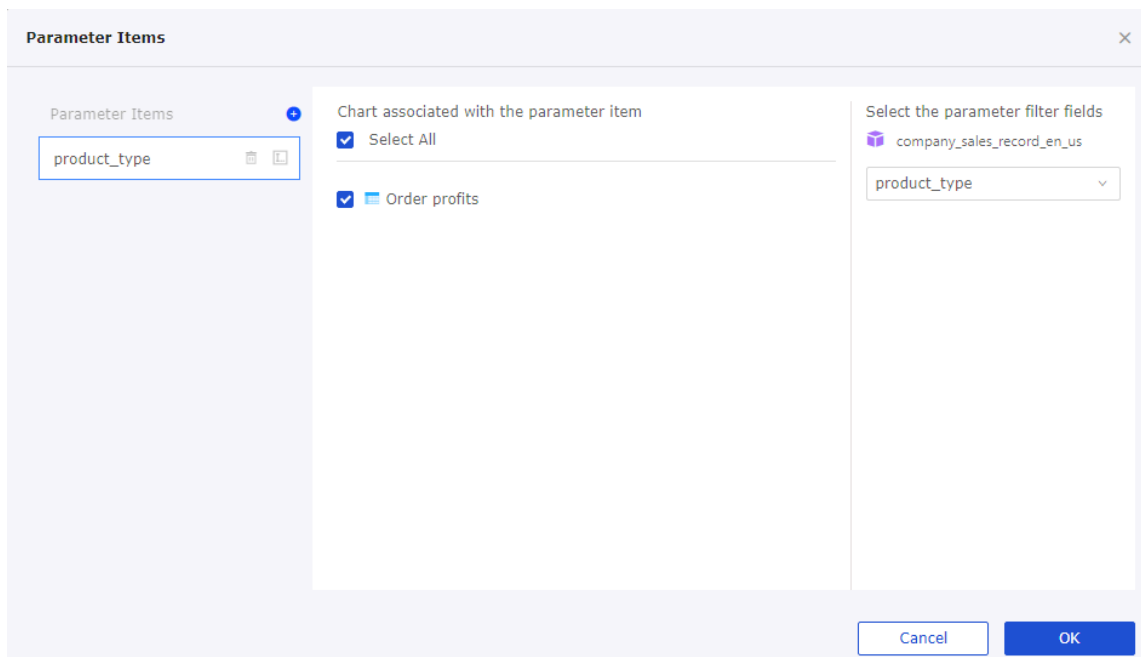
Note:

The following example uses global parameters for page jumping. You need to set global parameters first.

1. On the Order profits dashboard page, click the Global Variables icon.

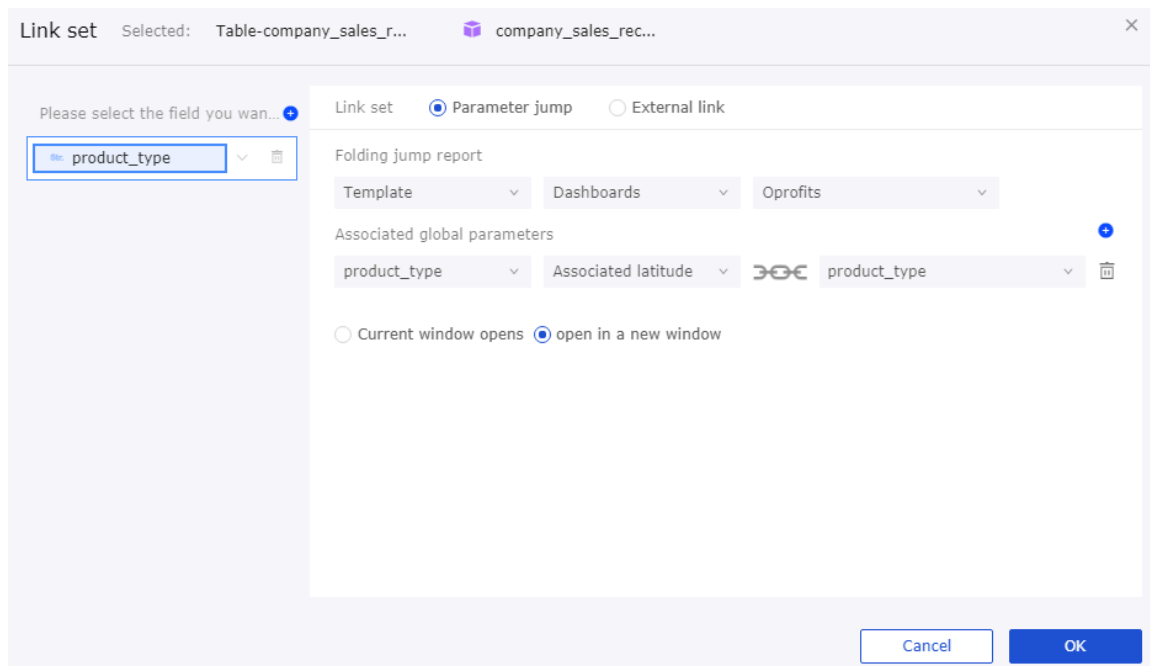


2. In the Global Variables dialog box that appears, perform the configurations as shown in the following figure and click OK.



- Configure a hyperlink

1. In the company's market data dashboard page, select the Order information cross table, click the Advanced tab in the Graphic Design panel.
2. Click the pen icon next to Hyperlink.
3. In the Hyperlink dialog box, perform the configurations as shown in the following figure and click OK.



After configurations are complete, the `product_type` column values in the Order information cross table are displayed as hyperlinks.

- Page jumps

Click Office in the Order information cross table, the Order profits dashboard is jumped to automatically. Only orders with Office as the value of the corresponding `product_type` field are displayed.

External link

You can jump to specified URLs such as web UIs of customer systems by using the external link feature.

1. Select the Order information cross table and click the Advanced tab in the Graphic Design panel.
2. Click the pen icon next to Hyperlink.

3. On the Hyperlink dialog box, select the fields that you want to hyperlink and select External Link as the hyperlinking method. Enter a URL and click OK.



Note:

You can add parameters to URLs by entering them manually or by double-clicking the fields in the Add Dimensions list.

4. Click the hyperlinked field values and the corresponding URL is jumped to.

3.4 Common widgets

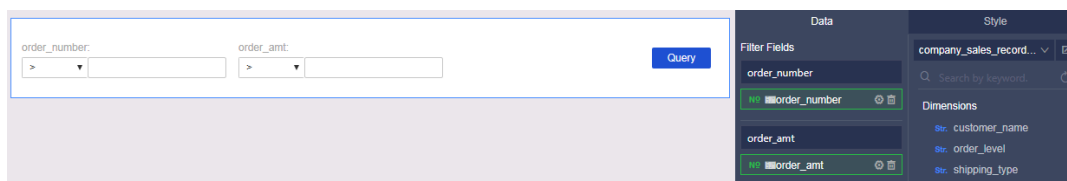
The presentation area of a dashboard supports the following widget types. You can double-click or drag a widget to add it to the presentation area of a dashboard.

- Standard mode
 - [Filter bar](#)
 - [Text area](#)
 - [IFrame](#)
 - [TAB](#)
 - [Image](#)
- Full-screen mode
 - Text area
 - IFrame
 - Image

3.4.1 Filter bar

You can use a filter bar to search data in one or more charts.

1. Click a filter bar.
2. Select a dataset, and select the fields to be added to the filter bar, as shown in the following figure.



Currently, a filter bar supports filter interactions between charts of the current dataset or charts of different datasets.

Filter interaction example for the current dataset

1. Select Current Dataset. In the current dataset field list, select the charts by the field type.
2. Click Style to edit the display name of the filter bar.
3. Click Search to filter the associated charts.

Filter interaction example for different datasets

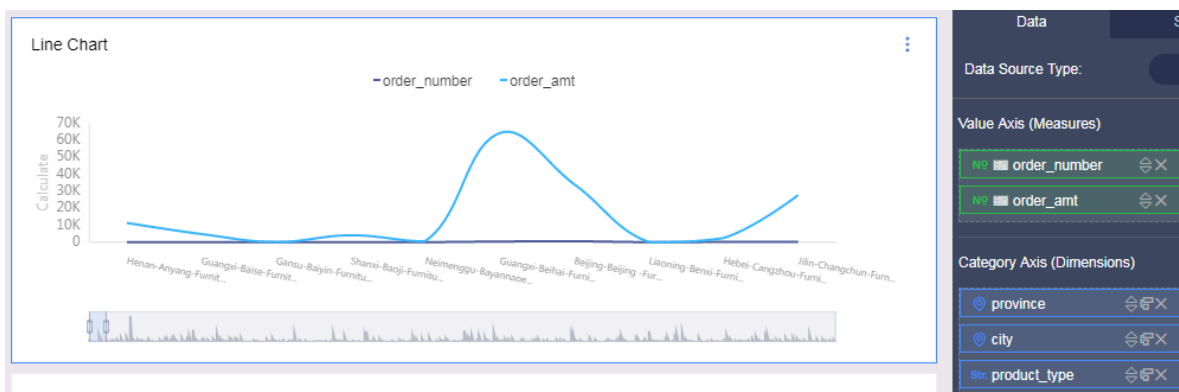
Filter bars can also filter data from different datasets. However, in the associated items, the data members must have the same fields. Otherwise, the interaction does not work.

1. Select a chart, such as a table.
2. Select the required fields, and then click Update.
3. Click the Style tab, and then change the display name and layout of the table. For example, set the display name of the table to overseas data.
4. Click the icon that switches datasets to change to another dataset.
5. Select a chart, such as Table.
6. Select the required fields, and then click Update.
7. Click the Style tab, and then change the display name and layout of the table. For example, set the display name of the table to domestic data.
8. Click the Filter Bar icon, and then select the dataset and add filter fields to the filter bar.
9. Select Other Dataset. In the Other Dataset list, select the associated items based on the field type.
10. Click the Style tab to specify the display name of the widget.
11. Click Search to update the charts filtered by the fields.

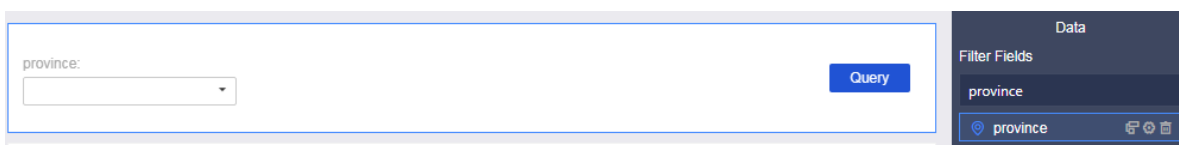
Cascade filter example

The filter bar supports cascade filter, which simplifies the steps of setting multiple filters.

1. Create line charts on the dashboard editing page, as shown in the following figure.



2. Click the filter bar widget and then select the dataset and the fields to be filtered.
In this example, we select the province field as the filter, as shown in the following figure.

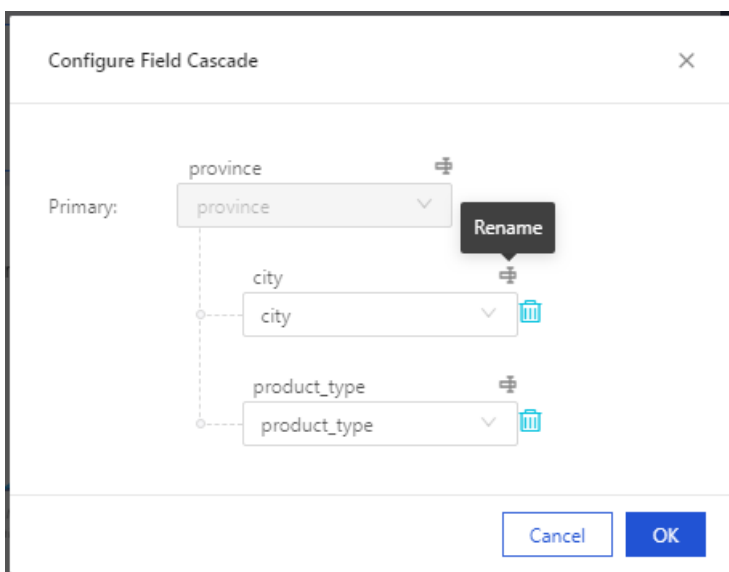


3. Click the cascade icon. On the Configure Field Cascade page, click + Add cascading relationship to add the fields to be cascaded, and then click OK. In this example, we select the city field and the product type field.



Note:

- The cascade filter supports three-level cascades, with lines connected between the parent nodes and child nodes.
- The cascade filter supports renaming the cascade fields.



4. Click Set Filter to set the filters and then click OK. In this example, we select Tile cascade display and Multiple Select, as shown in the following figure.



Note:

The cascade display supports Tree cascade display and Tile cascade display. You can select Cognate inheritance.

5. In the search widget, click Search. The result is shown in the following figure.



Note:

To view the detailed information of the cascade, you can hover over the cascade icon in the upper-right corner.

Filter data in a date range

When you filter data in date type, you can select the date range of the filter, manually set default values, and customize shortcuts.

1. In the Data tab, select the dataset and the fields to be filtered, such as order date (month).
2. Select a chart that needs to be filtered, and then click Set Time Range.
3. In the Set Time Range dialog box, enable Set Time Range, specify the time range, and then click OK
4. Select Manually set default values or Customize shortcuts to select a date range, and then click OK.



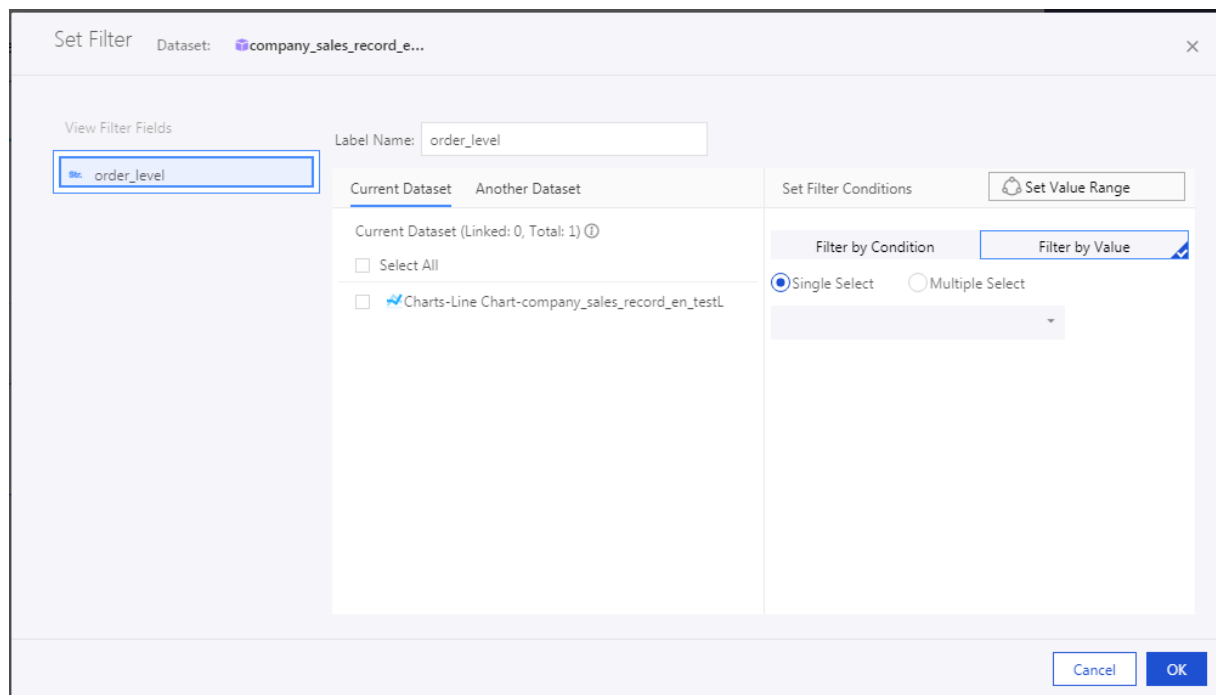
Note:

The date currently supports types of month and day for you to customize the date range.

5. Click Search. All the charts that are filtered by the widget are updated.

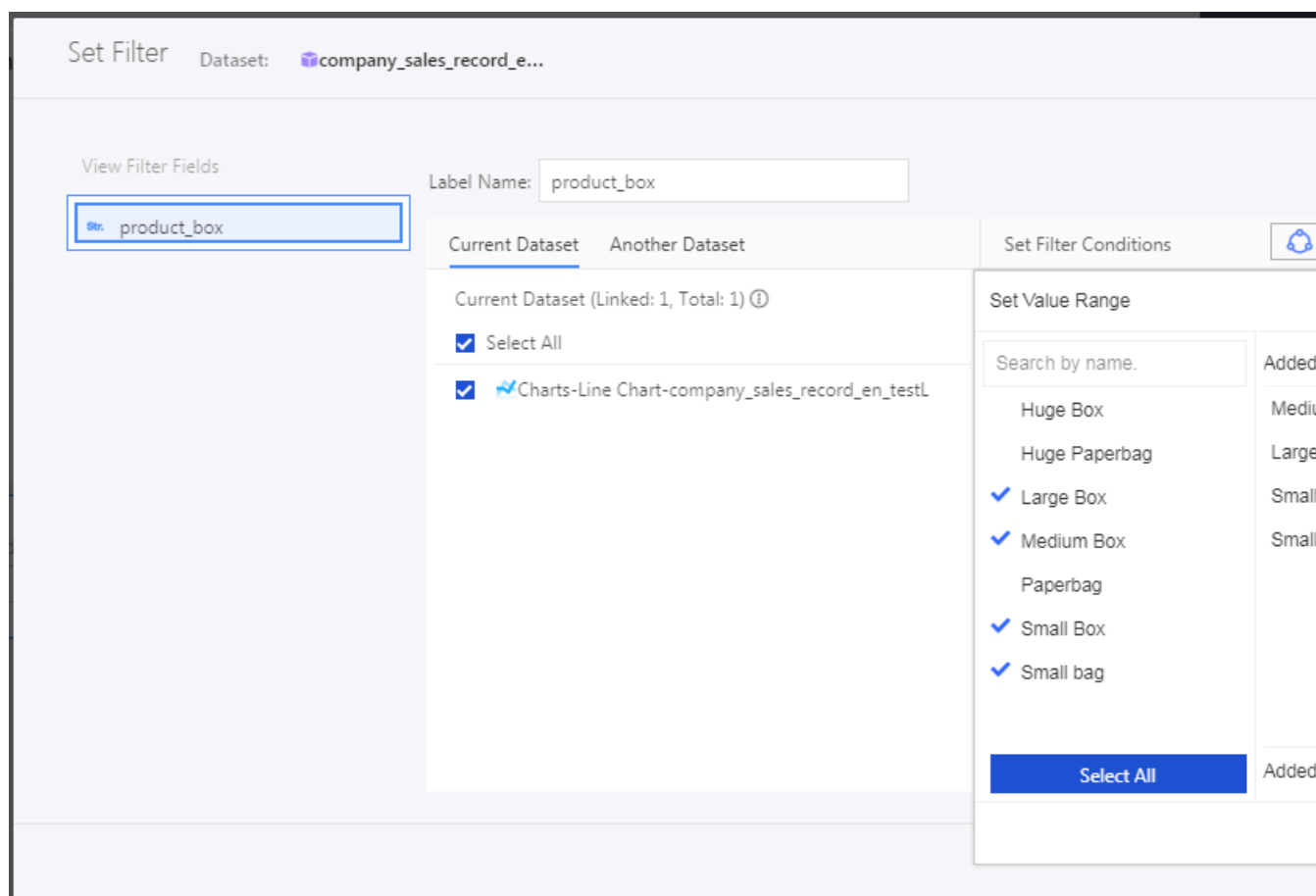
Filter text data

When you filter data in text type, you can set the enumeration range. as shown in the following figure:

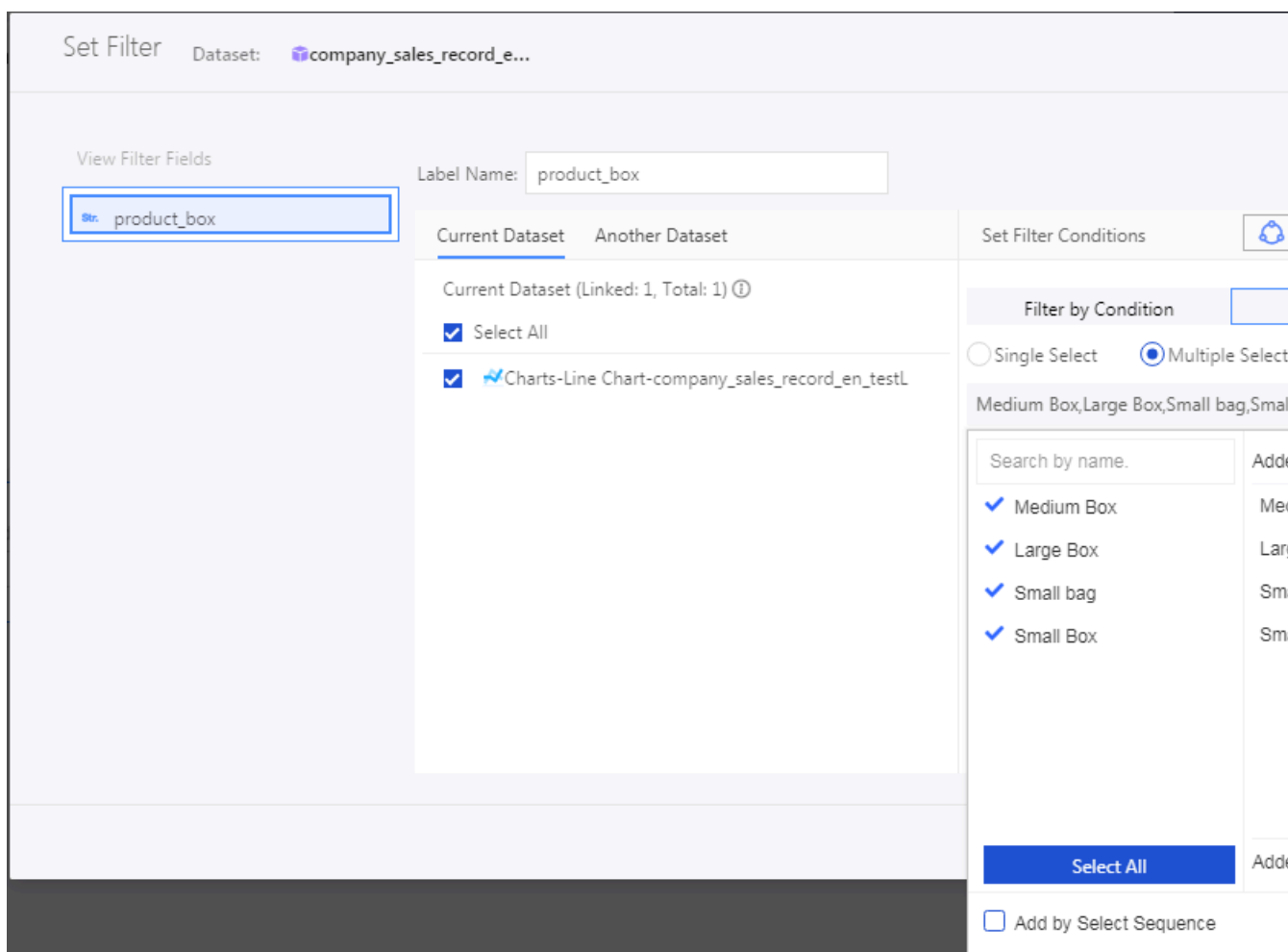


1. In the Data tab, select the dataset and fields to be filtered, such as product package.
2. Select a chart that needs to be used, and then click Set Value Range.

3. In the Set Value Range dialog box, enable Set Enumeration Range, click Manually set values or add available values such as Medium ox, Large Box, Small bag, and Small Box, and then click OK, as shown in the following figure.



4. Select Filter by Enumeration and Multiple Select, and then click the drop-down menu. The system automatically adds the available values of this field to the filter bar, as shown in the following figure.



Note:

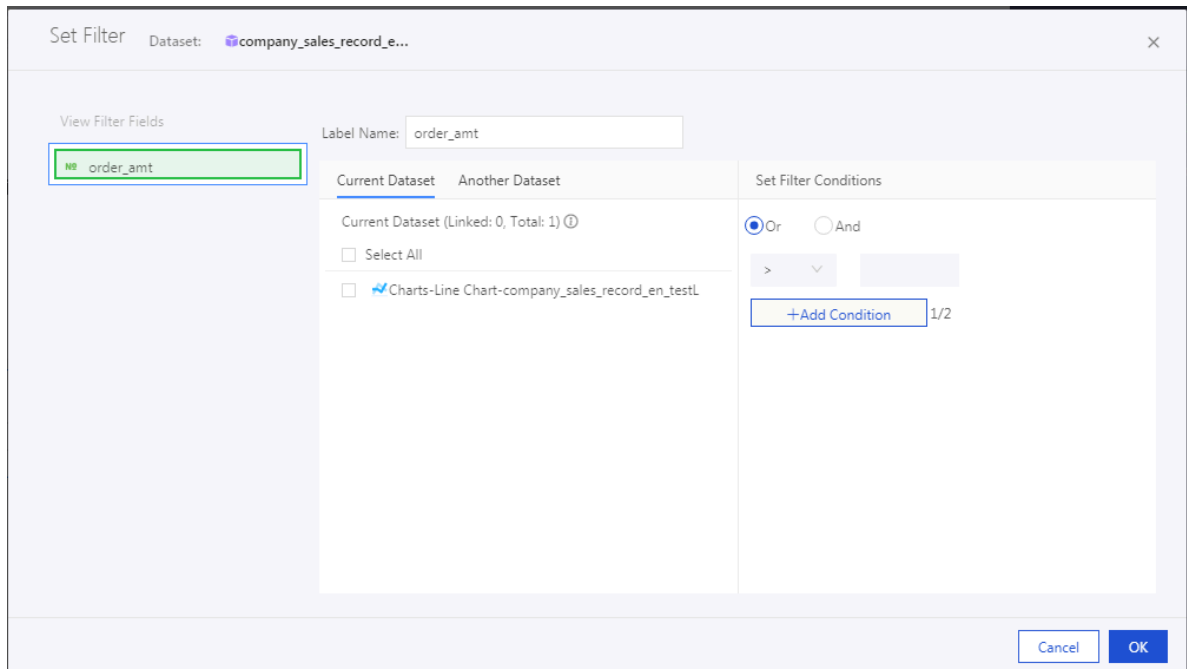
If you select Sort by fixed value, the selected values of the filter field are displayed in default order in relevant charts.

5. Manually specify the value or select the available values for the field to be filtered, and then click OK > OK.
6. Click Search. The charts that are filtered by the filter bar are updated.

Numeric query

1. On the Data tab, select a dataset and a query field, for example, order_amt.

2. Select a chart that needs to be filtered, set filter conditions, and click OK, as shown in the following figure:

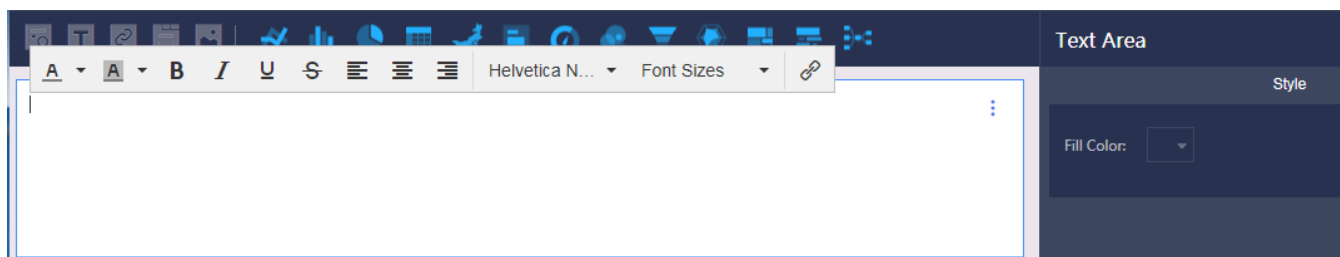


3. Click Search. The charts that are filtered by the filter bar are updated.

3.4.2 Text area

You can use a text area to enter text. For example, you can use this to create the report title.

1. Click the Text Area icon, and a text area appears in the dashboard display area.
2. Enter text, as shown in the following figure.



3.4.3 IFrame

You can use iFrames to insert required web pages to filter web data and browse web pages related to the current data in real time.

1. Click the IFrame icon, and an iFrame appears in the dashboard display area.

2. In the URL input box, enter the URL.



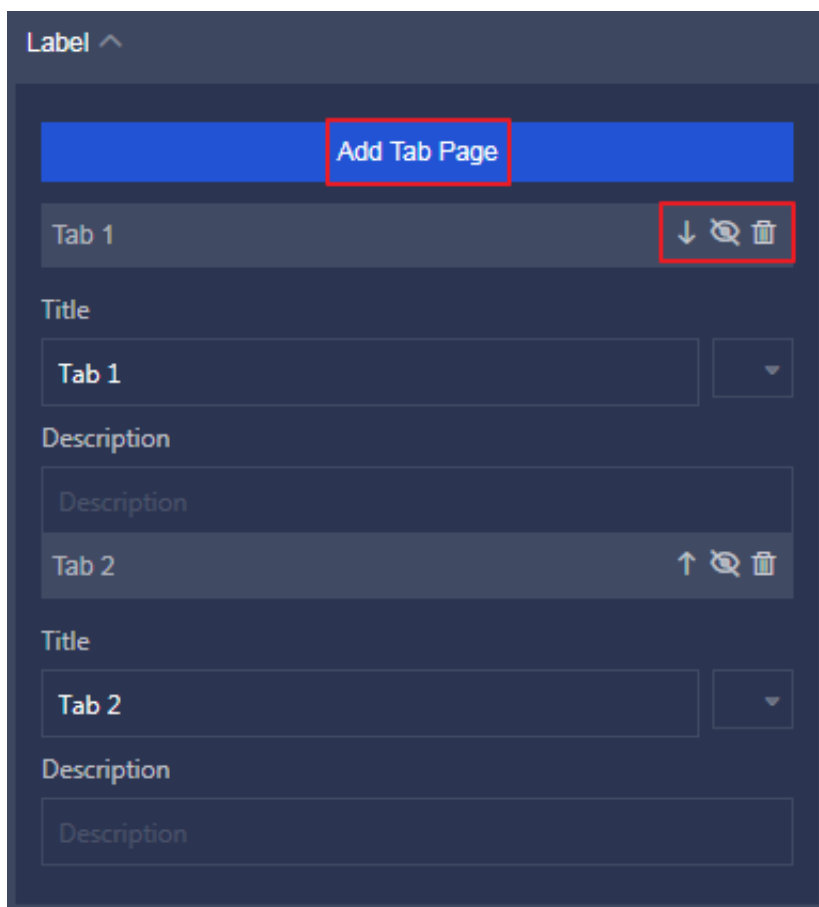
Note:

You must use an https URL.

3.4.4 Tab

You can use Tab to present charts in the form of multiple tabs.

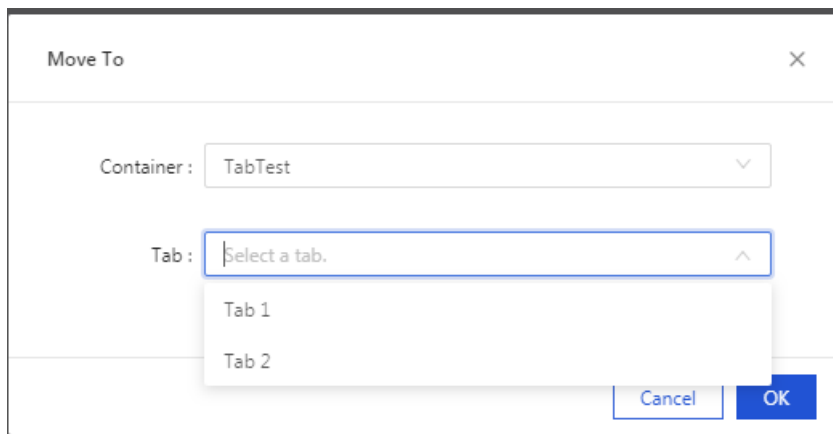
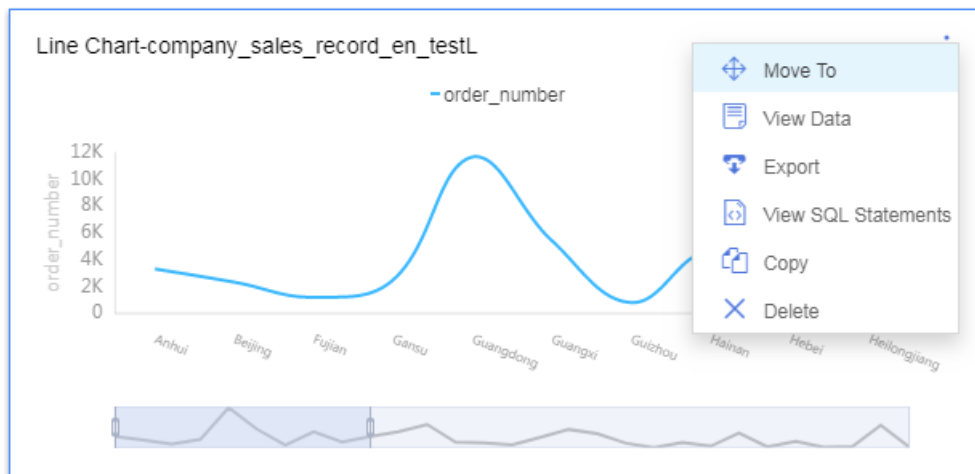
1. Click the Tab icon, and a Tab appears in the dashboard display area.
2. In the Tab editing menu, you can add, move, hide, or delete tabs, as shown in the following figure.



3. Select a Tab to insert charts. For example, click Tab1, and Tab1 is highlighted with a blue line.

4. Click a chart icon to add a chart, and the selected chart is added to Tab1.

Alternatively, you can choose **More > Move to** in the upper-right corner to move the existing chart to Tab1, as shown in the following figure.

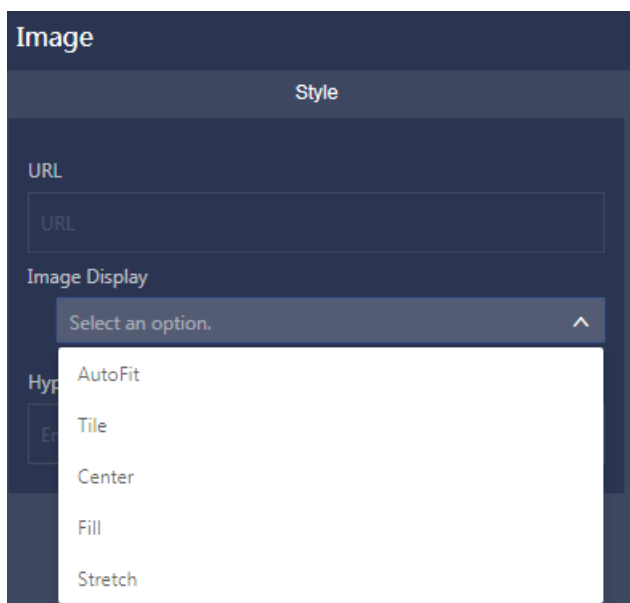


5. Follow the procedure to create a chart.

3.4.5 Image

1. Click the Image icon, and an image appears in the dashboard display area.
2. Enter the URL of the image.

3. Configure the style of the image, as shown in the following figure.



3.5 Create charts

3.5.1 Create charts in a dashboard

We recommend that you read [Dashboard overview](#) and [Basic dashboard operations](#) to prepare for this topic. In this topic, you will learn how to create charts on the dashboard.

You must create and edit a dataset before creating a chart. For example, you must switch the dimension field type to Location.

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

For more information about how to switch the dimension field type, see [#unique_72](#).

Line charts

[Line charts](#) display the trends in data at equal intervals or over time.

Area charts

Similar to [Line charts](#), [Area charts](#) can display the trends in data over time and the proportion of data.

Bar charts

[Vertical bar charts](#) display the comparisons among discrete categories and the changes of data over a period of time.

Stripe charts

Similar to [Vertical bar charts](#), [Horizontal bar charts](#) can present data with horizontal bars with lengths proportional to the values. A stripe chart can provide comparisons between categories of data.

Pie charts

[Pie charts](#) display the size and proportion of each data category.

Geo bubble maps

[Bubble maps](#) display the size and distribution scope of metrics by region or country.

Geomaps

[Colored maps](#) You can use a geomap to reflect data sizes and data distributions through the shades of color.

Tables

[Cross tables](#) is classic workbooks that display the values of a table field after a specified calculation, for example, sum, average, count, maximum, or minimum.

Gauge diagrams

[Gauges](#) diagrams display the range of a metric.

Radar charts

[Radar charts](#) displays values or ratios obtained from an analysis.

Scatter diagrams

[Scatter charts](#) diagrams demonstrate the correlation and distribution of different metrics.

Funnel diagrams

[Funnel charts](#) indicates the reduction of data as it passes through different business phases.

Card charts

[Kanbans](#) identifies the changes of data in each phase.

TreeMap

[Treemaps](#) displays hierarchical relationships through a set of rectangles, sized proportionately to each data category, clustered together into one large rectangle.

Polar charts

[Polar diagrams](#) allows a visual comparison between several items on various features.

Word Cloud

[Word clouds](#) You can use word clouds to generate user portraits and user labels.

Tornado

[Tornado-leaned funnel charts](#) You can use tornado funnel diagrams to compare different metrics between two objects or analyze a process with complicated steps.

Hierarchy

[Hierarchy charts](#) You can use hierarchy diagrams to display analysis results related to organization structures.

Conversion Path

[Flow analysis charts](#) charts illustrate the conversion rate of a web page by comparing its pageviews (PVs) and the unique visitors (UVs).

Progress charts

Similar to [Gauges](#), [Progress bars](#) can show the progress towards the completion of an indicator.

Pivot table

Similar to [Cross tables](#), [Pivot tables](#) can display the drill-down of data in a tree hierarchy in a classic workbook. Pivot tables also display the values of a table field after a specified calculation, for example, sum, average, count, maximum, or minimum.

3.5.2 Line charts

This topic describes how to create a line chart. Make sure that you have read [Dashboard overview](#) and [Basic dashboard operations](#). For creating a dataset, see [Create a dataset](#).

Overview

A line chart presents the changing trend of data through broken lines and shows continuous data that changes over time. Line charts are useful for analyzing and showing data trends at equal intervals. Line charts are also used for analyzing the interactions among multiple groups of data that change over time. For example, analyzing the sales volume of a certain product or related products for the prediction of future sales.

A line chart is based on the category axis and the value axis. The category axis is the horizontal axis. The categories are required to be dimensions such as dates, provinces, and product types. The value axis is the vertical axis. The values are required to be measures such as performance indicators and order numbers.

Dimensions and measures are automatically used for the category axis and the value axis respectively in the dashboards. You only need to select fields from the Dimensions and Measures lists.

Examples



Notes

You need to select at least one dimension for the category axis and at least one measure for the value axis. The color legend supports up to one dimension.



Note:

You can enable the color legend only when the value axis involves one measure.

Scenarios: order numbers and unit prices of multiple products

The following example uses the company_sales_record dataset.

1. Log on to the Quick BI console.

2. Click Datasets to go to the Datasets page.
3. Click the Create Dashboard icon for the company_sales_record dataset.

**Note:**

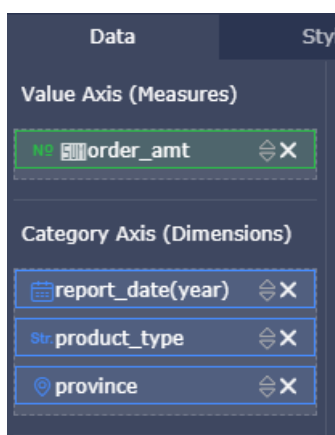
If you use Quick BI Enterprise Standard, you need to choose Standard or Full Screen as the dashboard display mode. The following example uses Standard.

4. Click the Line Chart icon and an empty line chart appears on the dashboard.
5. Select dimensions and measures.

In the Dimensions list, locate product_type and add it to the Category Axis (Dimensions) section. In the Measures list, locate order_number and price and add them to the Value Axis (Measures) section.

**Note:**

Make sure that you have converted the dimension type from String to Geo for the province dimension. For more information, see [#unique_72](#).



6. On the Style tab page, you can configure the basic settings, style, layout, axes, and series settings for a chart.
7. Click Save to save the dashboard.

Configure the style

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

Delete a chart

Click the More Actions icon in the upper-right corner of a chart and select Delete from the drop-down list to delete the chart.

3.5.3 Area charts

This topic describes how to create an area chart. Make sure that you have read [Dashboard overview](#) and [Basic dashboard operations](#). For creating a dataset, see [Create datasets](#).

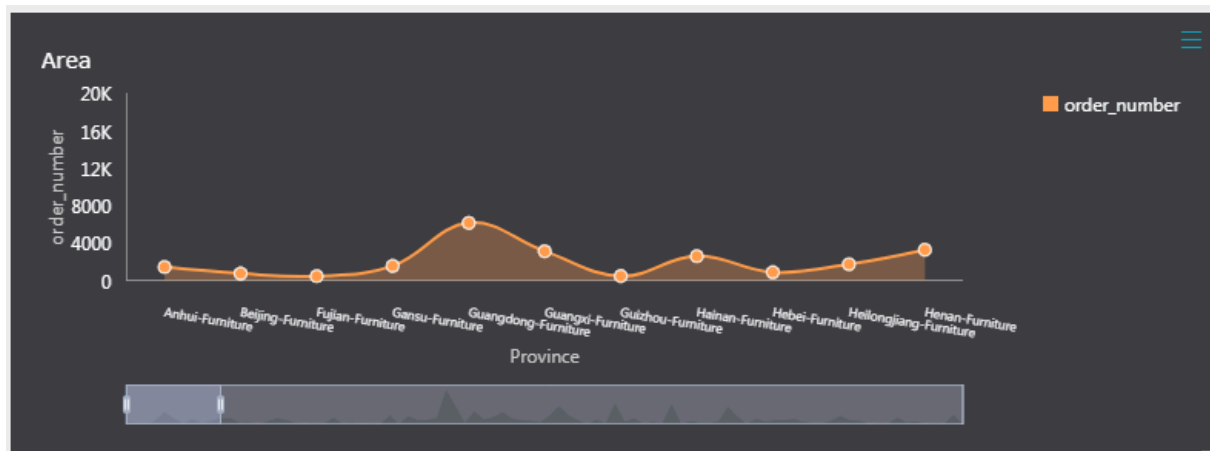
Overview

Similar to [Line charts](#), an area chart can display the trends in data over time and the proportion of data.

An area chart consists of the category axis and the value axis. The category axis is a horizontal axis and only supports dimensions such as dates, provinces, and product types. The value axis is a vertical axis and only supports measures such as sales indicators and order numbers.

Dimensions and measures are automatically used for the category axis and the value axis respectively in the dashboards. You only need to select fields from the Dimensions and Measures lists.

Examples



Notes

You can set at least one dimension for the category axis, and set at least one measure for the value axis. You can only select one dimension for the color legend.



Note:

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

Scenarios: order numbers of multiple products in provinces

The following example uses the `company_sales_record` dataset.

1. Log on to the Quick BI console.
2. Click Datasets to go to the Datasets page.
3. Select the `company_sales_record` dataset and click the Create Dashboard icon.



Note:

If you use Quick BI Enterprise Standard, you need to choose Standard or Full Screen as the display mode. The following example uses Standard.

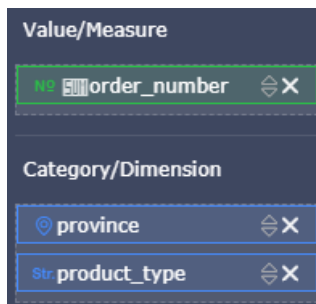
4. Click the Area Chart icon and an empty chart appears on the dashboard.
5. Select dimensions and measures.

On the Dimensions list, drag the `province` and `product_type` fields to the Category Axis (Dimensions) section in turn. On the Measures list, drag the `order_amt` field to the Value Axis (Measures) section.



Note:

Makes sure that you have converted the dimension type of the `province` field from String to Geo. For more information, see [Create dashboards](#).



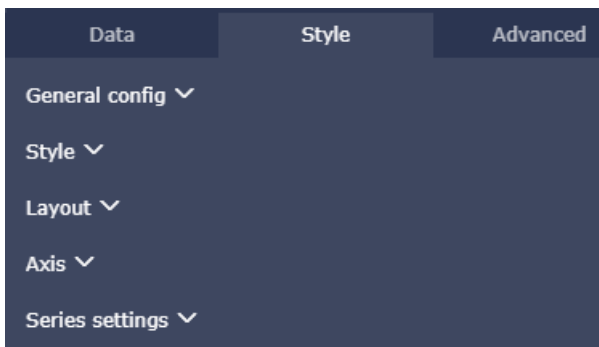
6. Drag the `product_type` field to the Color Legend (Dimensions) section and click Update.



Note:

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

7. On the Style tab page, you can configure the chart title, layout, legend, and axis style.



8. Click Save to save the dashboard.

Configure the style

- In the Basic Settings section, you can configure the chart title, hyperlinks, and background colors. This example uses Dark as the background color.



Note:

In the Basic Settings section, you can change the chart type such as the stacked area chart and 100% stacked area chart.

- In the Style section, you can configure the scroll bar and stacking style. This example uses 100% Stacking.
- In the Layout section, you can configure the legend location and choose whether to show labels and tooltips. In this example, the legend is displayed on the Right of the chart.

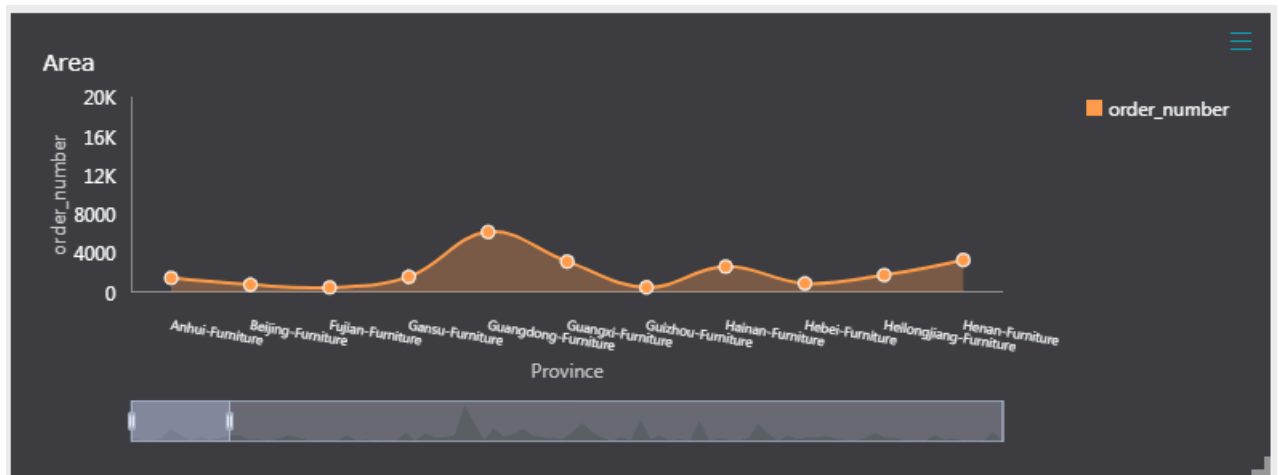


Note:

Select Show Labels to show all labels. Show Labels supports Smart Display and Full Display. Assume that a chart involves many dimension values and the scroll bar is not shown in the chart. In Smart Display mode, only partial labels are displayed. In Full Display mode, all labels are displayed.

- In the Axes section, you can configure axis titles and units. In this example, the X-Axis title is set to Province.
- In the Series Settings section, you can configure measure aliases, axis style, boundary values, and data display format. In this example, the Office area is set to orange.

The updated chart is shown as follows.



Note:

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

Delete a chart

Click the More Actions icon and select Delete from the drop-down list to delete a chart.

3.5.4 Vertical bar charts

This topic describes how to create a vertical bar chart. Make sure that you have read [Dashboard overview](#) and [Basic dashboard operations](#). For creating a dataset, see [Create a dataset](#).

Overview

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

Like [Line charts](#), a vertical bar chart consists of the category axis and the value axis.

Examples



Notes

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



Note:

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

Scenarios: the shipping cost for different products of provinces of East China

The following example uses the company_sales_record dataset.

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



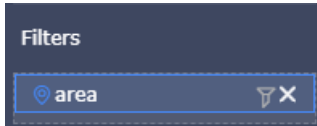
Note:

If you use Quick BI Enterprise Standard, you need to choose Standard or Full Screen as the display mode. The following example uses Standard.

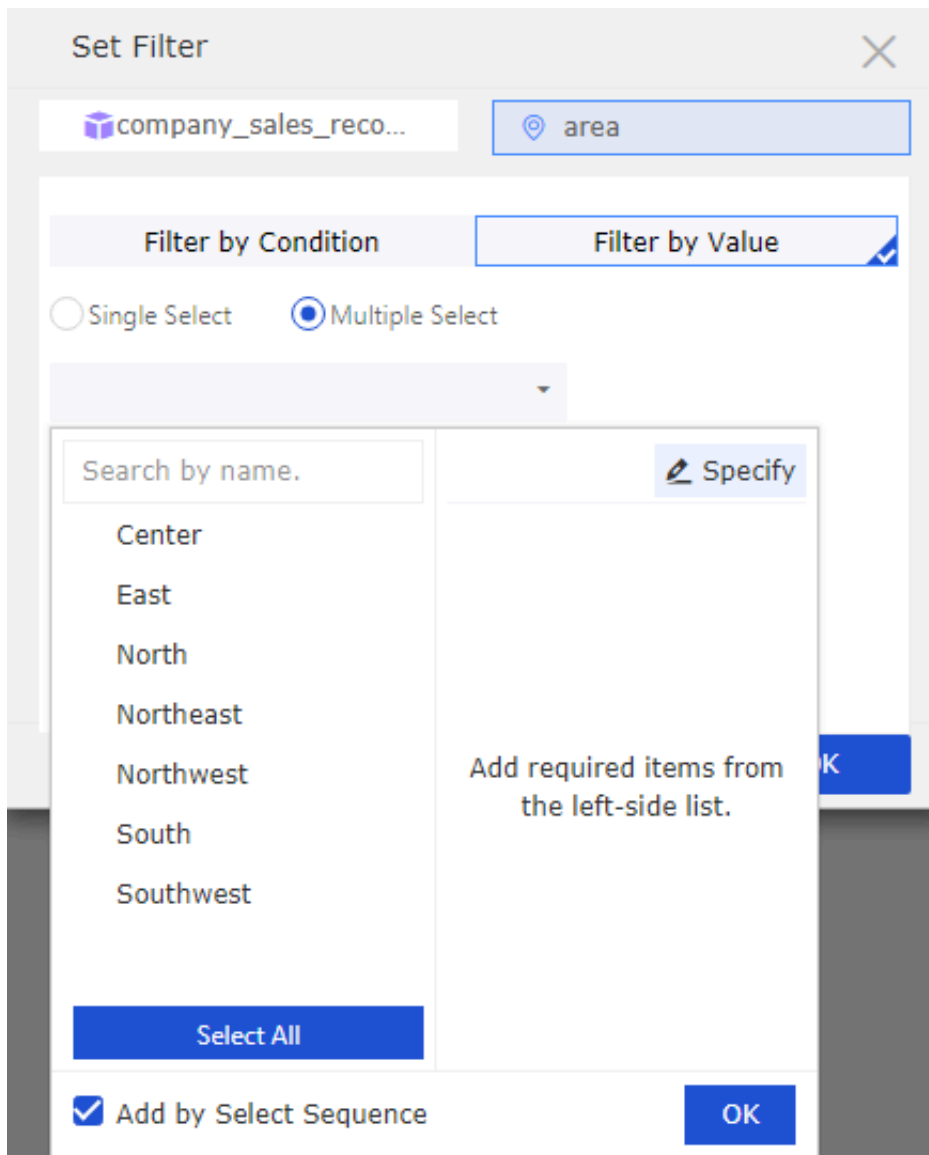
4. Click the Vertical Bar Chart icon and an empty chart appears on the dashboard.

5. On the Dimensions list, locate area and add it to the Filters section.

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



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



7. Select East China and click OK.
8. Drag province and product_type to the Category Axis (Dimensions) section.



Note:

Makes sure that you have converted the dimension type of the province field from String to Geo.

9. On the Measures list, drag `shipping_cost` to the Value Axis (Measures) area.

10. Drag `product_type` to the Color Legend (Dimensions) section.



Note:

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

11. Click Update and the chart is updated.

12. On the Style tab page, you can configure the chart title, layout, legend, and axis style.

13. Click Save to save the dashboard.

Configure the style



Note:

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

Delete a chart

Click the More Actions icon and select Delete from the drop-down list to delete a chart.

3.5.5 Horizontal bar charts

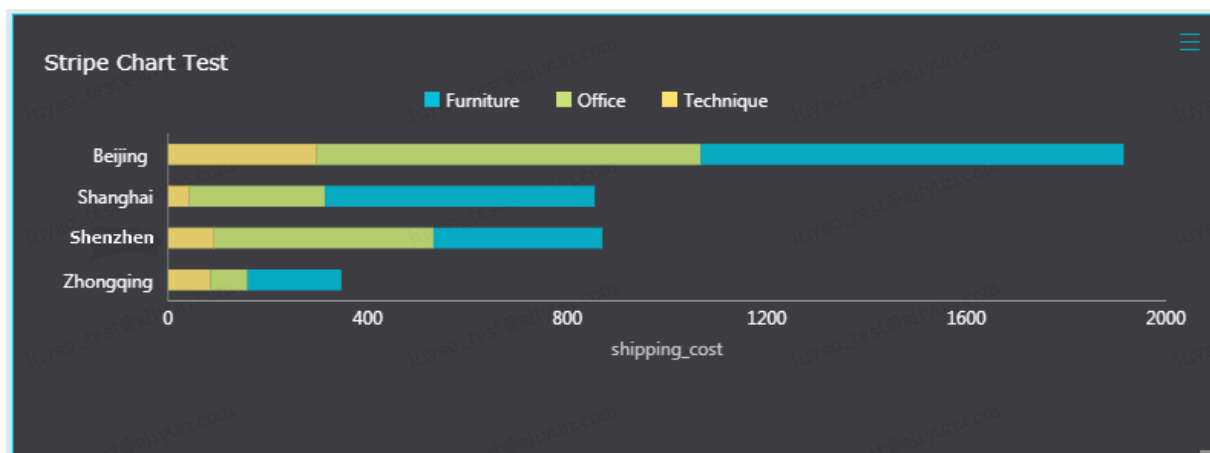
This topic describes how to create a horizontal bar chart. Make sure that you have read [Dashboard overview](#) and [Basic dashboard operations](#). For creating a dataset, see [Create a dataset](#).

Overview

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

Similar to [Line charts](#), a horizontal bar chart consists of the category axis and the value axis.

Examples



Notes

You can set a minimum of one dimension for the category axis such as province and product_type. In addition, you can set at least one measure for the value axis such as order_amt and profit_amt. The Color Legend (Dimensions) section can take only one dimension.



Note:

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

Scenarios: shipping costs of products in multiple cities

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



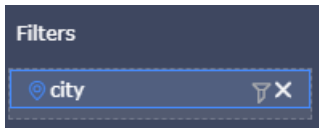
Note:

If you use Quick BI Enterprise Standard, you need to choose Standard or Full Screen as the display mode. The following example uses Standard.

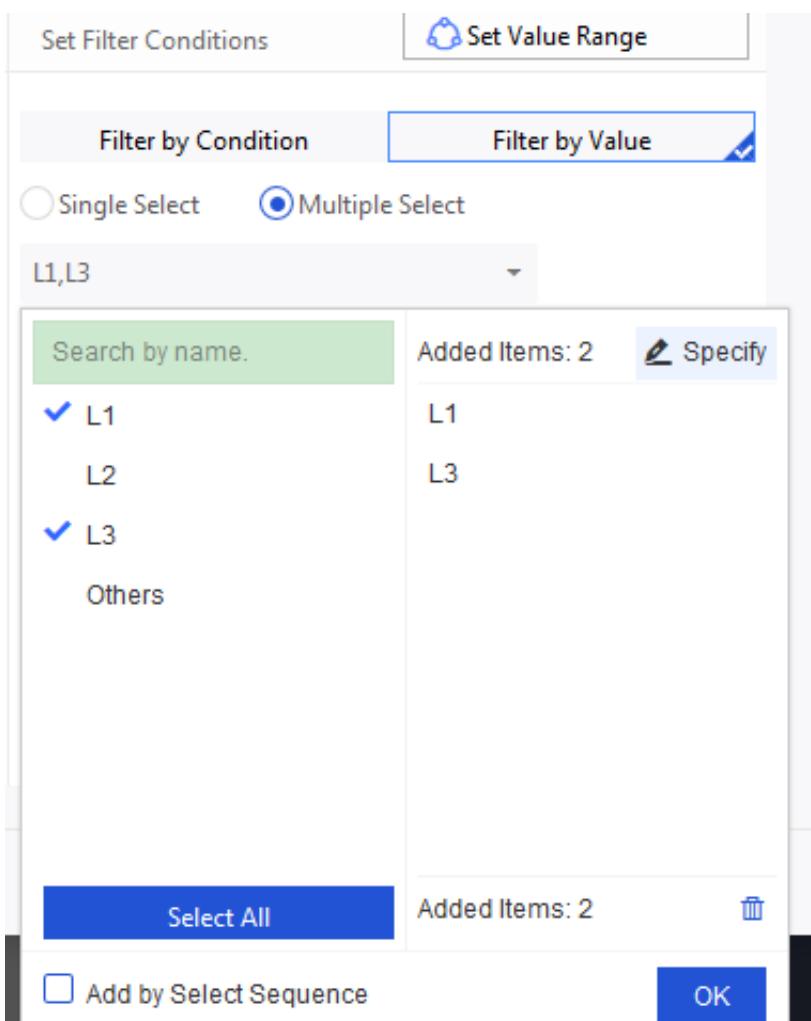
4. Click the Horizontal Bar Chart icon and an empty chart appears on the dashboard.

- On the Dimensions list, locate city and add it to the Filters section.

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



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



- Drag the city and product_type fields to the Category Axis (Dimensions) section.



Note:

Makes sure that you have converted the dimension type of the province field from String to Geo.

- On the Measures list, drag shipping_cost to the Value Axis (Measures) section.

10. Drag `product_type` to the Color Legend (Dimensions) section.

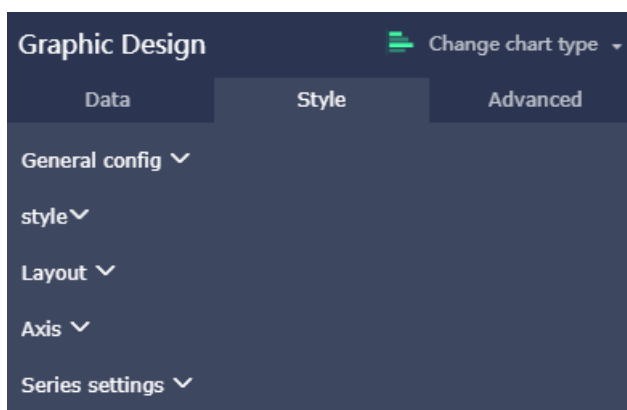


Note:

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

11. Click Update and the chart is updated.

12. On the Style tab page, you can configure the chart title, layout, legend, and axis style.



13. Click Save to save the dashboard.

Configure the style

- In the Basic Settings section, you can configure the chart title, hyperlinks, and background color. This example uses Dark as the background color.

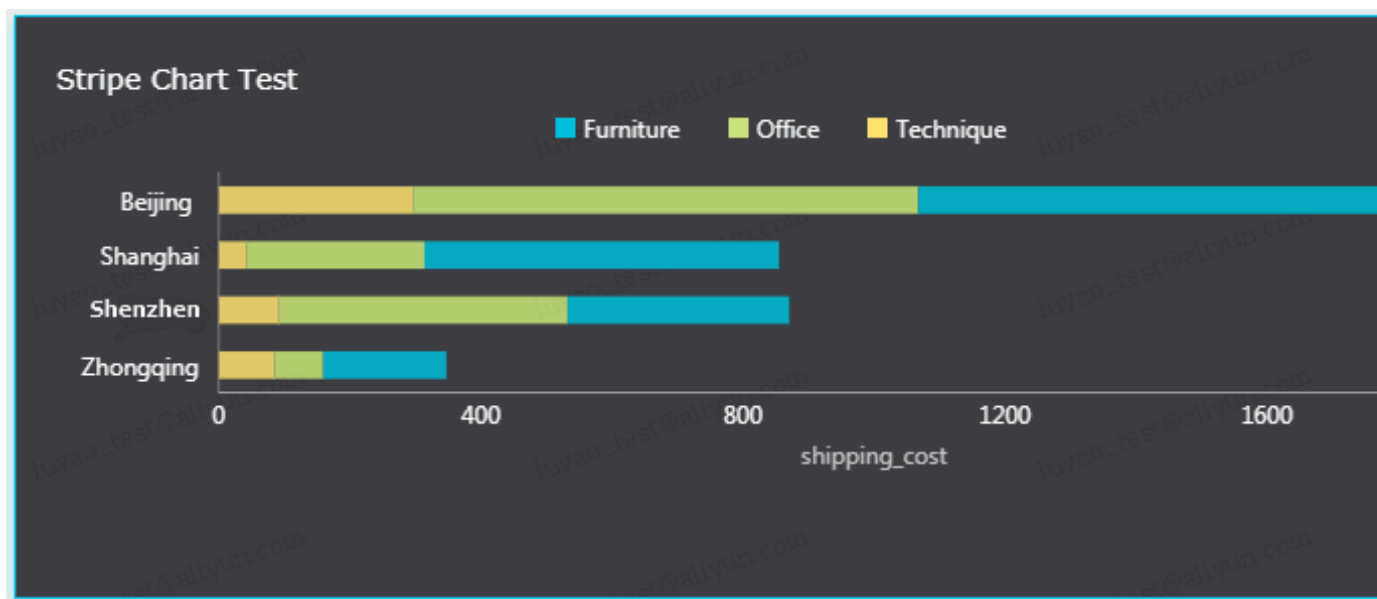


Note:

In the Basic Settings section, you can change the chart type such as the stacked horizontal bar chart and 100% stacked horizontal bar chart.

- In the Style section, you can configure the scroll bar and stacking style. This example uses Stacking.
- In the Layout section, you can configure the legend location and choose whether to show labels and tooltips. In this example, the legend is displayed on the Top of the chart.
- In the Axes section, you can configure axis titles and units. In this example, the Show Scale check box is selected on the Top Axis tab page.
- In the Series Settings section, you can configure measure aliases, axis style, boundary values, and data display format.

The updated chart is shown as follows.



Note:

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

Delete a chart

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

3.5.6 Pie charts

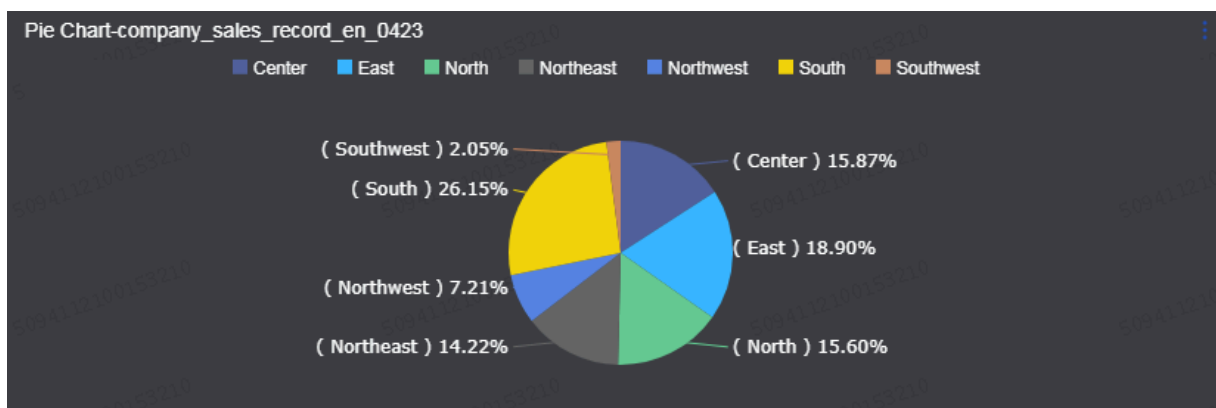
This topic describes how to create a pie chart. Make sure that you have read [Dashboard overview](#) and [Basic dashboard operations](#). For creating a dataset, see [Create a dataset](#).

Overview

A pie chart displays a data series. Each data series has a unique color or texture. Pie charts show data distribution and proportions. For example, you can use a pie chart to show the proportion of five social insurances and one housing fund in a person's income. You can also use a pie chart to show the sales proportion of an auto brand in total sales of all brands.

A pie chart is composed of slices. Labels are based on dimensions such as areas and product types. Central angles are based on measures such as order numbers and order amounts.

Examples



Notes

You can set a maximum of one dimension such as the area and product type for labels . The number of dimension values is required to be less than or equal to 12. You can set a maximum of one measure such as the order number and profit amount for central angles

Scenarios: shipping costs in multiple areas

The following example uses the company_sales_record dataset.

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



Note:

If you use Quick BI Enterprise Standard, you need to choose Standard or Full Screen as the display mode. The following example uses Standard.

4. Click the Pie Chart icon and an empty chart appears on the dashboard.
5. On the Data tab page, select dimensions and measures.

On the Dimensions list, locate area and add it to the Labels (Dimensions) section.

On the Measures list, locate shipping_cost and add it to the Central Angle (Measures) section.

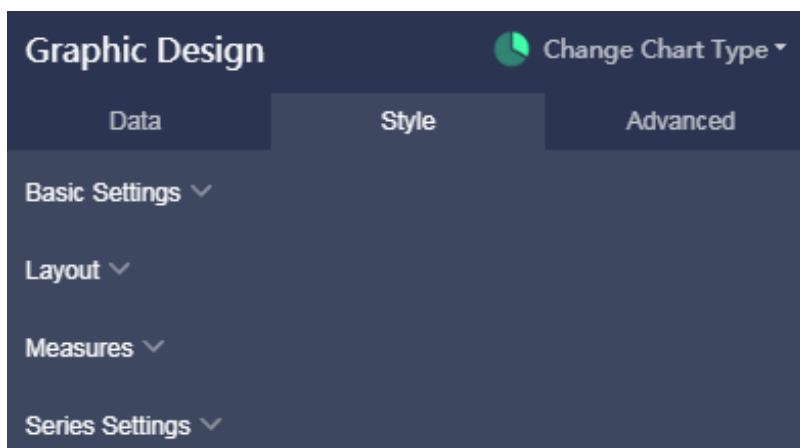


Note:

Make sure that you have converted the dimension type of the area field from String to Geo.



6. Click Update and the chart is updated.
7. On the Style tab page, you can configure the chart title, layout, legend, display mode, radius, and dimension names. For more information, see.

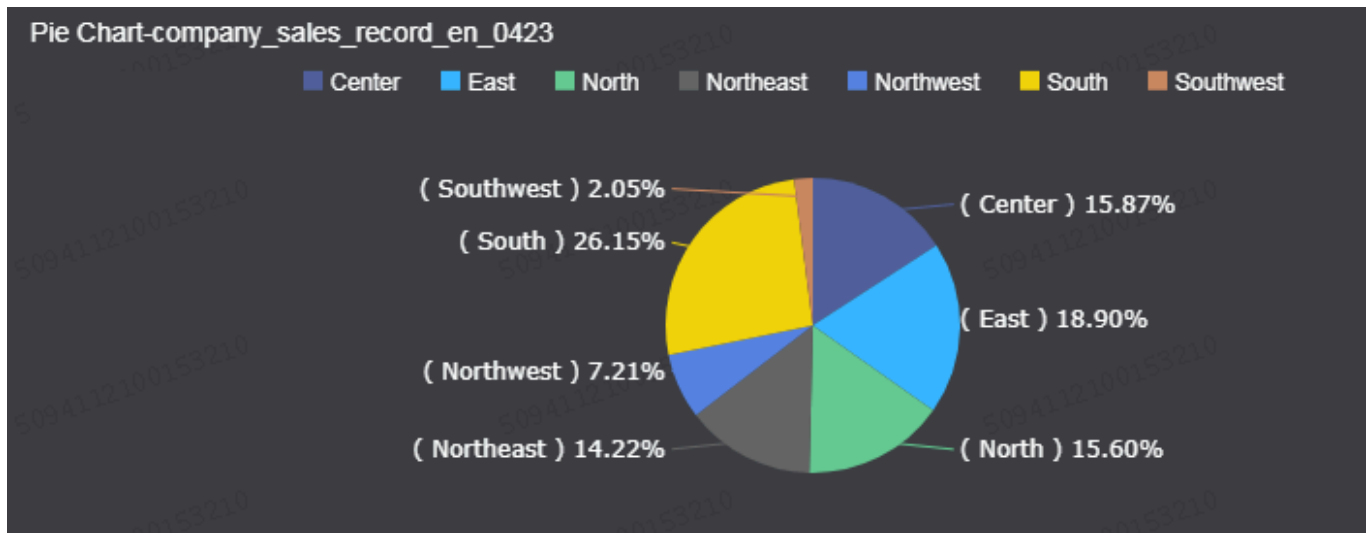


8. Click Save to save the dashboard.

Configure the style

- In the Basic Settings section, you can configure the chart title, title color, hyperlinks for page jumping, and background color. This example uses Dark as the background color.
- In the Layout section, you can configure the legend location, display mode, label style, leaders, and radius. In this example, Label Style is set to Name, Value (Percentage). The legend is displayed on the Right of the chart.
- In the Measures section, you can configure the value format and number of decimal places. In this example, the number of decimal places is set to 2.
- In the Series Settings section, you can configure dimension aliases and colors. In this example, the color of the Northeast slice is set to grey.

The updated chart is shown as follows.



Delete a chart

Click the More Actions icon and select Delete from the drop-down list to delete a chart.

3.5.7 Bubble maps

This topic describes how to create a bubble map. Make sure that you have read [Dashboard overview](#) and [Basic dashboard operations](#). For creating a dataset, see [Create a dataset](#).

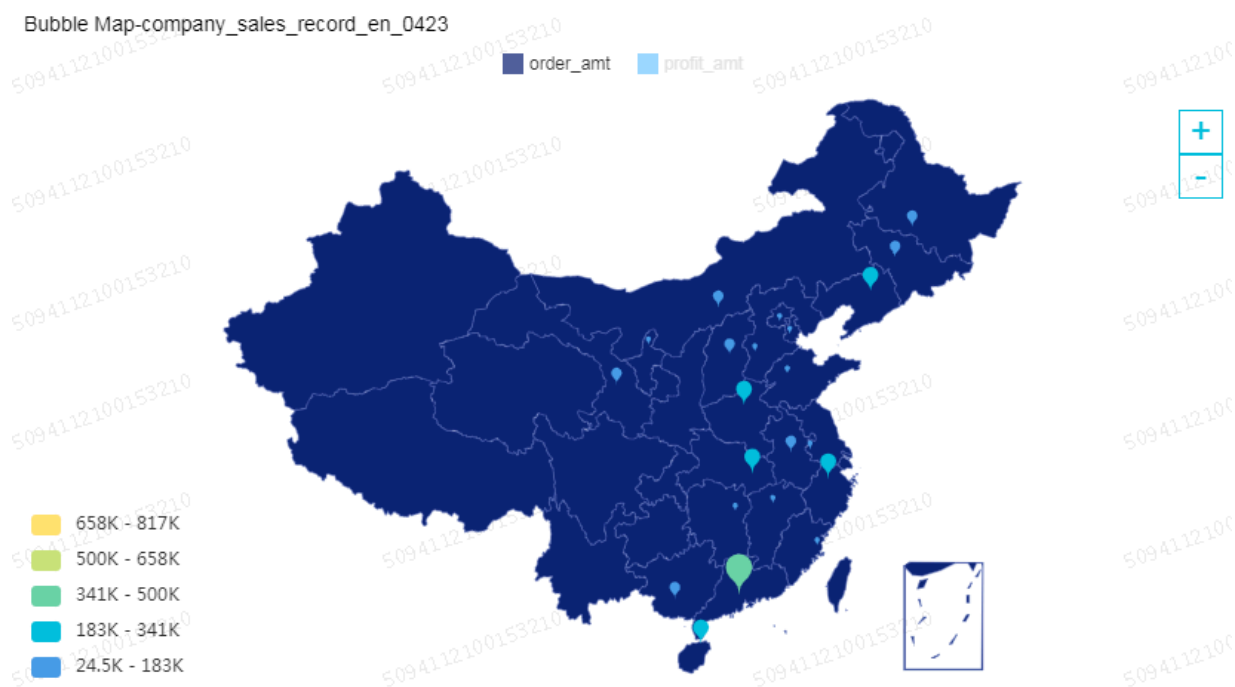
Overview

A bubble map displays data by using a map with bubbles of different sizes. You can view the values and distribution of data based on a country or a region. For example, you can use a bubble map to display tourist traffic in multiple tourist attractions or average income in multiple regions.

A bubble map is based on geographic locations and bubble sizes. Geographic locations are based on dimensions such as provinces. Bubble sizes are based on measures such as shipping costs and order numbers.

Examples

Bubble Map-company_sales_record_en_0423



Notes

You can select a maximum of one dimension for geographic locations. The dimension type is required to be Geo. You need to select a minimum of one and a maximum of five measures for bubble sizes.

Scenarios: order numbers and profit amounts in multiple provinces

The following example uses the company_sales_record dataset.

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



Note:

If you use Quick BI Enterprise Standard, you need to choose Standard or Full Screen as the display mode. The following example uses Standard.

4. Click the Bubble Map icon and an empty chart appears on the dashboard.

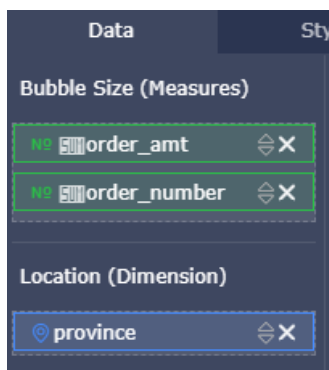
5. On the Data tab page, select dimensions and measures.

On the Dimensions list, locate province and add it to the Geo Location (Dimensions) section. On the Measures list, locate order_number and profit_amt and add them to the Bubble Size (Measures) section.

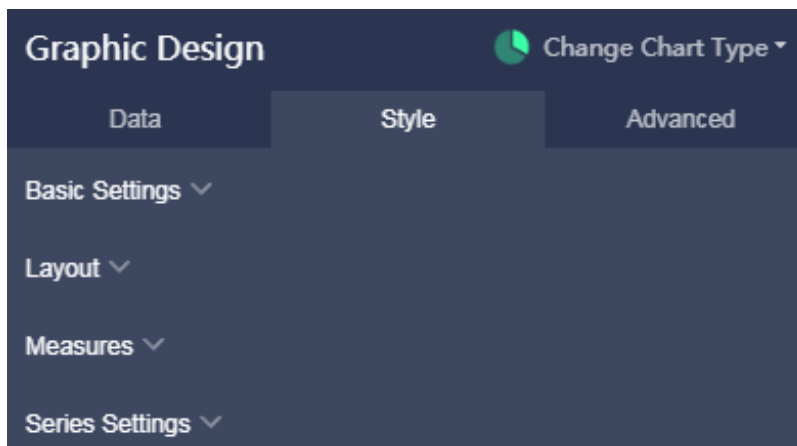


Note:

Make sure that you have converted the dimension type of the province field from String to Geo.



6. Click Update and the chart is updated.
7. On the Style tab page, you can configure the chart title, layout, legend, and value ranges.



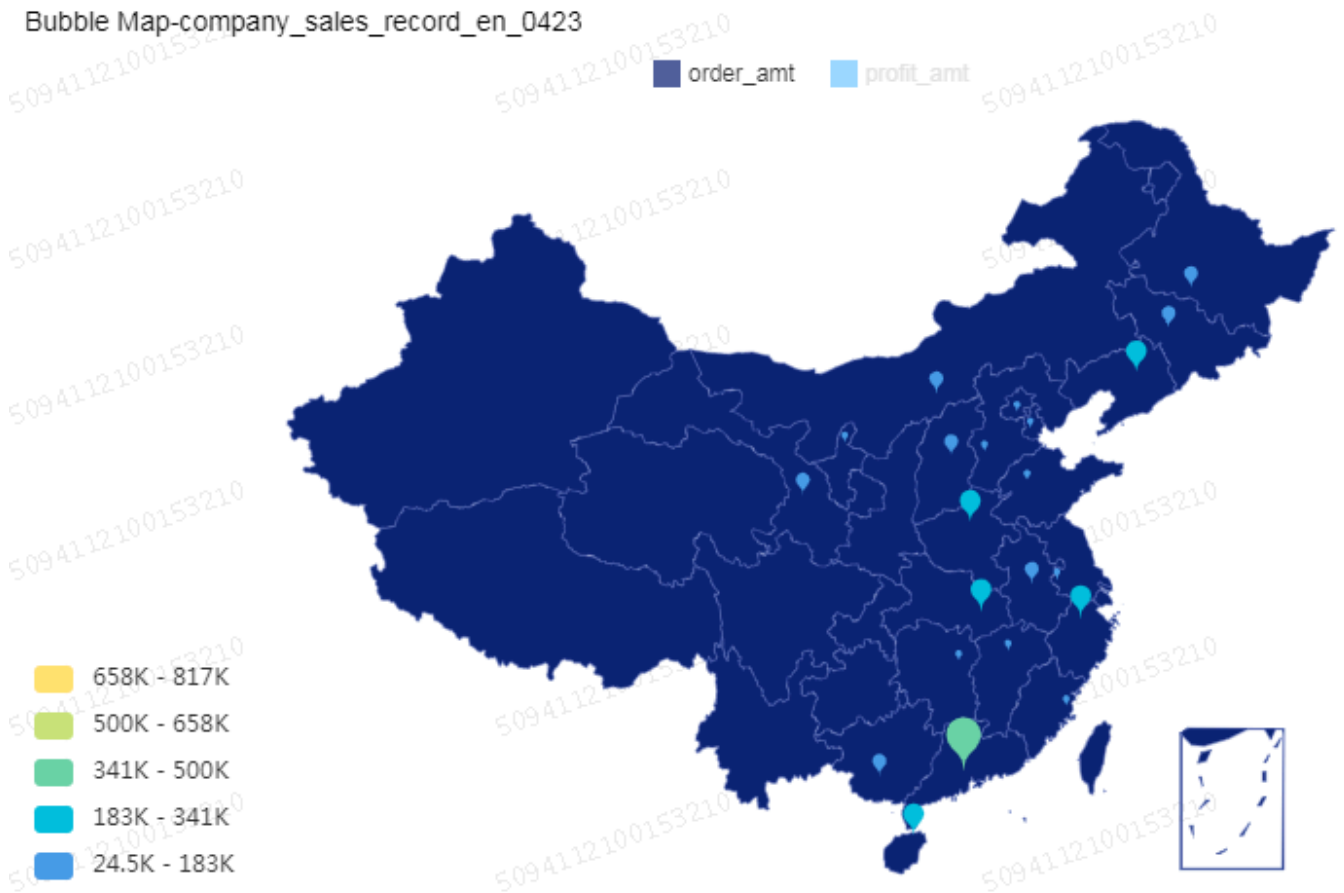
8. Click Save to save the dashboard.

Configure the style

- In the Basic Settings section, you can configure the chart title, text color, and background color. This example uses Dark as the background color.
- In the Layout section, you can configure the legend location and labels. In this example, the Show Geo Names check box is selected.

- In the Series Settings section, you can configure value ranges and the number of decimal places.

The updated chart is shown as follows.



Delete a chart

Click the More Actions icon and select Delete from the drop-down list to delete a chart.

3.5.8 Colored maps

This topic describes how to create a colored map. Make sure that you have read [Dashboard overview](#) and [Basic dashboard operations](#). For creating a dataset, see [Create a dataset](#).

Overview

Similar to [Bubble maps](#), a colored map uses colors with different shades to present the values and distribution of data.

A colored map is based on geographic locations and color scales. Geographic locations are based on dimensions such as provinces. Color scales are based on measures such as order amounts and profit amounts.

Examples



Notes

You can select a maximum of one dimension for geographic locations. The dimension type is required to be Geo. You need to select a minimum of one and a maximum of five measures for color scales.

For more information, see [Detailed information for regions](#).

Scenarios: shipping costs, order amounts, and profit amounts in multiple areas

The following example uses the company_sales_record dataset.

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



Note:

If you use Quick BI Enterprise Standard, you need to choose Standard or Full Screen as the display mode. The following example uses Standard.

4. Click the Colored Map icon and an empty chart appears on the dashboard.

5. On the Data tab page, select dimensions and measures.

On the Dimensions list, locate area and add it to the Geo Location (Dimensions) section. On the Measure list, locate order_amt, profit_amt, and shipping_cost and add them to the Colorscale (Measures) section.



Note:

Make sure that you have converted the dimension type of the area field from String to Geo.



6. Click Update and the chart is updated.

7. On the Style tab page, you can configure the chart title, legend, and value-based colors.

Series Settings ^

order_amt

▼

Alias

order_amt

Data display format setting

☐ AutoFit ☐ Custom ☒ Manual

EN

Set Value Ranges

Value Ranges ?

5

Colors:

474231.67	1297485.4328	<div></div>
1297485.4328	2120739.1956	<div></div>
2120739.1956	2943992.9584	<div></div>
2943992.9584	3767246.7212	<div></div>
3767246.7212	4590500.484	<div></div>

Update

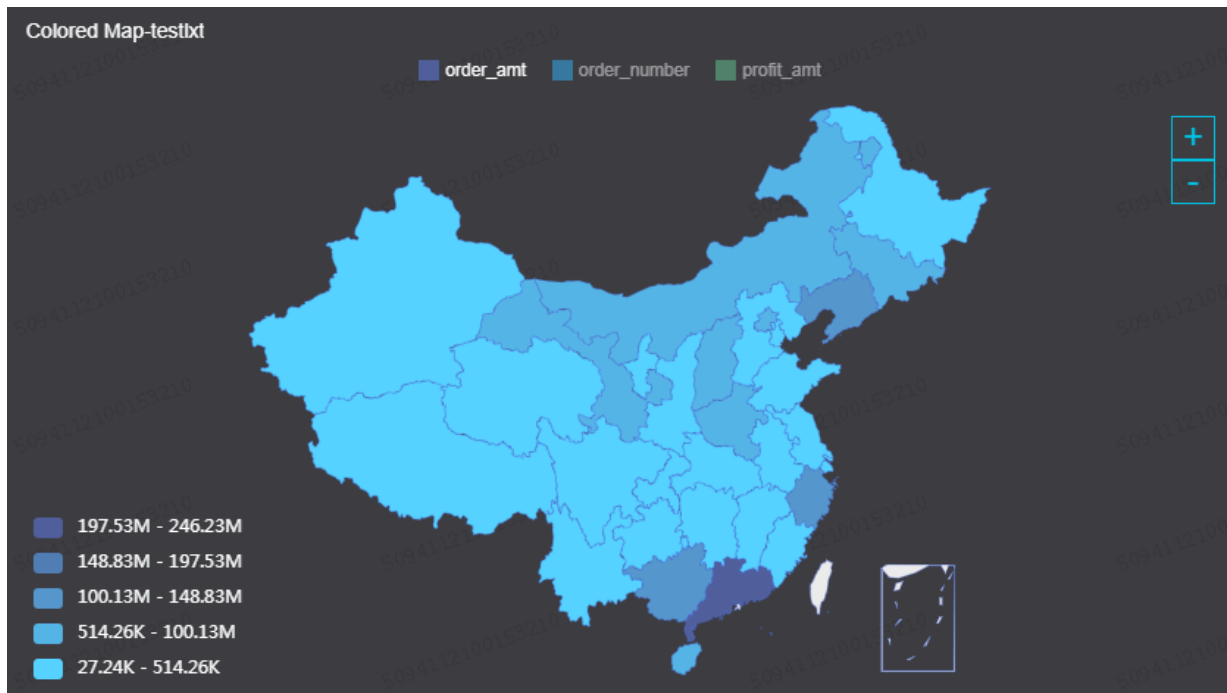
8. Click Save to save the dashboard.

Configure the style

- In the Basic Settings section, you can configure the title, hyperlinks, and background color. This example uses Dark as the background color.

- In the Layout section, you can configure the location of the legend and choose whether to show tooltips and geographic names. In this example, the legend is shown on the top of the chart and the geographic names are displayed.
- In the Series Settings section, you can configure measure aliases, data display formats, and value ranges.

The updated chart is shown as follows.



Delete a chart

Click the More Actions icon and select Delete from the drop-down list to delete a chart.

3.5.9 Cross tables

This topic describes how to create a cross table. Make sure that you have read [Dashboard overview](#) and [Basic dashboard operations](#). For creating a dataset, see [Create a dataset](#).

Overview

A cross table displays aggregates and sub-aggregates of columns and groups columns. Aggregates include sums, averages, maximums, and minimums.

A cross table consists of rows and columns. Rows are horizontal and based on dimensions such as provinces and product types. Columns are vertical and based on measures such as order numbers and profit amounts.

Examples

Cross Table

product_type	product_box	area	shipping_cost	order_amt	profit_amt
Furniture	Huge Box	Center	1240.48	135287.4425	4807.4699999999
Furniture	Huge Box	East	2825.0700000000006	294315.99250000	18386.8800000000
Furniture	Huge Box	North	1770.8700000000003	181526.43	14549.2100000000
Furniture	Huge Box	Northeast	1751.3300000000004	182986.12999999	3689.9099999999
Furniture	Huge Box	Northwest	631.1299999999999	52887.67	165.660000000000
Furniture	Huge Box	South	2769.3099999999995	283655.38	17881.5599999999
Furniture	Huge Box	Southwest	463.54	41517.729999999	845.580000000000
Furniture	Huge Paperbag	Center	2240.6299999999997	208515.22000000	-14159.0000000000

Notes

Numbers of rows and columns are not limited.

Scenarios: packages, shipping costs, order numbers, and profit amounts of multiple products based on provinces

The following example uses the `company_sales_record` dataset.

1. Log on to the Quick BI console.
2. Click Datasets to go to the Datasets page.
3. Select the `company_sales_record` dataset and click the Create Dashboard icon in the Actions column.



Note:

If you use Quick BI Enterprise Standard, you need to choose Standard or Full Screen as the display mode manually. The following example uses Standard.

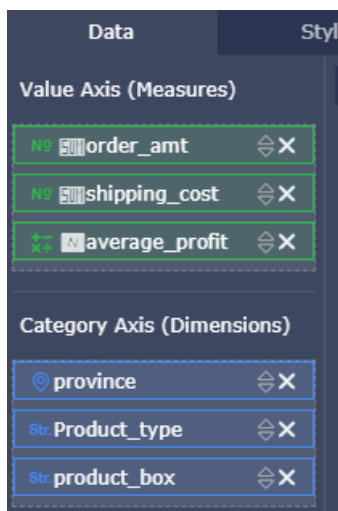
4. Click the Cross Table icon and an empty chart appears on the dashboard.
5. On the Data tab page, select dimensions and measures.

In the Dimensions list, locate the province, `product_type`, and `product_box` fields and add them to the Rows section. In the Measures list, locate the `order_number`, `shipping_cost`, and `profit_amt` and add them to the Columns section.

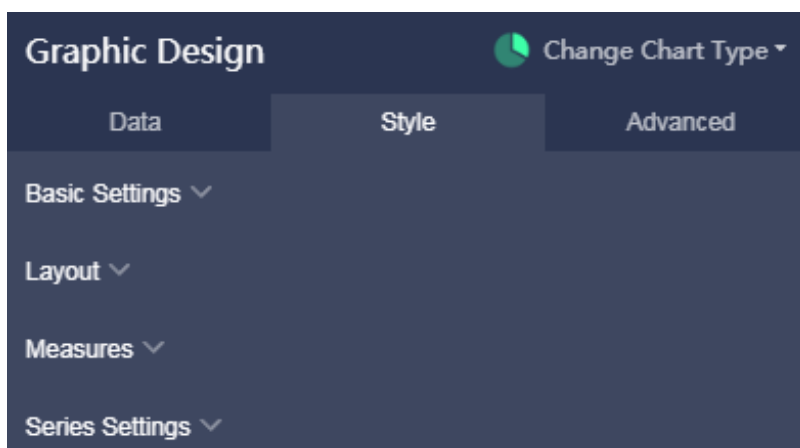


Note:

Make sure that you have converted the dimension type of the province field from String to Geo.



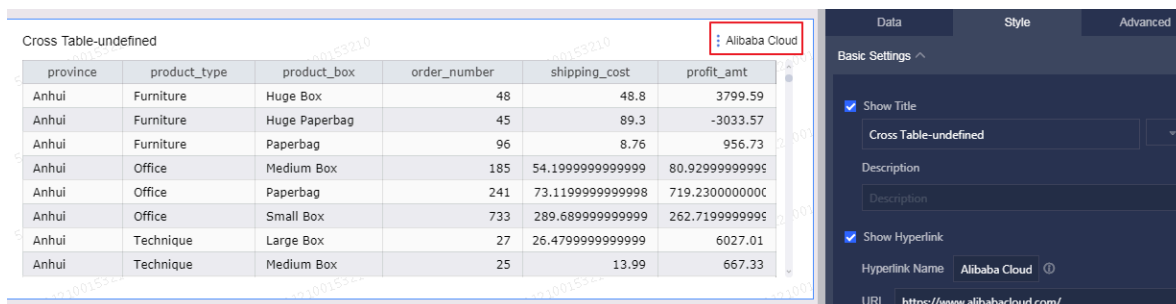
6. Click Update and the chart is updated.
7. On the Style tab page, you can configure the chart title, layout, format, and rules.



8. Click Save to save the dashboard.

Configure the style

- In the Basic Settings section, you can configure the title and hyperlinks for page jumping as shown in the following figure.



- In the Display Settings section, you can configure the table theme, choose whether to show row numbers and whether to merge duplicate cells, configure freezing rules, and set pagination. The updated chart is shown as follows.

Cross Table-undefined

	province	product_type	product_box	order_number	shipping_cost	profit_amt
1	Anhui	Furniture	Huge Box	48	48.8	1799.59
2	Anhui	Furniture	Huge Paperbag	45	89.3	-3033.57
3	Anhui	Furniture	Paperbag	96	8.76	956.73
4	Anhui	Office	Medium Box	185	54.19999999999999	80.92999
5	Anhui	Office	Paperbag	241	73.11999999999998	719.2306
6	Anhui	Office	Small Box	733	289.6899999999999	262.7196
265	Total			41556	20566.5499999999	318852

Alibaba Cloud

Basic Settings

Display Settings

Theme

☒ Default ☐ Simple

☒ Show Row Numbers

☐ Merge Same Cells

☒ Freeze

☒ Auto (Table Head) ☐ Columns ☐ From First

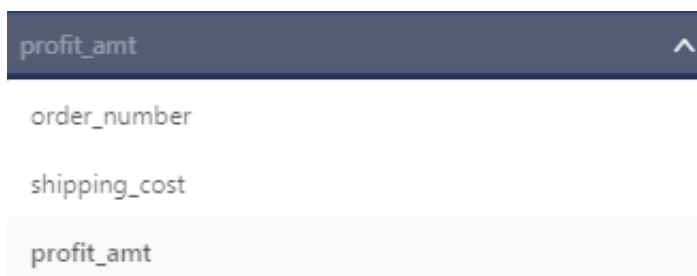
- In the Functionality Settings section, you can configure conditional formatting rules and aggregate rules.

Conditional formatting

- Select a field and select the Enable Conditional Formatting check box as shown in the following figure.



- Click the arrow. From the drop-down list, you can select the field that you want to perform conditional formatting for.



- Enter the beginnings and ends of intervals in the Value fields. Click the arrows and select text colors, background colors, and icons.



Select the `profit_amt` field for conditional formatting. The following formulas are used to determine which format to apply. $\text{Value} \geq 1000$, $\text{Value} < 1000$ and ≥ 500 , and $\text{Value} < 500$. The updated chart is shown as follows.

- When a value is greater than or equal to 1000, the background color of the cell is set to red and a green up arrow is displayed.
- When a value is greater than or equal to 500 and less than 1000, the background color of the cell is set to grey and an orange flat line is displayed.
- When a value is less than 500, the background color of the cell is set to green and a red down arrow is displayed.

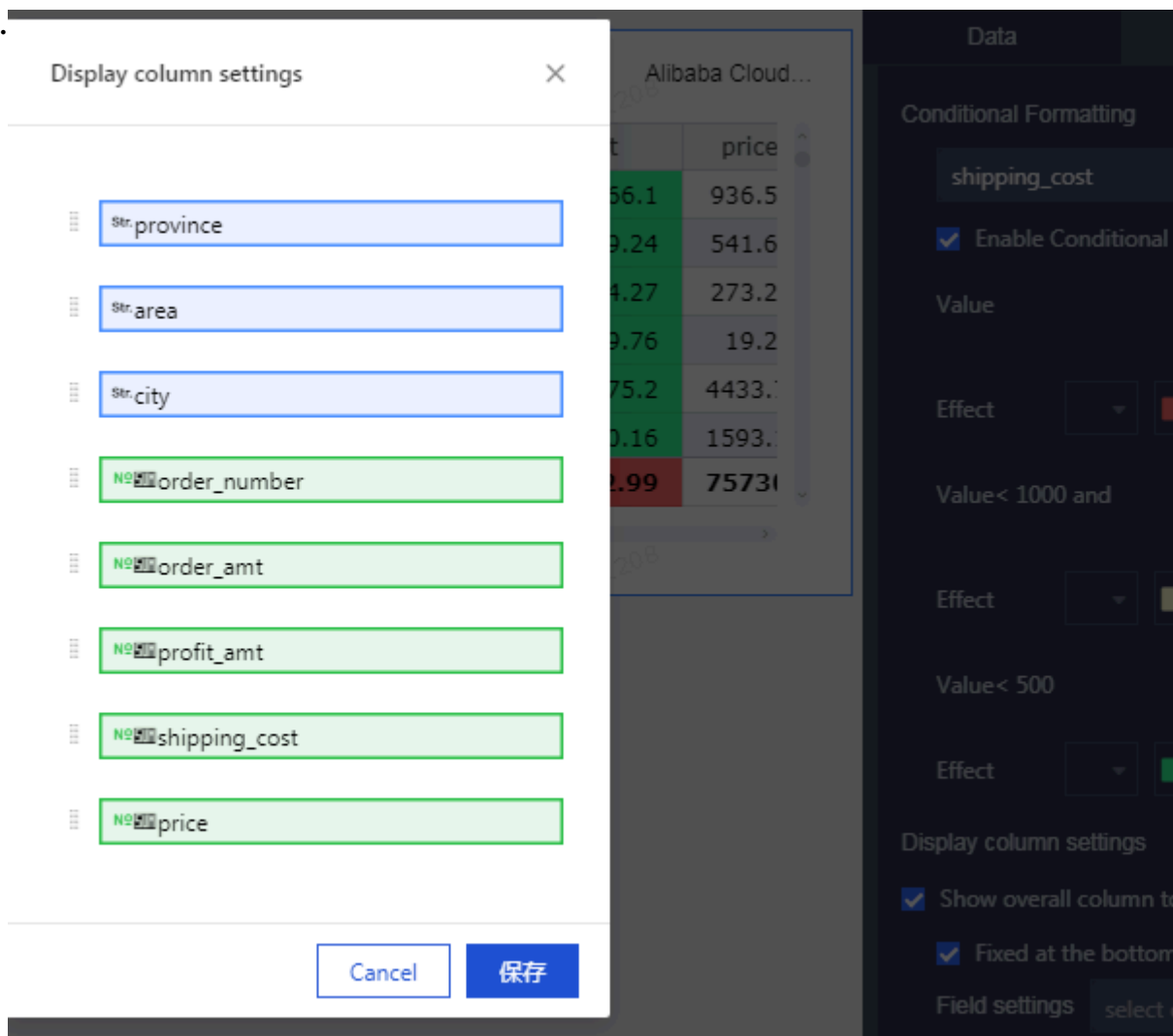
Cross Table-undefined

	province	product_type	product_box	order_number	shipping_cost
1	Anhui	Furniture	Huge Box	48	48
2	Anhui	Furniture	Huge Paperbag	45	89
3	Anhui	Furniture	Paperbag	96	8.
4	Anhui	Office	Medium Box	185	54.199999999999
5	Anhui	Office	Paperbag	241	73.119999999999
6	Anhui	Office	Small Box	733	289.689999999999

Sort Columns

By using the sort columns feature, you can group related fields and set group names. If you do not set groups,

dragging and dropping fields only modifies the sequence of columns.



Cross Table

	area	city	province	shipping_cost	order_amt	profit_amt	rder_numbe	price
1	Center	Anyan	Henan	448.92	65645.67000	9455.500000	997	3719.15
2	Center	Chang	Hunan	19.990000000000000	1672.03	405.2800000	74	72.2599
3	Center	Chang	Hunan	253.37	27704.7765	2379.25	479	1244.44
4	Center	Ezhou	Hubei	374.13000000000000	45247.662	-6348.260000	734	2897.6
5	Center	Hebi	Henan	63.33	6436.639999	-362.81	162	145.44
6	Center	Hengy	Hunan	75.96	4454.299	62.76999999	164	282.19
7	Center	Huang	Hubei	1407.0800000000000	153560.095	4362.979999	2462	9315.97
248	Total			110332.98999999	15154620.2	1549090.02	218871	757304

Show Totals

By using the show totals feature, you can configure the aggregates of column values as shown in the following figure.



Note:

You need to select the Merge Same Cells check box in the Display Settings section before selecting the Show Subtotals check box.

Table-company_sales_record				
	area	city	province	order_amt
40			Fujian	19993.18
41		Fuzhou	Jiangxi	1823.79999999999
42			Subtotal	21816.9799999999
43		Ganzhou	Jiangxi	2668.76
44		Hangzhou	Zhejiang	58110.2800000000
45		Hefei	Anhui	15604.6710000000
46		Heze	Shandong	26791.553
258		Total		15154620.25600

- In the Series Settings section, you can rename fields and set alignments.

Delete a chart

Click the More Actions icon in the upper-right corner of the chart and select Delete from the drop-down list to delete a chart.

3.5.10 Pivot tables



Note:

Pivot tables are available only to Quick BI Enterprise Standard users.

This topic describes how to create a pivot table. We recommend that you read [Dashboard overview](#) and [Basic dashboard operations](#) before you create a pivot table. You also can edit or create a dataset. For more information, see [Create a dataset](#).

Overview

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

Similar to [Cross tables](#), a pivot table consists of rows and columns. Rows are determined by data dimensions, such as the province and product type. Columns are determined by data measures, such as the order quantity and profit amount.

Example of a pivot table

Pivot Table-company_sales_record_en_0508

order_id	order_number
1000015	6.0
1000030	2.0
1000160	88.0
1000175	44.0
1000180	46.0
1000325	32.0
1000330	41.0
1000345	70.0
1000350	94.0
1000480	37.0

Precautions

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

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

The following scenario is based on the company_sales_record dataset.

1. Log on to the Quick BI console.
2. On the homepage, click the Workspace tab. In the left-side navigation pane, enter a group workspace name in the text box, or click the triangle next to the text box and select a group workspace from the drop-down list. Click Datasets to go to the All Items tab.
3. Click the Create Dashboard icon in the Actions column corresponding to the company_sales_record dataset.



Note:

If you are using Quick BI Enterprise Standard, you must select Standard or Full Screen. The following scenario uses Standard as an example.

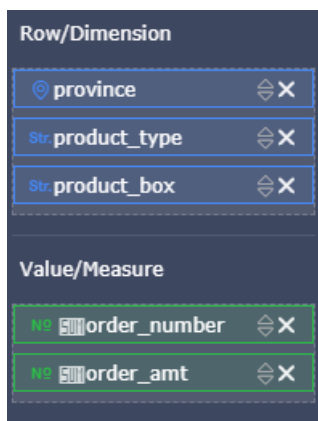
4. In the toolbar, click the Pivot Table icon. The blank pivot table is automatically displayed in the display section.

5. In the Graphic Design section, click the Data tab and select the required dimensions and measures.

In the Dimensions section, double-click province, product type, and product box, or drag and drop them to the Rows (Dimensions) section in order. In the Measures section, double-click order number and order amt, or drag and drop them to the Values (Measures) section in order, as shown in the following figure.

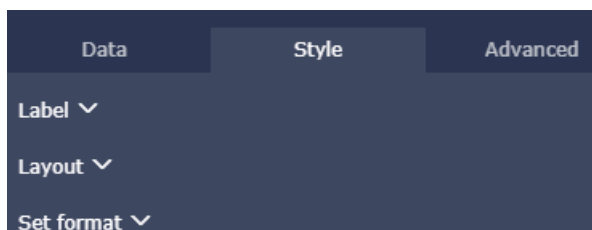
**Note:**

Make sure you have changed the data type of the province field value from String to Geo.

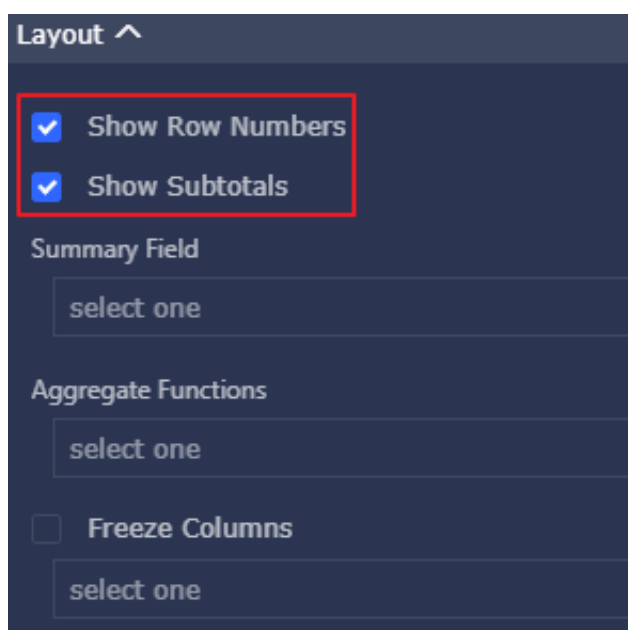


6. Click Update. The system automatically updates the table.

7. On the Style tab, you can set Title, Layout, and Format, as shown in the following figure.



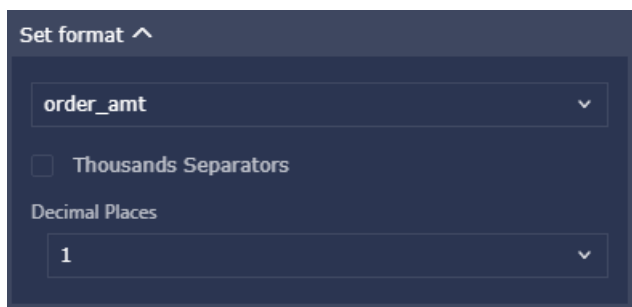
- In the Layout section, you can set Show Row Numbers and Show Totals. Click Update. A similar figure is displayed.



Pivot Table Test

	province	order_number	order_ar
23	+	17312.0	
24	+	2554.0	
25	+	5571.0	
26	+	556.0	
27	+	2433.0	
28	+	680.0	
29	+	19672.0	
30	+	585.0	
31	Total	218871.0	15

- In the Format section, set Decimal Places to 1 for order_amt. Click Update. A similar figure is displayed.



8. Click the plus icon in front of a value to drill into the data in a tree structure.

For example, when you click the plus sign in front of Shanghai, data about product types and packet designs is displayed as a tree.

	province	order_number	order_amt
23	+	17312.0	
24	+	2554.0	
25	+	5571.0	
26	+	556.0	
27	+	108.0	
28	+	308.0	
29	+	140.0	
30	+	2433.0	
31	+	680.0	
32	+	19672.0	

9. Click Save to save the dashboard.

Move the pointer over the upper-right corner of the window. Click the More icon that appears and choose More Actions > Delete to delete the current table.

Configure a style

- In the Title section, you can set Show Title.
- In the Layout section, you can set Show Row Numbers, Show Totals, and Freeze.
- In the Format section, you can set Thousands Separator and Decimal Places.

Click Update. A similar figure is displayed.

Pivot Table-company_sales_record_en_0508				
	order_id	order_number	order_amt	
1	1000015	6.0	261.54	
2	1000030	2.0	6.0	
3	1000160	88.0	4870.2735	
4	1000175	44.0	2181.408	
5	1000180	46.0	2484.7455	
6	1000325	32.0	3812.73	
7	1000330	41.0	108.15	
8	1000345	70.0	1237.59	
9	1000350	94.0	7894.58	
10	1000480	37.0	4158.1235	

Delete a table

Move the pointer over the upper-right corner of the window. Click the More icon that appears and choose More Actions > Delete to delete the current table.

3.5.11 Gauges

This topic describes how to create a gauge. Make sure that you have read [Dashboard overview](#) and [Basic dashboard operations](#). For creating a dataset, see [Create a dataset](#).

Overview

Similar to an auto gauge, a gauge shows the value range of a certain indicator. You can view the progress of a task or whether an indicator value is about to exceed the valid range. For example, you can use a gauge to display the inventory status of a product to see whether the inventory is sufficient.

A gauge is based on the pointer angles and filters. The pointer angles and filters are both based on data measures such as discount points and profit amounts.

Notes

For both the pointer angle and filters, you can select a maximum of one measure.

Examples

Gauge-mysql_99



Scenarios: order amounts represented by gauges

The following example uses the `company_sales_record` dataset.

1. Log on to the Quick BI console.
2. Click Datasets to go to the Datasets page.
3. Select the `company_sales_record` dataset and click the Create Dashboard icon in the Actions column.



Note:

If you use Quick BI Enterprise Standard, you need to choose Standard or Full Screen as the display mode manually. The following example uses Standard.

4. Click the Gauge icon and an empty chart appears.
5. On the Data tab page, select measures as needed.



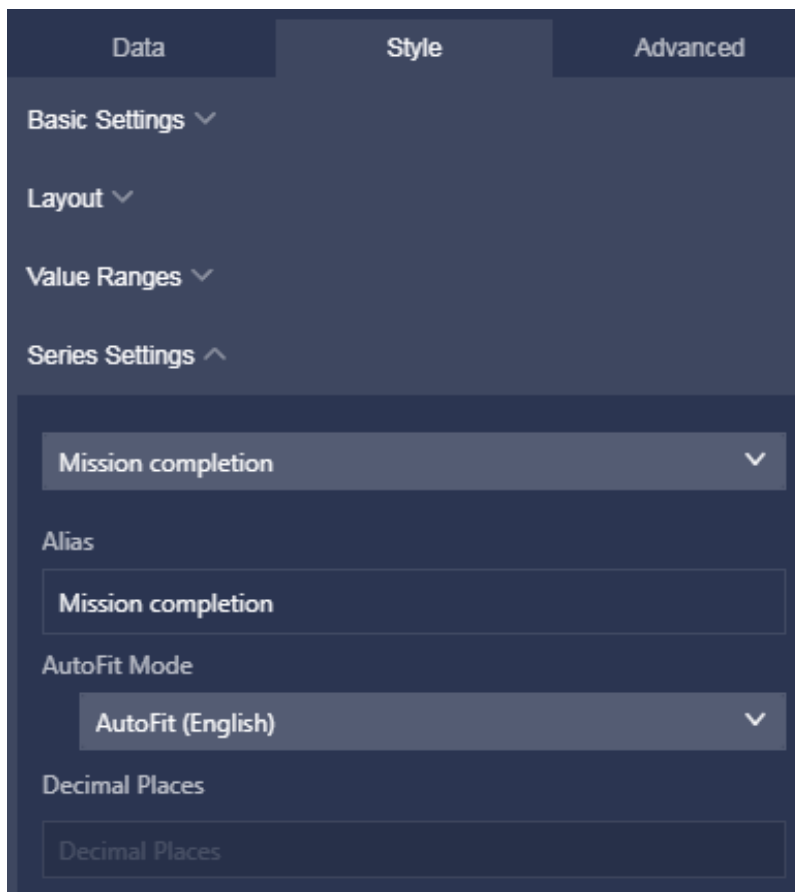
Note:

[DO NOT TRANSLATE]

In the Measures list, select `order_amt` and add it to the Angle.



6. Click Update and the chart is updated.
7. On the Style tab page, you can configure the chart title, layout, legend, and tick marks.



8. Click Save to save the dashboard.

Configure the style

- In the Basic Setting section, you can configure the chart title, hyperlinks for page jumping, and the background color.
- In the Layout section, you can configure whether to show tooltips, tick marks, and the legend.

- In the Value Ranges section, you can configure the interval and the color. In this example, the start value is 100 and the end value is 1000. The title of the interval is set to net profit.
- In the Series Settings section, you can configure the field aliases and the number of decimal places.

The updated chart is shown as follows.



Delete a chart

Click the More Actions icon in the upper-right corner of the chart and select Delete from the drop-down list to delete a chart.

3.5.12 Radar charts

This topic describes how to create a radar chart. Make sure that you have read [Dashboard overview](#) and [Basic dashboard operations](#). For creating a dataset, see [Create a dataset](#).

Overview

Radar charts display numbers and ratios obtained from data analysis. You can view the changing trends of indicators by using radar charts. For example, sales of all areas are represented by numbers and ratios in radar charts.

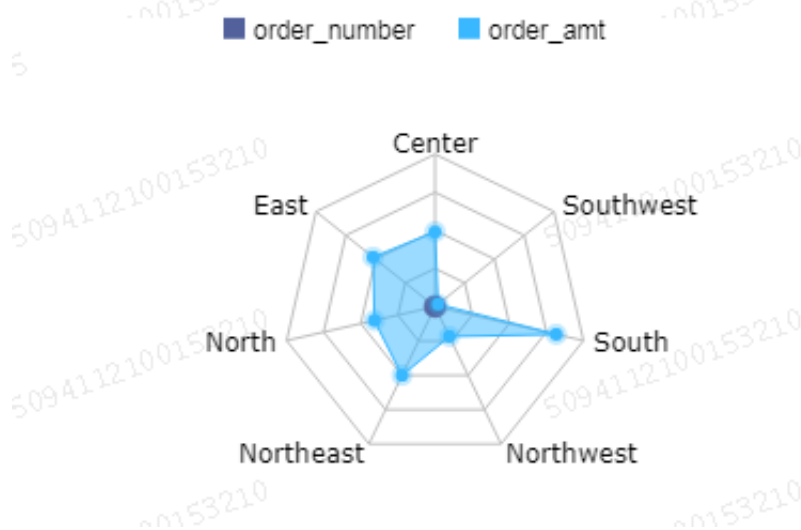
A radar chart is based on labels and lengths. Labels are based on dimensions such as product types. Lengths are based on measures such as shipping costs.

Notes

You can select a minimum of one and a maximum of two dimensions for the labels of a radar chart. The number of dimension values must be greater than or equal to three and less than or equal to 12. You need to select a minimum of one dimension for the length.

Examples

Radar Chart-mysql_99



Scenarios: order numbers and order amounts in multiple areas

The following example uses the company_sales_record dataset.

1. Log on to the Quick BI console.
2. Click Datasets to go to the Datasets page.
3. Select the company_sales_record dataset and click the Create Dashboard icon in the Actions column.



Note:

If you use Quick BI Enterprise Standard, you need to choose Standard or Full Screen as the display mode manually. The following example uses Standard.

4. Click the Radar Chart icon and an empty chart appears on the dashboard.

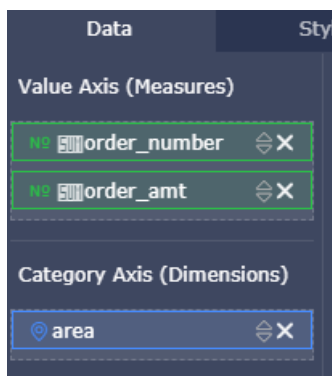
5. On the Data tab page, select dimensions and measures as needed.

In the Dimensions list, locate the area field and add it to the Labels (Dimensions) section. In the Measures list, locate the order_number and order_amt fields and add them to the Length (Measures) section.

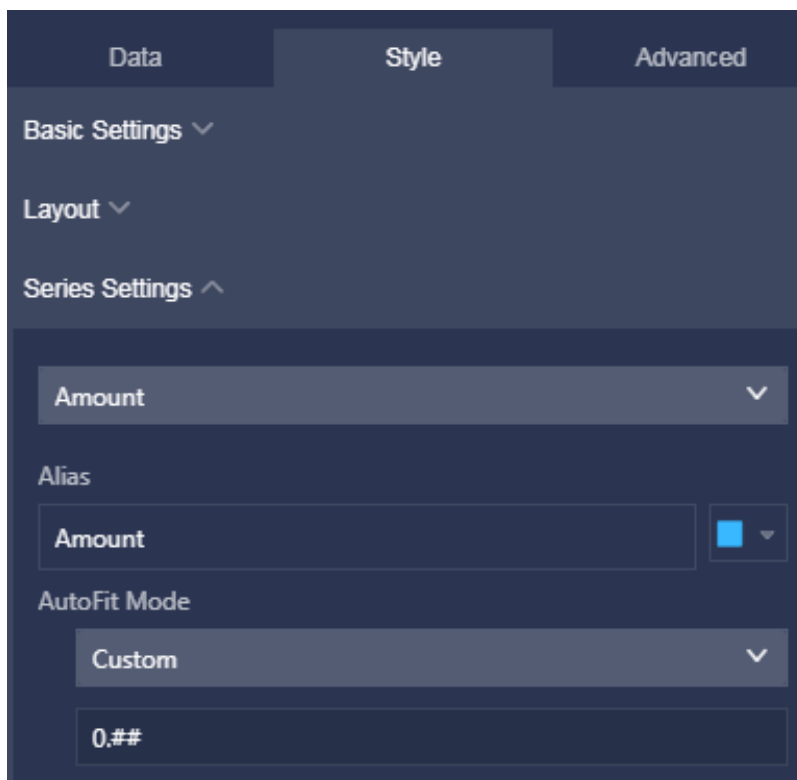


Note:

Make sure that you have converted the dimension type of the area field from String to Geo.



6. Click Update and the chart is updated.
7. On the Style tab page, you can change the title, layout, and legend of the chart as shown in the following figure.

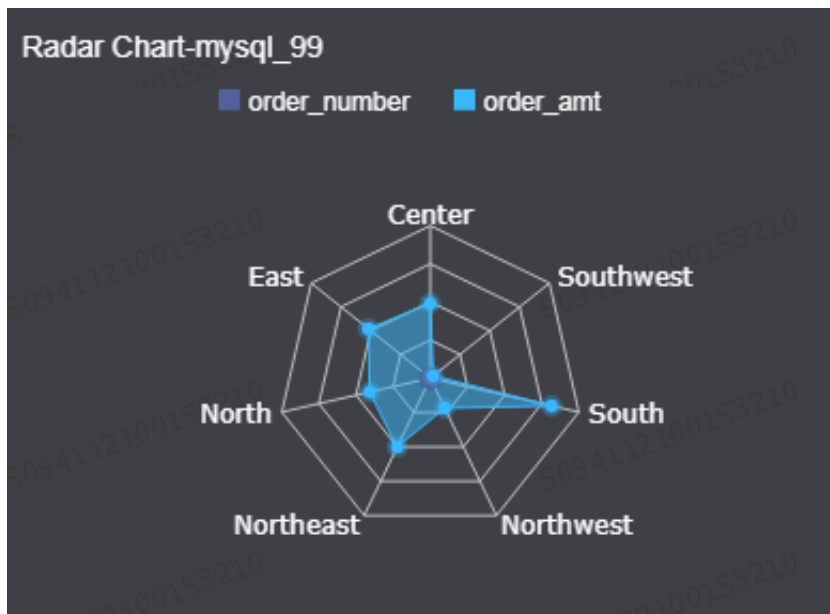


8. Click Save to save the dashboard.

Configure the style

- In the Basic Settings section, you can configure the chart title, hyperlinks for page jumping, and the background color. In this example, the chart title is set to domestic data. The background color is set to Dark.
- In the Layout section, you can configure the legend position and choose whether to show tooltips, areas, and labels.
- In the Series Settings section, you can configure measure aliases, the data format, and the number of decimal places. In this example, the color used to display `order_order` is set to red.

The updated chart is shown as follows.



Delete a chart

Click the More Actions icon in the upper-right corner of the chart and select Delete from the drop-down list to delete a chart.

3.5.13 Scatter charts

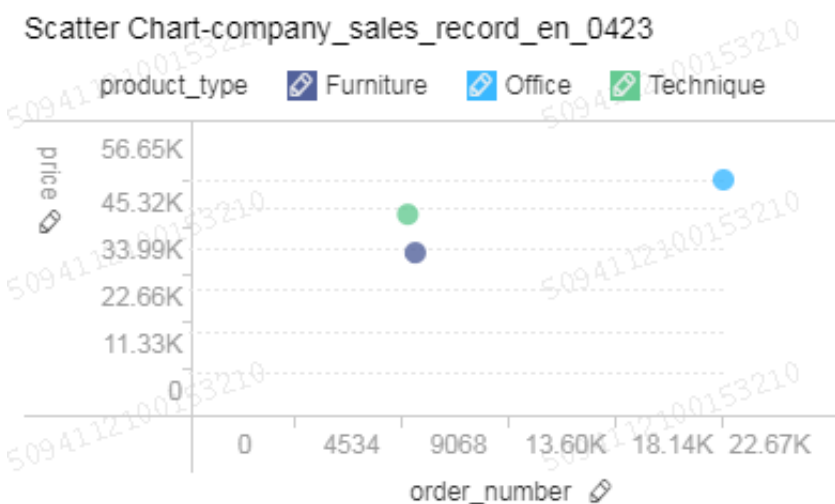
This topic describes how to create a scatter chart. Make sure that you have read [Dashboard overview](#) and [Basic dashboard operations](#). For creating a dataset, see [Create a dataset](#).

Overview

Scatter charts present the distribution and aggregation of data.

A scatter chart is composed of the X-axis and Y-axis. The color legend is based on the data dimension such as the product type. The scales of the X-axis and Y-axis are based on the data measures.

Examples



Notes

You can select a maximum of one dimension for the color legend. You can set a maximum of 1,000 dimension values.

X-axis: supports a minimum of one and a maximum of three dimensions.

Y-axis: supports one measure.

Scenarios: unit prices and order numbers of multiple product types

The following example uses the company_sales_record dataset.

1. Log on to the Quick BI console.
2. Click Datasets to go to the Datasets page.
3. Select the company_sales_record dataset and click the Create Dashboard icon in the Actions column.



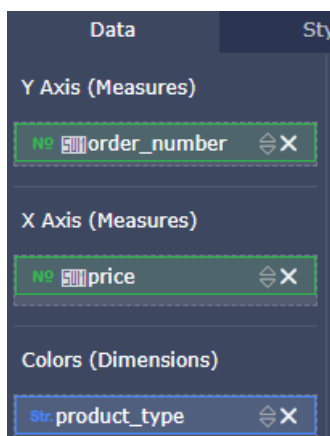
Note:

If you use Quick BI Enterprise Standard, you need to choose Standard or Full Screen as the display mode manually. The following example uses Standard.

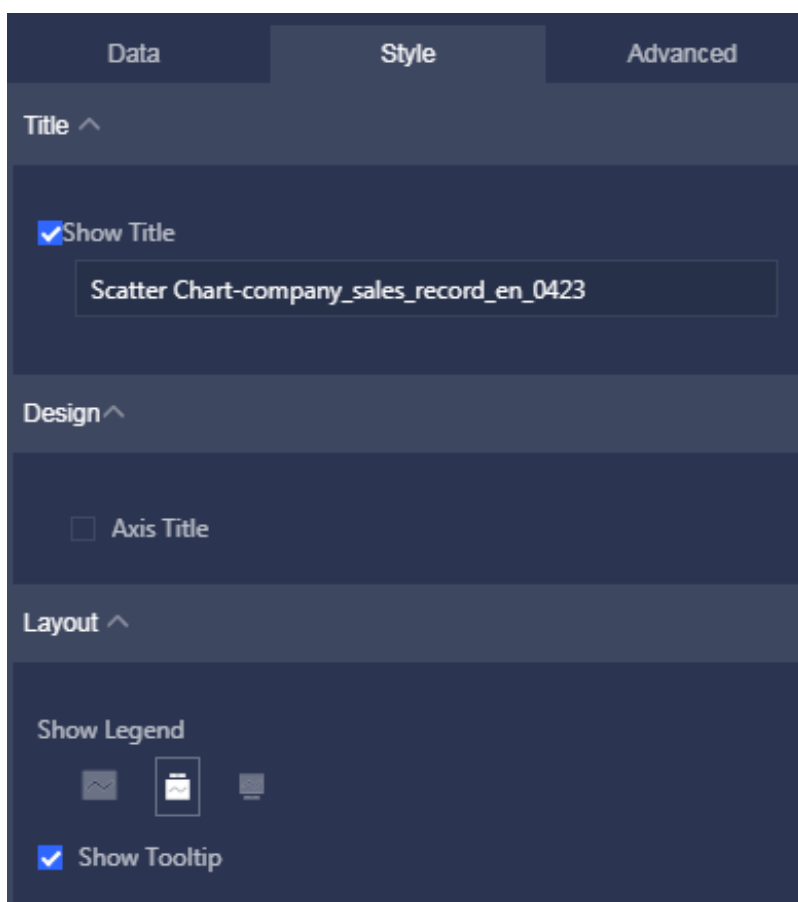
4. Click the Scatter Chart icon and an empty chart appears on the dashboard.

5. On the Data tab page, select dimensions and measures.

In the Dimensions list, locate the `product_type` field and add it to the Color Legend (Dimensions) section. In the Measures list, locate the `price` and `order_number` fields and add them to the X Axis (Measures) and Y Axis (Measures) sections separately.



6. Click Update and the chart is updated.
7. On the Style tab page, you can modify the chart name, layout, and legend as shown in the following figure.

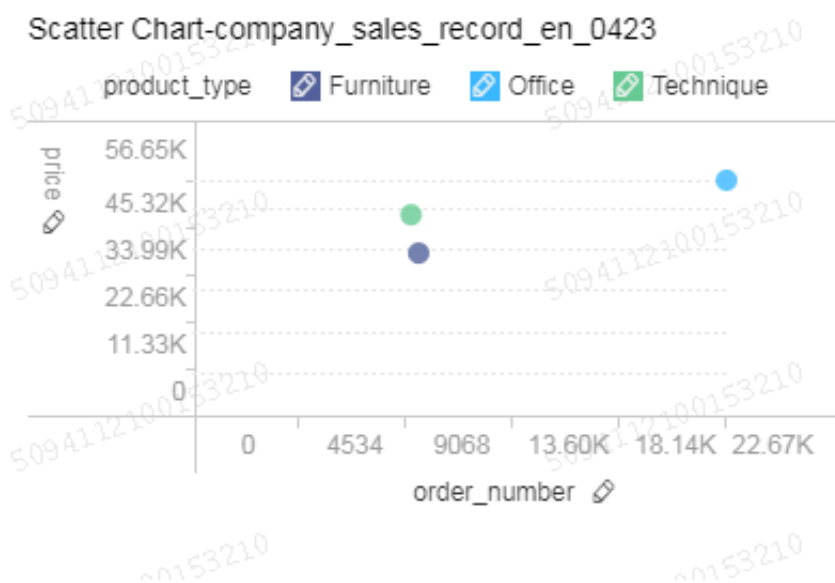


8. Click Save to save the dashboard.

Configure the style

- In the Title section, you can configure the title.
- In the Design section, you can choose whether to show axis titles. This example shows the axis titles.
- In the Layout section, you can set the legend position and choose whether to show tooltips.

The updated chart is as follows.



Delete a chart

Click the More Actions icon in the upper-right corner of the chart and select Delete from the drop-down list to delete a chart.

3.5.14 Funnel charts

This topic describes how to create a funnel chart. Make sure that you have read [Dashboard overview](#) and [Basic dashboard operations](#). For creating a dataset, see [Create a dataset](#).

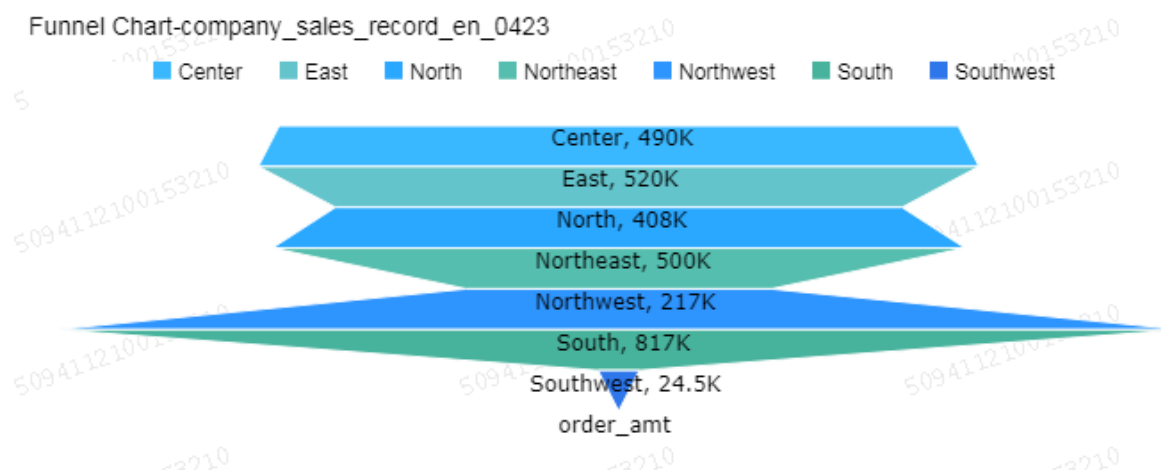
Overview

Funnel charts apply to the analysis of the standardized business process that has long cycles and multiple links. By using funnel charts, you can discover problems and locate the causes rapidly. Funnel charts are also used to present the conversion rate

of each step. For example, you can view the conversion rates throughout the process from a user entering a website to completing purchases.

A funnel chart is based on the tier label and tier area. The tier label is based on the dimension such as the region. The tier area is based on the measure such as the order amount.

Examples



Notes

You can select a maximum of one dimension for the tier labels of a funnel chart. You can select a maximum of one measure for the tier area of a funnel chart.

Scenarios: order amounts in multiple areas

The following example uses the company_sales_record dataset.

1. Log on to the Quick BI console.
2. Click Datasets to go to the Datasets page.
3. Select the company_sales_record dataset. Click the Create Dashboard icon in the Actions column.



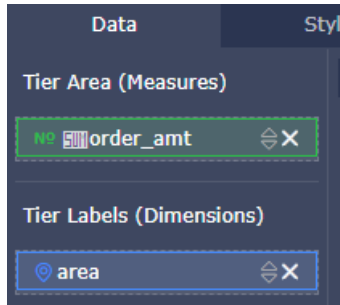
Note:

If you use Quick BI Enterprise Standard, you need to choose Standard or Full Screen as the display mode manually. The following example uses Standard.

4. Click the Funnel chart icon and an empty chart appears in the dashboard.

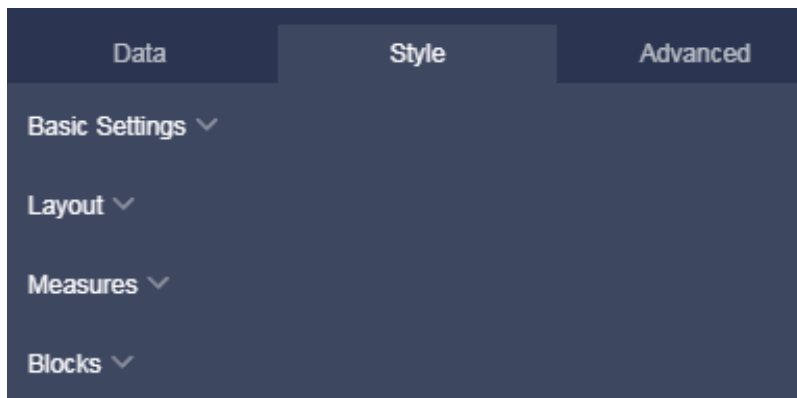
5. On the Data tab page, select dimensions and measures as needed.

In the Dimensions list, select the area field and add it to the Tier Labels (Dimensions) section. In the Measures list, select the order_amt field and add it to the Tier Area (Measures) section.



6. Click Update and the chart is updated.

7. On the Style tab page, modify the name, layout, and legend of the funnel chart.

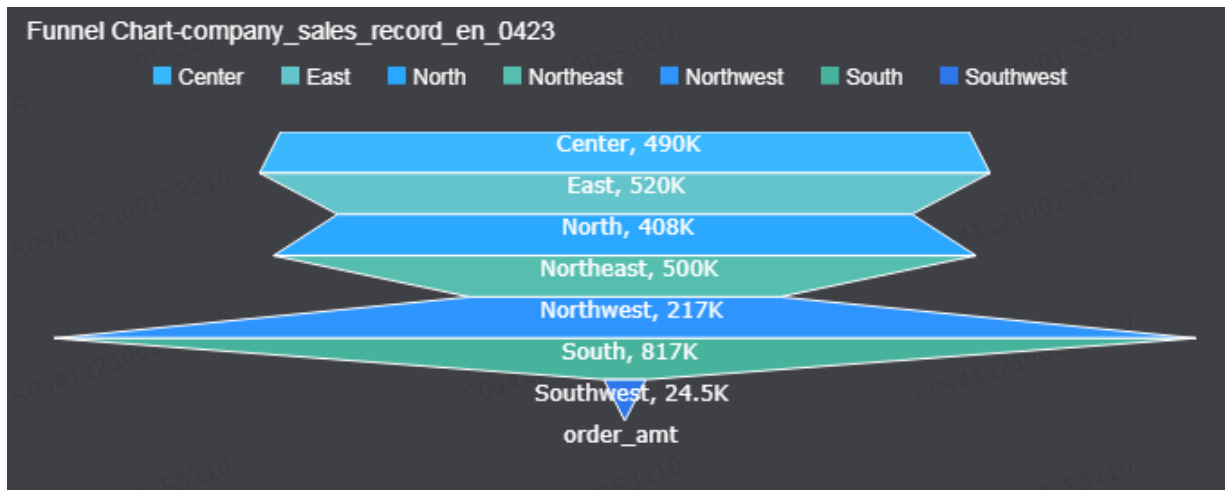


8. Click Save to save the dashboard.

Configure the style

- In the Basic Settings section, you can configure the chart name, hyperlinks for page jumping, and the background color. This example uses Dark as the background color.
- In the Layout section, you can configure the legend position, label style, and display mode.
- In the Measures section, you can configure the alias, format, and the number of decimal places of the measure.
- In the Blocks section, you can configure the colors and aliases of dimension values.

The updated chart is shown as follows.



Delete a chart

Click the More Actions icon in the upper-right corner of the chart and select Delete from the drop-down list to delete a chart.

3.5.15 Kanbans

This topic describes how to create a kanban. Make sure that you have read [Dashboard overview](#) and [Basic dashboard operations](#). For creating a dataset, see [Create a dataset](#).

Overview

A kanban provides an overview of data such as sales performance. Using kanbans enables you to rapidly respond to sales status and management situations. Kanbans helps you to discover and solve problems.

A kanban is composed of labels and measures. Labels are based on data dimensions such as regions. Measures are based on data measures such as order numbers and order amounts.

Examples

Kanban-company_sales_record_en_0423

Anhui order number 1.66K order_amt 93.2K profit_amt 11.7K shipping_cost 664	Beijing order number 1.16K order_amt 85.3K profit_amt 18.1K shipping_cost 599	Fujian order number 603 order_amt 57.5K profit_amt 12.9K shipping_cost 219	Gansu order number 1.25K order_amt 89.5K profit_amt 6.49K shipping_cost 777
Guangdong order number 5.82K order_amt 443K profit_amt 57.2K shipping_cost 2.79K	Guangxi order number 2.71K order_amt 176K profit_amt 17.3K shipping_cost 1.35K	Guizhou order number 406 order_amt 7.82K profit_amt 1.03K shipping_cost 130	Hainan order number 2.34K order_amt 198K profit_amt 14.8K shipping_cost 1.37K

Notes

You can select a maximum of one dimension for the labels of a kanban. You can select a minimum of one and a maximum of 10 dimensions for the measures of a kanban.

Example scenario: comparison of order numbers, order amounts, shipping costs, and profit amounts among provinces

The following example uses the company_sales_record dataset.

1. Log on to the Quick BI console.
2. Click Datasets to go to the Datasets page.
3. Select the company_sales_record dataset and click the Create Dashboard icon in the Actions column.



Note:

If you use Quick BI Enterprise Standard, you need to choose Standard or Full Screen as the display mode manually. The following example uses Standard.

4. Click the Kanban icon and an empty kanban chart appears in the dashboard.
5. On the Data tab page, select dimensions and measures.

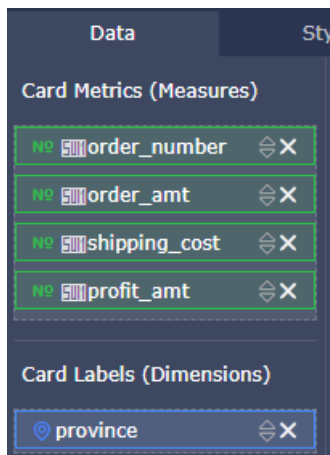
In the Dimensions list, locate the province field and add it to the Labels (Dimensions) section. In the Measures list, locate the order_number, order_amt,

shipping_cost, and profit_amt fields and add them to the Metrics (Measures) section.

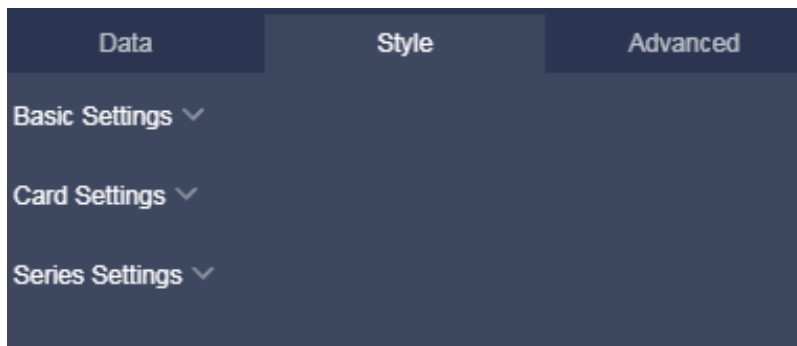


Note:

Make sure that you have converted the dimension type of the province field from String to Geo.



6. Click Update and the chart is updated.
7. On the Style tab page, modify the kanban title, template, and column number.



8. Click Save to save the dashboard.

Configure the style

- In the Basic Settings section, you can configure the chart title, hyperlinks for page jumping, and the background color. This example uses Dark as the background color.
- In the Card Settings section, you can configure the template type and card style. In this example, the column number is set to three.
- In the Series Settings section, you can configure aliases, the unit, formats, and the number of decimal places for dimensions.

The updated chart is shown as follows.

Kanban-company_sales_record_en_0423							
Anhui order number 1.66K		Beijing order number 1.16K		Fujian order number 603		Gansu order number 1.25K	
order_amt	93.2K	order_amt	85.3K	order_amt	57.5K	order_amt	89.5K
profit_amt	11.7K	profit_amt	18.1K	profit_amt	12.9K	profit_amt	6.49K
shipping_cost	664	shipping_cost	599	shipping_cost	219	shipping_cost	777
Guangdong order number 5.82K		Guangxi order number 2.71K		Guizhou order number 406		Hainan order number 2.34K	
order_amt	443K	order_amt	176K	order_amt	7.82K	order_amt	198K
profit_amt	57.2K	profit_amt	17.3K	profit_amt	1.03K	profit_amt	14.8K
shipping_cost	2.79K	shipping_cost	1.35K	shipping_cost	130	shipping_cost	1.37K

Delete a chart

Click the More Actions icon in the upper-right corner of the chart and select Delete from the drop-down list to delete a chart.

3.5.16 Treemaps

This topic describes how to create a treemap. We recommend that you read [Dashboard overview](#) and [Basic dashboard operations](#) before you create a treemap. You also can edit or create a dataset. For more information, see [Create a dataset](#).

Overview

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

A treemap consists of nested rectangles of different sizes and labels. The label of each rectangle is determined by data dimensions, such as the package design. The size of each rectangle is determined by data measures, such as the transportation cost.

Example of a treemap



Precautions

Only one dimension can be set for the labels of rectangles. This dimension can have a maximum of 12 dimension values. Only one measure can be set for the sizes of rectangles.

Scenario: Compare the order quantities of different products

The following scenario is based on the company_sales_record dataset.

1. Log on to the Quick BI console.
2. On the homepage, click the Workspace tab. In the left-side navigation pane, enter a group workspace name in the text box, or click the triangle next to the text box and select a group workspace from the drop-down list. Click Datasets to go to the All Items tab.
3. Click the Create Dashboard icon in the Actions column corresponding to the company_sales_record dataset.



Note:

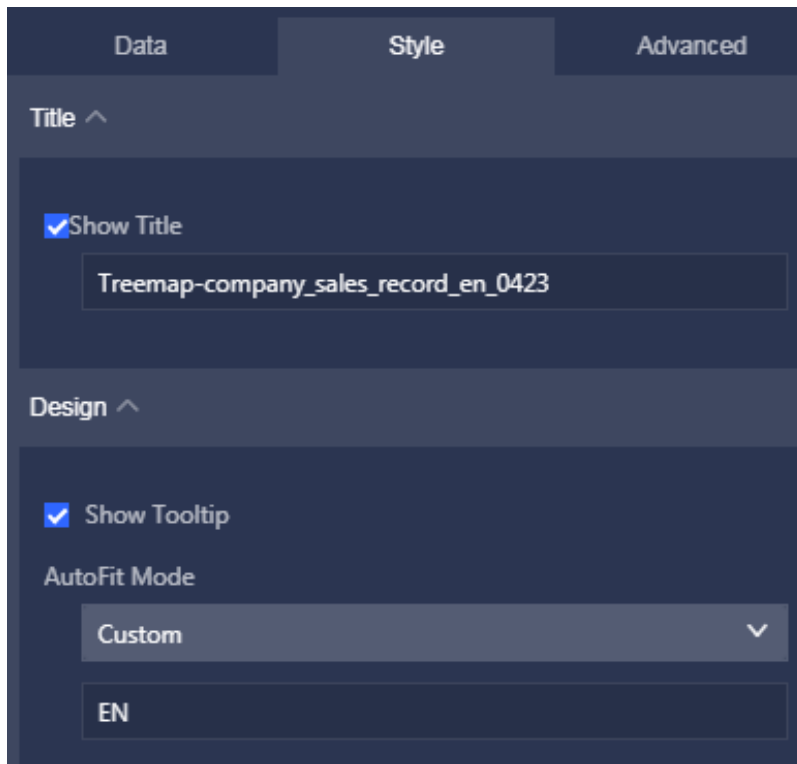
If you are using Quick BI Enterprise Standard, you must select Standard or Full Screen. The following scenario uses Standard as an example.

4. In the toolbar, click the Treemap icon. The blank treemap is automatically displayed in the display section.
5. Click the Data tab and select the required measure and dimension.

In the Dimensions section, double-click product type, or drag and drop it to the Rectangle Labels (Dimensions) section. In the Measures section, double-click order

number, or drag and drop it to the Rectangle Size (Measures) section, as shown in the following figure.

6. Click Update. The system automatically updates the chart.
7. On the Style tab, you can change the title and legend of the treemap, as shown in the following figure.



8. Click Save to save the dashboard.

Configure a style

- In the Basic Settings section, you can set Show Title.
- In the Design section, you can set Show Tooltip, AutoFit Mode, and the number of decimal places.

Delete a map

Move the pointer over the upper-right corner of the window. Click the More icon that appears and choose More Actions > Delete to delete the current map.

3.5.17 Polar diagrams

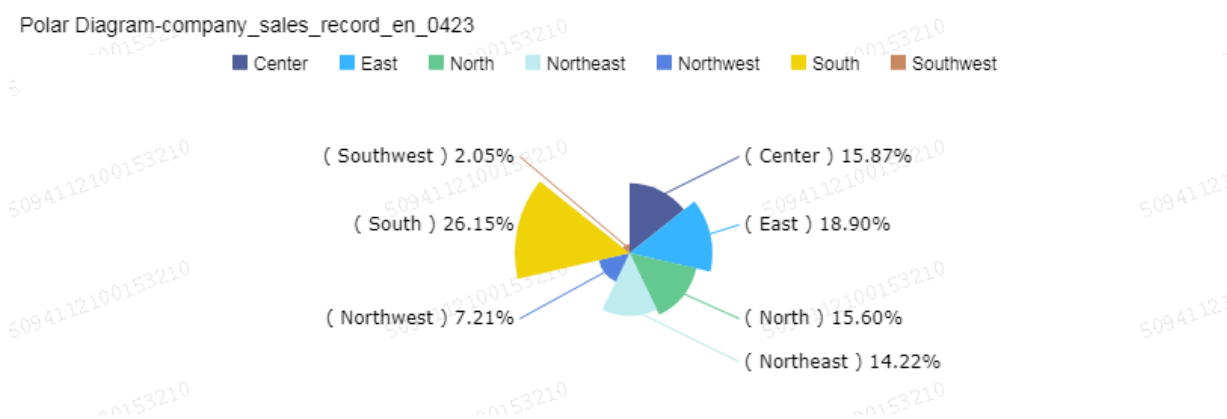
This topic describes how to create a polar diagram. We recommend that you read [Dashboard overview](#) and [Basic dashboard operations](#) before you create a polar diagram. You also can edit or create a dataset. For more information, see [Create a dataset](#).

Overview

A polar diagram can be used to display data changes over a period of time or compare metric values. It is suitable for data of the enumerated type. For example, compare data across different regions.

Similar to [Pie charts](#), a polar diagram consists of sectors of labels and arc radiuses. Labels are determined by data dimensions, such as the area and product type. Arc radiuses are determined by data measures, such as the order number and order amount.

Example of a polar diagram



Precautions

Only one dimension can be set for labels. This dimension must contain 3 to 12 variables. Only one measure can be set for arc radiuses.

Scenario: Compare the order quantities across multiple areas

The following scenario is based on the company_sales_record dataset.

1. Log on to the Quick BI console.
2. On the homepage, click the Workspace tab. In the left-side navigation pane, enter a group workspace name in the text box, or click the triangle next to the text box and select a group workspace from the drop-down list. Click Datasets to go to the All Items tab.

3. Click the Create Dashboard icon in the Actions column corresponding to the `company_sales_record` dataset.



Note:

If you are using Quick BI Enterprise Standard, you must select Standard or Full Screen. The following scenario uses Standard as an example.

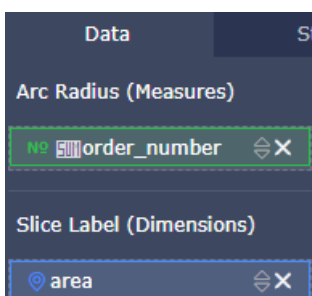
4. In the toolbar, click the Polar Diagram icon. The blank polar diagram is automatically displayed in the display section.
5. Click the Data tab and select the required measure and dimension.

In the Dimensions section, double-click area, or drag and drop it to the Label (Dimensions) section. In the Measures section, double-click order number, or drag and drop it to the Arc Radius (Measures) section, as shown in the following figure.

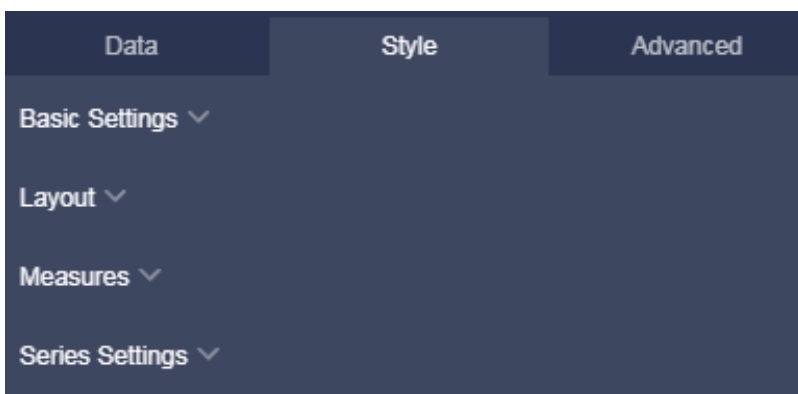


Note:

Make sure you have changed the data type of the province field value from String to Geo.



6. Click Update. The system automatically updates the diagram.
7. On the Style tab, you can set Show Title, Layout, Show Legend, Measures, and Series Settings, as shown in the following figure.



8. Click Save to save the dashboard.

Configure a style

- In the Basic Settings section, you can set Show Title, Show Hyperlink, and Background Color. Set Background Color to Light in this example.
- In the Layout section, you can set Show Legend, Show Tooltip, Label Style, Leaders, and Radius. In this example, set Show Legend to Right and Label Style to Name, Value (Percentage).
- In the Measures section, you can set AutoFit Mode and decimal places. In this case, enter 2.
- In the Series Settings section, you can set the alias of the measure and the color of the alias.

Click Update. A similar figure is displayed.

Polar Diagram-company_sales_record_en_0423



Delete a chart

Move the pointer over the upper-right corner of the window. Click the More icon that appears and choose More Actions > Delete to delete the current chart.

3.5.18 Word clouds

This topic describes how to create a word cloud. We recommend that you read [Dashboard overview](#) and [Basic dashboard operations](#) before you create a word cloud. You also can edit or create a dataset. For more information, see [Create a dataset](#).

Overview

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

A word cloud consists of words with various sizes. Words are determined by data dimensions, such as the customer name or product type. Word sizes are determined by data measures, such as the profit amt or unit price.

Example of a word cloud



Precautions

Only one dimension can be set for words. Only one measure can be set for word sizes.

Scenario: Compare the order quantities across different provinces

The following scenario is based on the company_sales_record dataset.

1. Log on to the Quick BI console.
2. On the homepage, click the Workspace tab. In the left-side navigation pane, enter a group workspace name in the text box, or click the triangle next to the text box and select a group workspace from the drop-down list. Click Datasets to go to the All Items tab.
3. Click the Create Dashboard icon in the Actions column corresponding to the company_sales_record dataset.



Note:

If you are using Quick BI Enterprise Standard, you must select Standard or Full Screen. The following scenario uses Standard as an example.

4. In the toolbar, click the Word Cloud icon. The blank word cloud is automatically displayed in the display section.

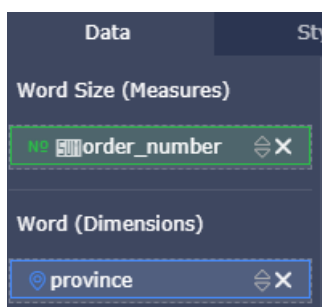
5. Click the Data tab and select the required measure and dimension.

In the Dimensions section, double-click province, or drag and drop it to the Word (Dimensions) section. In the Measures section, double-click order number, or drag and drop it to the Word Size (Measures) section, as shown in the following figure.



Note:

Make sure you have changed the data type of the province field value from String to Geo.



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

7. On the Style tab, you can set Show Title, Show Hyperlink, and Background Color, as shown in the following figure.

The screenshot shows the 'Style' tab of the Quick BI configuration interface. It includes sections for 'Basic Settings', 'Show Title' (checked), 'Description', 'Show Hyperlink' (unchecked), 'Hyperlink Name', 'URL', and 'Background' (set to 'Light').

Data **Style** **Advanced**

Basic Settings ^

☒ Show Title

Word Cloud-company_sales_record_en_0423

Description

Description

☐ Show Hyperlink

Hyperlink Name Hyperlink ⓘ

URL <https://bi-op-southeast-1.data.aliyun.com/dashboard/p>

Background

Light



8. Click Save to save the dashboard.

Delete a chart

Move the pointer over the upper-right corner of the window. Click the More icon that appears and choose More Actions > Delete to delete the current chart.

3.5.19 Tornado-leaned funnel charts

This topic describes how to create a tornado-leaned funnel chart. We recommend that you read [Dashboard overview](#) and [Basic dashboard operations](#) before you create a tornado-leaned funnel chart. You also can edit or create a dataset. For more information, see [Create a dataset](#).

Overview

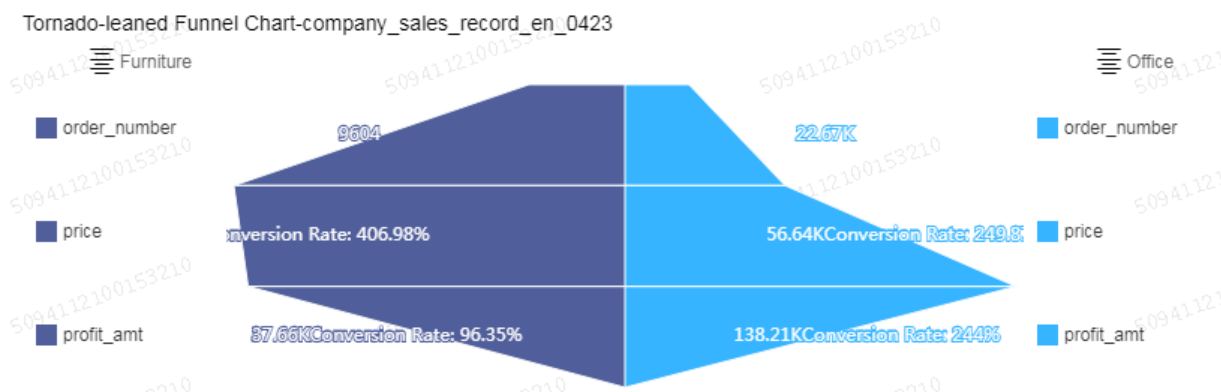
A tornado-leaned funnel chart is the combination of a tornado chart and a funnel chart. Tornado charts can be used to compare different metrics between two objects, such as the income and education levels between residents in two cities. Funnel charts are used to show the rate of conversion between each step of a process. It can be used to analyze complex business procedures. For example, you can use a funnel chart to clearly show the rate of visitors that finally buy any product after they access the website.

A tornado-leaned funnel chart combines the features of tornado charts and funnel charts. For example, when you compare the percentage of the migrant population, employment rate, and commercial real estate transaction in Beijing and Shanghai, if a conversion relation exists between these metrics of the two cities, the tornado-leaned funnel chart can show the difference and conversion rates for each city between these metrics.

If no conversion relations exist, the chart functions as a tornado chart. If a conversion relation exists between metrics and only one object is defined for these metrics, the chart functions as a funnel chart.

A tornado-leaned funnel chart consists of objects and metrics. Objects are determined by data dimensions, such as the area and product type. Metrics are determined by data measures, such as the order quantity and order amount.

Example of a tornado-leaned funnel chart



Precautions

Only one dimension can be set for the objects. Set at least one measure for metrics.

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

The following scenario is based on the company_sales_record dataset.

1. Log on to the Quick BI console.
2. On the homepage, click the Workspace tab. In the left-side navigation pane, enter a group workspace name in the text box, or click the triangle next to the text box and select a group workspace from the drop-down list. Click Datasets to go to the All Items tab.
3. Click the Create Dashboard icon in the Actions column corresponding to the company_sales_record dataset.



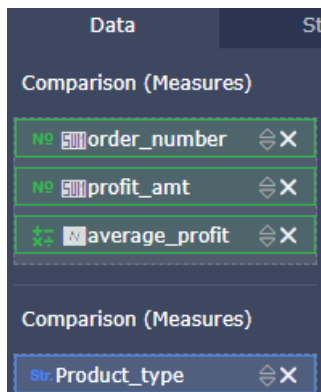
Note:

If you are using Quick BI Enterprise Standard, you must select Standard or Full Screen. The following scenario uses Standard as an example.

4. In the toolbar, click the Tornado-leaned Funnel Chart icon. The blank tornado-leaned funnel chart is automatically displayed in the display section.
5. Click the Data tab and select the required measures and dimension.

In the Dimensions section, double-click product type, or drag and drop it to the Metrics (Dimensions) section. In the Measures section, double-click order number,

profit amt, and average profit, or drag and drop them to Metrics (Measures) in order, as shown in the following figure.



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

7. On the Style tab, you can set Show Title, Layout, and Show Conversion Rates, as shown in the following figure.

The screenshot displays the configuration interface for a Tornado-leaned Funnel Chart in Quick BI, specifically the 'Style' tab. The interface is divided into three main sections: 'Basic Settings', 'Layout', and 'Advanced'. The 'Basic Settings' section includes a 'Show Title' checkbox (checked), a title text box containing 'Tornado-leaned Funnel Chart-company_sales_recor', a 'Description' text box, a 'Show Hyperlink' checkbox (unchecked), a 'Hyperlink Name' text box containing 'Hyperlink', a 'URL' text box containing 'https://bi-ap-southeast-1.data.aliyun.com/dashboard', and a 'Background' dropdown menu set to 'Light'. The 'Layout' section includes a 'Display Mode' section with 'Origin' selected (radio button) and 'Balance' (radio button), a 'Legend Position' dropdown menu set to 'Sides', and two dropdown menus for 'Left' and 'Right' legend positions. The 'Advanced' section includes a 'Show Conversion Rates' checkbox (checked).

Style

Basic Settings ^

☒ Show Title

Tornado-leaned Funnel Chart-company_sales_recor

Description

Description

☐ Show Hyperlink

Hyperlink Name Hyperlink ⓘ

URL https://bi-ap-southeast-1.data.aliyun.com/dashboard/

Background

Light

Layout ^

Display Mode

☒ Origin ☐ Balance

Legend Position

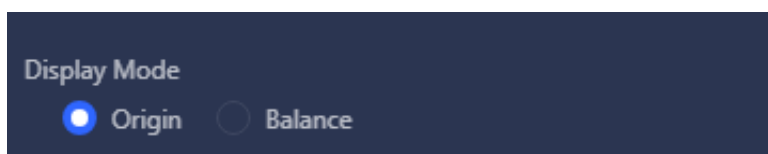
Sides

Left

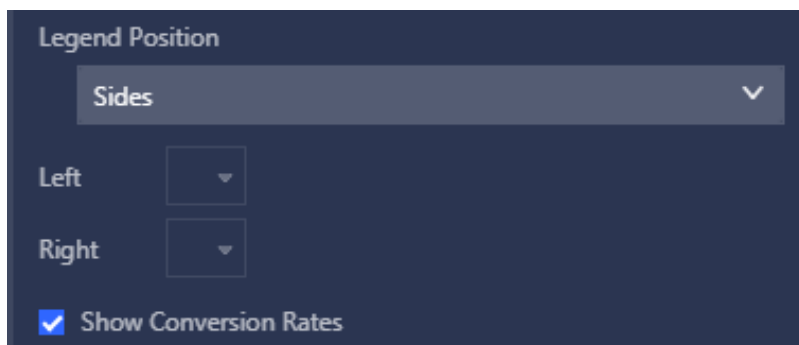
Right

☒ Show Conversion Rates

- Tornado-leaned funnel charts support two display modes. You can also select one mode as needed.



- You can also set Legend Position and Show Conversion Rates, as shown in the following figure.



8. Click Save to save the dashboard.

Delete a chart

Move the pointer over the upper-right corner of the window. Click the More icon that appears and choose More Actions > Delete to delete the current chart.

3.5.20 Hierarchy charts

This topic describes how to create a hierarchy chart. We recommend that you read [Dashboard overview](#) and [Basic dashboard operations](#) before you create a hierarchy chart.

You also can edit or create a dataset. For more information, see [Create a dataset](#).

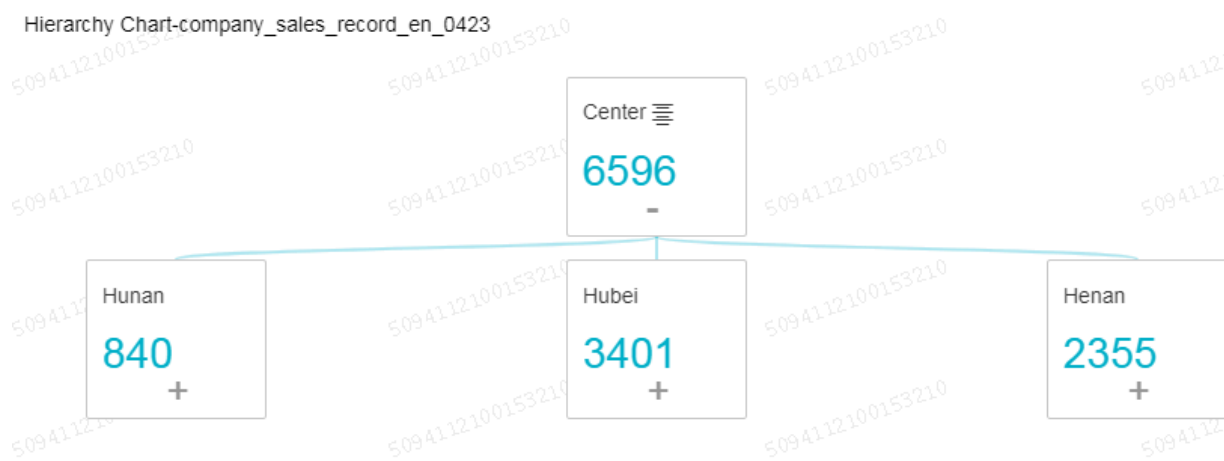
Overview

A hierarchy chart uses the tree structure to display and organize hierarchical data. It is an implementation of the enumeration method. For example, when you view the revenues of the prefecture-level cities within a province, the relationships between the province and prefecture-level cities can be displayed in parent-child structures. Hierarchy charts are used to analyze organizational structures, such as the staff structure of a company or the department structure of a hospital.

A hierarchy chart consists of node metrics and node labels. Each node label is determined by data dimensions, such as the area and product type. Each node metric is determined by data measures, such as the order quantity and order amount.

Example of a hierarchy chart

Hierarchy Chart-company_sales_record_en_0423



Precautions

At least two dimensions must be set for node labels. These two dimensions must have a parent-child relationship. At least one measure must be set for the node metric.

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

The following scenario is based on the company_sales_record dataset.

1. Log on to the Quick BI console.
2. On the homepage, click the Workspace tab. In the left-side navigation pane, enter a group workspace name in the text box, or click the triangle next to the text box and select a group workspace from the drop-down list. Click Datasets to go to the All Items tab.
3. Click the Create Dashboard icon in the Actions column corresponding to the company_sales_record dataset.



Note:

If you are using Quick BI Enterprise Standard, you must select Standard or Full Screen. The following scenario uses Standard as an example.

4. In the toolbar, click the Hierarchy Chart icon. The blank hierarchy chart is automatically displayed in the display section.
5. Click the Data tab and select the required measures and dimensions.

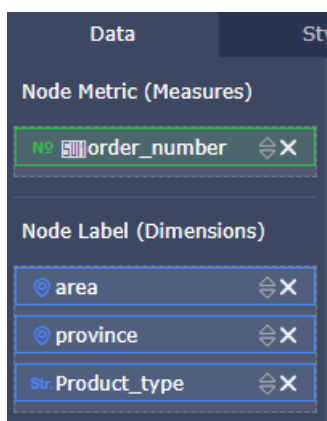
In the Dimensions section, double-click area, province, and product type, or drag and drop them to the Node Labels (Dimensions) section in order. This order determines their hierarchical relationships in the chart. In the Measures section,

double-click order number, or drag and drop it to the Node Metrics (Measures) section, as shown in the following figure.



Note:

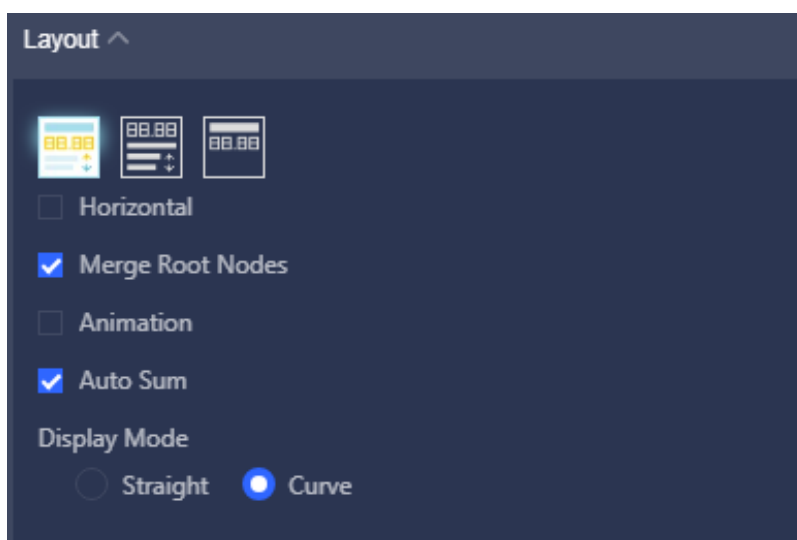
Make sure you have changed the data type of the province field value from String to Geo.



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

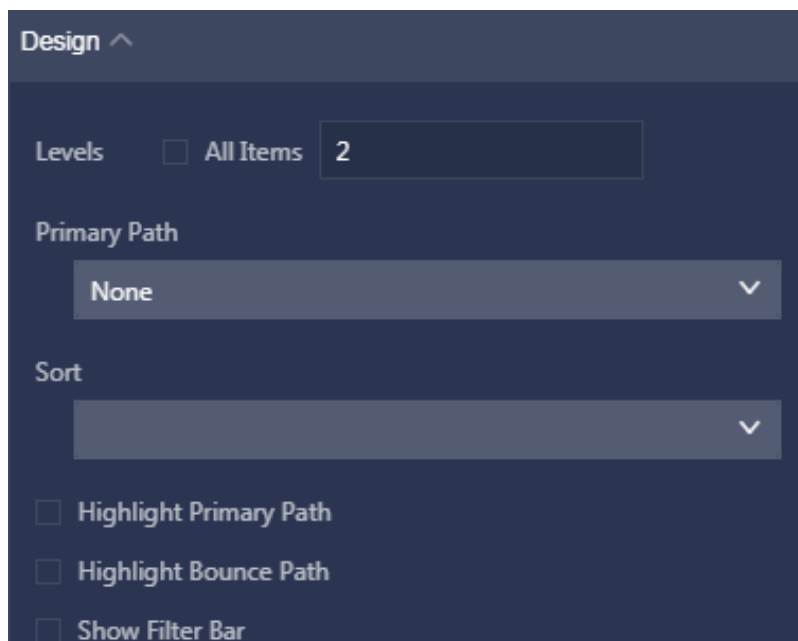
7. On the Style tab, you can set Show Title, Layout, and Design.

- Hierarchy charts support three layouts. You can select the expansion mode (root nodes are merged by default) and display mode of parent and child nodes as needed.



- In the Design section, you can manually enter the number of hierarchy levels displayed in the chart. You can select a primary path from the corresponding drop down list. The primary path is displayed in a different color from other

paths. You can load the filter bar to the chart so that you can edit the chart in the preview mode or on the dashboard, as shown in the following figure.



8. Click Save to save the dashboard.

Delete a chart

Move the pointer over the upper-right corner of the window. Click the More icon that appears and choose More Actions > Delete to delete the current chart.

3.5.21 Flow analysis charts

This topic describes how to create a flow analysis chart. We recommend that you read [Dashboard overview](#) and [Basic dashboard operations](#) before you create a flow analysis chart.

You also can edit or create a dataset. For more information, see [Create a dataset](#).

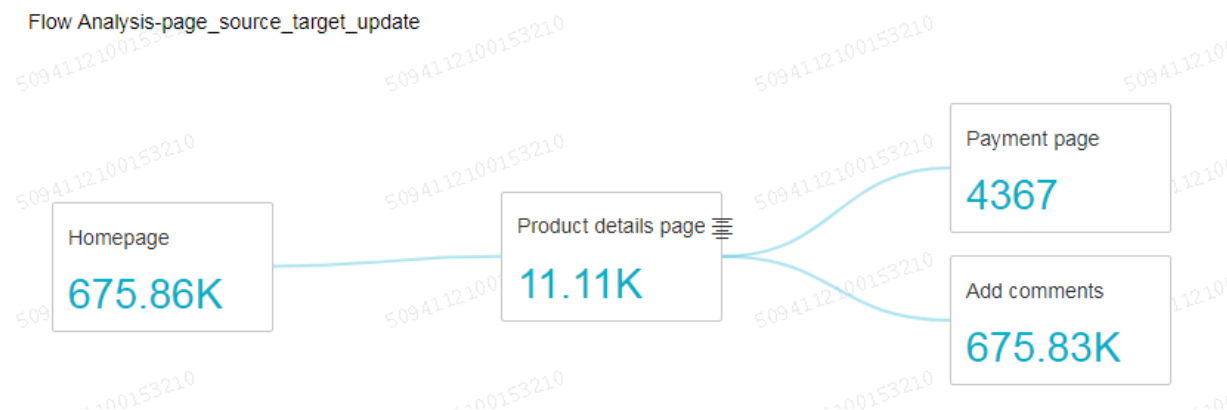
Overview

A flow analysis chart illustrates the conversion rate of a Webpage by comparing the page traffic or number page views (PV) against the number of unique visitors (UV), so that the Webpage operators can gain insights into the operating status of the Website and the final transaction volume for a type of product. A flow analysis chart is suitable for analyzing digital marketing campaigns and e-commerce websites. For example, you can use a flow analysis chart to find out which products are in highest demand and what are the peak hours of your business.

Currently, a flow analysis chart supports the following three dimensions: previous page, current page, and next page. The measures of a flow analysis chart include PV,

UV, conversion rate, and bounce rate. You need to specify the PVs or UVs for all three pages.

Example of a flow analysis chart



Precautions

Only one dimension can be set for each of the three pages. The dimension fields must be hierarchical. The order of the dimensions determines the hierarchical relationship in the chart. Only one measure can be set for each of the three PVs or UVs, the conversion rate, and the bounce rate.

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

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

The following uses the page_source_target_state dataset as an example.

1. Log on to the Quick BI console.
2. On the homepage, click the Workspace tab. In the left-side navigation pane, enter a group workspace name in the text box, or click the triangle next to the text box and select a group workspace from the drop-down list. Click Datasets to go to the All Items tab.
3. Select the page_source_target_state dataset and click Create Dashboard.



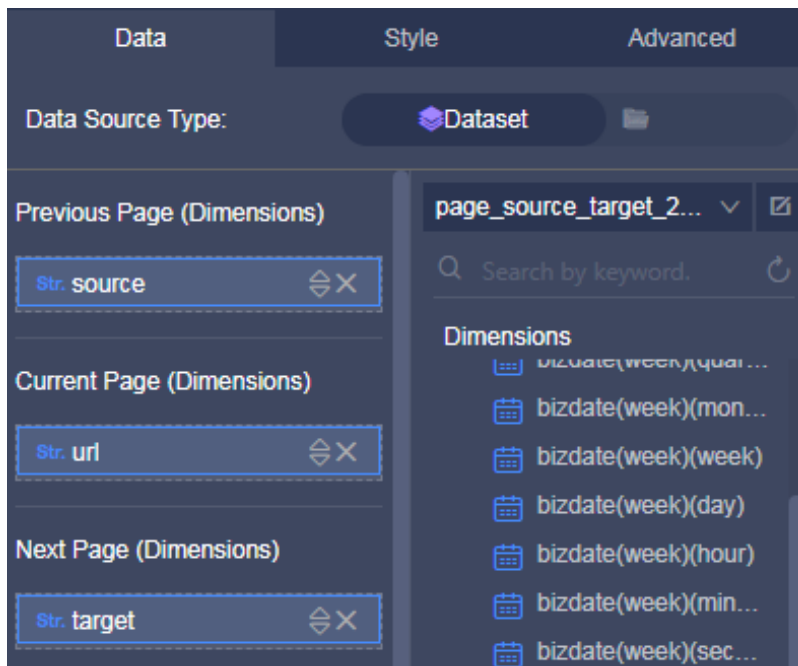
Note:

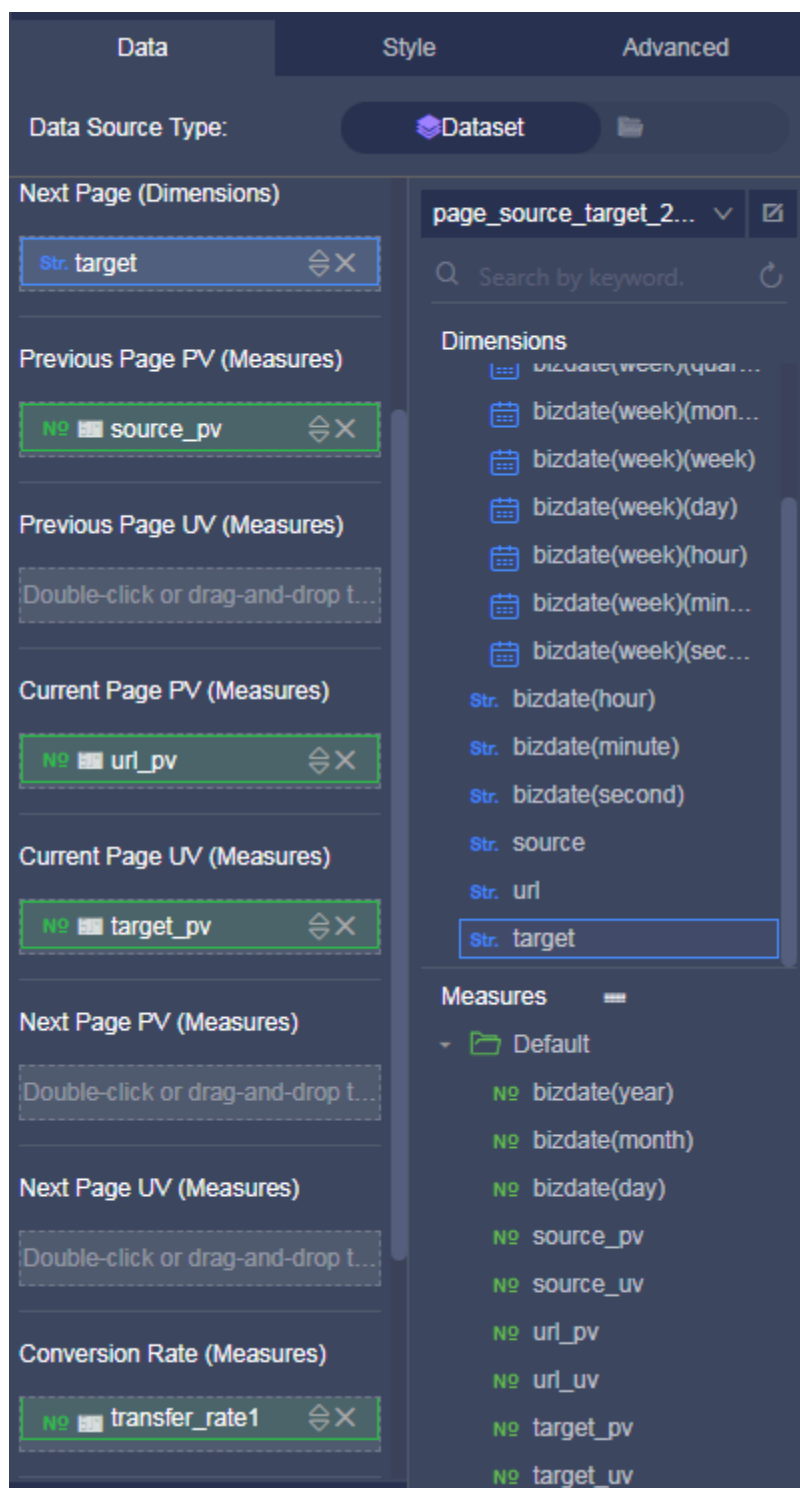
If you are using Quick BI Enterprise Standard, you must select Standard or Full Screen. The following scenario uses Standard as an example.

4. In the toolbar, click the Flow Analysis icon. The blank flow analysis chart is automatically displayed in the display section.
5. Click the Data tab and select the required measures and dimensions.

In the Dimensions section, double-click Previous Page, Current Page, and Next Page, or drag and drop them to the corresponding fields. This order determines the hierarchical relationship between pages in the diagram. In the Measures section, double-click Conversion Rate and Bounce Rate, or drag and drop them to the

corresponding fields. You must also select three PVs or UVs for the corresponding pages, as shown in the following figure.

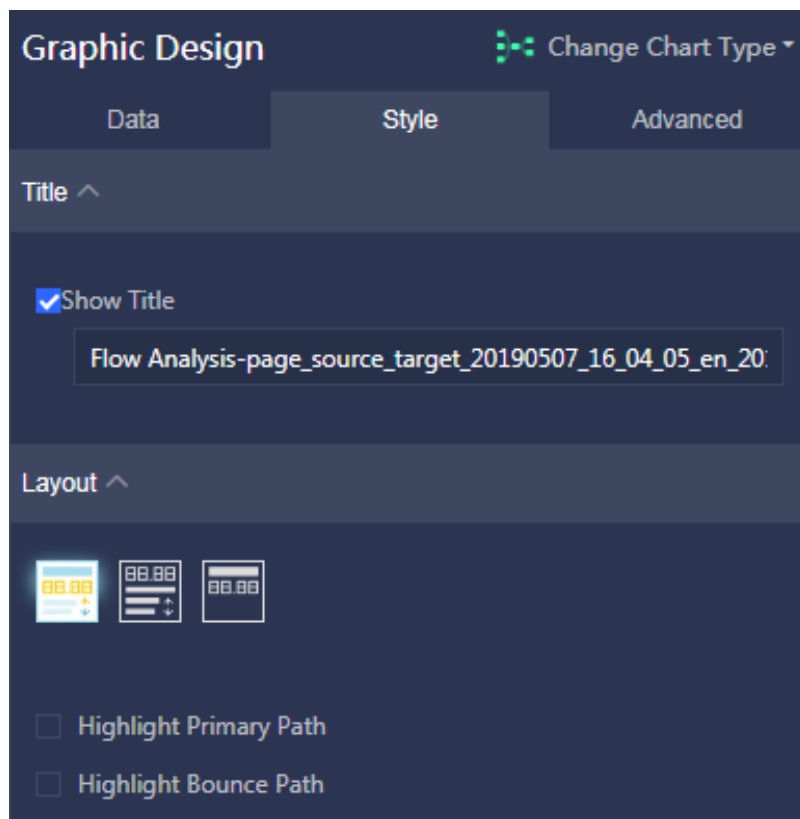




6. Click Update. The system automatically updates the chart.

7. On the Style tab, you can set Show Title and Layout.

In the Layout section, you can select one of the three modes and select Highlight Primary Path or Highlight Bounce Path for the mode.



8. Click Save to save the dashboard.

Delete a chart

Move the pointer over the upper-right corner of the window. Click the More icon that appears and choose More Actions > Delete to delete the current chart.

3.5.22 LBS heat maps



Note:

LBS heat maps are available only to Quick BI Enterprise Standard users.

This topic describes how to create an LBS heat map. We recommend that you read [Dashboard overview](#) and [Basic dashboard operations](#) before you create an LBS heat map.

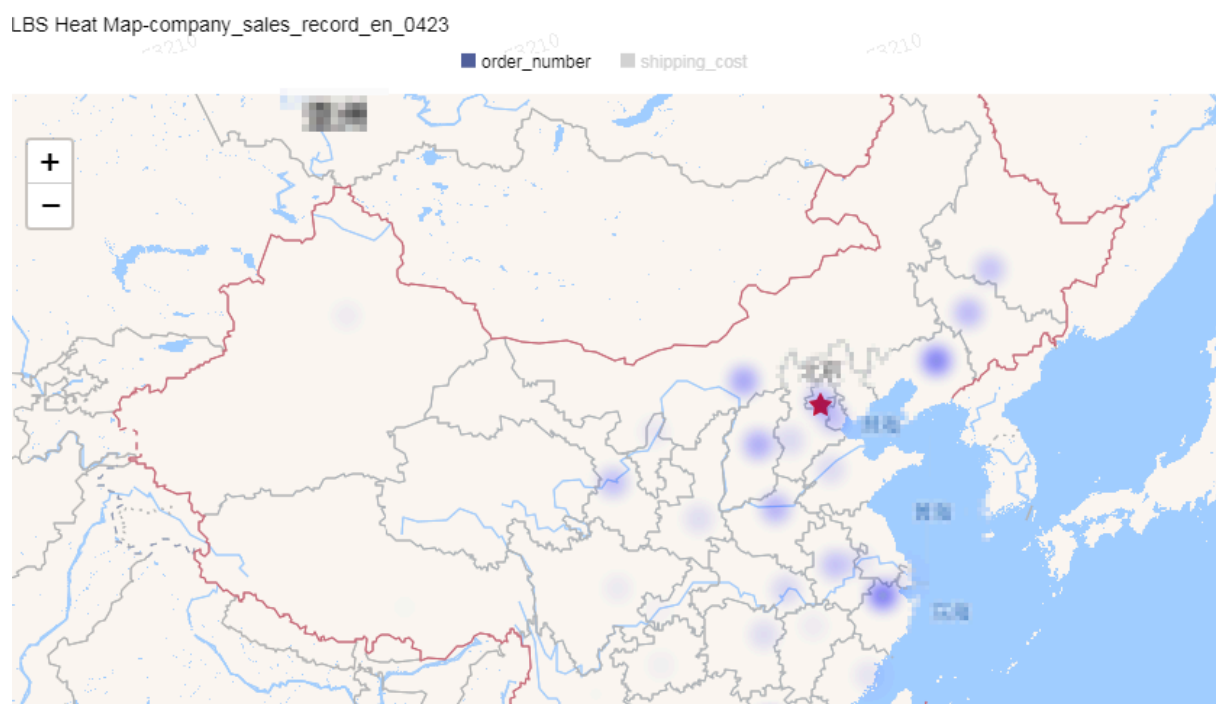
You also can edit or create a dataset. For more information, see [Create a dataset](#).

Overview

Similar to [Colored maps](#), an LBS heat map shows the size and distribution of data by using shades of color.

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

An example of an LBS heat map



Precautions

Only one dimension can be set for the region of an LBS heat map and it must be a geographical dimension. One to five measures can be set for the heat intensity.

For more information about the administrative divisions of China, see [Administrative divisions of China](#).

Scenario: Compare the transportation costs and order quantities across provinces

The following scenario is based on the company_sales_record dataset.

1. Log on to the Quick BI console.
2. On the homepage, click the Workspace tab. In the left-side navigation pane, enter a group workspace name in the text box, or click the triangle next to the text box and select a group workspace from the drop-down list. Click Datasets to go to the All Items tab.

3. Click the Create Dashboard icon in the Actions column corresponding to the `company_sales_record` dataset.

**Note:**

If you are using Quick BI Enterprise Standard, you must select Standard or Full Screen. The following scenario uses Standard as an example.

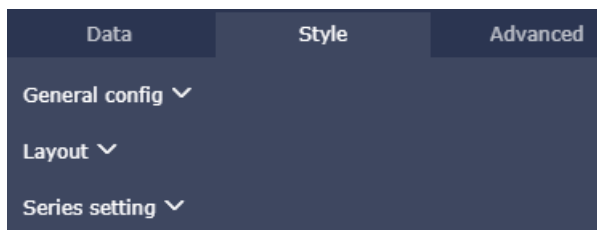
4. In the toolbar, click the LBS Heat Map icon. The blank LBS heat map is automatically displayed in the display section.
5. Click the Data tab and select the required measures and dimension.

In the Dimensions section, double-click province, or drag and drop it to the Geo Location section. In the Measures section, double-click order number and shipping cost, or drag and drop them to the Heat Intensity (Measures) section.

**Note:**

Make sure you have changed the data type of the province field value from String to Geo.

6. Click Update. The system automatically updates the map.
7. On the Style tab, you can change the title and layout of the map, and the formats of specific fields, as shown in the following figure.



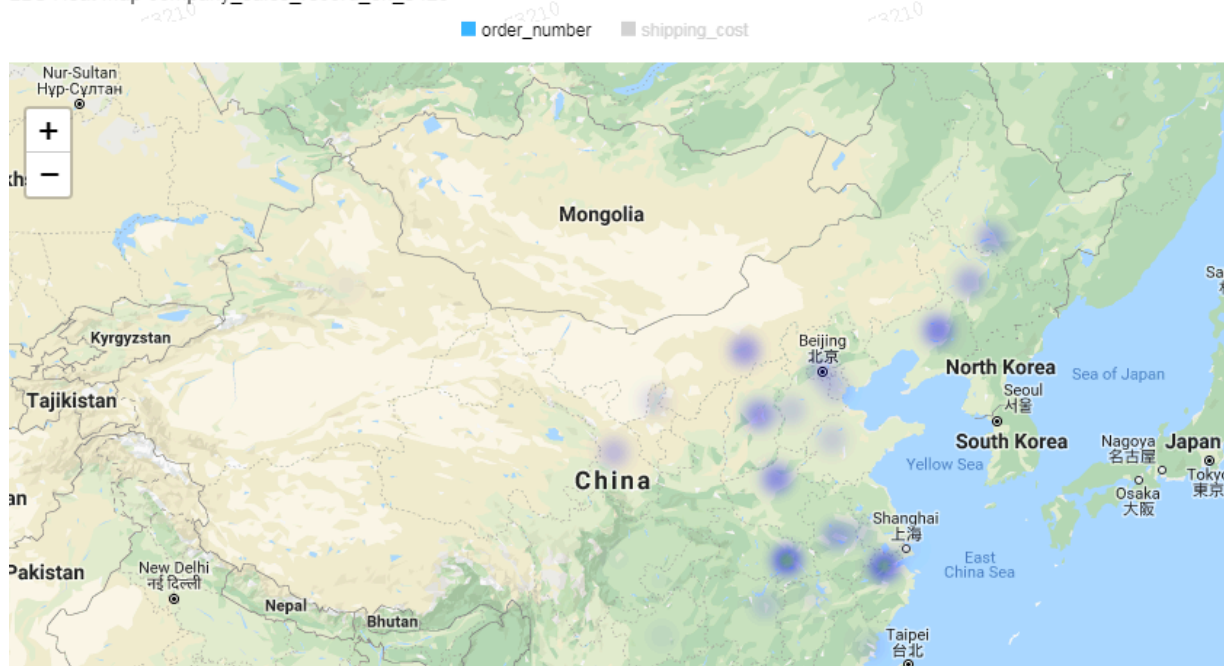
8. Click Save to save the dashboard.

Configure a style

- In the Basic Settings section, you can set Show Title, Show Hyperlink, and Background Color. Set Background Color to Dark in this example.
- In the Layout section, you can set Show Legend, Map, Zoom, and Map Center. Set Map Center to Google Map in this example.
- In the Series Settings section, you can set the alias and color of the measure.

Click Update. A similar figure is displayed.

LBS Heat Map-company_sales_record_en_0423



Delete a map

Move the pointer over the upper-right corner of the window. Click the More icon that appears and choose More Actions > Delete to delete the current map.

3.5.23 LBS bubble maps



Note:

LBS bubble maps are available only to Quick BI Enterprise Standard users.

This topic describes how to create an LBS bubble map. We recommend that you read [Dashboard overview](#) and [Basic dashboard operations](#) before you create an LBS bubble map.

You also can edit or create a dataset. For more information, see [Create a dataset](#).

Overview

Similar to [Bubble maps](#), an LBS bubble map is a map that uses the sizes of bubbles distributed across the map to reflect data sizes. It provides multiple basemaps for you to choose from, such as AMAP, Google Map, and GeoQ. LBS bubble maps allow you to understand the distribution and values of metrics across countries and regions in an easy and visual way. For example, LBS bubble maps can display the number of visitors at different tourist attractions or the per capita incomes across different regions.

An LBS bubble map consists of regions with bubbles of various sizes. Regions are determined by data dimensions, or the latitude and longitude values of the location

such as the province. Bubble sizes are determined by data measures, such as the transportation cost and order quantity.

Example of an LBS bubble map



Precautions

Only one dimension can be set for the region of an LBS bubble map and it must be a geographical dimension or the latitude and longitude values of the location, such as the region, province, or city. One to five measures can be set for the bubble size.

For more information about the administrative divisions of China, see [Administrative divisions of China](#).

Scenario: Compare the order amounts and profit amounts across provinces

The following scenario is based on the company_sales_record dataset.

1. Log on to the Quick BI console.
2. On the homepage, click the Workspace tab. In the left-side navigation pane, enter a group workspace name in the text box, or click the triangle next to the text box and select a group workspace from the drop-down list. Click Datasets to go to the All Items tab.

- Click the Create Dashboard icon in the Actions column corresponding to the `company_sales_record` dataset.

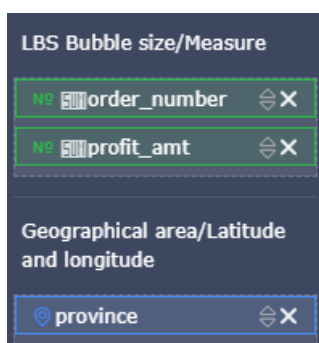


Note:

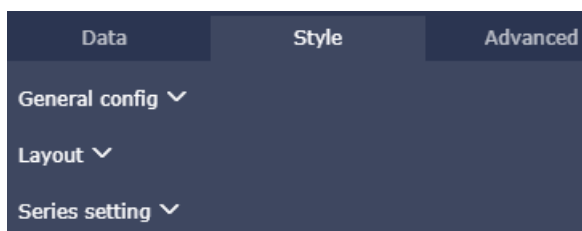
If you are using Quick BI Enterprise Standard, you must select Standard or Full Screen. The following scenario uses Standard as an example.

- Click the LBS Bubble Map icon. The blank LBS bubble map is automatically displayed in the display section.
- Click the Data tab and select the required measure and dimensions.

In the Dimensions section, double-click province, or drag and drop it to the Geo (Location) section. In the Measures section, double-click order amt and profit amt, or drag and drop them to the Bubble Size (Measures) section, as shown in the following figure.



- Click Update. The system automatically updates the map.
- On the Style tab, you can change the title and layout of the map, and the formats of specific fields, as shown in the following figure.



- Click Save to save the dashboard.

Move the pointer over the upper-right corner of the window. Click the More icon that appears and choose More Actions > Delete to delete the current chart.

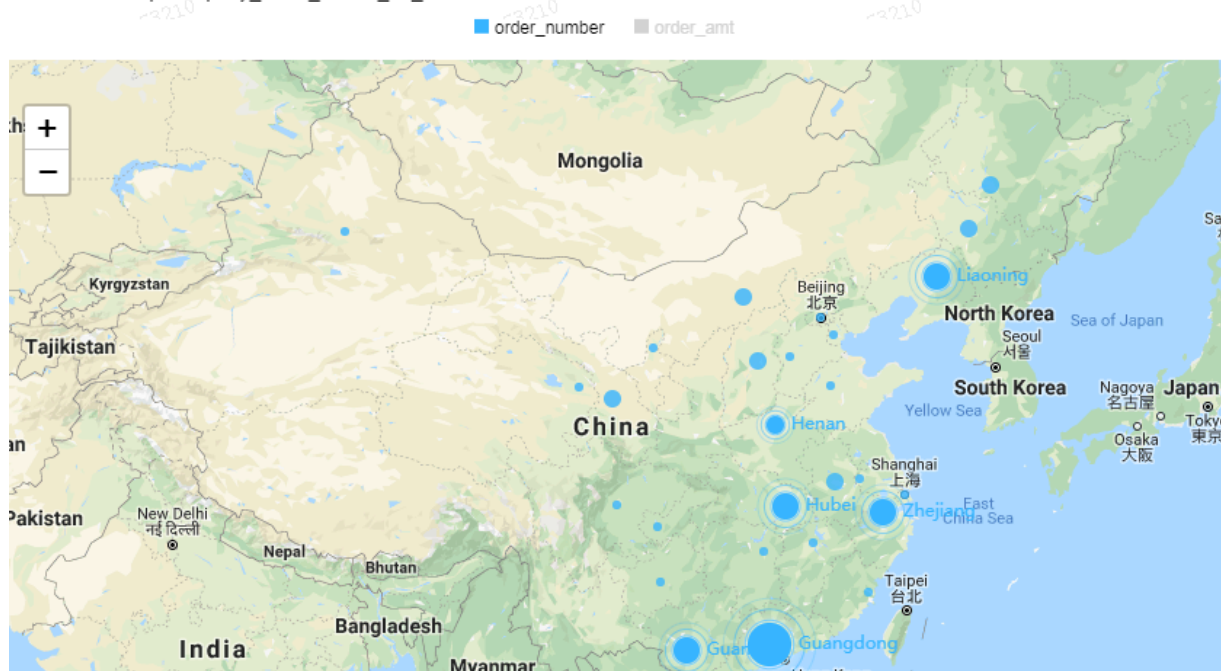
Configure a style

- In the Basic Settings section, you can set Show Title, Show Hyperlink, and Background Color. Set Background Color to Dark in this example.

- In the Layout section, you can set Show Legend, Map, Zoom, and Map Center. Set Map Center to Google Map in this example.
- In the Series Settings section, you can set Alias, AutoFit Mode, and Decimal Places.

Click Update. A similar figure is displayed.

LBS Bubble Map-company_sales_record_en_0423



Delete a map

Move the pointer over the upper-right corner of the window. Click the More icon that appears and choose More Actions > Delete to delete the current map.

3.5.24 LBS flying line maps



Note:

LBS flying line maps are available only to Quick BI Enterprise Standard users.

This topic describes how to create an LBS flying line map. We recommend that you read [Dashboard overview](#) and [Basic dashboard operations](#) before you create an LBS flying line map. You also can edit or create a dataset. For more information, see [Create a dataset](#).

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

An LBS flying line map consists of regions connected with routes. Regions are determined by data dimensions, such as the province or city. Routes are determined by data measures, such as the transportation cost or order quantity.

Overview

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

An LBS flying line map consists of regions connected with routes. Regions are determined by data dimensions, such as the province or city. Routes are determined by data measures, such as the transportation cost or order quantity.

Example of an LBS flying line map

LBS Flying Line Map-company_sales_record_en_0423



Precautions

A maximum of two dimensions can be set for the region of an LBS flying line map. These dimensions must be geographical dimensions such as the region, province and city. Only one measure can be set for the route.

For more information about the administrative divisions of China, see [Administrative divisions of China](#).

Scenario: Display the costs of transportation from regions to provinces

The following scenario is based on the company_sales_record dataset.

1. Log on to the Quick BI console.
2. On the homepage, click the Workspace tab. In the left-side navigation pane, enter a group workspace name in the text box, or click the triangle next to the text box and select a group workspace from the drop-down list. Click Datasets to go to the All Items tab.
3. Click the Create Dashboard icon in the Actions column corresponding to the company_sales_record dataset.

**Note:**

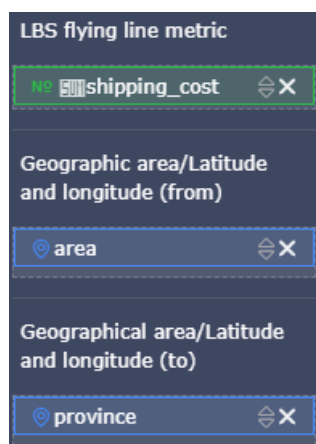
If you are using Quick BI Enterprise Standard, you must select Standard or Full Screen. The following scenario uses Standard as an example.

4. In the toolbar, click the LBS Flying Line Map icon. The blank LBS flying line map is automatically displayed in the display section.
5. Click the Data tab to select the required measure and dimensions.

In the Dimensions section, double-click area, or drag and drop it to the Geo Location (from) section. Double-click province, or drag and drop it to the Geo Location (to) section. In the Measures section, double-click shipping cost, or drag and drop it to the Routes (Measures) section, as shown in the following figure.

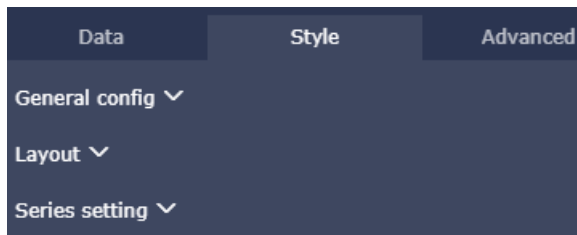
**Note:**

Make sure you have changed the data type of the province field value from String to Geo.



6. Click Update. The system automatically updates the map.

7. On the Style tab, you can change the title and layout of the map, and configure Series Settings, as shown in the following figure.



8. Click Save to save the dashboard.

Move the pointer over the upper-right corner of the window. Click the More icon that appears and choose More Actions > Delete to delete the current map.

Configure a style

- In the Basic Settings section, you can set Show Title, Show Hyperlink, and Background Color. Set Background Color to Dark in this example.
- In the Layout section, you can set Show Legend, Map, Zoom, and Map Center. Set Map Center to Google Map in this example.



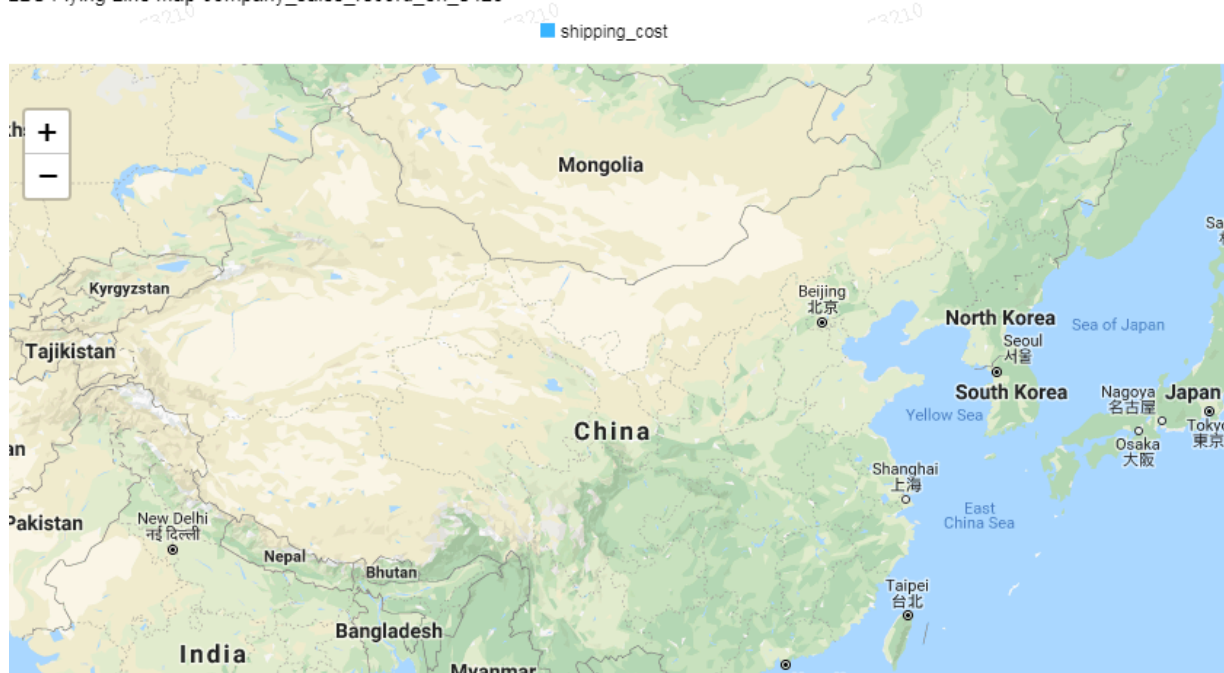
Note:

A dot is moving along each LBS route to indicate the direction of traffic. You can set Flying Time to adjust the speed of the dot. A greater value indicates a lower speed.

- In the Series Settings section, you can set the alias and color of the measure.

Click Update. A similar figure is displayed.

LBS Flying Line Map-company_sales_record_en_0423



Delete a map

Move the pointer over the upper-right corner of the window. Click the More icon that appears and choose More Actions > Delete to delete the current map.

3.5.25 Progress bars

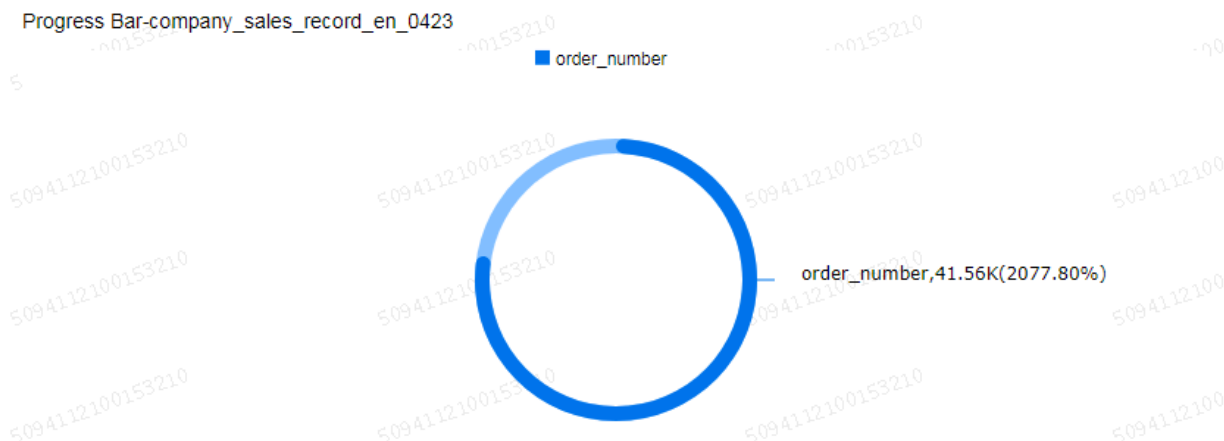
This topic describes how to create a progress bar. We recommend that you read [Dashboard overview](#) and [Basic dashboard operations](#) before you create a progress bar. You also can edit or create a dataset. For more information, see [Create a dataset](#).

Overview

A progress bar displays the progress of the current task.

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

Example of a progress bar



Precautions

- For each progress bar, one to five measures can be specified to determine the progress metrics.
- To use a progress bar, choose Style > Series Settings to specify the maximum and minimum values of each progress metric.

Scenario: Use a progress bar to display the order quantity

The following scenario is based on the company_sales_record dataset.

1. Log on to the Quick BI console.
2. On the homepage, click the Workspace tab. In the left-side navigation pane, enter a group workspace name in the text box, or click the triangle next to the text box and select a group workspace from the drop-down list. Click Datasets to go to the All Items tab.
3. Click the Create Dashboard icon in the Actions column corresponding to the company_sales_record dataset.



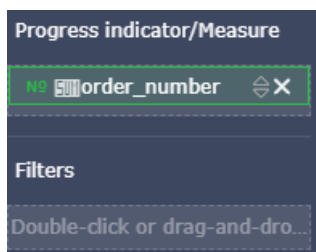
Note:

If you are using Quick BI Enterprise Standard, you must select Standard or Full Screen. The following scenario uses Standard as an example.

4. In the toolbar, click the Progress Bar icon. The blank progress bar is automatically displayed in the display section.

5. Click the Data tab to select data measures.

In the Measures section, double-click order number or drag and drop it to the Poniter (Measures) section, as shown in the following figure.



6. Click Update. The system automatically updates the bar.

7. On the Style tab, you can set Show Title, Show Hyperlink, Show Legend, and Alias, as shown in the following figure.

The screenshot shows the 'Style' tab of a configuration panel with three sections: General config, Layout, and Series settings.

- General config**
 - ☒ show
 - Title:
 - Remarks:
 - Background:
- Layout**
 - Show legend:
 - ☒ Show tooltip
- Series settings**
 -
 - Alias:
 - Min:
 - Max:
 - Format:
 - Decimal digits:

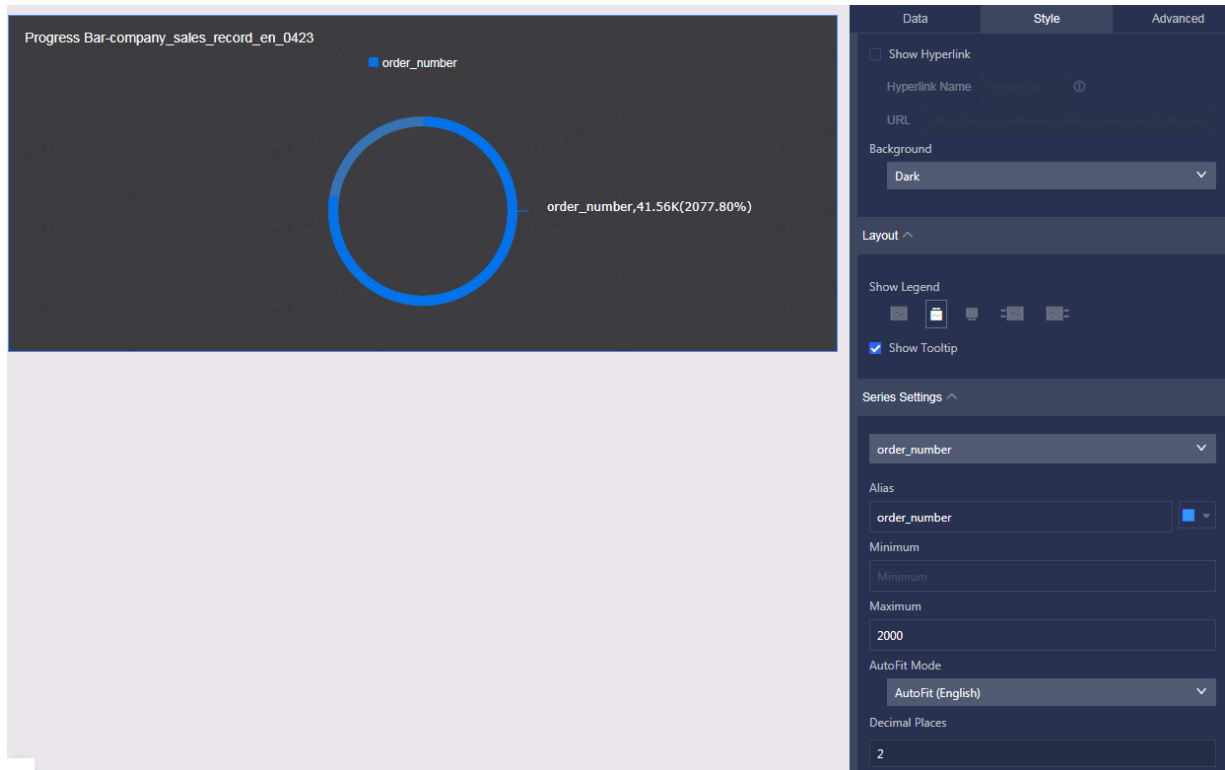
8. Click Save to save the dashboard.

Configure a style

- In the Basic Settings section, you can set Show Title, Show Hyperlink, and Background Color. Set Background Color to Dark in this example.
- In the Layout section, you can set Show Legend and Show Tooltip.

- In the Series Settings section, you can set Alias, Minimum, Maximum, AutoFit Mode, and Decimal Places.

Click Update. A similar figure is displayed.



Delete a bar

Move the pointer over the upper-right corner of the window. Click the More icon that appears and choose More Actions > Delete to delete the current bar.

3.6 Share dashboards, make dashboard public, transfer dashboards, add dashboards to favorites, and change the security level

You can share dashboards or make dashboards public.

Share a dashboard

1. Log on to the Quick BI console.
2. Select Workspaces > Dashboards.
3. On the dashboards page, select a dashboard, and click the Share icon.

4. Set the expiration date and select the users that you want to share the dashboard with, as shown in the following figure:

**Note:**

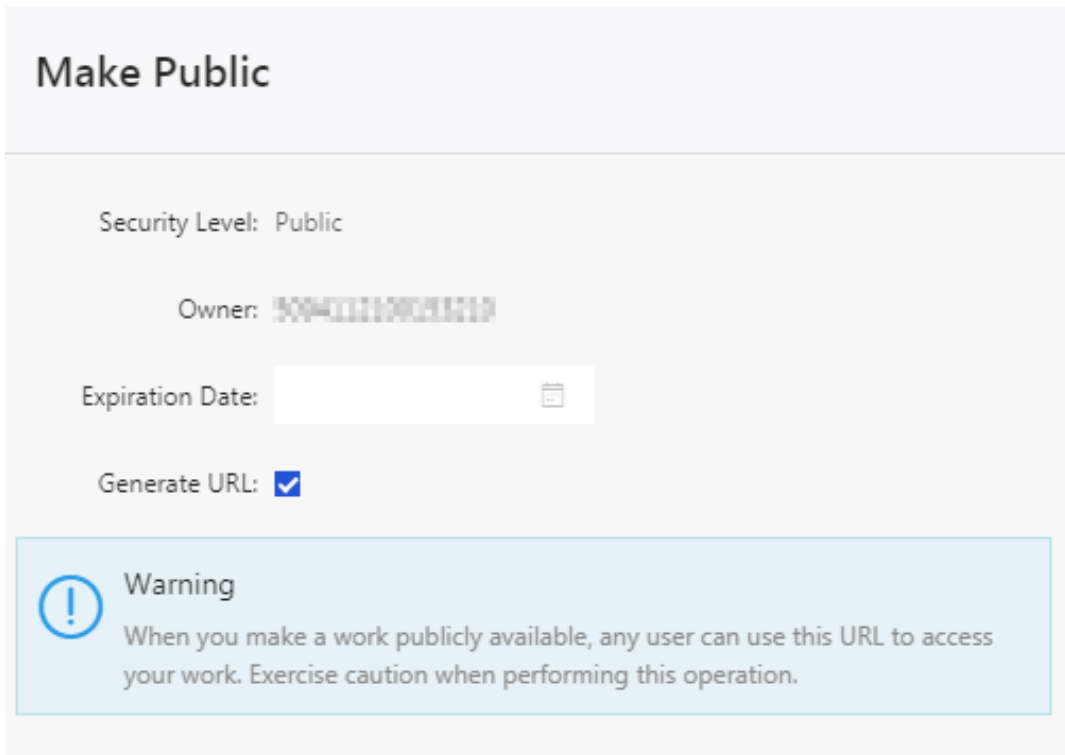
In Quick BI Pro and Quick BI Enterprise Standard, you can share dashboards with the specified user groups, the specified users, or all users. In Quick BI Standard, you can only specify users.

5. Click Save to share the dashboard.

Make a dashboard public

1. Log on to the Quick BI console.
2. Select Workspaces > Dashboards.
3. On the dashboards page, select a dashboard, right-click the dashboard and select Make Public, or click the More icon and select Make Public.


4. Set the expiration date and select Generate URL.




Make Public

Security Level: Public

Owner: 909401110000000000

Expiration Date: 

Generate URL: ☒

 **Warning**
When you make a work publicly available, any user can use this URL to access your work. Exercise caution when performing this operation.

5. Click Make Public.

Rename a dashboard, transfer it, or change its security level

1. Log on to the Quick BI console.
2. Select Workspaces > Dashboards.
3. On the dashboards page, select a dashboard, right-click the dashboard and select Properties, or click the Properties icon.
4. On the Properties page, you can rename the dashboard, transfer the dashboard to another member, or change its security level. If the security level is set to Protected, other members in the workspace can edit the dashboard. They can use

the lock function to prevent their changes from being overwritten by others'. For more information, see [Protected mode](#).

Edit Properties

* Name:

Owner:

Description:

Security Level: ☒ Private (Allow Only Workspace Owner to Edit)
☐ Protected (Allow Other Workspace Members to Edit)



Note:

The dashboard transfer and security level functions are only available in Quick BI Pro and Quick BI Enterprise Standard workspaces.

Add a dashboard to favorites

You can use the following methods to add a dashboard to favorites:

- Go to the dashboards page, click the Add to Favorites icon before the dashboard name.

standard You have added 2222222222 to favorites. My Items workspace Guide Subscriptions

dashboards All Items My Items Name ▼ 🔍 Total Files: 11 + Create Dashboard + Create Folder

Name	Created By	Modified By/At	Type	Actions
测试仪表盘	5094112100153210	5094112100153210 1/10/2019, 22:35:10	-	
测试仪表盘	5094112100153210	5094112100153210 4/22/2019, 11:16:39	Standard	

- Go to the dashboard edit page, click the Add to Favorites icon after the dashboard name.

**Note:**

You can click the Add to Favorites icon again to remove a dashboard from your favorites.

4 Create workbooks

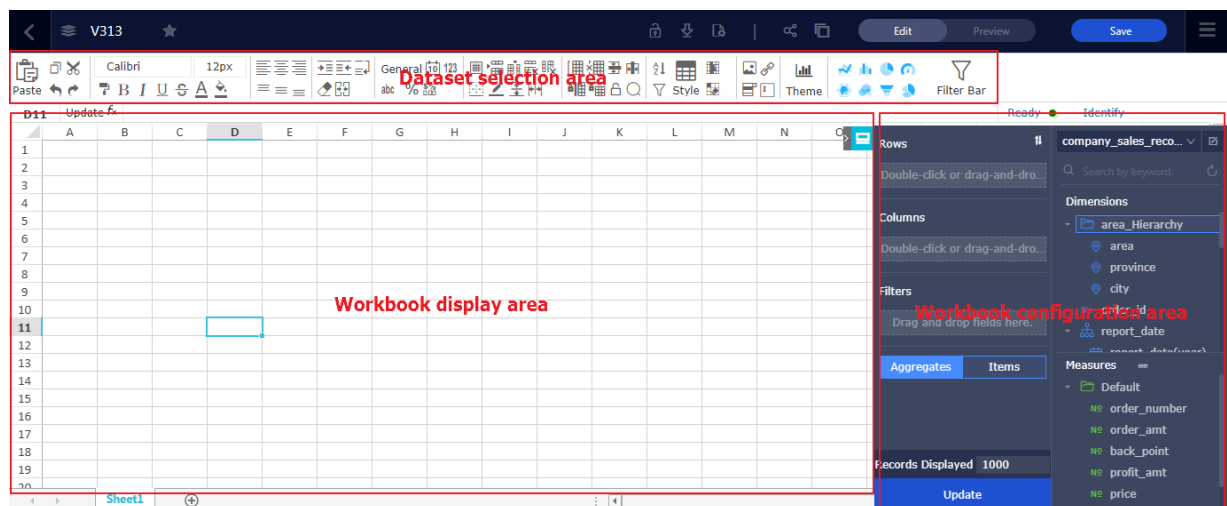
4.1 Workbook overview

Workbooks are available only in the workspace of Quick BI Pro and Quick BI Enterprise Standard. You cannot create workbooks in personal spaces. You can only add charts and filter bars in Quick BI Enterprise Standard.

Edit page description

The Edit page of a workbook is divided into the following areas:

- Dataset selection area
- Workbook configuration area
- Workbook display area



- **Dataset selection area:** In this area, you can switch datasets. The fields of each dataset are displayed in the Dimensions and Measures lists based on the data types preset in the system. You can select dimensions and measures based on the data in the chart.
- **Workbook configuration area:** In this area, you can select the expected chart type, and set the color, font, and data format of cells as needed.
- **Workbook display area:** In this area, you can reprocess data based on the displayed data in cells and reference data.

4.2 Basic workbook operations

4.2.1 Create a workbook

After the datasets have been prepared, you can create workbooks based on the prepared datasets. For more information about creating datasets, see [Create a dataset](#).

If you want to perform more complex operations on the fields, you need to go to the dataset editing page to Convert Dimension to Measure, Convert Measure to Dimension, Create Calculated Field, and Create Hierarchy.

After a dataset schema has been changed, you need to reload the workbook to view the changed dataset schema.

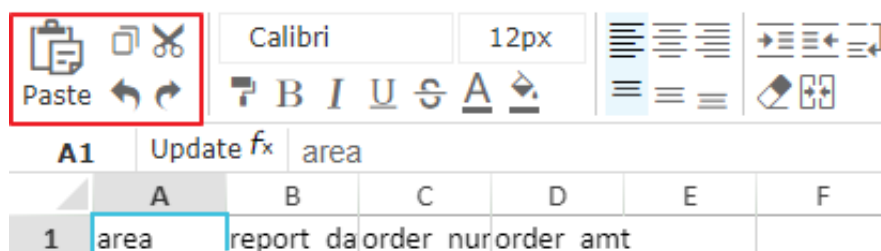
1. Log on to the Quick BI console.
2. Switch to a workspace, as shown in the following figure.
3. Click Workspace > Workbook, and enter the Workbooks page.
4. Click Create Workbook to open the workbook editing page.
5. Click the Data Preview icon to open the preview area.
6. Click the drop-down arrow to select a dataset.
7. Double-click or drag a field to the right-side panel, and then click Update.
8. The selected fields are automatically shown in the workbook.
9. Click Transpose > Update to transfer it to a two-dimensional table.
10. After you have selected the fields, click Save.
11. Enter a chart name, and select the location to save the workbook.
12. Click OK to finish creating the workbook.

4.2.2 Configure workbooks

You can configure workbooks on the Edit page.

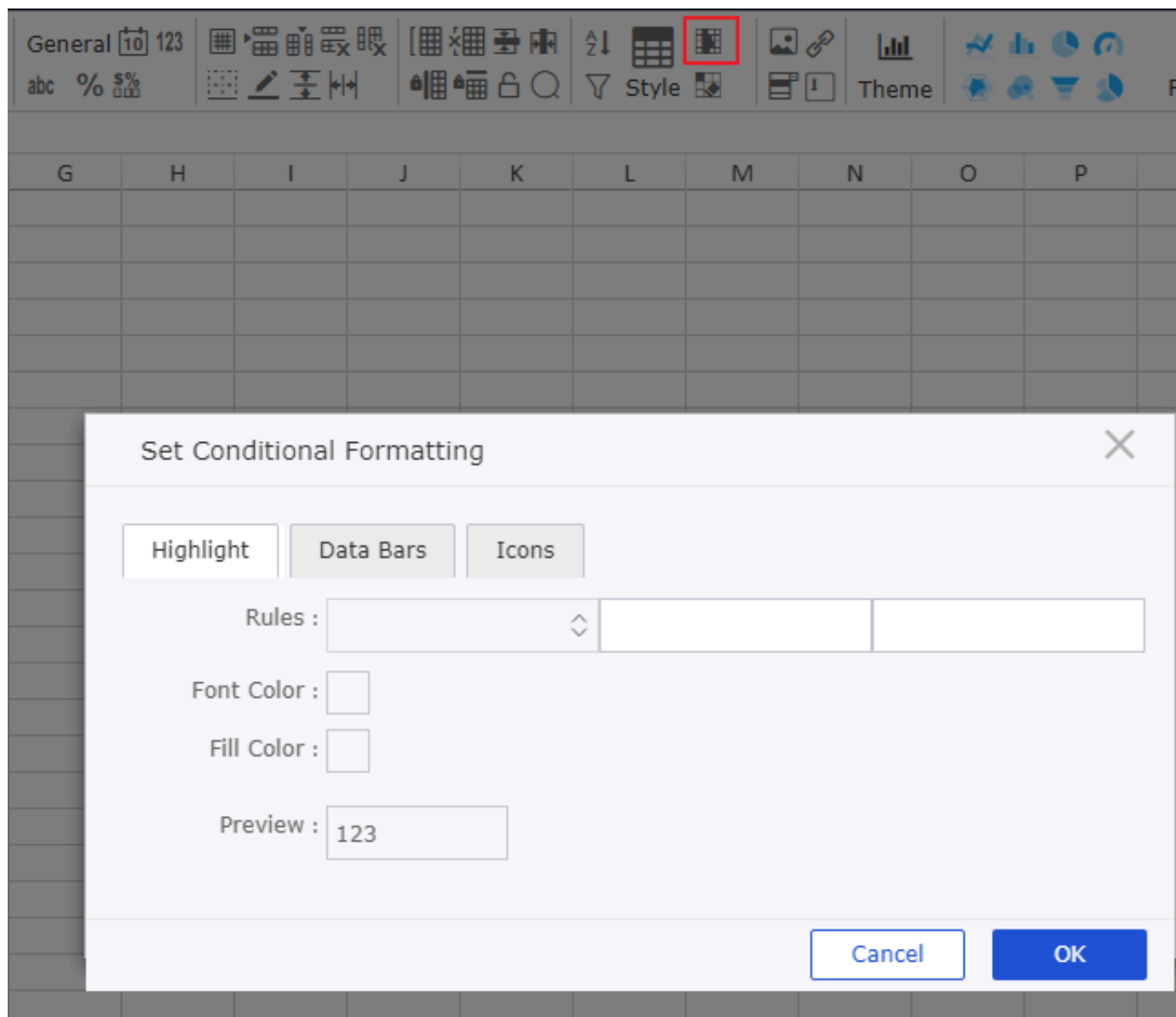
Common functions

On the workbook Edit page, you can perform multiple operations on data, including undo, redo, cut, copy, and paste, as shown in the following figure:



Conditional formatting

Click the Conditional Formatting icon to set conditional formatting rules, for example, highlight values within a specified value range.



Add images and hyperlinks

You can click the Upload Image and Hyperlink icons to add images and hyperlinks to the workbook to visually optimize the workbook, as shown in the following figure:



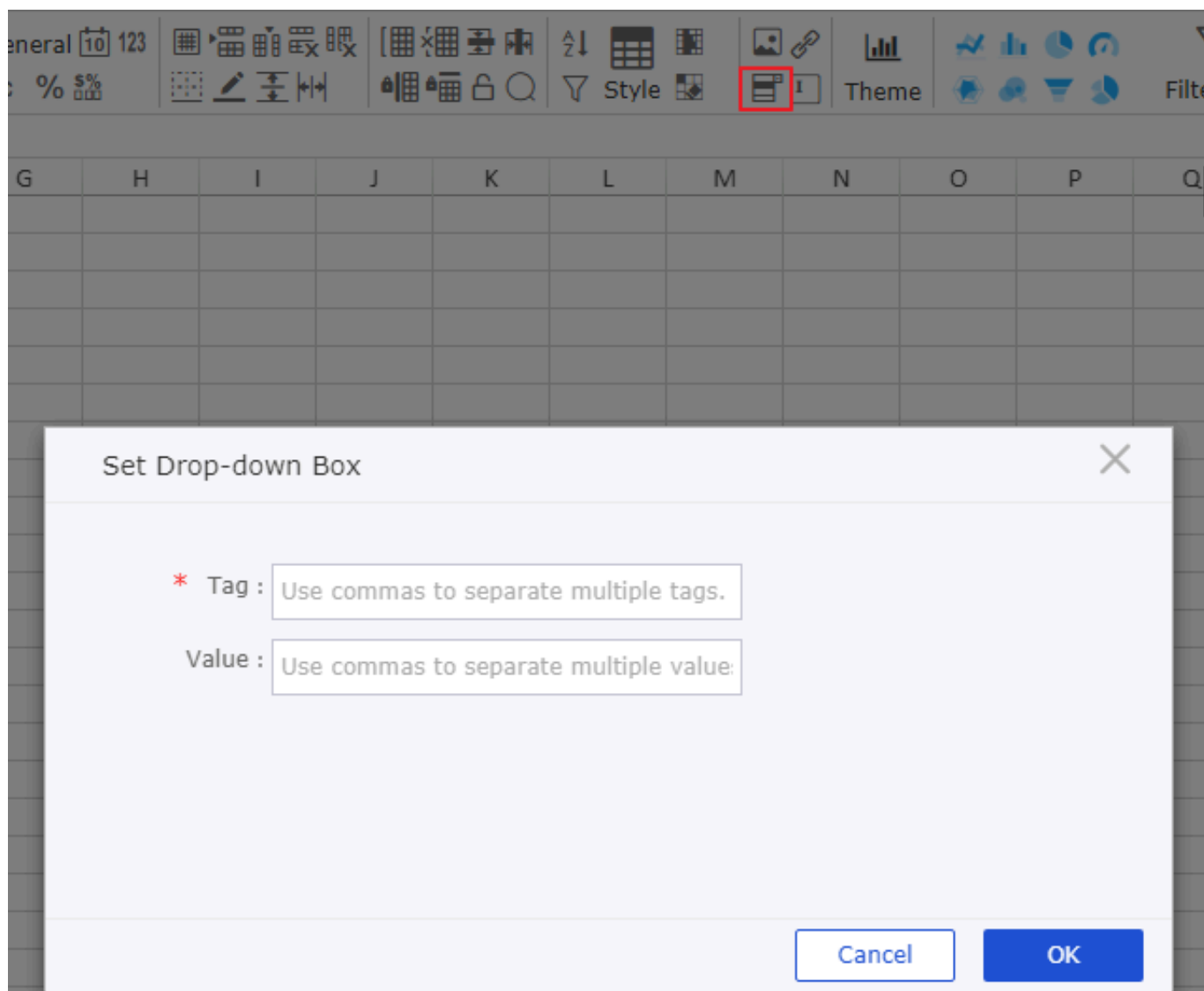
Add drop-down lists

You can click the Drop Down icon to add labels to the data records.



Note:

Separate multiple labels with commas (,).



Text format

This feature allows you to adjust the text format in charts.

- Specify the text font, color, and background.
- Specify the text size and style (bold, italic, underline, and strikethrough).
- Specify the cell style (text alignment, text wrap, text indent, and cell merge).
- Specify the text formatting method (general, number, text, percentage, date, and custom settings)



Table properties

This feature allows you to adjust table properties.

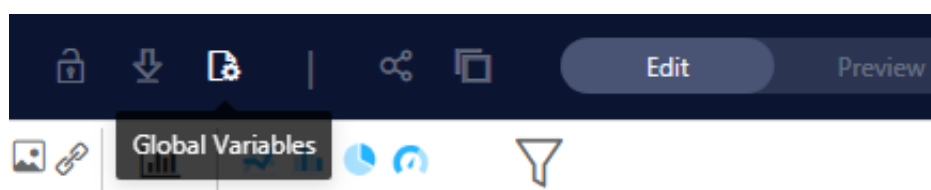
- Insert rows, insert columns, delete rows, delete columns, autofit row height, and autofit column width.
- Group, ungroup, hide rows, hide columns, freeze rows, and freeze columns.
- Set borders.
- Sort, filter, and set table styles.



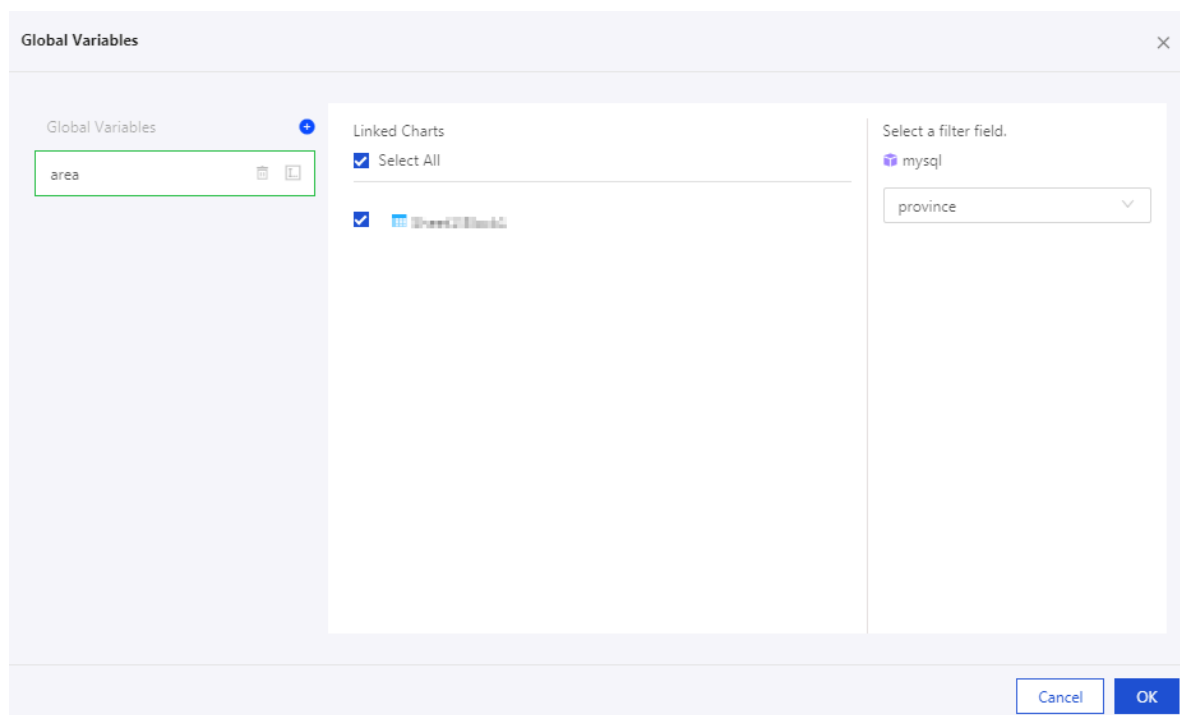
Global variables

You can set global variables in the workbook. You can use global variables to add hyperlinks to cross tables.

1. On the workbook Editing page, click the Global Variables icon.



2. In the Global Variables dialog box, enter the required variable and click OK, as shown in the following figure:



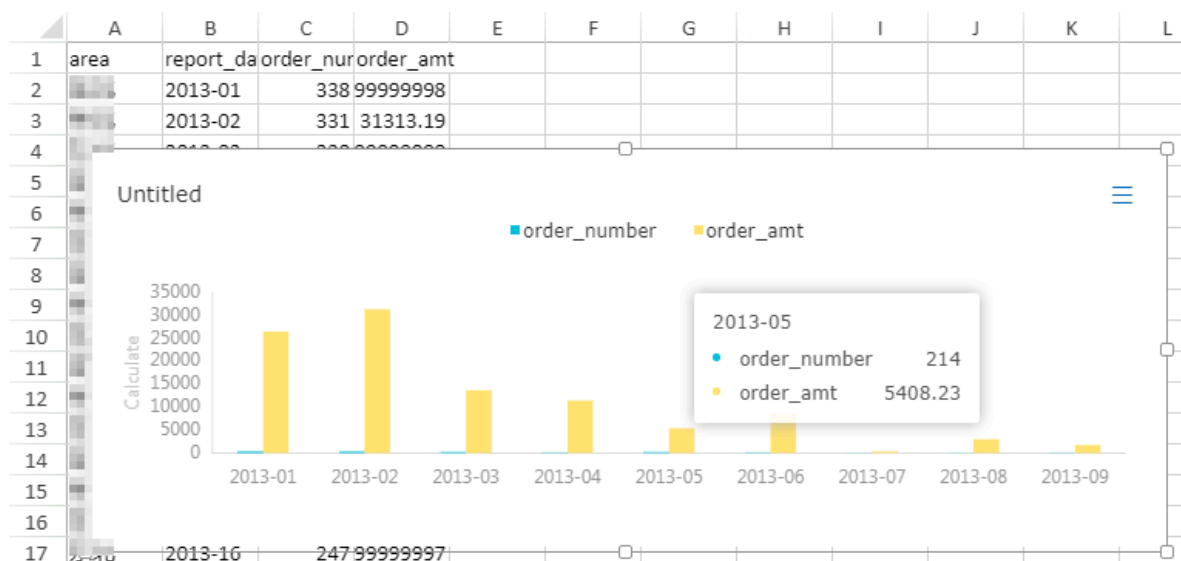
Create charts

In the workbook, you can create charts based on the data in the workbook. Currently, you can create the following types of charts: line, vertical bar, pie, funnel, scatter, and radar charts. You can also create gauges and polar diagrams.

1. You can click a chart icon to create a chart, such as a vertical bar chart.
2. You need to select data sources in the workbook to create charts.

[illegible]

3. Click OK. A chart is automatically created in the workbook.



4.2.3 Highlight pivot tables

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

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

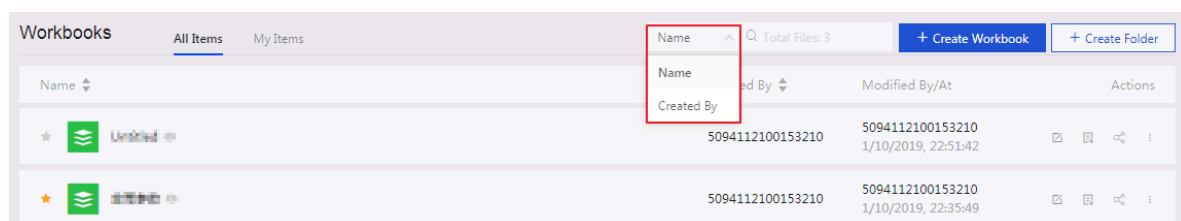
You can modify the display name for different pivot tables.

4.3 Search, move, and delete workbooks

You can search, move, and delete the workbooks that you have created.

Search workbooks

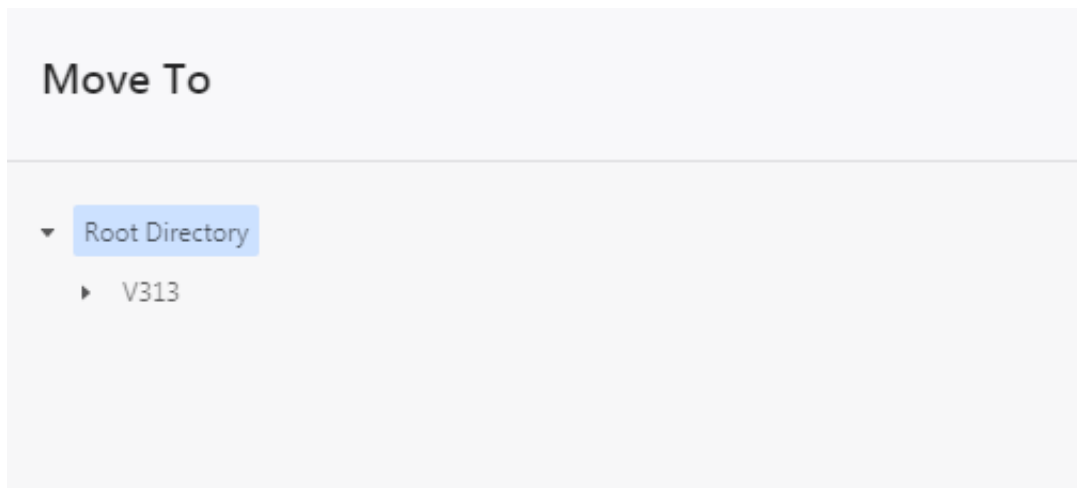
1. Log on to the Quick BI console.
2. Click Workbooks, enter a workbook name or username in the search box on the workbooks page.



3. Click the Search icon to search for the workbook.

Move workbooks

1. Log on to the Quick BI console.
2. Click Workbooks, select a workbook on the workbooks page. Click the More icon, or right-click the workbook.
3. Select Move To.
4. Select a directory and click Save.



Delete workbooks

1. Log on to the Quick BI console.
2. Click Workbooks, select a workbook on the workbooks page. Click the More icon, or right-click the workbook.
3. Select Delete to delete the workbook.

4.4 Manage workbooks

On the workbooks page, you can create, rename, and delete workbook folders.

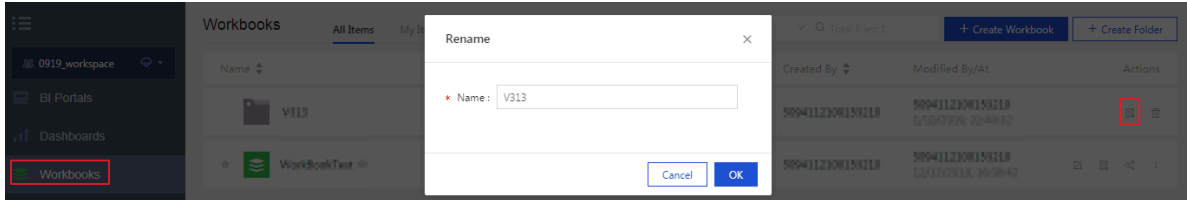
Create a workbook folder

1. Log on to the Quick BI console.
2. Click Workbooks, click Create Folder on the workbooks page, and enter a folder name.
3. Click OK to create the folder.



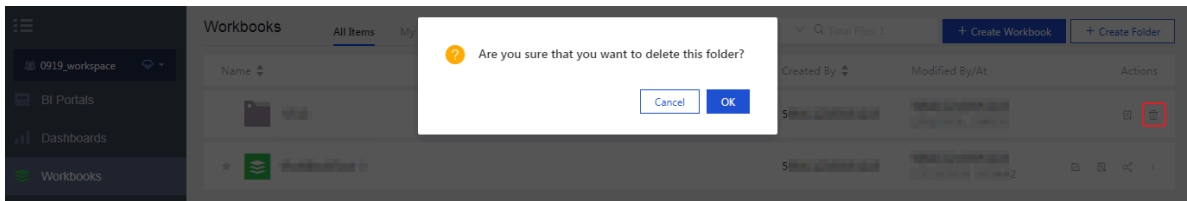
Rename a workbook folder

1. Log on to the Quick BI console.
2. Click Workbooks, select a workbook folder on the workbooks page, click the Rename icon, or right-click the folder and select Rename.
3. Enter a new folder name, and click OK.



Create a workbook folder

1. Log on to the Quick BI console.
2. Click Workbooks, select a workbook folder on the workbooks page, click the Delete icon, or right-click the folder and select Delete.
3. Click OK to delete the workbook folder.



5 BI portals

5.1 BI portal overview

A BI portal is a set of dashboards, workbooks, and external links organized with menus. You can use a BI portal to perform complex topic-based data analysis with navigation menus.

5.2 Create a BI portal

This topic describes how to create a BI portal.

Procedure

1. Log on to the Quick BI console, and select a workspace.
2. In the left-side navigation pane, select BI Portals.
3. Click Create BI Portal.



4. On the BI portal edit page, set the parameters, and then click Save.

5.3 Configure page settings

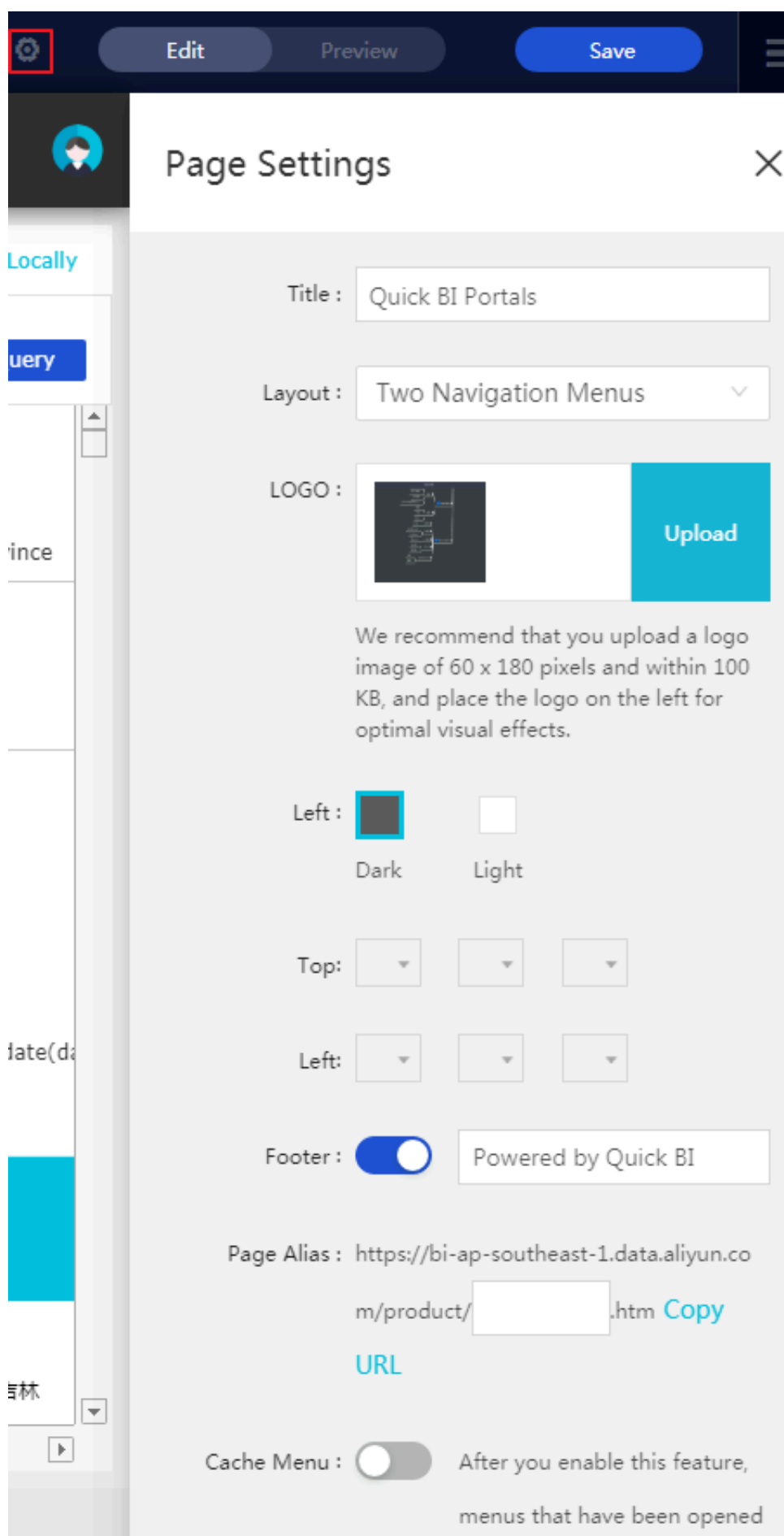
On the page settings page, you can set the title, logo, and footer of a BI portal page.

Procedure

1. Log on to the Quick BI console, and select a workspace.
2. In the left-side navigation pane, select BI portals.
3. On the BI portals page, click a BI portal name.

You can also create a BI portal. For more information, see [Create a BI portal](#).

4. Click the Settings icon to edit the BI portal page.



5. Click Save.

5.4 Configure menus

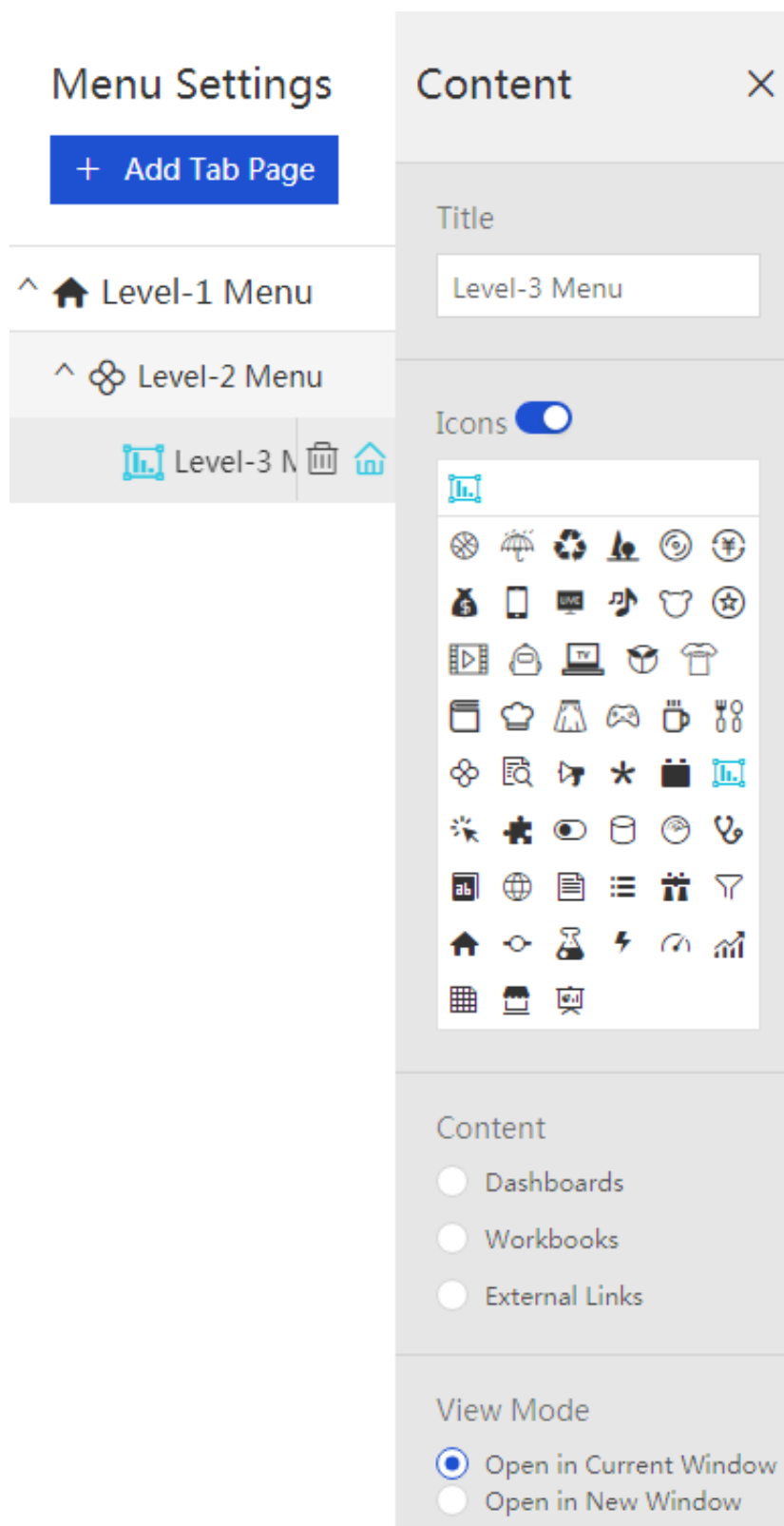
On the menu settings page, you can set the title, links, and other information of a menu.

Procedure

1. Log on to the Quick BI console, and select a workspace.
2. In the left-side navigation pane, select BI Portals.
3. On the data portals page, click a BI portal name.

You can also create a BI portal. For more information, see [Create a BI portal](#).

4. Select a menu level from the left-side list, and edit the menu on the right-side Detail Settings page.



- You can select a menu on the Menu Settings page and edit the menu.
- You can add dashboards or workbooks to menus.

5. Click Save.

5.5 Share, rename, and transfer BI portals and change security level

The share function allows you to share BI portals with other users. You can edit the properties of a BI portal. You can rename a BI portal, transfer it to another user, or change its security level.

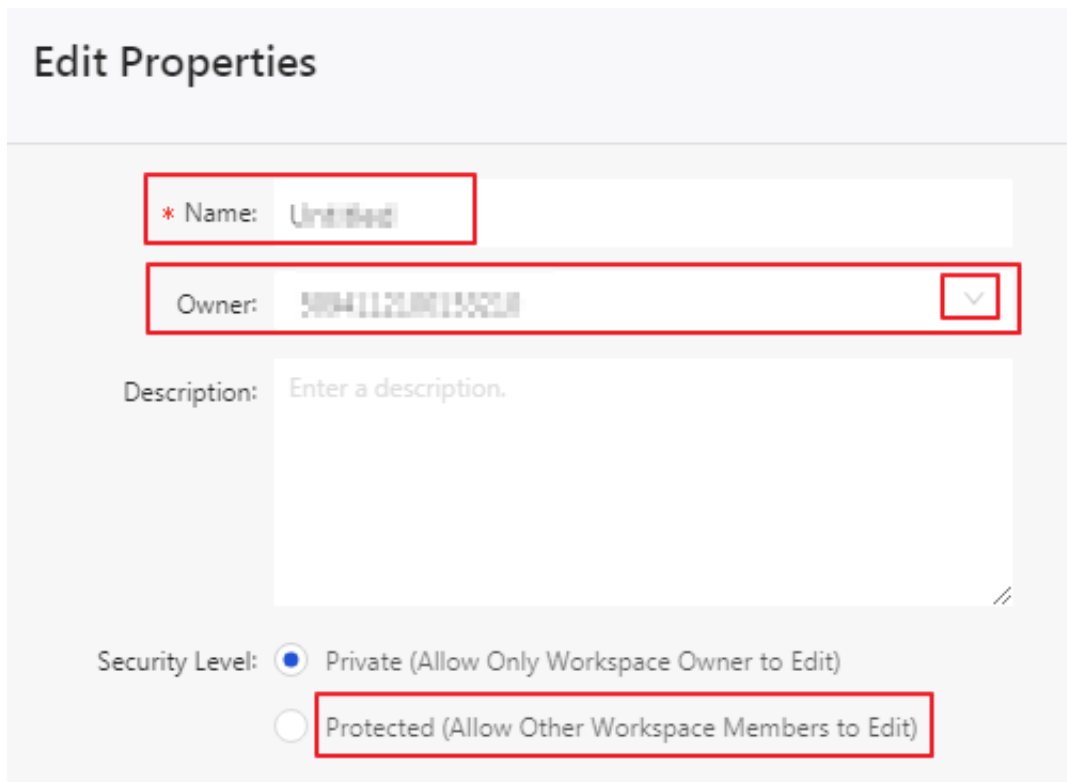
Share a BI portal

1. Log on to the Quick BI console, and select a workspace.
2. In the left-side navigation pane, select BI Portals.
3. On the BI portals page, right-click a BI portal, and select Share.
4. Set the expiration date and select the users that you want to share the BI portal with.

Rename a BI portal, transfer it, or change its security level

1. Log on to the Quick BI console, and select a workspace.
2. In the left-side navigation pane, select BI Portals.
3. On the BI portals page, right-click a BI portal, and select Edit Properties.
4. On the properties page, you can rename the BI portal, transfer it to another user in the workspace, or change its security level. If the security level is set to Protected, other members in the workspace can edit the BI portal. They can use the lock

function to prevent their changes from being overwritten by the other users. For more information, see [Protected mode](#).



Note:

The BI portal transfer and security level functions are only available in group workspaces.

5.6 BI portal menu permissions

For more information about managing permissions of BI portal menus, see [Configure BI portal menu permissions](#).

6 Privilege control

6.1 Basic concepts of permission management

Permission management include data object management and row-level permission management.

Data objects include data sources, datasets, workbooks, dashboards, and portals.

Data object management is classified based on the workspace types, which include the personal workspace and the workspace.

Row-level permission

You do not need to configure row-level permission for all fields in a dataset. Configure row-level permission for certain fields as needed.

Currently, for a single field, the maximum number of values that can be shown on the list is 500. If the number of values exceeds 500, you can add the excess values to the list manually.

You can find the All check box on the list. If you select the All check box (equivalent to selecting all values of a field) for a member of the organization, then the member can access the dataset without restriction from this field. You do not need to reselect the All check box after adding or deleting values for this field.

Significant time for configuring permissions is saved for administrators through selecting the All check box.

Manage data objects in a workspace

Quick BI supports sharing and publishing data objects in a workspace.

Share data objects in a workspace

Quick BI supports sharing workbooks, dashboards, and portals. Shared data objects are read-only for other Alibaba Cloud accounts and RAM users. Other Alibaba Cloud accounts and RAM users do not have permission to modify, delete or save the data objects.

- Only the owner of the data object and the administrators of the workspaces have permissions to share the data object.

- If you clear the Works can be authorized checkbox for a workspace, then the data objects in this workspace cannot be shared.
- Currently, data objects can only be shared with Alibaba Cloud accounts and RAM users of the same organization.

Members can access the data objects in the workspace that they belong to.

Data objects can be shared with members of the same organization. Authorized users can view the shared data objects in their own personal workspaces.

Publish data objects in a workspace

Data objects that have been published can be accessed by everyone using the URLs.

We recommend that you do not publish data objects that involve private business data

.

Manage data objects in the personal workspace

Only the owner of a personal workspace has permission to perform operations on the data objects.

Share data objects in the personal workspace

Quick BI supports sharing workbooks, dashboards, and portals. Shared data objects are read-only for other Alibaba Cloud accounts and RAM users. Other Alibaba Cloud accounts and RAM users do not have permissions to modify, delete or save the data objects.

- Only the owner of the data objects has permission to share them.
- Data objects can only be shared with users of Alibaba Cloud Quick BI.

Authorized users can view the shared data objects in their own personal workspaces.

Publish data objects in the personal workspace

Data objects that have been published can be accessed by everyone using the URLs.

We recommend that you do not publish data objects that involve private business data

.

6.2 Configure row-level permissions

Row-level permissions are performed based on datasets. Quick BI supports the following authorization modes: User/User Group Authorization and Tag

Authentication. Currently, only Quick BI Pro and Quick BI Professional Edition support performing row-level permissions based on datasets.

The User/User Group Authorization mode applies to scenarios that involve a small number of members. The Tag Authentication mode applies to scenarios that involve a large number of members. Tag Authentication authorizes all users at once instead of implementing authorization for users/user groups separately. In scenarios that involve a large number of members, using Tag Authentication reduces costs and complexity for configuring row-level permissions and makes it easier for management.

User/User Group Authorization

1. Log on to the Quick BI console.
2. Select a workspace. If you need to create a workspace, see [Create a workspace](#).
3. Click the Datasets icon to jump to the Datasets page.
4. Select a dataset. Click the More icon in the Actions column or right click the dataset.
5. Select Row-Level Permissions.
6. Select the Enable Row-Level Access Control > User/User Group Authorization checkbox to enable row-level permissions.

7. Click the drop-down arrow. Select the fields to perform row-level permissions, such as province and metrics, as shown in the following figure.

Grant Row-Level Permissions to Dataset company_sales_record_en

☒ Enable Row-level Access Control Fields: province, Measure Value

Authorize: ☐ Tag ☒ Users/User Groups

User Groups Users

Search by keyword.

Permission To

- ✓ ☐ Configured Permissions
 - ✓ ☐ Measure Value
 - ✓ ☐ province
- ✓ ☐ Inherited Permissions (Locked)
 - ✓ ☐ Measure Value
 - ✓ ☐ province

Notes:

1. Only the first 500 members are listed. However, you can manually add more members.
2. The two authorization modes are mutually exclusive, and you can select only one mode.

Close

The values of the metrics field are the metrics in the dataset. By performing row-level access permissions on the metrics field, users have access to different data rows that are corresponding to the values of the metrics field.

8. Click the province field in the Permissions list. Then all values of the province field are listed as shown in the following figure.

9. Select a member. Then select the values of the province field to grant row-level permission to the user as shown in the following figure.

Grant Row-Level Permissions to Dataset company_sales_record_en

☒ Enable Row-level Access Control Fields: province, Measure Value

Authorize: ☐ Tag ☒ Users/User Groups

User Groups Users

Search by keyword. Q

example4
ASDF
5094112100153210

Permission To

- Configured Permissions
 - Measure Value
 - province
- Inherited Permissions (Lock...)
 - Measure Value
 - province

Select Specify

Search by keyword. Q

☐ All
☐ Anhui
☒ Beijing
☒ Fujian
☐ Gansu
☐ Guangdong
☐ Guangxi

Add

Notes:

- Only the first 500 members are listed. However, you can manually add more members.
- The two authorization modes are mutually exclusive, and you can select only one mode.

Close

The member can only view the data rows where the value of the province field is Shanghai or Yunnan.



Note:

Specify for all members of the workspace whether they have permissions to access the data rows that are corresponding to the values of the field, on which row-level permissions have been performed. Members, who haven't been specified the permission for, do not have permissions to access any data reports generated from the dataset by default.

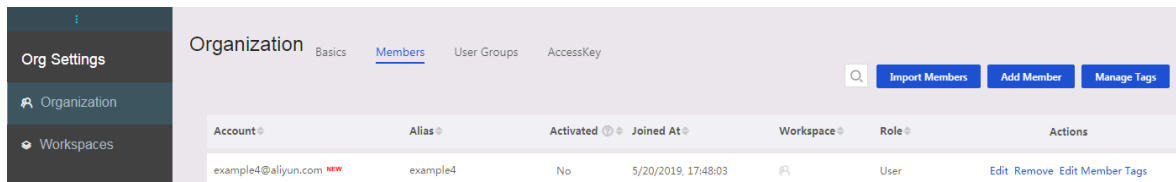
10. Click Add to complete the configuration of row-level permissions.

Tag Authentication

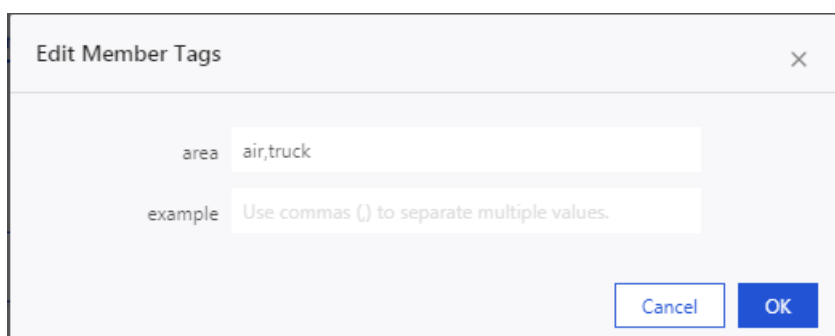
Scenario: Users can only access the data rows in the company_sales_record dataset where the value of the shipping_type is truck or air.

Set member tags

1. On the Settings page, select Edit Member Tags in the Actions column for the member to authorize as shown in the following figure.



2. In the Edit Member Tags dialog box, set the value of the area tag to air, truck and click OK.



After setting the member tags, set tag authentication in the Row-Level Access dialog box for the dataset.

Set tag authentication

1. Select the company_sales_record dataset. Click the More icon in the Actions column or right click the dataset.
2. Select Row-Level Permissions.
3. Select the Enable Row-Level Access Control > Tag Authentication check box to enable row-level permissions.

4. From the Field drop-down list, select `shipping_type`. Select area as Tag Parameter. Click OK to complete the settings.

Grant Row-Level Permissions to Dataset company_sales_record_en

☒ Enable Row-level Access Control Fields: shipping_type

Authorize: ☒ Tag ☐ Users/User Groups

Field	Tag	Actions
shipping_type	area	Delete

Cancel OK

After tag authentication is complete, the user can only access data rows where the `shipping_type` is air or truck.

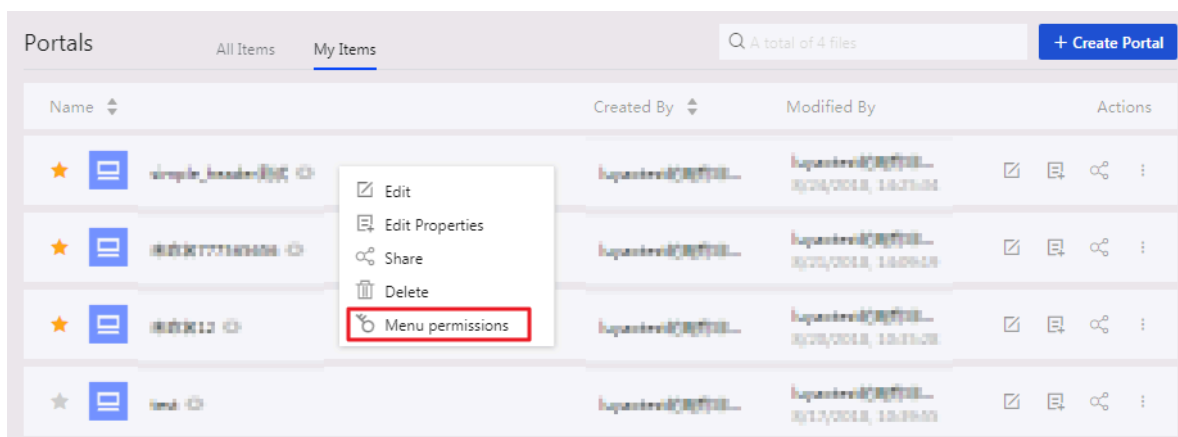
6.3 Configure BI portal menu permissions

Workspace administrators can manage permissions to view BI portal menus.

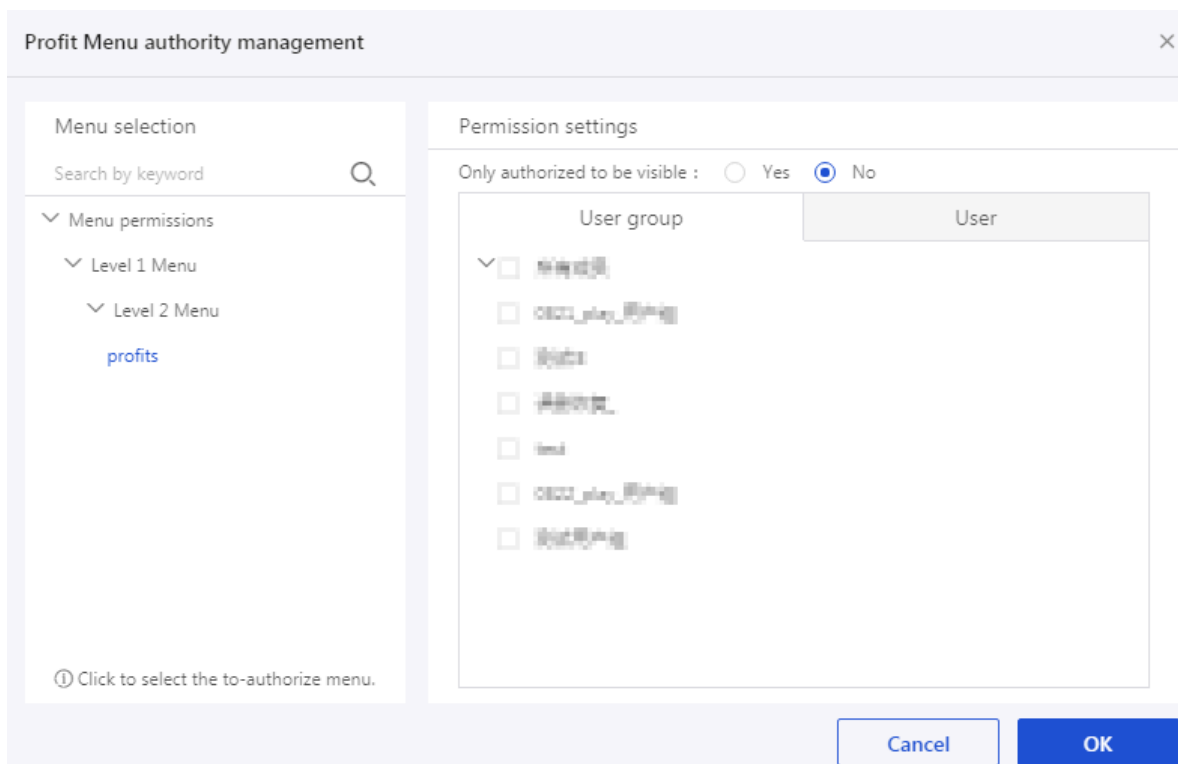
You can grant menu permissions to a specified user or user group. Procedure:

1. Log on to the Quick BI console.
2. Select the target workspace. For more information about creating a workspace, see [Create a workspace](#).
3. In the left-side navigation pane, click BI Portals to go to the BI Portals page.

4. On the BI Portals page, select the target portal and click the More icon in the Actions column, or right-click the target portal and select Menu Permissions, as shown in the following figure:



5. In the Manage Menu Permissions dialog box, select the target menu, specify whether the menu is available only to authorized users, and select the users or user groups that you need to authorize.



Note:

For more information about Available Only to Authorized Users, see the following description:

- **Yes:** Only authorized user groups and users have permissions to view the specified menu.
- **No:** All users have permissions to view the specified menu.

For more information about user groups, see [Create a user group](#).

6. Click OK to complete the configuration.

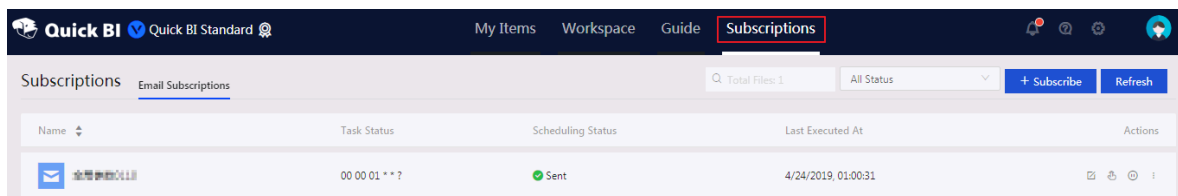
7 Email subscriptions

The email subscription function of Quick BI allows you to use emails to send pictures of dashboards or workbooks to users periodically. This function is only available in Quick BI Pro and Quick BI Enterprise Standard.

7.1 Create an email subscription

You can create an email subscription to send emails to the specified recipients.


1. Log on to the Quick BI console.
2. Click Subscriptions.
3. On the email subscriptions page, click +Subscribe.



4. On the Subscribe page, set the following parameters:

*Subject :

Header :


*Body : (To ensure that emails can be sent properly, we recommend that the dashboard does not exceed 4,000 pixels in height, and the workbook has up to 200 rows and 50 columns.) 

Selected :	Available :
<div></div>	<div></div>

Footer :

*Owner :

*Recurrence : (Currently, the Asia/Shanghai time is used.)

*Start From : 

*Recipients :

- **Subject**
- **Header:** the header of the email.
- **Body:** the main content of the email, which can be a dashboard or workbook.
To make sure that the email can be sent properly, we recommend that the

dashboard contains no more than 4,000 pixels in height and the workbook contains no more than 200 rows and 50 columns.

*Body : (To ensure that emails can be sent properly, we recommend that the dashboard does not exceed 4,000 pixels in height, and the workbook has up to 200 rows and 50 columns.)

DefaultWorkspace

Selected :

sheet

×

Available :

Table of Contents

^ Dashboards

^ Workbooks

- **Footer:** the footer of the email.
- **Owner:** the user that creates the email subscription. The owner cannot be changed.
- **Recurrence:** the frequency for sending emails.

*Recurrence : 00 00 00-00/01 * * ?

(Currently, the Asia/Shanghai time is used.)

*Start From : Hourly Daily Weekly Monthly

*Recipients : Interval (Hours): 01

Start At: 00 : 00

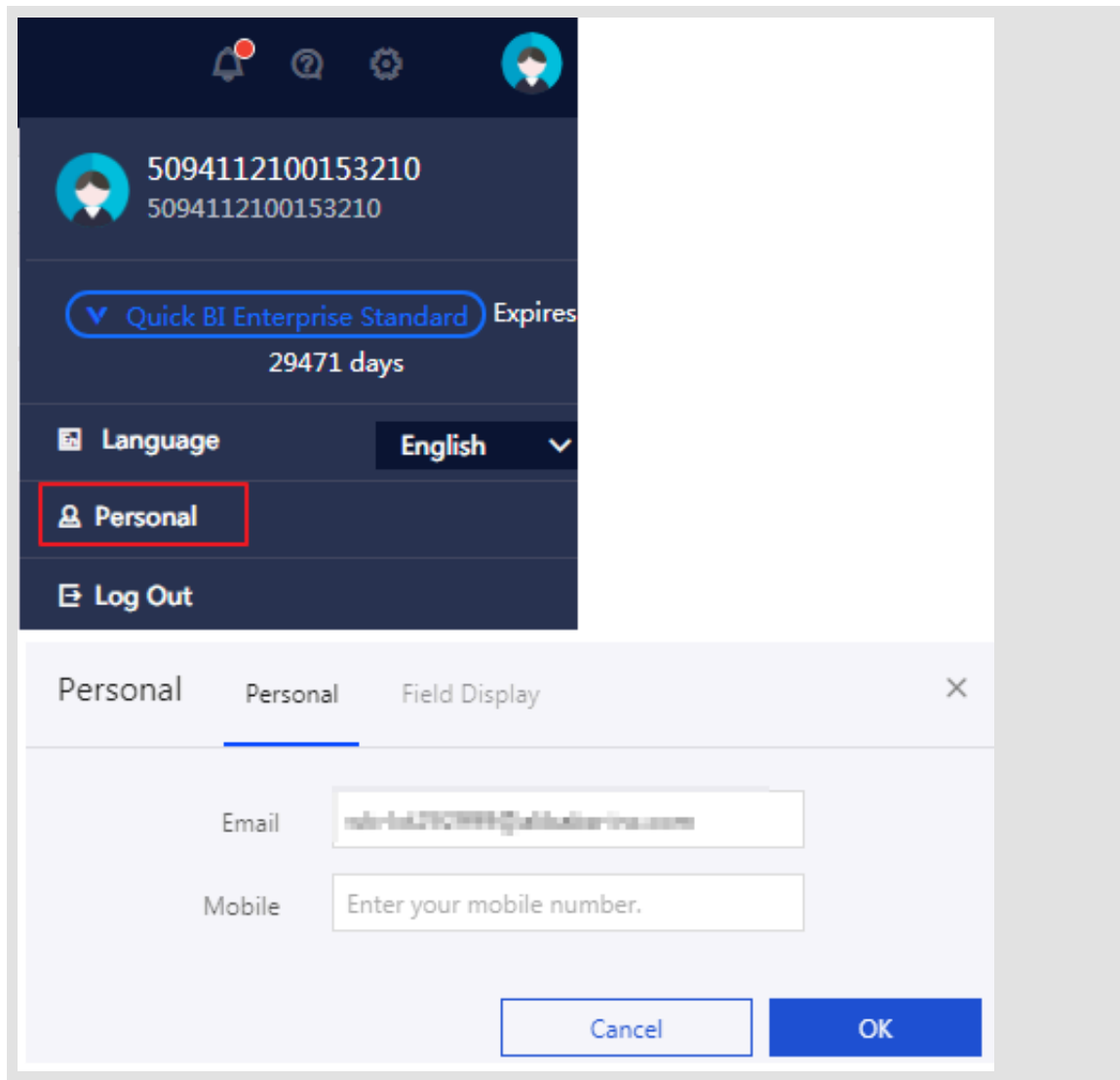
End At: 00 :59

- **Start From**
- **Recipients:** only Alibaba Cloud accounts in the same organization are supported. If an account is in the grey color, this means that the account does not have an email address. You must set an email address for the account first.



Note:

You can set an email address for the account in the Personal settings, as shown in the following figure:



5. Click Save to create the email subscription.

7.2 Manage email subscriptions

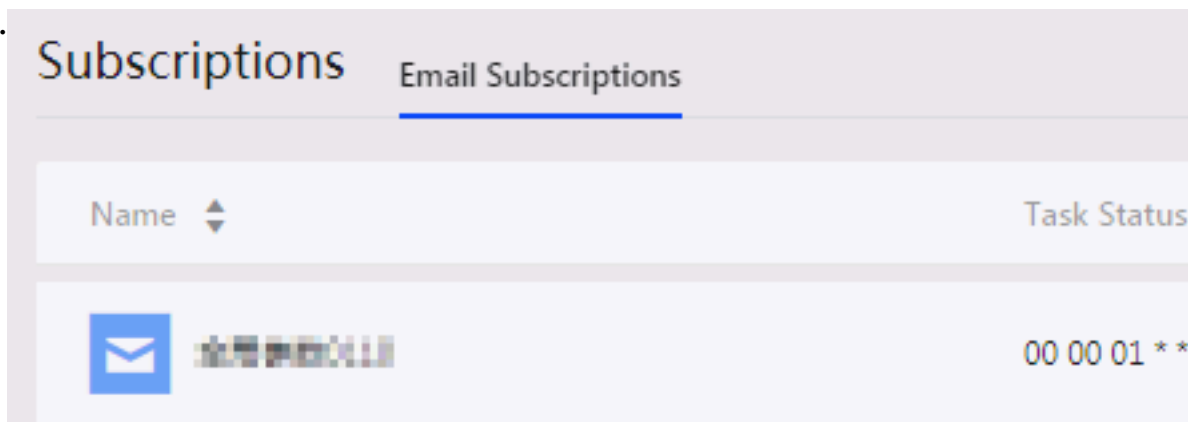
You can go to the subscriptions page to manage the email subscriptions you have created.

The following operations are all completed on the subscriptions page. Follow these steps to go to the subscriptions page:

1. Log on to the Quick BI console
2. Click Subscriptions to go to the email subscriptions page.

Search email subscriptions

Enter an email subscription name into the search box and select an email status to search for the email subscription.









Note:

The following email statuses are available:

- Pending Schedule
- Sending
- Sent
- Canceled
- Error

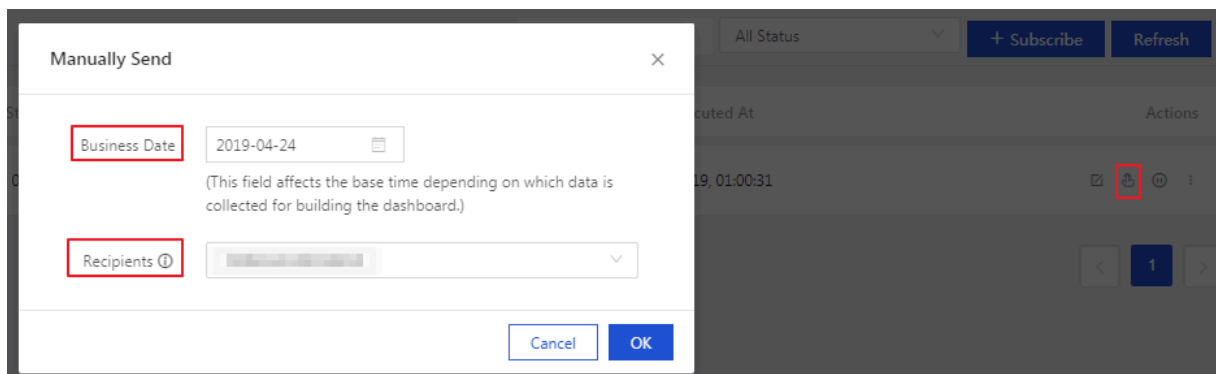
Edit email subscriptions

Click the Edit icon to edit an email subscription.

Name	Task Status	Scheduling Status	Last Executed At	Actions
 全局参数0110	00 00 01 * * ?	 Sent	4/24/2019, 01:00:31	   

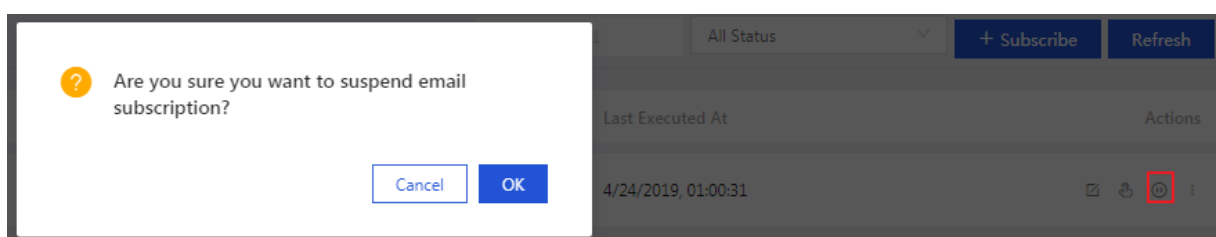
Manually send emails

Click the Manually Send icon, and set the business date and recipients in the dialog box. This function ignores the email subscription schedule and sends an email immediately. The business time affects the base time depending on which data is collected for building the dashboard.



Suspend scheduling

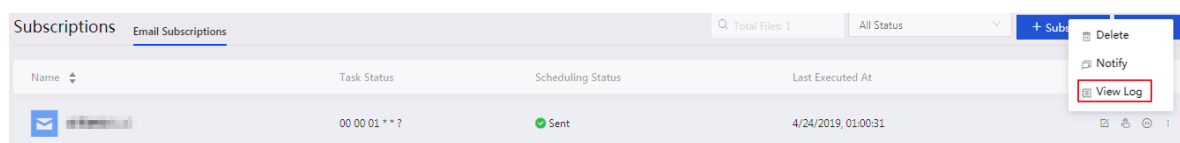
Click the Suspend Scheduling icon to suspend an email subscription.



More actions

Click the More icon to perform the following actions:

- **Delete:** delete the email subscription.
- **Notify:** send a notification to the subscription user.
- **View log:** view the email subscription log as shown in the following figure. You can check the log when the system failed to send emails.



8 Create a report

8.1 Build reports

The Report Building Service (RBS) supports the What You See Is What You Get (WYSIWYG) feature for designing data applications. You can use widgets and templates to generate charts for PC users and mobile users. Charts such as the dashboard, workbook, and classic workbook can be shared, published, and transferred to allow readers to see the created charts.



Note:

The classic workbook is a beta feature and is not supported in future releases. Additionally, the classic workbook does not support custom group fields, data type conversion, snowflake schemas association, or database data association across different sources.

Service components

Create and manage dashboards

Create an interactive dashboard style chart. Dashboard charts include the following features:

- Supports dividing the dashboard into 12 sections.
- Supports 35 types of charts including bar, pie, dashboard, radar, polar, funnel, and card, and 5 types of widgets including the filter bar, text area, iFrame, TAB, and image.
- Supports global parameters, linkage, link (only for tables and scatters), drilling, and linkage query.
- Supports row-level permissions

Create and manage data applications

Data applications are the collections of the pre-defined dashboards. It provides you with an interactive selection feature that is similar to a menu, including the following features:

- Create and edit data applications based on templates.
- List, view, and delete data applications.

Share and transfer data works, and manage permissions

The system allows you to share and transfer charts you have created to readers with the following features:

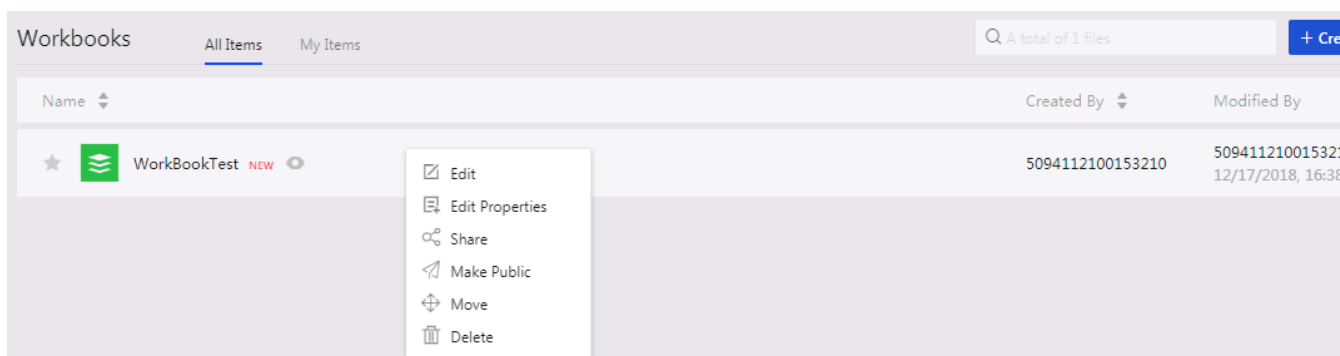
- Transfer and share dashboards and data applications.
- Manage permissions for accessing dashboards and data applications.
- Use the permission hierarchy and inheritance to control access for dashboards and data applications.

8.2 Manage files

Data portals are also called data applications. You can query and edit your own chart files.

Procedure

1. Log on to the Quick BI console.
2. Click Workspace > Workbooks to enter the Workbooks page.
3. Select and right-click a workbook, as shown in the following figure.



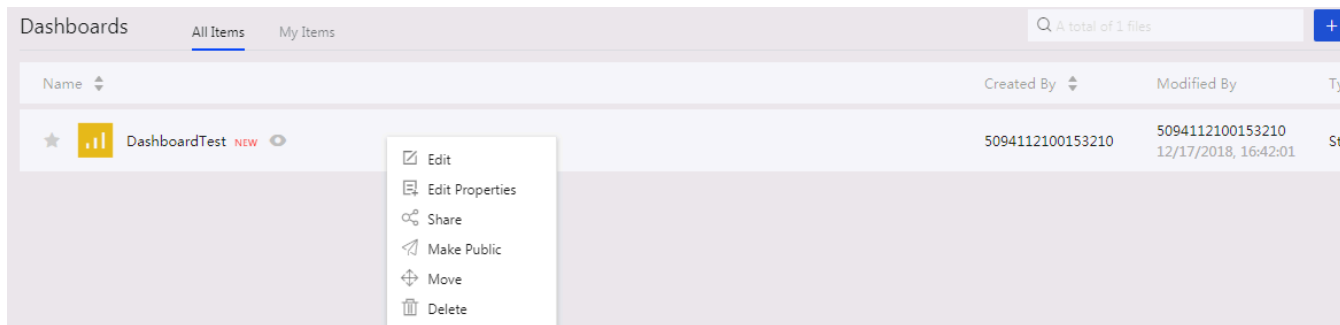
- **Edit:** Edit the workbook.
- **Edit Properties:** Edit the workbook name.
- **Share:** Share the workbook with other users in a specific period.
- **Make Public:** Allows visitors to access the workbook through a generated link without logging on to the system.
- **Move:** Move the workbook to another directory.
- **Delete:** Delete the workbook.



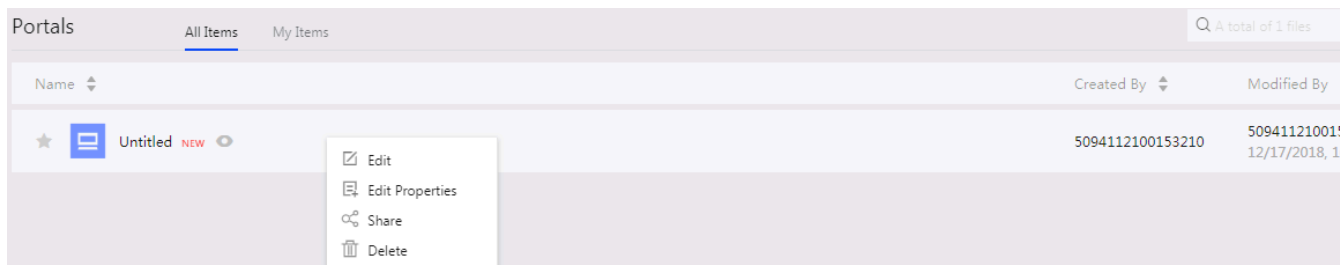
Note:

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

4. Click Dashboards to enter the Dashboards page.
5. Select and right-click a dashboard, as shown in the following figure.



- **Edit:** Edit the dashboard.
 - **Edit Properties:** Edit the dashboard name.
 - **Share:** Share the workbook with other users in a specific period.
 - **Make Public:** Allows visitors to access the workbook through a generated link without logging on to the system.
 - **Move:** Move the dashboard to another directory.
 - **Delete:** Delete the dashboard.
6. Click Portals to enter the Portals page.
 7. Select a portal, and right-click it, as shown in the following figure.



- **Edit:** Edit the portal.
- **Edit Properties:** Edit the portal name.
- **Share:** Share the workbook with other users in a specific period.
- **Delete:** Delete the portal.