

Alibaba Cloud Quick BI Quick Start

Issue: 20190604

Legal disclaimer

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

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

or trust in this document, even if Alibaba Cloud has been notified of the possibility of such a loss.

5. By law, all the content of the Alibaba Cloud website, including but not limited to works, products, images, archives, information, materials, website architecture, website graphic layout, and webpage design, are intellectual property of Alibaba Cloud and/or its affiliates. This intellectual property includes, but is not limited to, trademark rights, patent rights, copyrights, and trade secrets. No part of the Alibaba Cloud website, product programs, or content shall be used, modified, reproduced, publicly transmitted, changed, disseminated, distributed, or published without the prior written consent of Alibaba Cloud and/or its affiliates. The names owned by Alibaba Cloud shall not be used, published, or reproduced for marketing, advertising, promotion, or other purposes without the prior written consent of Alibaba Cloud. The names owned by Alibaba Cloud include, but are not limited to, "Alibaba Cloud", "Aliyun", "HiChina", and other brands of Alibaba Cloud and/or its affiliates, which appear separately or in combination, as well as the auxiliary signs and patterns of the preceding brands, or anything similar to the company names, trade names, trademarks, product or service names, domain names, patterns, logos, marks, signs, or special descriptions that third parties identify as Alibaba Cloud and/or its affiliates).
6. Please contact Alibaba Cloud directly if you discover any errors in this document.

Generic conventions

Table -1: Style conventions

Style	Description	Example
	This warning information indicates a situation that will cause major system changes, faults, physical injuries, and other adverse results.	 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 <i>Instance_ID</i></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.	swich {stand slave}

Contents

Legal disclaimer.....	I
Generic conventions.....	I
1 Preparations.....	1
1.1 Prerequisites.....	1
1.2 Quick BI case reports.....	2
1.3 Create data sources.....	4
1.4 Create datasets.....	8
2 Create a report.....	9
2.1 Create dashboards.....	9
2.2 Create a workbook.....	21
2.3 Create portals.....	22
3 Share reports.....	26
3.1 Publish the data objects in the personal workspace.....	26
3.2 Share the data objects in the personal workspace.....	27
3.3 Publish the data objects in a workspace.....	28
3.4 Share data objects in a workspace.....	29

1 Preparations

1.1 Prerequisites

Purchase Quick BI

Before you can use Quick BI, you must purchase Quick BI or apply for a Quick BI free trial. For more information, see [Purchases, upgrades, downgrades, renewals, and overdue payments](#).

Add a Quick BI user

After you purchase a user quota, you can add users up to the quota limit.

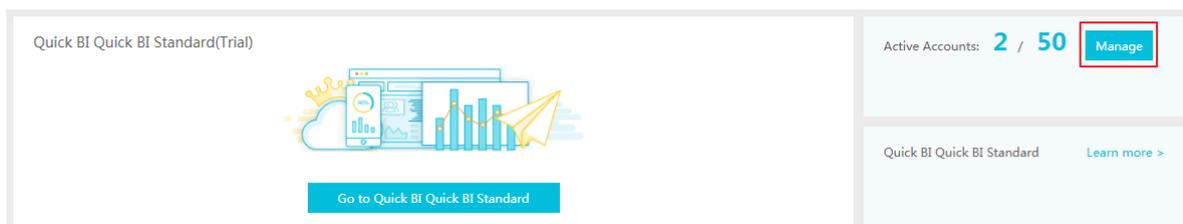


Note:

We recommend that you add RAM users. If you remove an Alibaba Cloud account, company data under the Alibaba Cloud account may be disclosed. Proceed with caution.

Procedure

1. Log on to the Quick BI console
2. Choose Manage > Add Member.



3. Add an Alibaba Cloud account or a RAM user.
4. Click OK to add the user.



Note:

This operation is only supported by Quick BI Basic. For more information about Quick BI Pro and Quick BI Enterprise Standard, see [Add a member](#).

After you add the user, it will be displayed on the Members tab page.

Remove a Quick BI user

You can remove users from the user list. Removed users can no longer use Quick BI.

Procedure

1. Log on to the Quick BI console.
2. Locate the target user on the Members tab page.
3. Click Remove to remove the user.

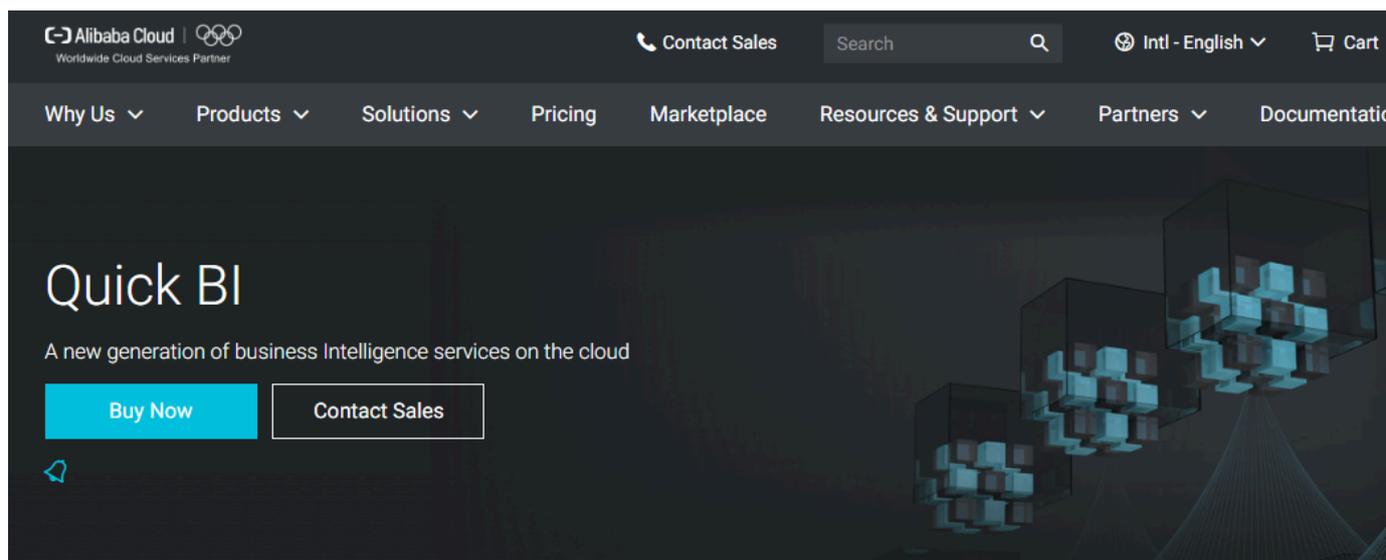


Note:

This operation is only supported by Quick BI Enterprise Standard. For more information about Quick BI Basic and Quick BI Pro, see [Remove a member](#).

Log on to the Quick BI console

On the Quick BI product details page, click [Console](#) to log on to the Quick BI console.



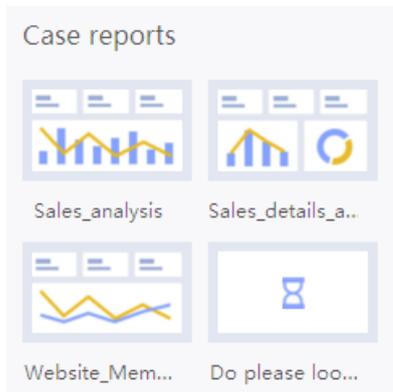
1.2 Quick BI case reports

This topic uses case reports to describe how to use Quick BI. If you are a beginner, you can use the data sources, datasets, and dashboards provided by the case reports to practice.

Obtain Quick BI case reports

1. Log on to the Quick BI console.

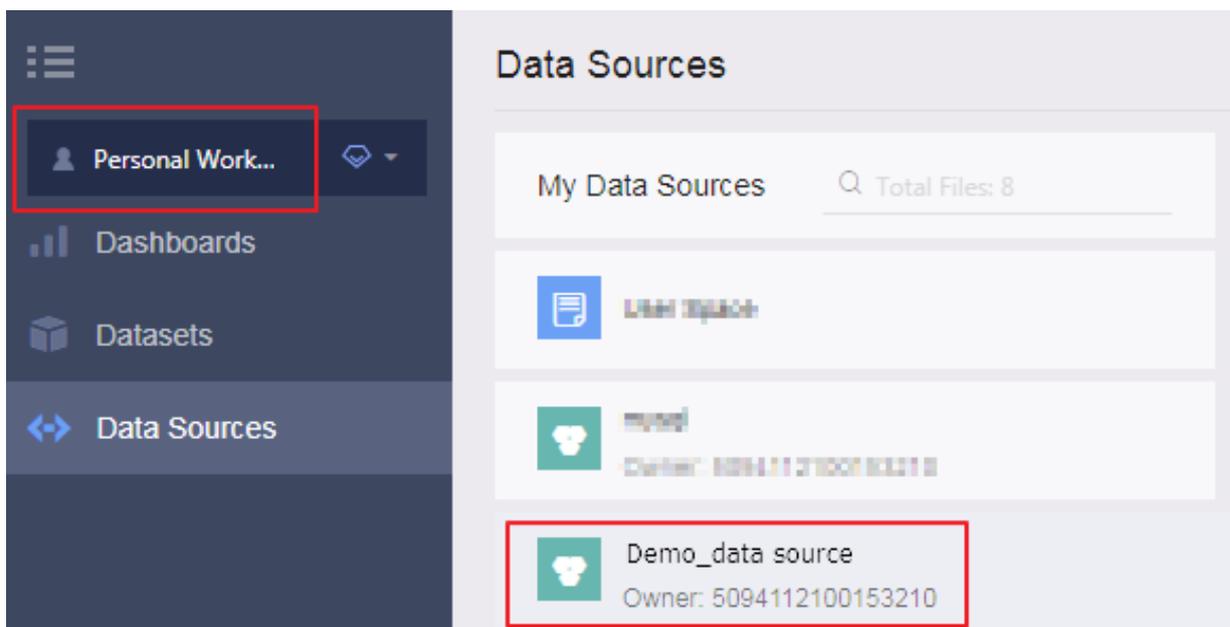
2. Click Case Reports in the upper-right corner, and select a case to go to the dashboard.



3. Click the Installation icon in the upper-right corner of the dashboard to install the related case data source, dataset, and dashboard to your personal workspace.

Use Quick BI case reports

After you obtain the case, you can use the case data source Demo_data source in your personal workspace to perform the following operations.



For more information about the procedure, see the following topics:

- [Create data sources](#)
- [Create dashboards](#)
- [Create a workbook](#)
- [Create portals](#)

1.3 Create data sources

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

Before connecting Quick BI to RDS MySQL, make sure you have access permissions to the MySQL database. For more information, see [Create accounts and databases](#).

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

Configure the IP address whitelist in the MySQL database.

Copy the IP address from Quick BI

1. Log on to the Quick BI console.
2. Choose **Workbench > Data Sources** to go to the data source management page.
3. Click **Create Data Source > Cloud Database > MySQL** to create a MySQL data source.

4. Copy the IP address displayed in the blue area, as shown in the following figure.

Add Data Source ✕

*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

Obtain the endpoint of the MySQL database from RDS

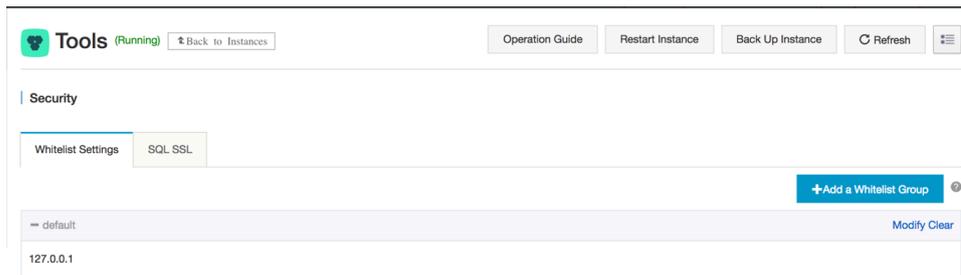
1. Log on to the RDS console.
2. Select the region where the target instance is located.
3. Click the name of the instance to go to the Basic Information page.

The IP address is the database endpoint.

Set the IP address whitelists on RDS

1. In the left-side navigation pane, click Data Security to go to the data security management page.

2. On the Whitelist Settings tab page, click **Modify**, as shown in the following figure.



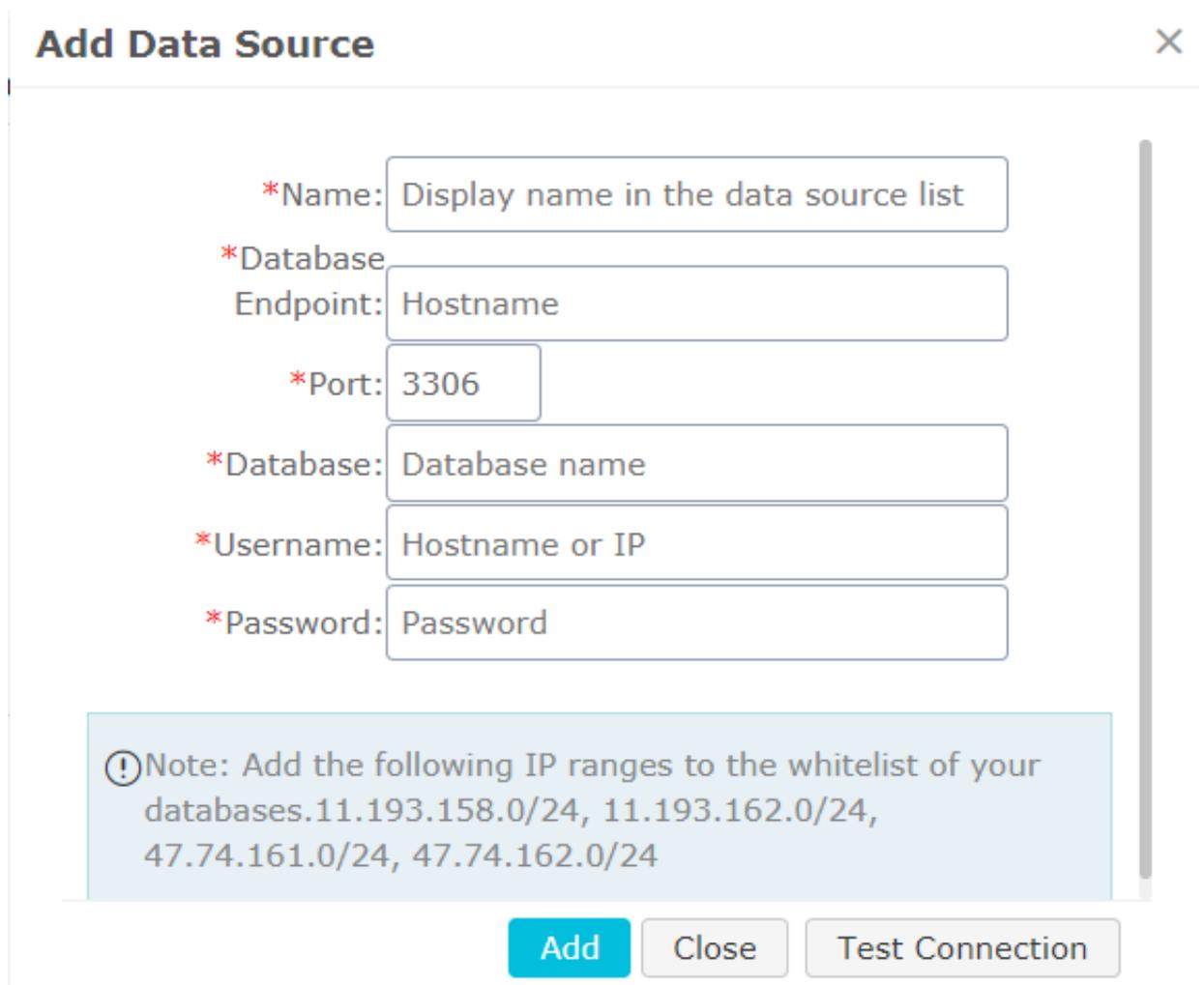
3. Click **Clear** to delete the IP address 127.0.0.1.
4. Click **Add Whitelist Group** to add a new whitelist group.
5. Enter a new group name and paste the IP address in the whitelist area.
6. Click **OK** to complete the whitelist settings.

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

Verify the data source connection and create the data source.

1. Go back to the Quick BI data source management page.
2. Click **Create Data Source > Cloud Database > MySQL**.

3. Enter the data source connection information as shown in the following figure.



Add Data Source ✕

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

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

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

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

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

More information

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

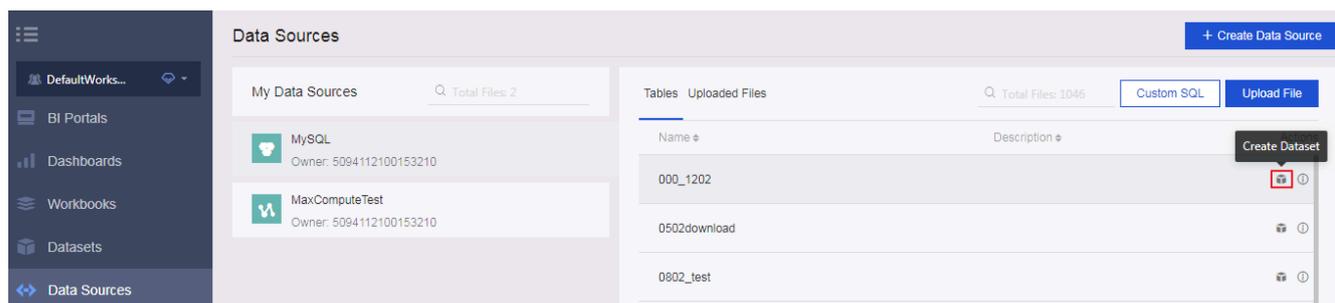
- [ApsaraDB for RDS](#)
- [Quick BI](#)

1.4 Create datasets

Create a dataset

Before you create a dashboard, you must create a dataset.

1. Go to the Data Sources page and select the target data source.
2. Select a table, for example, `company_sales_record`, and click the Create Dataset icon in the Actions column, as shown in the following figure:



The dataset that you create is automatically stored in the My Items folder and labeled as NEW. This label helps you quickly locate the newly created dataset.

2 Create a report

2.1 Create dashboards

This topic describes how to create a dashboard and how to use the dashboard to create a report. This example involves only some of the chart types. For more information about basic dashboard operations and chart creation procedures, see [Basic dashboard operations](#) and [Use dashboard to create charts](#).

Dashboard only supports two display modes.

- Standard mode
- Full-screen mode (only available for Quick BI Enterprise Standard)

Create a dashboard using the dataset named `company_sales_reco`. For more information about basic dataset operations, see [Create datasets](#).

Create dashboards

1. Log on to the Quick BI console, and click **Workspace**.
2. In the left-side navigation pane, click **Dashboards** to go to the dashboard management page.
3. Click **Create Dashboard** to go to the dashboard editing page.
4. Select a display mode, as shown in the following figure.



Note:

The full-screen mode is only available in the Workspace of Quick BI Enterprise Standard. The Personal Space only supports the standard mode.

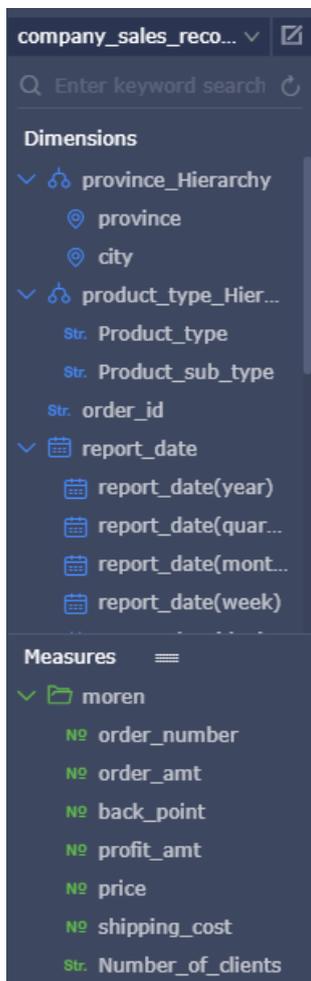


Add datasets to a dashboard

1. Click the Switch icon, and select a dataset, as shown in the following figure.



2. Click the workbook `company_sales_record`. The data in the workbook is listed in the dimension list and the measure list respectively, as shown in the following figure.



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

Create charts (standard mode)

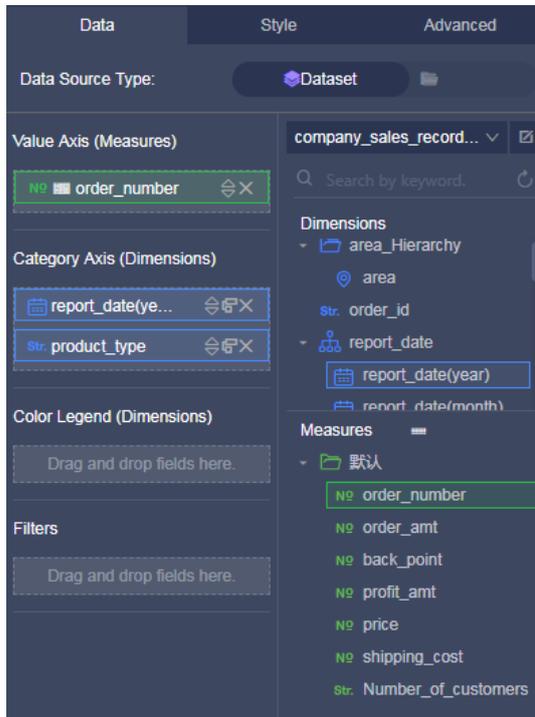
This topic only describes how to create a column chart in standard mode. For more information about how to create other charts, see [Use dashboard to create charts](#).

For more information about the data elements and applicable scenarios of each chart, see [Dashboard overview](#).

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

1. Click the column chart icon.

2. Double-click a field on the Data tab page. The field data is automatically filled in a specified area, as shown in the following figure.



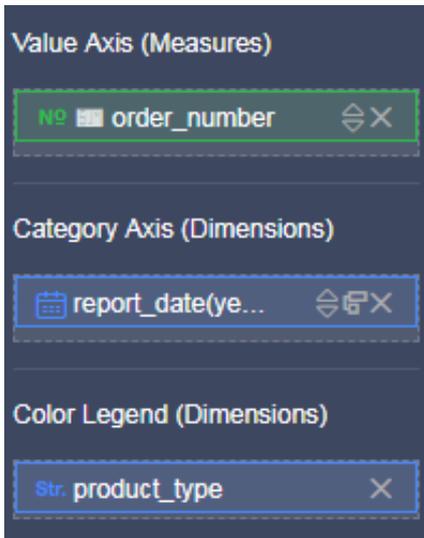
3. Click Update. The system automatically draws a chart.

If a large amount of data needs to be displayed, you can enable the Color Legend feature. Drag and drop a dimension field to the color legend area. Information of this field is displayed in different colors in the chart.

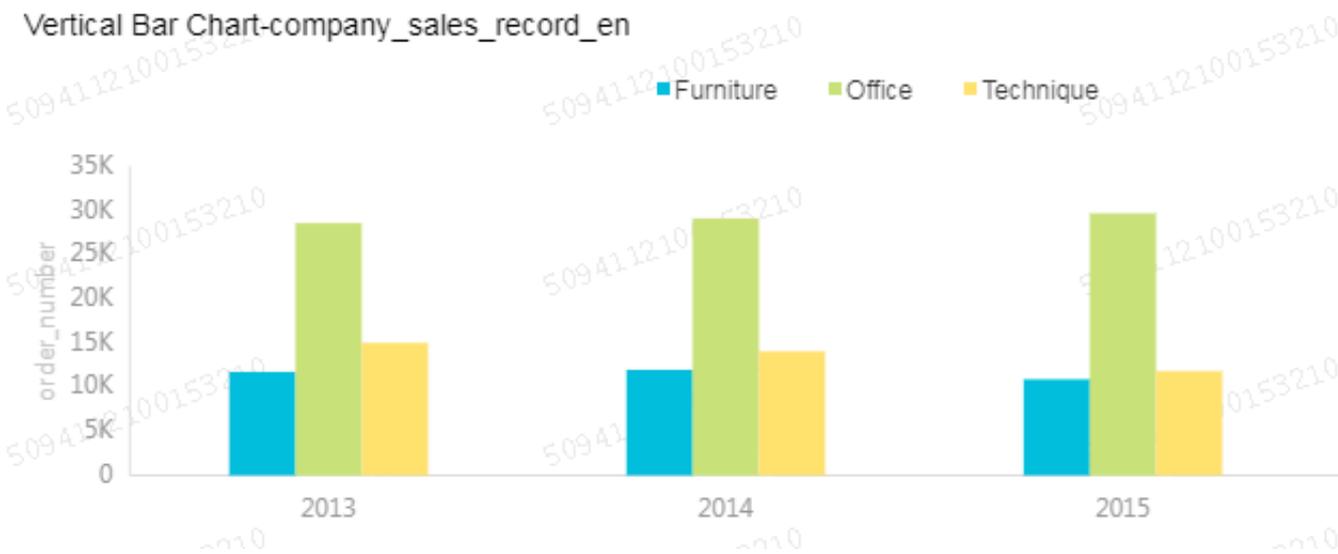
**Note:**

This feature is only available when the Value Axis area is filled with only one measure field. When the color legend is unavailable, the system automatically

provides prompts and reasons. You can manually adjust the dimension fields and measure fields as prompted.

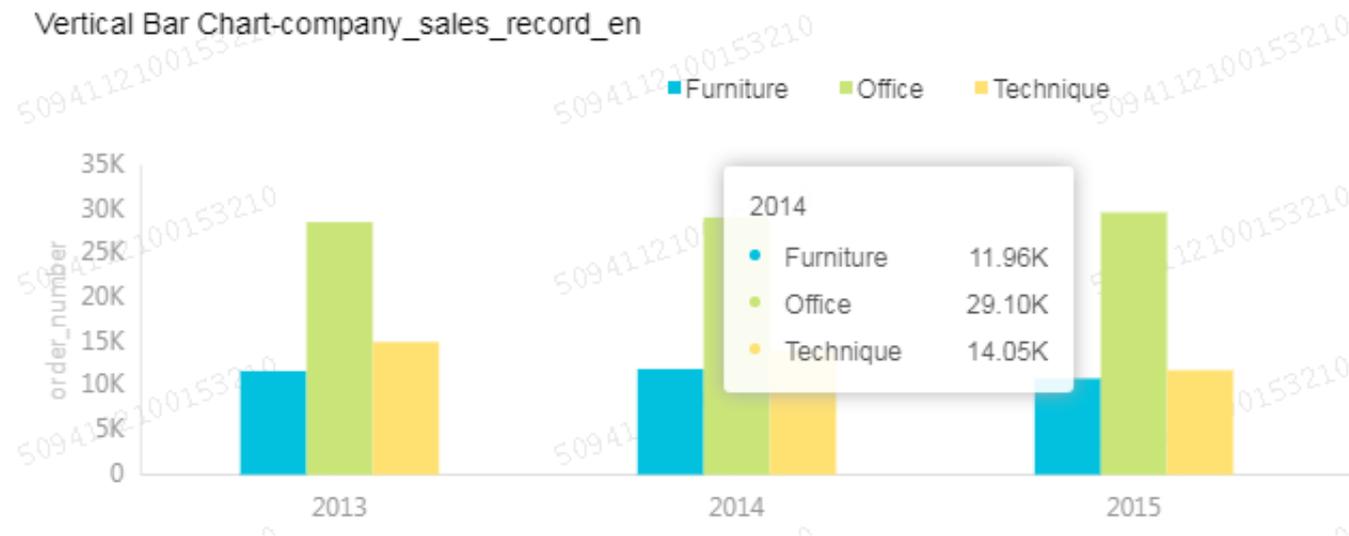


4. Click Update. The updated chart is shown in the following figure.

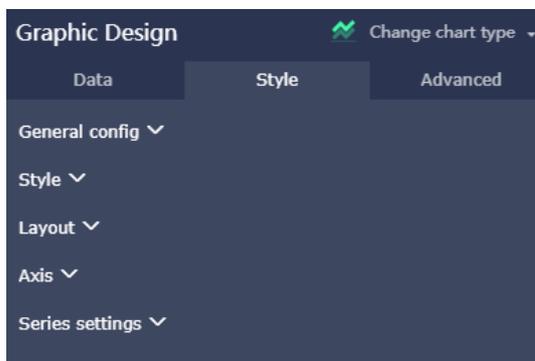


5. When you hover your mouse cursor over a set of data, the details of the data (ToolTip) are listed automatically, as shown in the following figure.

You can choose **Style > Layout > Tooltips** to clear the Tooltip option.



6. On the Style tab page, you can modify the titles, layouts, formats, and axis styles, and select a legend type, as shown in the following figure.



- **General configuration:** You can set the title and the background color of the chart, as well as the font and the color of the title.
- **Style:** You can set the display style of the chart on the Style tab page. For example, you can select Secondary Y Axis, Stacked Percentage, or Stacked.
- **Layout:** You can set the legend type and whether to show the tooltip of the chart.
- **Axis:** You can set the title and the display style of axes, the display mode of axis values, and the coefficient.
- **Series Settings:** You can set the alias, display type, and color for a series of data. You can also set the format, decimal digits of the values, and decide whether to display the labels.

To delete the current chart, click **More** in the upper right corner and select **> Delete** to delete the chart.

Create charts (full-screen mode)

This topic only describes how to create a geo bubble chart in full-screen mode.

1. Click the Geo Bubble icon, as shown in the following figure.
2. Double-click a field on the Data tab page. The field data is automatically filled in a specified area.



Note:

Make sure you have changed the dimension type of Province from String to Location.

3. Click **Update**, and the system automatically updates the chart.
4. Click the **Style** tab to edit the title and legend of the chart.
5. Click **Page Setting** to set the page scale, the background color, the time interval of data update, and the time interval of data carousel, as shown in the following figure.

To delete the current chart, click the **Delete** icon in the lower right corner of the chart.

Add widgets

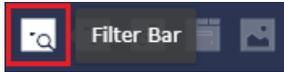
A dashboard supports the following five widgets.

- **Standard dashboard**
 - **Filter Bar**
 - **Text Area**
 - **IFrame**
 - **TAB**
 - **Image**
- **Full-screen mode**
 - **Text area**
 - **IFrame**
 - **Image**

- Add filter bars

You can click Filter Bar to search one or more charts for specific data.

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



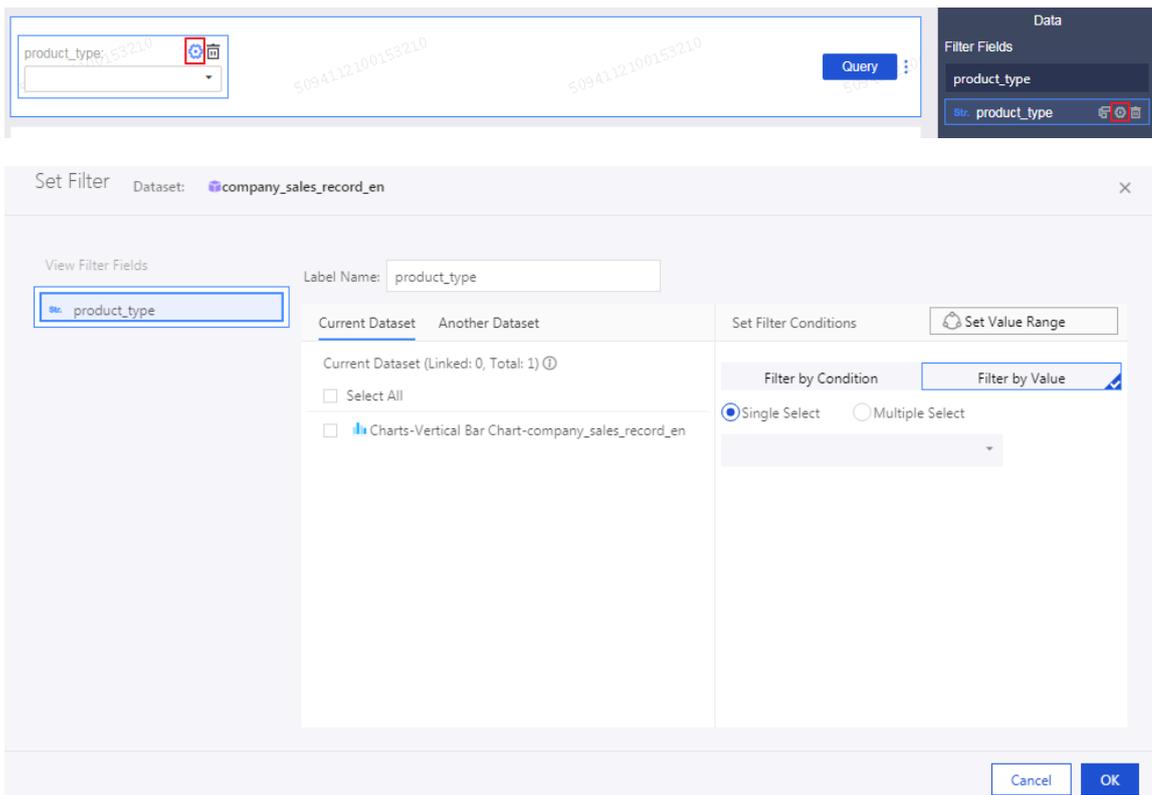
2. Click the Filter Bar widget to open the editing menu.

3. Select a dataset that can be operated, for example, company_sales_record.

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

The filter bar supports filter interactions for datasets from different sources or from the same source. This example uses the datasets from the same source.

5. Click the Set Filter icon, and select Current Dataset. Select a chart, as shown in the following figure.



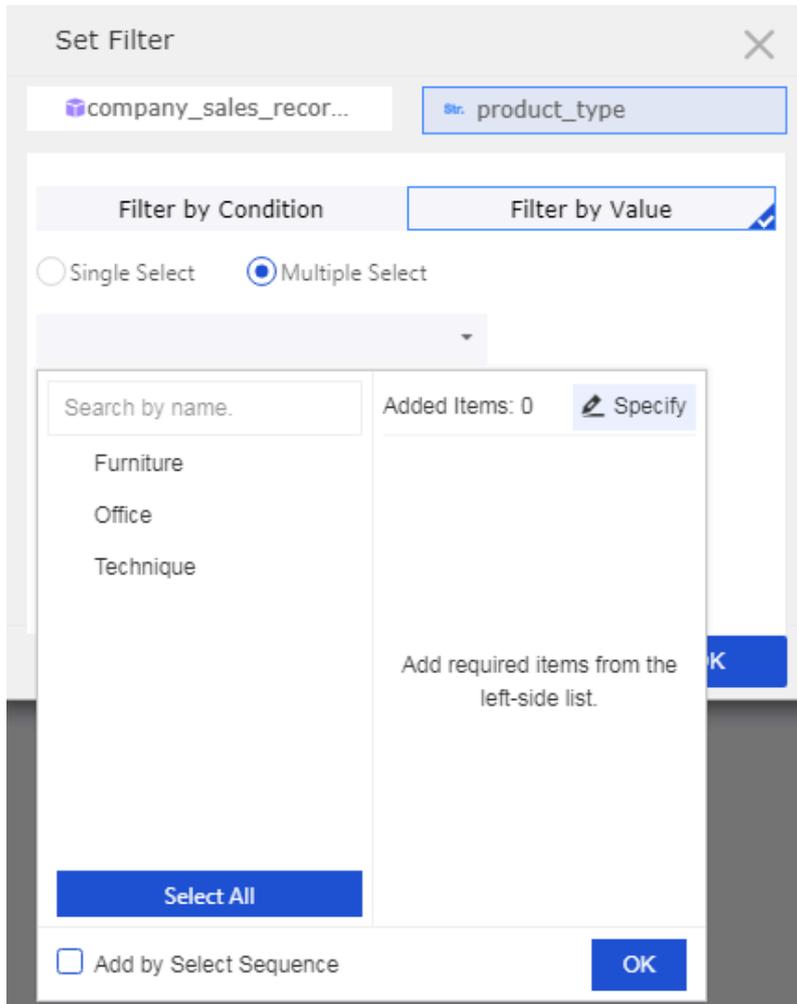
6. Click Style to edit the title of the widget.

7. In the Set Filter Criteria dialog box, click Filter by Enumeration and select Ratio or Multiple Select.

8. Click the drop-down arrow and select the item to be searched, as shown in the following figure.

**Note:**

If you have selected Ratio, you can select only one item. Otherwise, you can select multiple items.



9. Click Search, and the charts that contain the queried items are updated.

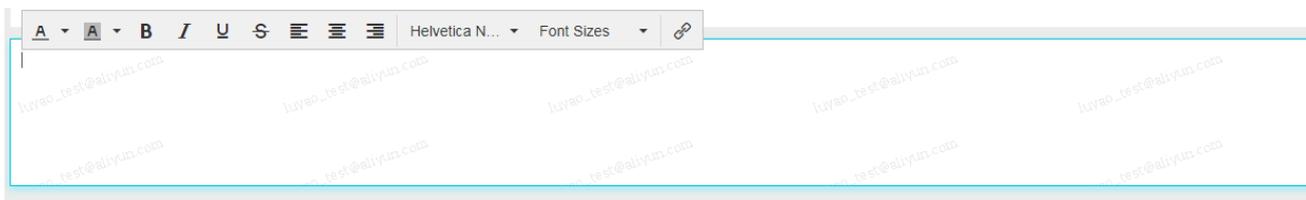
To delete the current widget, click More > Delete in the upper-right corner of the widget.

You can also search a field by date or value.

- **Add Text Area**

You can enter a text in Text Area to specify content such as a report title.

1. Click the Text Area icon.
2. Enter a text, as shown in the following figure.



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

- **Add IFrame**

You can use IFrame to insert required webpages to query web data in real time and browse webpages related to the data on the current dashboard.

1. Click the IFrame icon.
2. Enter a web address, as shown in the following figure.



Note:

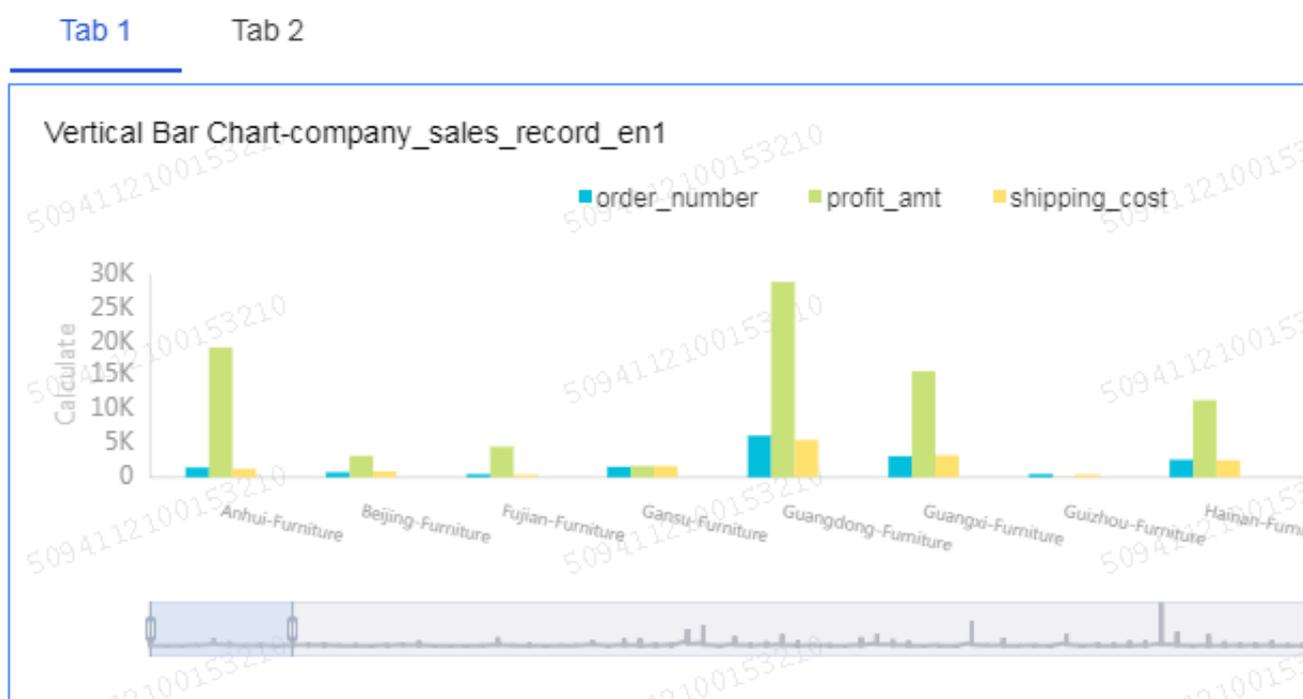
The web address must start with **https**.

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

- Add TAB

You can use TAB to display multiple charts on different tab pages.

1. Click the TAB icon.
2. Click Add TAB Page to add a new tab page.
3. Select a TAB to insert charts. For example, click TAB1, and TAB1 is highlighted with a blue line.
4. Click the required chart icon, and a chart is automatically inserted to the TAB1 tab page.
5. Create the chart by following the chart creation process. After the chart is created, the created TAB widget is shown in the following figure.

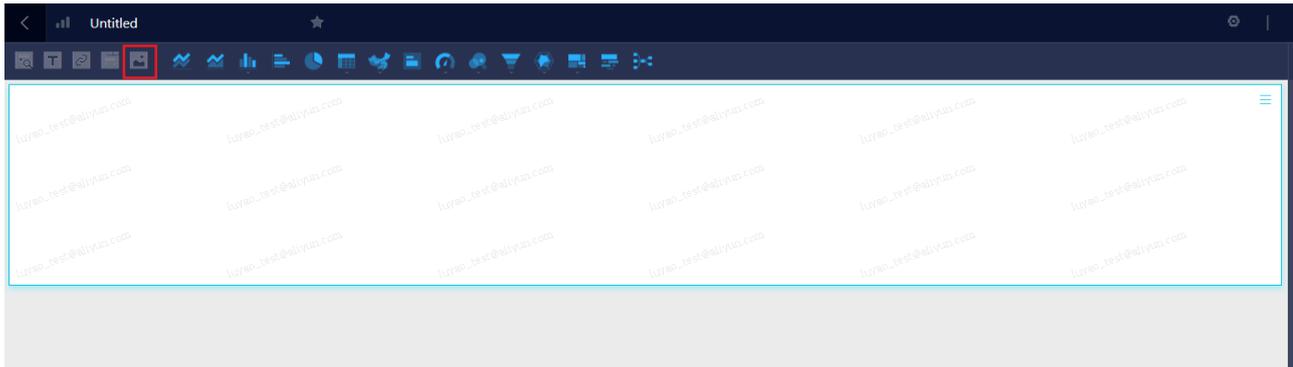


To delete the current widget, click **More > Delete** in the upper-right corner of the widget to delete the current widget.

- Add pictures

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

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

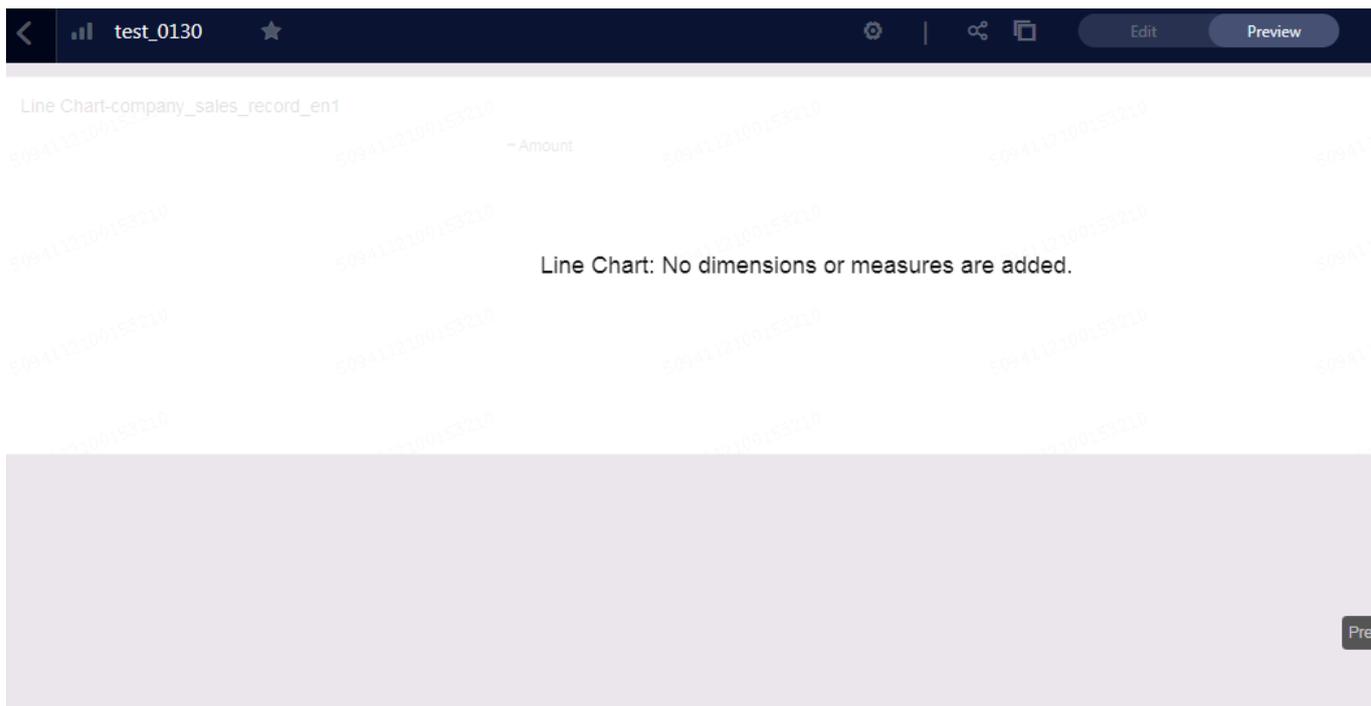


To delete the current widget, click More > Delete in the upper-right corner of the widget

Preview a dashboard

After a dashboard is edited, you can preview the charts in the dashboard.

Click Preview, choose PC Preview or Mobile Preview, as shown in the following figure.



Save dashboards

After the dashboard is edited, you can click Save to save the dashboard.

Click Save.

2.2 Create a workbook

You can only create workbooks in workspaces of Quick BI Enterprise Standard and Quick BI Pro. The workbook feature is unavailable in personal spaces.

Create a workbook

Quick BI categorizes the data in a dataset into dimensions and measures based on certain rules. Typically, the String type data is categorized as dimensions. The Double and Bigint type data is categorized as measures. You can select fields from dimensions and measures, and add them to rows or columns in a workbook. You can also perform data analysis by setting filter conditions.

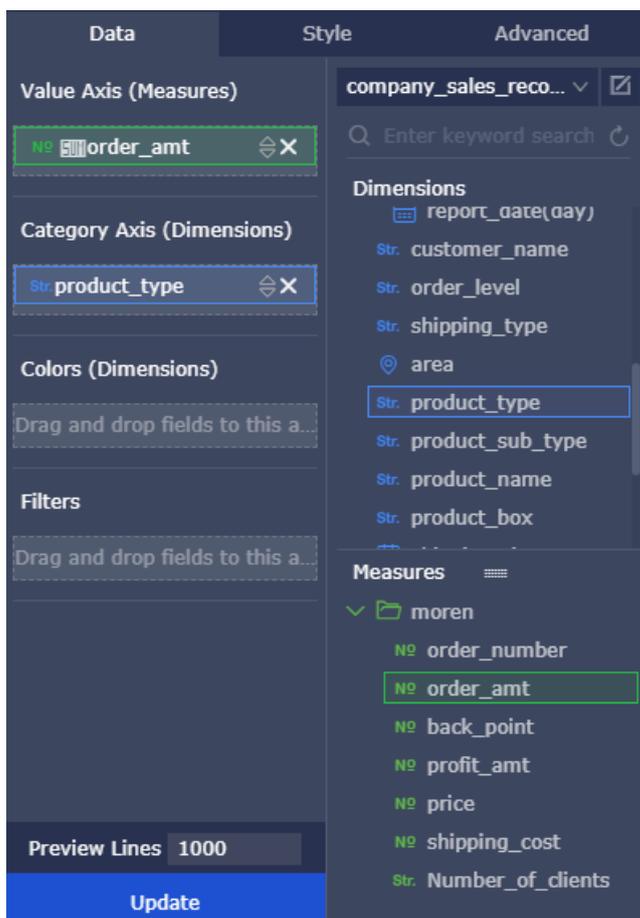
1. Log on to the Quick BI console, click Workspaces, and select a workspace.
2. Click Workbooks to go to the workbook management page.
3. Click Create Workbook to go to the workbook editing page.
4. Click the All icon in the upper-left corner of the workbook to select all fields in the workbook. Otherwise, the data in the workbook is not displayed correctly.



Note:

You can also specify the scope of data to be displayed in the workbook. The data can be displayed in blocks. For more information about data blocks, see [Highlight pivot tables](#).

5. Locate the `company_sales_record` dataset, and double-click the `product_type` field and the `order_amt` field, as shown in the following figure.



6. Click Update to update the data.
7. Click Save and select a path to save the workbook.



Note:

You can also save the workbook to a local disk, as shown in the following figure.

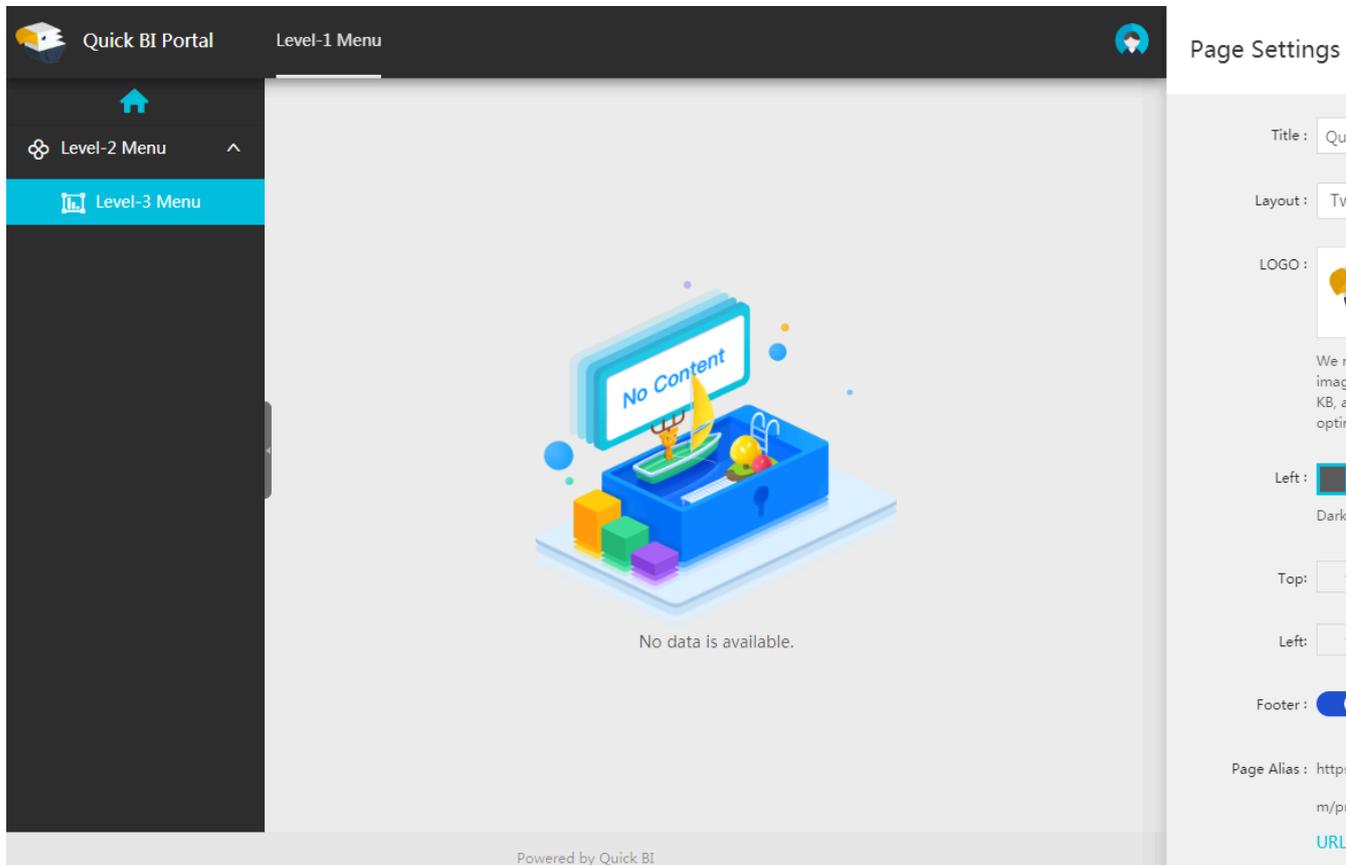
2.3 Create portals

A portal, also known as a data product, is a set of dashboards that contain menus. You can use a portal to perform complex topic-based data analysis with a navigation pane.

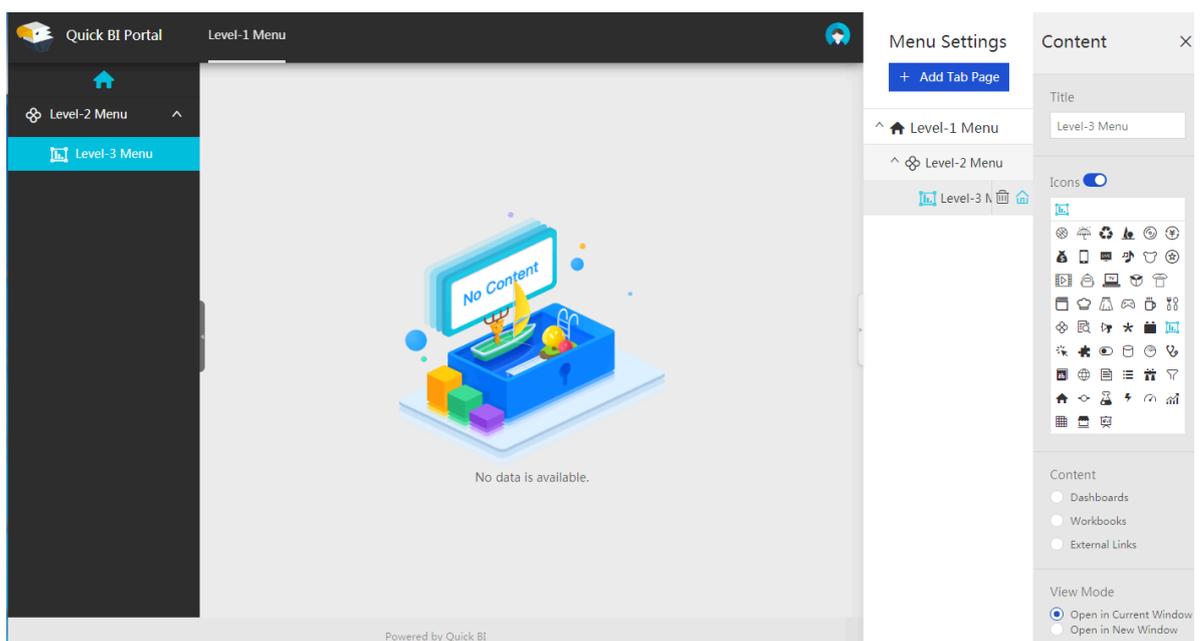
Create portals

1. Log on to the Quick BI console.
2. Click Workspace > BI Portals to go to the portal management page, as shown in the following figure.
3. Click Create Portal to go to the portal editing page.

4. On the Page Setting tab page, set the title name, background color, and navigation bar color. You can also upload a logo and edit the footer, as shown in the following figure.



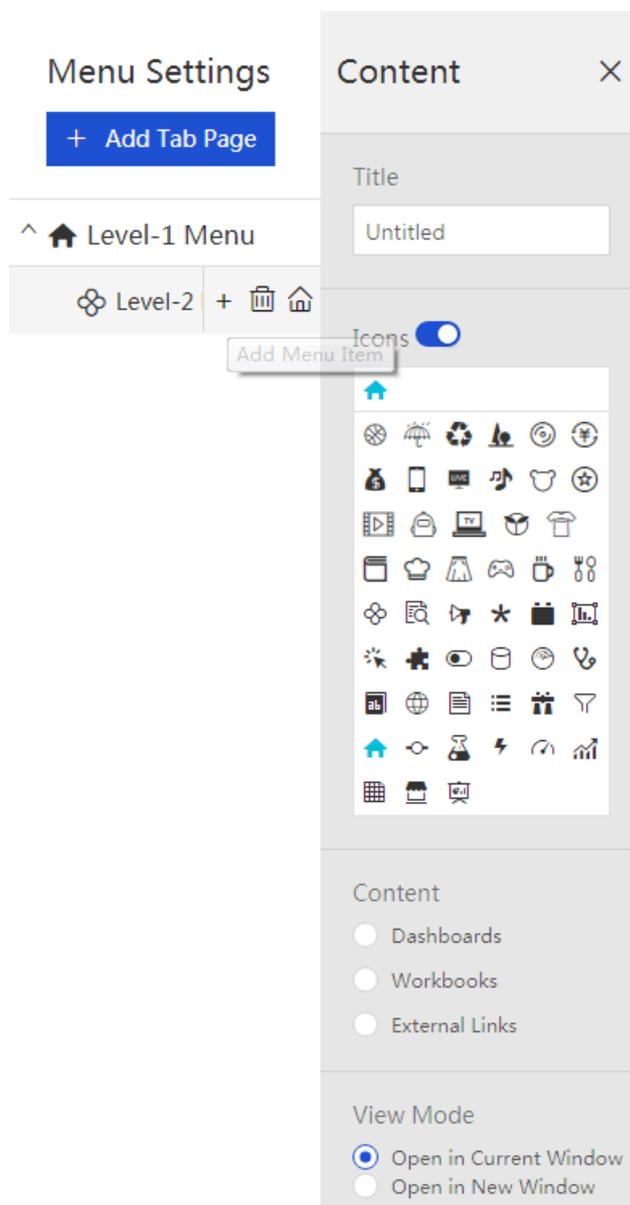
5. Click the Edit icon to go to the Menu Setting tab page, as shown in the following figure.



6. On the Menu Setting tab page, set the menu structure, menu levels, and menu homepage.
7. On the Content Setting tab page, set the display name, external link, icon, and view type of each menu.
8. Click the Preview icon to view the portal.

Menu settings

- Click Create Menu to add a level-one menu in the navigation bar.
- Click + to add a submenu, as shown in the following figure.



- References to dashboards, workbooks, and external links are supported.

Manage portals

After creating a data portal, you can perform the following operations on the portal management page:



Note:

In addition to the data portal search operation, you can right-click a data portal and select an operation, or click the operation icon next to the data portal.

- Search for portals

Enter a portal name in the search box and click the Search icon to search for a data portal.

- Edit

Select Edit to go to the portal editing page where you can edit portals.

- Attributes

Select Attribute to go to the attribute editing page where you can edit the data portal name, owner, and security policy.

- Share

Select Share to grant organization users the access permission to the workbook.

For more information, see [Share data objects in a workspace](#) and [Share the data objects in the personal workspace](#).

- Menu permission

Select Menu permission to set the user's permission to access the content in the data portal. For more information, see [Configure BI portal menu permissions](#).

- Delete

Select Delete to delete the current portal.

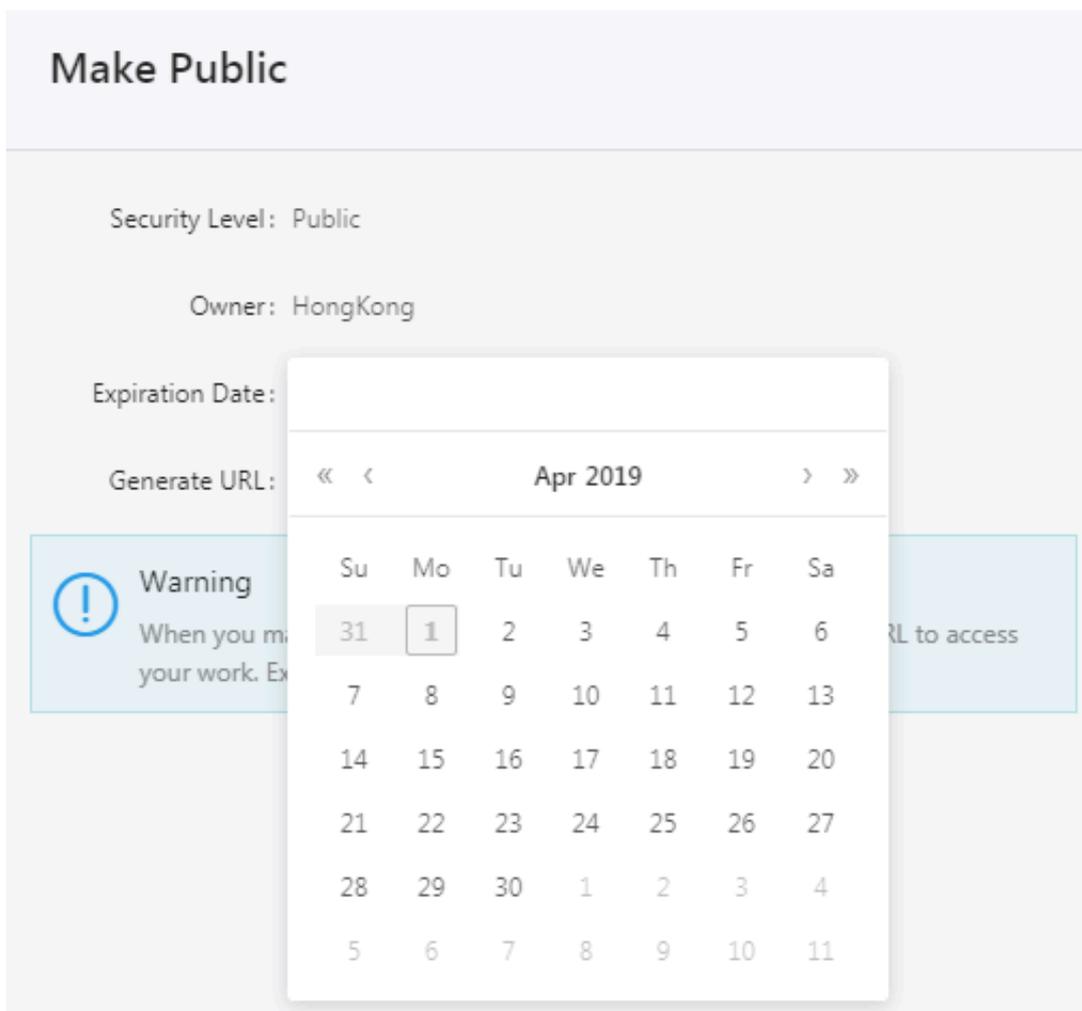
3 Share reports

3.1 Publish the 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.

Procedure

1. Log on to the Quick BI console.
2. Click the Dashboards icon to jump to the Dashboards page.
3. Select a dashboard, and click the Make Public icon.
4. Select an expiration date as shown in the following figure.



5. Click **Make Public** to complete publishing the data objects. Copy and paste the newly generated URL to the address bar in your browser. Then you can access the dashboard using this URL.

3.2 Share the data objects in the personal workspace

Only the owner of the data objects has permission to share them.

Context

For personal workspaces, 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.

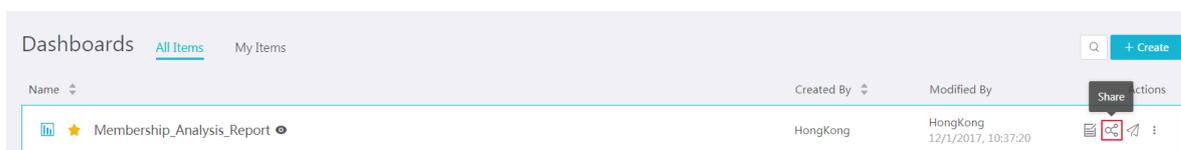


Note:

To access the data objects shared by others, make sure that you have purchased the Quick BI service using your Alibaba Cloud account and the Quick BI service has not expired.

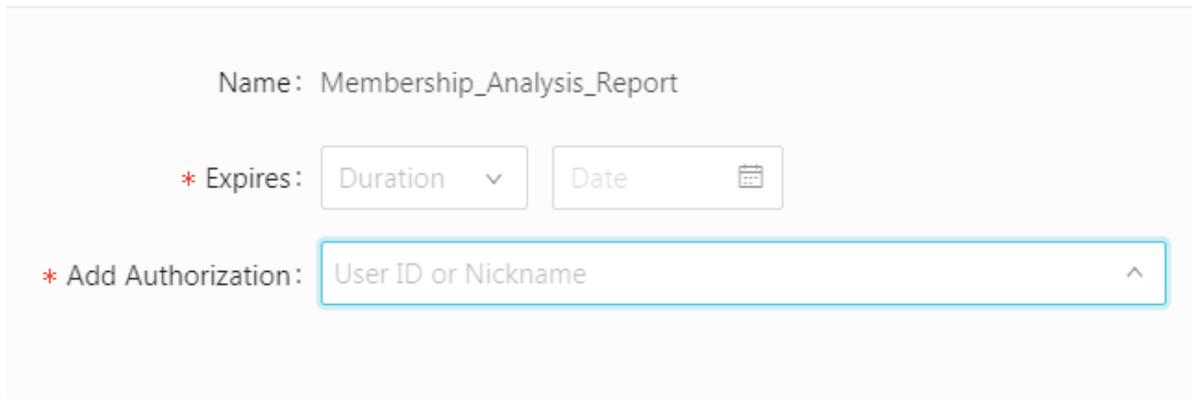
Procedure

1. Log on to the Quick BI console.
2. Click the Dashboards icon to jump to the Dashboards page.
3. Select a dashboard and click the Share icon in the Actions column as shown in the following figure.



4. Enter the usernames of the user that you want to authorize and select an expiration date as shown in the following figure.

Share and Authorize



Name: Membership_Analysis_Report

* Expires:

* Add Authorization:

5. Click Save to finish the authorization.

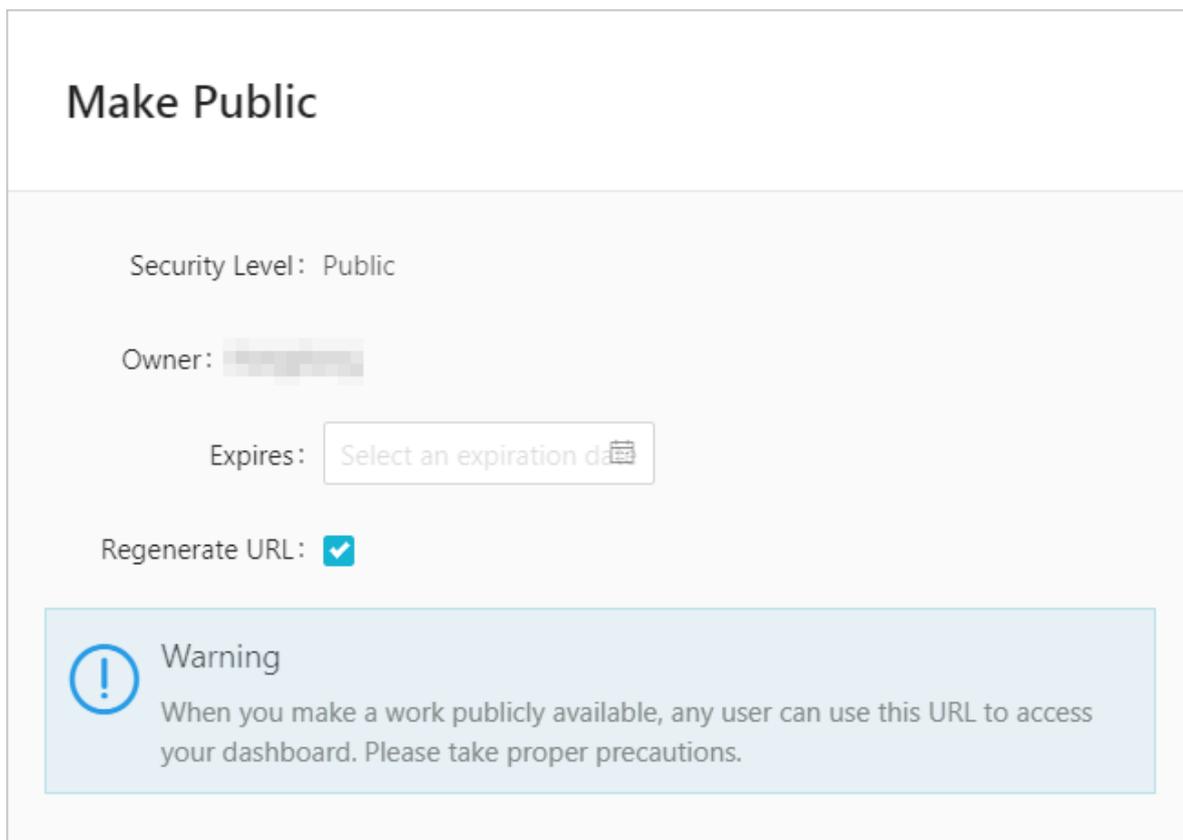
3.3 Publish the data objects in a workspace

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.

Procedure

1. Log on to the Quick BI console.
2. Select a workspace.
3. Click the Dashboards icon to jump to the Dashboards page.
4. Select a dashboard, click the More icon, and click the Make Public icon.

5. Select an expiration date and click Make Public as shown in the following figure.



Make Public

Security Level: Public

Owner: [redacted]

Expires:

Regenerate URL:

Warning
When you make a work publicly available, any user can use this URL to access your dashboard. Please take proper precautions.

Copy and paste the newly generated URL to the address bar in your browser. Then you can access the dashboard using this URL.

3.4 Share data objects in a workspace

Quick BI supports sharing workbooks, dashboards, and portals in a workspace. 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.

Context

Only the owner of the data objects and administrators of the workspace have permission to share the data objects. Currently, data objects can only be shared with Alibaba Cloud accounts and RAM users within the same organization.

If the Works can be authorized check box is cleared for the workspace, then the data objects in this workspace cannot be shared.

Procedure

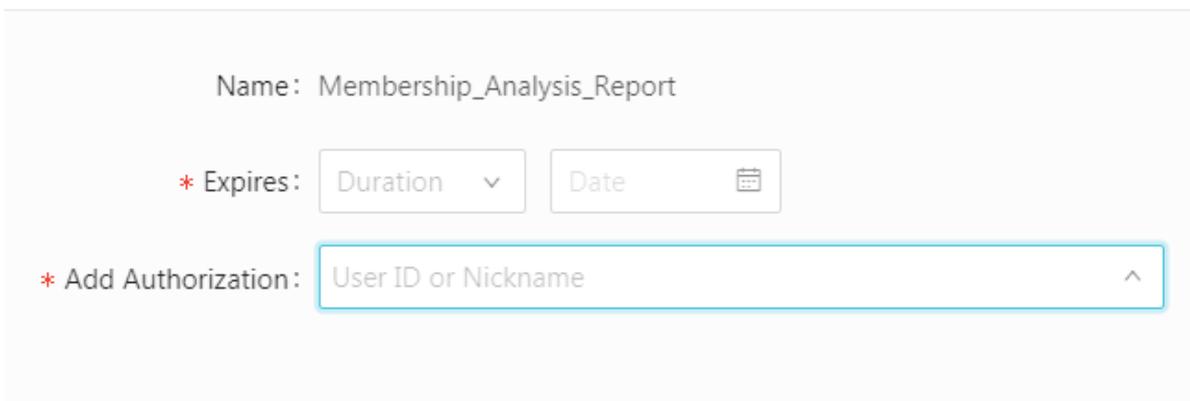
1. Log on to the Quick BI console.

2. Select a workspace.
3. Click Dashboards to jump to the Dashboards page.
4. Select a dashboard and click the Share icon in the Actions column as shown in the following figure.



5. Enter the username or user ID of the user that you want to authorize. Select an expiration date as shown in the following figure.

Share and Authorize

A screenshot of the 'Share and Authorize' dialog box. The dialog has a title bar and a main content area. The content area shows: 'Name: Membership_Analysis_Report'. Below this is a red asterisk followed by 'Expires:' and two input fields: 'Duration' (with a dropdown arrow) and 'Date' (with a calendar icon). Below that is another red asterisk followed by 'Add Authorization:' and a text input field containing 'User ID or Nickname' with an upward-pointing arrow on the right side.

6. Click Save to complete sharing the data objects.