# Alibaba Cloud

Quick BI Quick Start

**Document Version: 20210525** 

(-) Alibaba Cloud

### 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.

- You shall download and obtain this document from the Alibaba Cloud website or other Alibaba Cloudauthorized 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 because of product version upgrade, adjustment, or other reasons. Alibaba Cloud reserves the right to modify the content of this document without notice and an updated version of this document will be released through Alibaba Cloud-authorized channels from time to time. You should 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 this document based on the "status quo", "being defective", and "existing functions" of its products and services. 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 take legal responsibility for any errors or lost profits incurred by any organization, company, or individual arising from download, use, or trust in this document. Alibaba Cloud shall not, under any circumstances, take responsibility for any indirect, consequential, punitive, contingent, 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 contents in Alibaba Cloud documents, including but not limited to pictures, architecture design, page layout, and text description, 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 this document 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 directly contact Alibaba Cloud for any errors of this document.

# **Document conventions**

Style	Description	Example
<u> Danger</u>	A danger notice 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.
<u> </u>	A warning notice 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 restart an instance.
Notice	A caution notice indicates warning information, supplementary instructions, and other content that the user must understand.	Notice:  If the weight is set to 0, the server no longer receives new requests.
? Note	A note indicates supplemental instructions, best practices, tips, and other content.	Note: You can use Ctrl + A to select all files.
>	Closing angle brackets are used to indicate a multi-level menu cascade.	Click Settings> Network> Set network type.
Bold	Bold formatting is used for buttons , menus, page names, and other UI elements.	Click OK.
Courier font	Courier font is used for commands	Run the cd /d C:/window command to enter the Windows system folder.
Italic	Italic formatting is used for parameters and variables.	bae log listinstanceid  Instance_ID
[] or [a b]	This format is used for an optional value, where only one item can be selected.	ipconfig [-all -t]
{} or {a b}	This format is used for a required value, where only one item can be selected.	switch {active stand}

# **Table of Contents**

1.Preparations	05
1.1. Prerequisites	05
1.2. Create data sources	06
1.3. Quick start: Create a dataset	08
2.Create a report	09
2.1. Create dashboards	09
2.2. Create a workbook	16
2.3. Create a BI portal	17
3.Share reports	22
3.1. Publish the data objects in the personal workspace	22
3.2. Share the data objects in the personal workspace	22
3.3. Publish the data objects in a workspace	23
3.4. Share the data objects in a group workspace	24

# 1.Preparations1.1. 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**

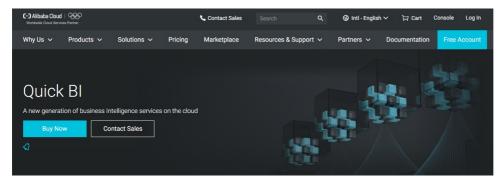
- 1. Log on to the Quick BI console.
- 2. Locate the target user on the Members tab page.
- 3. Click **Remove** to remove the user.

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

Quick Start · Preparations Quick BI

On the Quick BI product details page, click Console to log on to the Quick BI console.



### 1.2. Create data sources

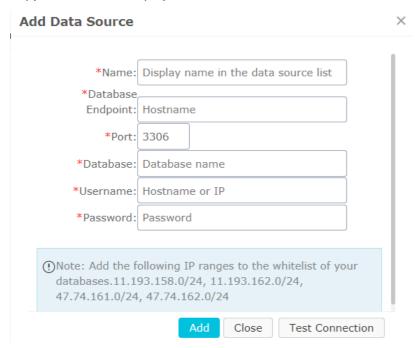
This topic uses MySQL database as an example to describe how to connect Quick BI to RDS MySQL.

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 for an ApsaraDB RDS for MySQL instance. 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.



Obtain the endpoint of the MySQL database from RDS

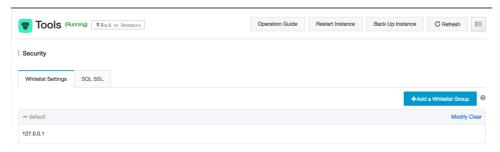
1. Log on to the RDS console.

- 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.

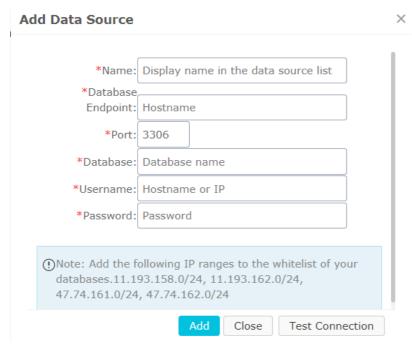


- 3. Click Clear to delete the IP address 127.0.0.1.
- 4. Click Add Whitelist Group to add a new whitelist group.
- 5. Enter a new group name and paste the IP address in the whitelist area.
- 6. Click **OK** to complete the whitelist settings.

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.



• Name: The display name of the data source.

Quick Start · Preparations Quick BI

- o Database Endpoint: The IP address of the database.
- o Port: The port number.
- o Database: The database name.
- o User Name: The name of the database user.
- o 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.

#### More information

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

- ApsaraDB for RDS
- Quick BI

## 1.3. Quick start: Create a dataset

#### Create a dataset

Create a dataset before you create a dashboard.

- 1. Go to the Data Sources page and select a data source.
- 2. Select a table, for example, company\_sales\_record, and click the **Create Dataset** icon in the Actions column to create a dataset.



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 Create a dashboard.

Dashboard only supports two display modes.

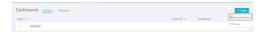
- Standard mode
- Full-screen mode (only available for Quick BI Enterprise Standard)

Create a dashboard using the dataset named company\_sales\_reco. For more information about basic dataset operations, see Quick start: Create a dataset.

#### Create dashboards

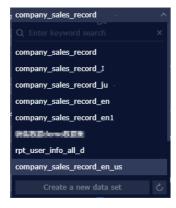
- 1. Log on to the Quick BI console, and click Workspace.
- 2. In the left-side navigation pane, click **Dashboards** to go to the dashboard management page.
- 3. Click Create Dashboard to go to the dashboard editing page.
- 4. Select a display mode, as shown in the following figure.

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

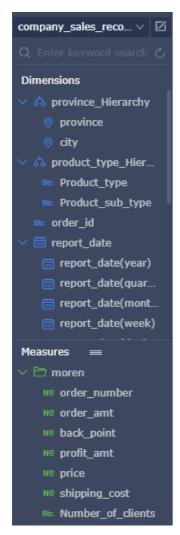


#### Add datasets to a dashboard

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 Create a dashboard.

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.



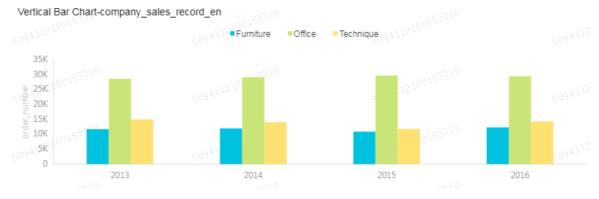
3. Click **Update**. The system automatically draws a chart.

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 > Tooltip 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
  - o Filter Bar
  - o Text Area
  - o IFrame
  - o TAB
  - o Image
- Full-screen mode
  - o Text area
  - o IFrame
  - o Image

#### • Add filter bars

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

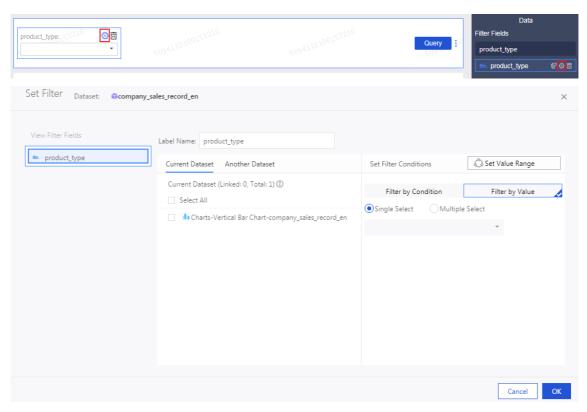
i. Click the Filter Bar icon, as shown in the following figure.



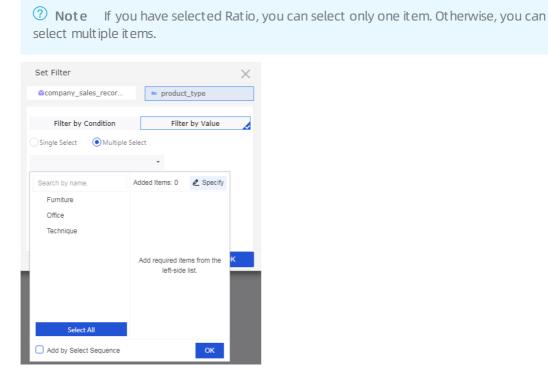
- ii. Click the Filter Bar widget to open the editing menu.
- iii. Select a dataset that can be operated, for example, company\_sales\_record.
- iv. Select a field to be searched, for example, product\_type.

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.

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



- vi. Click Style to edit the title of the widget.
- vii. In the **Set Filter Criteria** dialog box, click **Filter by Enumeration** and select **Ratio** or **Multiple Select**.
- viii. Click the drop-down arrow and select the item to be searched, as shown in the following figure.



ix. 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.

- i. Click the Text Area icon.
- ii. 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.

- i. Click the IFrame icon.
- ii. 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.

- i. Click the TAB icon.
- ii. Click Add TAB Page to add a new tab page.
- iii. Select a TAB to insert charts. For example, click TAB1, and TAB1 is highlighted with a blue line.
- iv. Click the required chart icon, and a chart is automatically inserted to the TAB1 tab page.
- v. 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.

- i. Click the picture icon.
- ii. Enter the picture URL.
- iii. 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

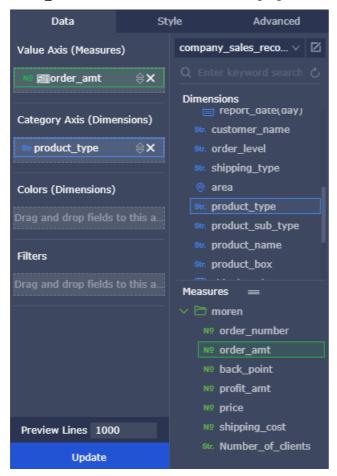
You can only create workbooks in workspaces of Quick BI Enterprise Standard and Quick BI Pro. The workbook feature is unavailable in personal spaces.

#### 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.
- 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.



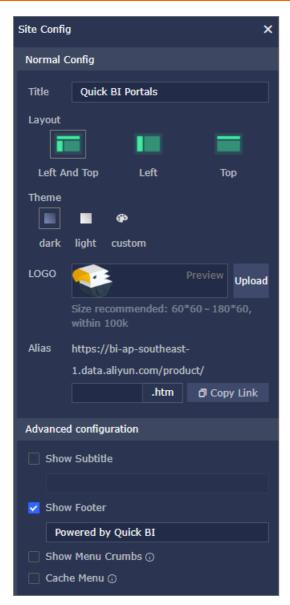
- 6. Click Update to update the data.
- 7. Click Save and select a path to save the workbook.
  - ? Note You can also save the workbook to a local disk, as shown in the following figure.

## 2.3. Create a BI portal

A BI portal, also known as a data product, is a set of dashboards that are organized in the form of menus. You can use a BI portal to perform complex topic-based data analysis with navigation menus.

#### Create a BI portal

- 1. Log on to the Quick BI console.
- 2. Click the Workspace tab. In the left-side navigation pane, click BI Portals.
- 3. On the BI Portals page that appears, click Create BI Portal in the upper-right corner.
- 4. On the **Site Config** tab, configure the title, logo, background colors, menu colors, and footer of the portal.



5. Click the Exit icon. Menu Config and Content settings tabs appear for you to configure the menus.



- 6. On the **Menu Config** tab, add menus, configure menu levels, and specify whether to set a menu as the home page. You can also drag and drop a menu to adjust its level.
- 7. On the **Content settings** tab, configure the display name, external link, icon, and view mode of each menu.
- 8. Click Preview to view the BI portal.

### Configure the menus

Т	ab	Parameter	Description
---	----	-----------	-------------

Tab	Parameter	Description
	Add main menu	Add a level-1 menu.  Note You can also drag and drop a menu to adjust its level.
Menu Config	***	Hides a menu. If a parent menu is hidden, its child menus are also hidden.  If you want to show a menu after it is hidden, click the icon again.
	+	Adds a level-2 or lower menu.
	•	Set a menu as the home page. When you open a BI portal, this home page appears.
	11	Deletes a menu.
	Menu display name	Specifies the name of a menu.
	Show menu icon	Sets the icon of a menu.
	Menu can fold	Specifies whether a menu can be folded.
	Default folding	Specifies the default state of a menu.
		Note This option can be selected only if Menu can fold is selected.
	Set to empty node	If this option is selected, you cannot set the menu content.
Content settings		

Tab	Parameter	Description
Content settings	Content settings	The following content types are supported:  Dashboard  Excel  Data reporting  Downloads  External link  View mode: The options are Open in current page and Open in a new window.
		Note This field cannot be configured if Set to empty node is selected.

### Manage BI portals

After a BI portal is created, you can perform the following operations on this portal on the BI Portals page:

**? Note** You can perform all operations, except for searching for a BI portal, by right-clicking a BI portal and select the required actions or by clicking the required action icons in the Actions column.

• Search for the BI Portal

Enter the name of the BI portal in the search box and click the **search** icon.

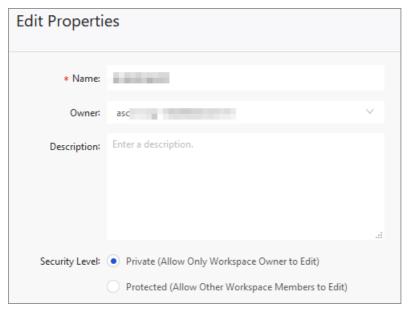


• Edit the BI portal

Click the Edit icon in the Actions column. On the BI portal edit page that appears, edit this portal.

• Edit Properties

Click the **Edit Properties** icon in the Actions column. In the Edit Properties side pane that appears, edit the portal name, owner, description, and security policy of the BI portal.



#### • Share the BI portal

Click the **Share** icon in the Actions column. In the Share side pane that appears, authorize users in the same organization to access this portal. For more information, see Share the data objects in a group workspace and Share the data objects in the personal workspace.

#### • Manage Menu Permissions

Click the More icon in the Actions column and select **Manage Menu Permissions**. In the dialog box that appears, authorize users to access menus in the BI portal. For more information, see Configure menu permissions for a BI portal.

#### Delete

Click the More icon in the Actions column and select **Delete**. In the confirmation message that appears, click OK.

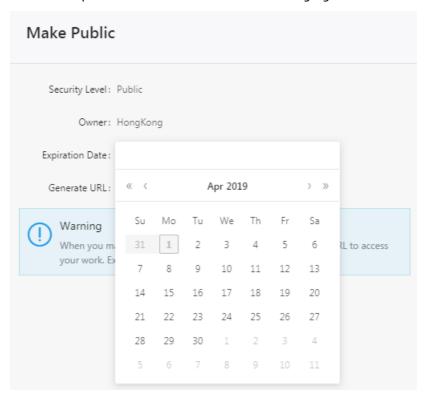
## 3. Share reports

# 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.

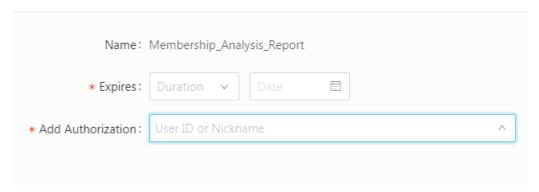
#### **Procedure**

- 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



5. Click Save to finish the authorization.

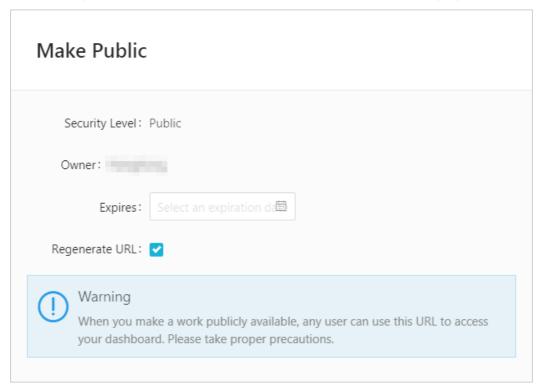
# 3.3. Publish the data objects in a workspace

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.



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 the data objects in a group workspace

Quick BI allows you to share workbooks, dashboards, and BI portals in a group 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 permissions to modify, delete or save data objects.

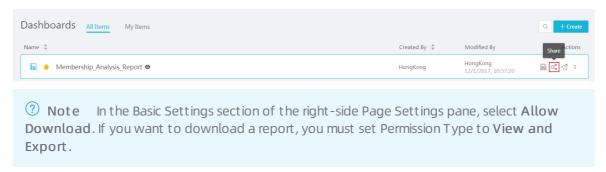
#### Context

Only the owner of data objects and the administrator of a group workspace have permissions to share the data objects. Data objects can only be shared with Alibaba Cloud accounts and RAM users within the same organization.

If Works to Be Shared is cleared in the Settings section of the Workspace page, the data objects in this group workspace cannot be shared. The following example shows how to share a dashboard.

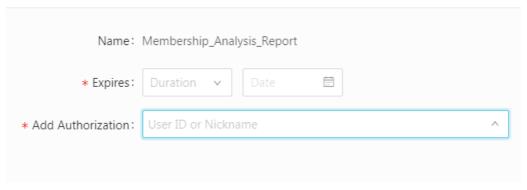
#### Procedure

- 1. Log on to the Quick BI console.
- 2. Select a group workspace.
- 3. In the left-side navigation pane of the Workspace page, click **Dashboards** to go to the Dashboards page.
- 4. Click the **Share** icon in the Actions column corresponding to the dashboard you want to share, or right-click the dashboard and select **Share**.



5. Enter the alias or account of the user that you want to share with, and specify Permission Type and Expiration Date.

### Share and Authorize



6. Click Save.