

Alibaba Cloud

DataV
FAQ

Document Version: 20210506

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 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
 Danger	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.
 Warning	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 <code>cd /d C:/window</code> command to enter the Windows system folder.
<i>Italic</i>	Italic formatting is used for parameters and variables.	<code>bae log list --instanceid</code> <i>Instance_ID</i>
[] or [a b]	This format is used for an optional value, where only one item can be selected.	<code>ipconfig [-all -t]</code>
{ } or {a b}	This format is used for a required value, where only one item can be selected.	<code>switch {active stand}</code>

Table of Contents

1.FAQ	05
2.Widget FAQ	07
3.Data source FAQ	08
4.Operation FAQ	09
5.Data visualizations rendered by DataV on macOS are not displ.....	10
6.Frequently asked questions (User self-check process)	11
7.FAQ about map tiles	17
8.FAQ about basemap deployment	18
9.What are the advantages of DataV over BI dashboards?	19
10.Impacts of updating Google Chrome to v80	20

1.FAQ

Widget FAQ

1. What can I do if my screen is blank after I log on to the DataV console?

You can change your browser version to Chrome 50 or a later version to resolve this issue.

2. What can I do if my widgets are not loading properly? For example, some widgets are not fully displayed.

You can clear the cache and cookies on your web browser and then log on to the DataV console again.

Data FAQ

1. What can I do if I fail to connect to my database?

You can add the IP address of your DataV server to your database whitelist or your ECS security group according to the network type and region of your database. You can also use the DataV proxy service to connect to your database. For more information, see [DataV Proxy configuration in Linux](#).

2. How can I configure a CSV data source?

You can use the first row of the CSV file as the table header, and make sure that the names of each column are consistent with the field names of the required data structure of the corresponding chart.

3. Which data centers can be connected to DataV through Alibaba Cloud classic intranet?

The data centers in China (Hangzhou), China (Shanghai), and China (Beijing) are supported.

4. Can I connect databases deployed on my ECS instance or other devices to DataV?

Yes, you can. However, you must activate the Internet IP of your database first. You can also use the DataV proxy service to connect to your database. For more information, see [DataV Proxy configuration in Linux](#).

Operation FAQ

1. Where can I watch DataV tutorial videos?

You can watch the tutorial videos by visiting the following links:

- [Data operations](#)
- [DataV design and operations](#)

2. How can I draw map borders?

You can obtain the corresponding GeoJSON data and paste it to the Geographical Boundaries area of the **Choropleth Layer** child widget in the **Basic Flat Map**. You can customize the border style in the Mapping field according to the codes of different areas.

3. How can I configure a data source for a carousel table?

You can input data in the data panel of a carousel table widget, and run SQL statements to query the data by assuming the table as a 2D table. The aliases of the table are used as table headers.

```
select field1 as "Column 1", field2 as "Column 2", field3 as "Column 3" from table
```

4. How can I configure a data source for a flying routes layer?

If you are using a SQL data source, you must obtain data of the from and to fields, and separate the longitude and latitude in each field with a comma (,).

5. How can I configure the widget interaction function?

The widget interaction function is being tested currently. For more information, see [Widget interaction](#).

6. How can I manage displayed data by passing parameters through a URL?

You can express your variables in SQL through `:dot-id`, for example, `select car_speed, car_color, car_name from table where car_ID = :dot-id`.

You can also manage displayed data by passing these variables through a URL, for example, `http://datav.aliyun.com/...?spm=xxxxx&dot_id=10102`.

Account FAQ

1. Can I create a RAM user to log on to the DataV console?

Yes, you can. To do so, follow these steps:

- i. Create a RAM user. For more information, see [Prepare an Alibaba Cloud account](#).
- ii. Log on to the [Authorization Center](#) and click **Refresh**

After you refresh the page, all the RAM users are displayed. The target RAM user can log on to the DataV console without obtaining other permissions.

2.Widget FAQ

This topic describes potential faults that you could encounter when you use DataV and provides the corresponding solutions.

What do I do if my screen is blank after I log on to the DataV console?

You can change your browser version to Chrome 50 or a later to resolve this issue.

What do I do if my widgets are not loaded properly? For example, some widgets are not displayed.

You can clear the cache and cookies on your web browser and try again.

3.Data source FAQ

This topic describes common issues that may occur when you connect DataV to a data source and provides corresponding solutions.

What do I do if I fail to connect to my database?

You can add the IP address of your DataV server to your database whitelist or your ECS security group based on the network type and region of your database. You can also use the DataV Proxy service to connect to your database. For more information, see [Introduction to the DataV Proxy service](#).

How can I configure a CSV data source?

You can use the first row of the CSV file as the table header, and make sure that the name of each column is consistent with the field names of the required data structure from the corresponding chart.

Which data centers can be connected to DataV over an Alibaba Cloud classic network?

The data centers in China (Hangzhou), China (Shanghai), and China (Beijing) are supported.

Can I connect databases deployed on my ECS instance or other devices to DataV?

Yes, you can. However, you must open the Internet IP address of your database first. For security reasons, you can use the DataV Proxy service to connect to your database. For more information, see [Introduction to the DataV Proxy service](#).

4.Operation FAQ

This topic describes DataV operations.

How can I draw map borders?

You can obtain the corresponding GeoJSON data and paste it to the **Geographical Boundaries** area of the **Choropleth Layer** child widget in the **Basic Flat Map**. You can customize the border style in the **Mapping** field based on the codes of different areas.

How can I configure a data source for a carousel table?

You can input data in the data panel of a carousel table widget and run SQL statements to query the data by using the table as a 2D table. The aliases of the fields are used as table headers.

```
select field1 as "Column 1", field2 as "Column 2", field3 as "Column 3" from table
```

How can I configure a data source for a flying routes layer?

If you are using an SQL data source, you must obtain data of the from and to fields, and separate the longitude and latitude in each field with a comma (.). This process is slightly different from the process for using static data or calling the API.

How can I configure the widget interaction function?

The widget interaction function is currently being tested. For more information, see [Widget interaction](#).

How can I filter data by passing parameters into a URL?

You can define your variables in SQL by using `:dot-id`, for example, `select car_speed, car_color, car_name from table where car_ID = :dot-id`.

You can also pass these variables into a URL to filter the returned data, for example, `http://datav.aliyun.com/...?spm=xxxxx&dot_id=10102`.

5.Data visualizations rendered by DataV on macOS are not displayed properly

Symptoms

Data visualizations do not display properly if the following conditions apply:

- You are using a full-HD Retina display.
- You have updated the latest version of Google Chrome on macOS.
- You use DataV to edit projects that use a map widget.

Cause

This firmware issue occurs because the latest macOS version of Google Chrome (version: 66.0.3359.31) has a **bug**. Due to this bug, frame rates as slow as 8 FPS and display lag may occur in many cases, and CPU consumption increases to full capacity while rendering projects on a canvas.

Solution

This issue has been reported to the Google Chrome development team. A new version is expected to be released soon that will rectify this firmware issue. To continue using DataV properly, we recommend that you consider the following workarounds:

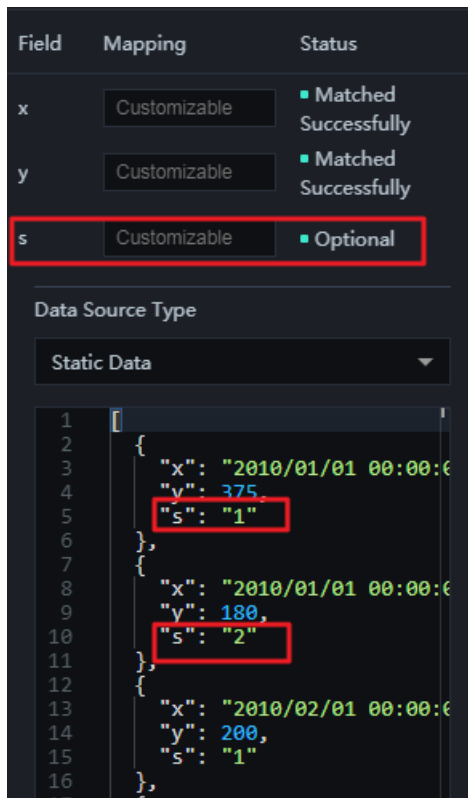
- Use Google Chrome 57 or a later version (excluding the latest version) for macOS.
- Use another web browser such as Safari on macOS, or temporarily switch to using Chrome or another browser on Windows.

6.Frequently asked questions (User self-check process)

What is the relationship between the data series and the style series?

- Data series:

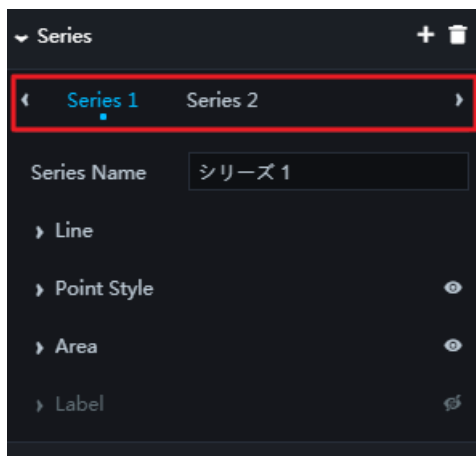
Most basic two-dimensional widgets such as line charts and bar charts support multiple series. You can set the **s** field to apply different data series.



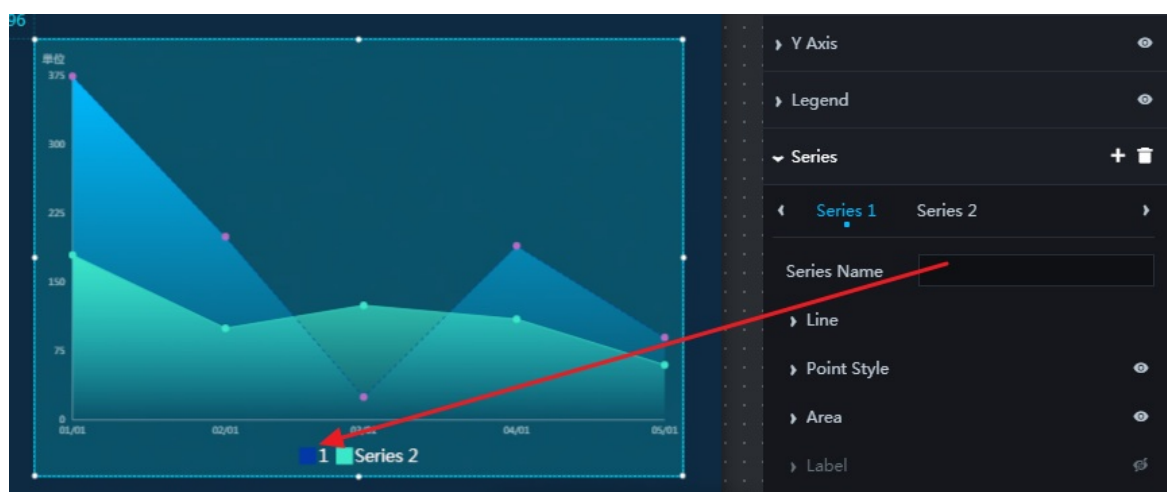
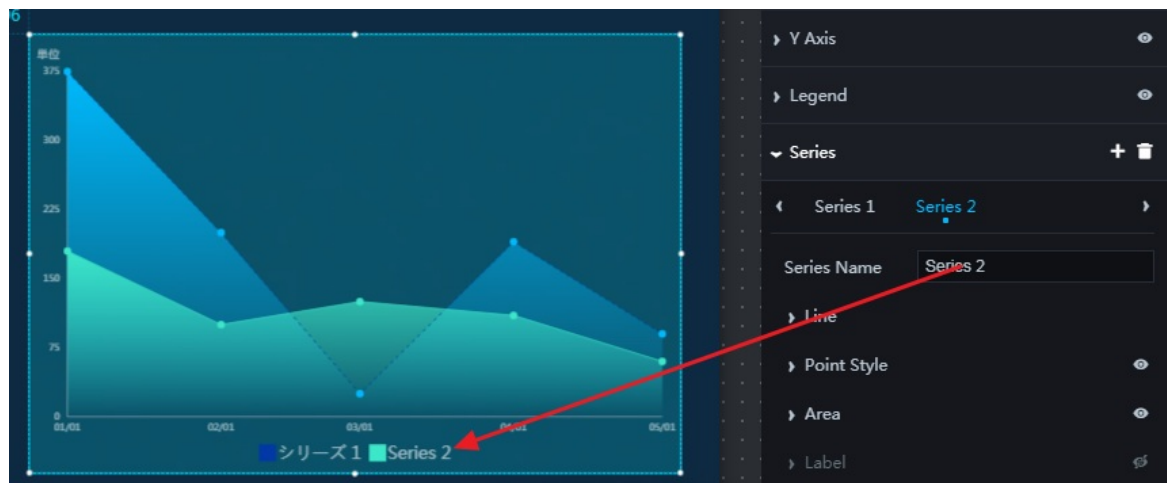
- Style series:

Some widgets such as line charts and bar charts can render multiple data series. You can set the **Series** field on the **Style** tab page.

This field is used to define an array of styles and cyclically render different data series. As shown in the following figure, two series are defined. The widget uses the styles that are specified in ['Series 1','Series 2'] to render the s field for data in cycles.



- Note
 - The **Series Name** field is set to the name of the specified style, and also used as the legend name of the corresponding chart. If Series Name is empty, the legend name is set to the value of the s field specified for the target data series.



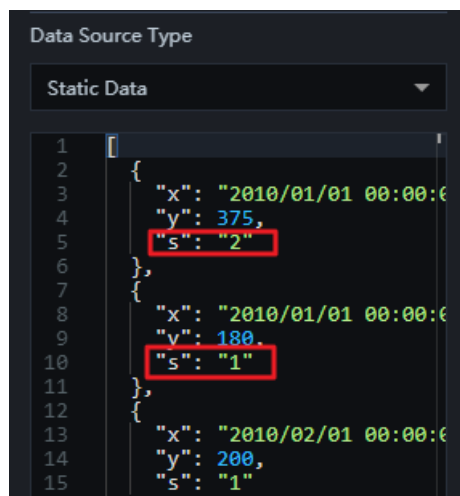
- The style series are mapped to the data series in the order of the series listed in the style setting rather than their names.

For example, the style series [Series1, Series 2, Series 3] can be mapped to the data series [{s1: series 1 style}, {s2: series 2 style}, {s3: series 3 style}, {s4: series 1 style}, {s5: series 2 style}].

Note The s1, s2, s3, s4, and s5 parameters are sequentially set to the values of the s field.

- If some styles such as red s2 and blue s1 are required, you can sort the data in the filter or data source after configuring the style series.

For example, if the style series are set to [red, blue], you can sort the data in the order of [{"s": "2"}, {"s": "1"}].



Why does the widget not change rendering after the callback ID is changed?

- Test the callback ID of the widget on the edit page.

Cause: The widget on the edit page cannot obtain the callback value returned by other widgets.

Solution: Use the default value in the URL, and then test the widget on the edit page.

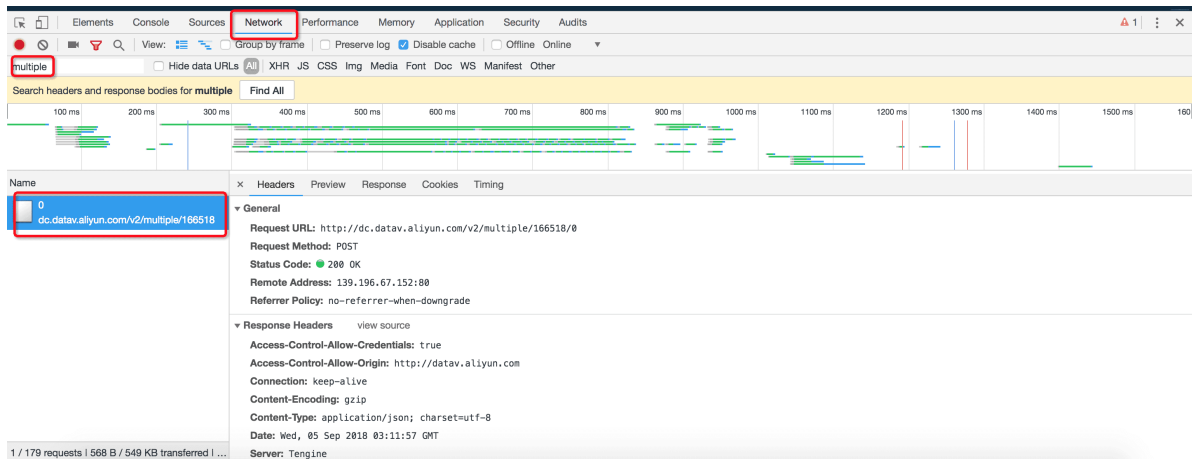
Example: `xxxx/admin/screen/123456? value=123&name=12345`

- Test the callback ID of the widget on the Preview or Publish page.

On the Preview or Publish page of the dashboard, press F12 in Windows or press Option+Command+I in macOS to go to the Network tab page in the console, search `multiple`, and then check whether the widget has requested the Callback ID parameter.

- If the search result is empty, the widget has not requested the Callback ID parameter. You must check the callback configuration.
- If the search result is not empty, the widget has requested the Callback ID parameter. You must check whether the callback parameter in the request is correct, and whether **Status Code** 200 is returned.

If the response is an error, you must check the connection to the data source.



- If you have used the **Ticker Board** widget and Status Code 200 is returned, but the widget does not change rendering, you must check whether **Data Correction** is selected in the widget configuration.

If Data Correction is selected and the specified value is smaller than the current value, the widget does not change rendering.

If your data is fluctuating and real-time data rendering is required, do not select Data Correction.

How can I handle a timeout error when I configure a database as the data source?

1. Make sure that you have completed the configuration as specified in [Database whitelist settings](#).
2. If your data source is Alibaba Cloud RDS, you must configure the RDS whitelist as specified in [Configure RDS Whitelist](#), and make sure that you are using a VPC. <div data-spm-anchor-id="a2762.11472859.0.i97.67dc203byBKOZT">
 - If you are using a VPC, when adding the data source, enable **VPC**, and enter the **VPC ID** and **Instance ID**.

Note You can obtain the VPC ID in the Alibaba Cloud VPC console and the instance ID in the Alibaba Cloud RDS console. Delete the front and end spaces of the ID before you enter it.

- If you are not using a VPC, contact the technical support.


How can I handle a timeout error when a component requests data?

- Cause: The data query has timed out. The timeout value of requests sent to the database is set to 10s in DataV. If the data query time exceeds 10s, a timeout error occurs.

Solution: This timeout value is specified on the server of DataV. You cannot modify this setting. We recommend that you optimize the corresponding SQL statement, or adjust the table structure to decrease the query time.

- Cause: The widget data query consumes too much time, but the interval of requesting the widget auto update is less than the query time. Google Chrome supports a maximum of six HyperText Transfer Protocol (HTTP)-based requests to access the same domain at the same time. The subsequent requests will be pending, and Google Chrome will not be able to send them to the data center.

Solution: We recommend that you adjust the interval of requesting the widget auto update, or optimize the corresponding SQL statement to decrease the query time.

 **Note** Solution to long-time queries:

- Create an API that supports the DataV service for cross-origin data integration.
- Optimize the database query. For example, create related indexes based on common SQL conditions to accelerate the query.


How can I write the SQL statement when the value of the Callback ID parameter is an array?

- Common SQL statement

```
select * from tb where id in (:idList)
```

- Stored procedure

```
function(concat_ws(',', :idList))
```

 **Note** The `idList` object is the array that you configured for the Callback ID parameter.

How can I handle a DataV data proxy request disconnection?

Follow the following steps to troubleshoot:

1. Check if there is a **configuration error** message on the request interface.
 - If a configuration error message appears, the disconnection is caused by a key and secret parsing error. Solutions:
 - a. You can search for time in any web browser search engine, and then check if the local time of your machine is the same as the standard time.
 - b. Check if the key and secret are filled with errors, such as extra spaces. We recommend that you create a new key and secret.
 - If a configuration error does not appear, take the next step.
2. Log on to the machine where you installed the data proxy to access `ip:9998/status` through a browser (for example 128.23. **. **: 9998/status, 9998 is the default port for Data Proxy Service), and then check if your Data Proxy Service starts properly.
 - If your Data Proxy Service starts properly, take the next step.
 - If your Data Proxy Service starts improperly, restart your Data Proxy Service.
3. Check if the machine where you installed the data proxy is configured with an HTTPS certificate issued by a third party.
 - If the machine is configured with an HTTPS certificate, take the next step.
 - If the machine is not configured with an HTTPS certificate, modify the DataV page address protocol to http when accessing your the data proxy.
4. Check if the machine where your data proxy is installed connects to your database.
 - If the machine connects to your database, open a ticket on the DataV console, or contact Alibaba Cloud technical engineers directly.

- If the machine does not connect to your database, check if your data proxy configuration is correct.

7.FAQ about map tiles

This topic provides answers to commonly asked questions about map tiles.

How do I call a map tile in a local area network (LAN)?

You can cache an online tile on your web server and name it in a standard format, for example, [Zoom level]/[Row number]/[Column number].png. Then, you can call the tile by using a URL, for example, `http://ip:port/path_to_your_tile_directory/{z}/{x}/{y}.png`.

What are the coordinate systems and service standards for map tiles in DataV?

Coordinate systems: DataV supports the WGS 84 and GCJ-02 coordinate systems. Map tiles are projected by using Web Mercator (SRID 3857).

Service standards:

- Google Maps uses the Tile Map Service (TMS) standard.
- AMAP accesses a map tile by using a URL, for example, `http://webrd03.is.autonavi.com/appmaptile?lang=en_us&size=1&scale=1&style=8&x={x}&y={y}&z={z}`. In the example URL, {} indicates a placeholder. You must replace a placeholder with the row number or column number of a map tile.

How do I use data in the WGS 84 format in AMAP?

AMAP supports the GCJ-02 coordinate system. You must convert the data format from WGS 84 to GCJ-02. For more information, see [Converting the coordinate system](#).

How do I cache map tiles?

DataV does not provide services or tools to cache map tiles. You can use a map downloader or write code to cache map tiles.

8.FAQ about basemap deployment

This topic answers to commonly asked questions about basemap deployment.

What is TMS?

Tile Map Service (TMS) is also known as Web Map Tile Service (WMTS). For more information, visit the [OGC website](#).

Does DataV provide offline map tile packages?

No, DataV does not provide offline map tile packages.

How can I obtain offline map tile packages?

You can purchase offline map tile packages from AMAP or other map service providers.

9. What are the advantages of DataV over BI dashboards?

DataV and BI dashboards are both data visualization tools.

BI dashboards are usually used to present business metrics, KPIs, and other crucial data for organizations, departments, and teams on a single screen. DataV has the following advantages compared with BI dashboards:

- **Scenario:** DataV supports multi-screen collaboration and large-screen merging. It supports 8K and higher resolutions, which makes it ideal for exhibitions, real-time data monitoring, geographic data analysis, and multidimensional data presentations.
- **Display media:** DataV projects can be displayed on large screens, televisions, computers, and mobile devices.
- **Visual effects:** DataV provides exquisite dynamic visual effects.
- **Customization:** DataV allows you to customize widgets based on your business needs.
- **Display of geographic data:** DataV provides both 2D and 3D spatial engines to display geographic data on 2D and 3D maps.
- **Support for third-party widgets:** DataV integrates a variety of third-party widgets, such as ECharts and Anti-G2. You can find more third-party widgets in the [Alibaba Cloud Marketplace](#).

10. Impacts of updating Google Chrome to v80

After you update Google Chrome to v80, API data of DataV projects may fail to be returned or displayed. This topic describes the background and solutions for this issue.

Background

Google released **Chrome v80** on February 4, 2020. This version of Google Chrome gradually blocks third-party cookies. By default, a **SameSite=Lax** attribute is added for all cookies, and requests that contain insecure cookies with the **SameSite=None** attribute are rejected. This prevents cross-site request forgery (CSRF) attacks.

How can I determine whether updating Google Chrome to v80 will affect my DataV project?

1. Open `chrome://flags/#same-site-by-default-cookies` in Google Chrome and set **SameSite by default cookies** to **Enabled**.
2. Open `chrome://flags/#cookies-without-same-site-must-be-secure` in Google Chrome and set **Cookies without SameSite must be secure** to **Enabled**.
3. Restart Google Chrome and access a DataV project. Check whether all data is returned and displayed as expected.
 - If yes, updating Google Chrome to v80 does not affect your project.
 - If no, the update affects your project. You can troubleshoot the issue based on the following scenarios.

Scenario 1: Your project uses an API data source

Description: The widget in your project uses an API data source. Requests to call the API contain user login information in cookies to obtain data from a third-party website.

Impact: Widget data cannot be returned and displayed as expected.

Solution: Determine whether the API requests use HTTPS or HTTP.

- **HTTPS**

Check whether the settings of **Set-Cookie** in the request header contain **SameSite=None** and **Secure**. If no, add **SameSite=None** and **Secure** to the settings of **Set-Cookie**.

- **HTTP**

- i. Open `chrome://flags/#same-site-by-default-cookies` in Google Chrome and set **SameSite by default cookies** to **Disabled**.
- ii. Open `chrome://flags/#cookies-without-same-site-must-be-secure` in Google Chrome and set **Cookies without SameSite must be secure** to **Disabled**.
- iii. Restart Google Chrome.