Data Lake Visualization

FAQs

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What Is DLV Used For?

DLV is specifically designed to surface valuable insights buried inside the constantly changing and complex data in a more intuitive and user-friendly way. It applies to different sectors including retailing, logistics, electric power, water conservancy, environmental protection, and transportation. With real-time data displayed on interactive screens, DLV helps users discover and diagnose service issues whenever they arise. The following lists some benefits that DLV will bring to you:

- DLV provides you various visual components. In addition to the regular charts optimized for service display, DLV provides irregular charts presenting topological relationships. In addition, DLV supports display of flying lines, heatmaps, regions, 3D maps, and 3D globe, and allows layering of geographical data. In addition, there are irregular charts presenting topological relationships available for you.
- DLV seamlessly integrates with HUAWEI CLOUD services, such as Data Warehouse Service (DWS), Data Lake Insight (DLI), Relational Database Service (RDS), and Object Storage Service (OBS), and supports local CSV files, online APIs, and the private cloud data of enterprises. By fully utilizing big data computing capability, DLV can meet real-time computing and monitoring requirements.
- DLV enables you to build screens only by drag-and-drop without programming and to create screens of different sizes by adapting to unconventional resolutions.
- DLV allows you to release and share your created screens. In this way, your data services can be externally displayed.

2 Regions and AZs

What Are Regions and AZs?

A region and availability zone (AZ) identify the location of a data center. You can create resources in a specific region and AZ.

- Regions are defined in terms of geographical locations and network latencies. Public services such as Elastic Cloud Server (ECS), Elastic Volume Service (EVS), Object Storage Service (OBS), Virtual Private Cloud (VPC), Elastic IP (EIP), and Image Management Service (IMS) are shared within the same region. Regions are classified as common regions and dedicated regions. A common region provides common cloud services that should be made available to all tenants. A dedicated region provides services of a specific type or only for specific tenants.
- An availability zone (AZ) contains one or multiple physical data centers. Each
 AZ has independent cooling, fire extinguishing, moisture-proof, and electricity
 facilities. Within an AZ, computing, network, storage, and other resources are
 logically divided into multiple clusters. AZs within a region are interconnected
 using high-speed optical fibers to support cross-AZ high-availability systems.

Figure 2-1 shows the relationship between regions and AZs.

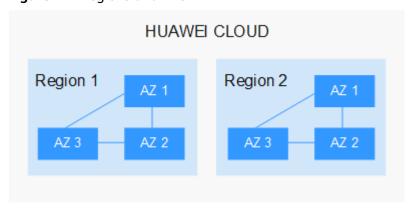


Figure 2-1 Regions and AZs

Currently, HUAWEI CLOUD provides services worldwide. You can select a region and AZ as required. For more information, see **HUAWEI CLOUD Global Regions**.

How Do I Select a Region?

When selecting a region, consider the following factors:

Location

You are advised to select a region close to you or your target users. This reduces network latency and improves access rate. However, the Chinese mainland regions provide the same infrastructure, BGP network quality, as well as resource operations and configurations. Therefore, if you or your target users are in the Chinese mainland, you do not need to consider the network latency differences when selecting a region.

The countries and regions outside the Chinese mainland, such as Bangkok and Hong Kong, provide services for users outside the Chinese mainland. If you or your target users are in the Chinese mainland, these regions are not recommended due to high access latency.

- If you or your target users are in the Asia Pacific area (excluding the Chinese mainland), select the CN-Hong Kong, AP-Bangkok, or AP-Singapore region.
- If you or your target users are in Africa, select the AF-Johannesburg region.
- If you or your target users are in Europe, select the **EU-Paris** region.
- Resource Price

Resource prices may vary in different regions. For details, see **Product Pricing Details**.

How Do I Select an AZ?

When determining whether to deploy resources in the same AZ, consider your applications' requirements for disaster recovery (DR) and network latency.

- For high DR capability, deploy resources in different AZs in the same region.
- For low network latency, deploy resources in the same AZ.

Regions and Endpoints

When using an API to use resources, you must specify its region and endpoint. For details about HUAWEI CLOUD regions and endpoints, see **Regions and Endpoints**.

3 Can I Quickly Create a DLV Screen Using a Template?

Yes, DLV allows you to quickly create a screen by using a template. Template customization is not supported at present but will be supported soon.

4 Can DLV Connect to Data Sources Through APIs?

Yes, DLV can connect to external data sources through APIs. Specifically, you need to drag a component to a screen, set **Data Source Type** to **API** on the **Data** tab, and enter a URL by which DLV connects to a data source and obtains data from it. If a cross-region issue occurs, set header information **Access-Control-Allow-Origin** at the peer end to grant a region access permission.

5 What Types of Data Connections Are Supported in DLV?

DLV supports the following types of data connections:

- Database class: Data Warehouse Service (DWS), MapReduce Service (MRS)
 Hive, MRS SparkSQL, Relational Database Service (RDS) for MySQL, RDS for
 PostgreSQL, and RDS for SQL Server, MySQL, PostreSQL, SQL Server, and
 Oracle
- File class: CSV files and static JSON files
- API class: APIs
- Others: Object Storage Service (OBS)

6 How Do I Configure a CSV Data Source?

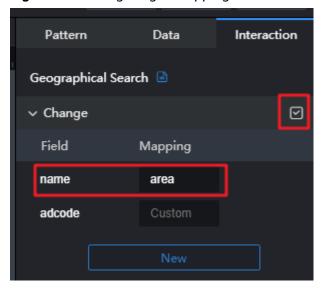
In a CSV file, the first row is the table header and each of the other rows is a data record. Each data record consists of one or more fields. Fields are separated by commas (,). When configuring a data source, retain the first row of the CSV file as the table header, and ensure that the name of each column is consistent with the field name of the data structure required in the corresponding chart.

How Do I Use the Interaction Function?

The interaction function enables parameters set for one component to be useful in other components.

For example, enable the interaction function of a geographical search component and set the mapping of field **name** to **area**, as shown in **Figure 7-1**.

Figure 7-1 Configuring a mapping for a field



In other components, **name** can be used as a variable in the format of **\${name}**, as shown below:

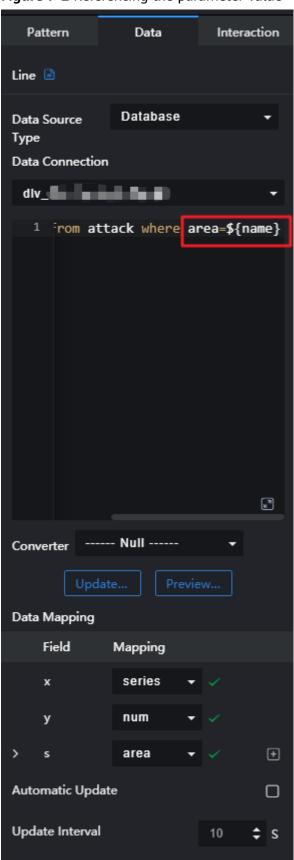


Figure 7-2 Referencing the parameter value

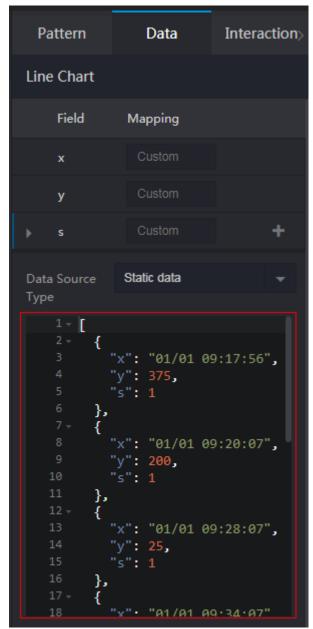
8 What Can I Do If a Component Cannot Be Completely or Normally Displayed?

Clear your browser cache (especially cookie) and log in again.

9 How Do I Query Data Formats Supported by Different Components?

On the **Data** page of a component, you can view data fields and formats and configure mapping relationships. For details about data fields and formats, set **Data Source Type** to **Static data** and see the example content, as shown below:





10 What Can I Do When the WebGL Component Breaks Down?

WebGL is an API for rendering interactive 3D graphics within web browsers. If the system prompts that the WebGL component breaks down when you are using it, refresh or restart the browser.