#### LakeFormation

### FAQs

 Issue
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## What is LakeFormation?

DataArts Lake Formation (LakeFormation) is an enterprise-level one-stop data lake construction service.

It adopts a storage-compute decoupling architecture and provides GUIs and APIs for unified lake metadata management. It is compatible with Hive metadata models and Ranger permission models and can interconnect with MapReduce Service (MRS),Data Lake Insight (DLI), ModelArts, DataArts Studio, and GaussDB(DWS). LakeFormation helps you to easily and efficiently build data lakes and operation services, accelerating the release of service data value.

LakeFormation is a serverless service that uses underlying resources to implement cross-AZ deployment, high reliability, auto scaling, unified metadata management, association between metadata and file directories, and interconnection with multiple compute engines.

# **2** What Are Regions and AZs?

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

- A region is a physical data center, which is completely isolated to improve fault tolerance and stability. After a resource is created, its region cannot be changed.
- An AZ is a physical location with independent power supplies and network in a region. A region can contain multiple AZs, which are physically isolated but interconnected through internal networks. This ensures the independence of AZs and provides low-cost and low-latency network connections.



Figure 2-1 Regions and AZs

Huawei Cloud provides services in many regions worldwide. You can select a region and AZ as required. For more information, see **Global Products and Services**.

## **3** What Is a Project?

You can use projects to group and isolate resources (including compute, storage, and network resources) across physical regions. A default project is provided for each region, and you can create subprojects under each default project. You can grant permissions to users for accessing resources in specific projects.

If you need more refined access control, create subprojects under a default project and prepare resources in subprojects. Then you can assign users the permissions required to access only the resources in the specific subprojects.

**NOTE** 

Resources cannot be transferred across IAM projects.

## **4** What Are Quotas?

#### Introduction

A quota limits the quantity of a resource available to users, thereby preventing spikes in the usage of the resource. A quota indicates, for example, how many ECSs or EVS disks can be created.

If a quota cannot meet your needs, apply for a higher quota.

#### How Do I View My Quotas?

- **Step 1** Log in to the LakeFormation console.
- **Step 2** Click  $\bigcirc$  in the upper left corner and select a region and a project.
- **Step 3** In the upper right corner of the page, choose **Resources** > **My Quotas**.

The Service Quota page is displayed.

#### Figure 4-1 My quotas



- **Step 4** View the used and total quota of each type of resources on the displayed page.
- **Step 5** If a quota cannot meet service requirements, increase a quota.

#### How Do I Apply for a Higher Quota?

- **Step 1** Log in to the LakeFormation console.
- **Step 2** In the upper right corner of the page, choose **Resources** > **My Quotas**.

The **Service Quota** page is displayed.

#### Figure 4-2 My quotas

| Resources       | Billing |  |
|-----------------|---------|--|
| My Resources    | s       |  |
| My Quotas       |         |  |
| Open Beta Tests |         |  |
| My KooGallery   |         |  |

- Step 3 Click Increase Quota.
- Step 4 On the Create Service Ticket page, configure parameters as required.In the Problem Description area, fill in the content and reason for adjustment.
- **Step 5** Select the agreement and click **Submit**.

# **5** What Are the Application Scenarios of LakeFormation?

LakeFormation applies to the following scenarios:

- To ensure fast data lake building and easy daily management of mass metadata and permissions, customers need convenient and efficient methods.
- Multiple compute engines (such as Hive and Spark) use the same metadata to maximize data sharing, avoiding unnecessary data copy and maximizing the value of service data.

## 6 How Do I Obtain an AK/SK?

Access Key ID (AK) is used together with Secret Access Key (SK) to sign requests cryptographically, ensuring that the requests are secret, complete, and correct.

- **Step 1** Log in to the Huawei Cloud management console.
- **Step 2** Move the cursor over your username in the upper right corner of the management console and click **My Credentials** from the drop-down list.
- Step 3 Choose Access Keys.
- Step 4 Click Create Access Key.
- **Step 5** Enter the required information as prompted and click **OK**. On the displayed page, click **Download**.
- Step 6 Open the file to obtain the AK/SK information.

#### NOTICE

For security purposes, access keys are automatically downloaded only when they are generated for the first time and cannot be obtained from the management console later. Keep them properly.

# **7** How Do I Obtain the ID of a LakeFormation Instance?

- **Step 1** Log in to the LakeFormation console.
- **Step 2** In the upper left corner, click  $\equiv$  and choose **Analytics** > **LakeFormation** to access the LakeFormation console.
- **Step 3** Select the target LakeFormation instance from the drop-down list box on the left.
- **Step 4** Obtain the ID of the target instance in the **Basic Information** area.

Instance ID

9d7c31b4-c7aa-48db-

### 8 What Should I Do If a LakeFormation Instance Cannot Be Deleted?

#### Question

A user encounters an issue deleting an instance on the console, and receives an error message stating that the instance cannot be deleted and it is advisable to attempt the deletion again after ensuring that all clients associated with that instance have been removed.

#### Answer

If the current instance contains a client, the instance cannot be deleted. You should delete all access management clients before deleting the instance.

- Step 1 Log in to the LakeFormation console and click Clients in the left navigation pane.
- **Step 2** Click **Delete** in the **Operation** column of each client in the list to delete all clients one by one. (Ensure that the client is no longer used before deleting it.)
- **Step 3** Click **Overview** in the left navigation pane, click **Delete Instance** in the upper right corner, select the checkbox for confirming the impact, and click **OK**.

If an error is reported, rectify the fault based on the error details.

#### **NOTE**

• Deleted instances are moved to the recycle bin and continue to be billed until they are deleted from the recycle bin.

To restore a deleted DB instance, click **Recycle Bin** in the left navigation pane, click **Restore** in the **Operation** column, and click **OK**.

- Instances that have been stored in the recycle bin for more than one day will be automatically deleted and cannot be restored.
- Instances can be forcibly deleted only 15 minutes after they are moved to the recycle bin to prevent service interruption.