

GaussDB(for MySQL)

Billing

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1 Billing Overview

In this document, you will learn about how DB instances are billed, how you can renew subscriptions and manage costs, and what happens if your account goes into arrears.

- **Billing Modes**

There are yearly/monthly, pay-per-use, and serverless billing modes. Each one has different advantages and disadvantages.

- Yearly/Monthly: You pay upfront for the amount of time you expect to use the DB instance for. You will need to make sure you have a top-up account with a sufficient balance or have a valid payment method configured first.
- Pay-per-use: You can start using the DB instance first and then pay as you go.
- Serverless: The instance capacities automatically change based on application requirements. You can start using the DB instance first and then pay as you go.

For details about the preceding billing modes, see [Overview](#).

You can also change the billing mode later if it no longer meets your needs. For details, see [Overview](#).

- **Billing Items**

You will be billed for instance specifications, storage space, backup space, EIP bandwidth, and the Monitoring by Seconds function.

For more information about the billing samples and the billing for each item, see [Billing Examples](#).

- **Renewing Subscriptions**

If you want to continue using a DB instance after it expires, you need to renew the DB instance subscription within the specified period. Otherwise, resources, such as compute and storage, will be automatically released, and data may be lost. You can renew your subscription manually or automatically. For more information about renewal, see [Overview](#).

- **Viewing Bills**

You can choose **Billing Center** > **Billing** to check the DB instance transactions and bills. For details, see [Bills](#).

- **Arrears**
If there is not a sufficient account balance to pay for your bill, your account will go into arrears. If you want to continue using your cloud services, you will need to top up your account in a timely manner. For details, see [Arrears](#).
- **Stopping Billing**
If you no longer need to use your DB instance, you can unsubscribe from or delete it to stop the billing. For details, see [Billing Termination](#).
- **Managing Costs**
GaussDB(for MySQL) costs include resource costs and O&M costs. You can allocate, analyze, and optimize GaussDB(for MySQL) costs to save more money. For details, see [Cost Management](#).

2 Billing Modes

2.1 Overview

There are yearly/monthly, pay-per-use, and serverless billing modes. Each one has different advantages and disadvantages.

- Yearly/Monthly is a prepaid billing mode. You pay in advance for a subscription term, and in exchange, you get a discounted rate. The longer the subscription term, the bigger the discount. Yearly/Monthly billing is a good option for long-term, stable services.
- Pay-per-use is a postpaid billing mode. You pay as you go and just pay for what you use. The DB instance usage is calculated by the second but billed every hour. Pay-per-use billing is a good option for scenarios where there are sudden traffic bursts, such as e-commerce promotions.
- Serverless: The instance capacities automatically change based on application requirements. You can start using the DB instance first and then pay as you go.

Table 2-1 Differences between billing modes

Billing Mode	Yearly/Monthly	Pay-per-use
Payment	Prepaid Billed by the subscription term you purchase	Postpaid Billed for what you use
Billed Usage Period	Billed by the subscription term you purchase	Calculated by the second but billed every hour

Billing Items	<p>Instance specifications (vCPUs and memory), storage space, backup space, EIP, and monitoring by seconds</p> <p>NOTE If a DB instance is deleted, its automated backups will also be deleted and you will no longer be billed for them. Manual backups are retained and generate additional costs. You need to manually delete manual backups.</p>	<p>Instance specifications (vCPUs and memory), storage space, backup space, EIP, and monitoring by seconds</p> <p>NOTE If a DB instance is deleted, its automated backups will also be deleted and you will no longer be billed for them. Manual backups are retained and generate additional costs. You need to manually delete manual backups.</p>
Changing the Billing Mode	<p>Yearly/Monthly can be changed to pay-per-use. The change takes effect only after the yearly/monthly subscription expires.</p> <p>Changing the Billing Mode from Yearly/Monthly to Pay-per-Use</p>	<p>Pay-per-use can be changed to yearly/monthly.</p> <p>Changing the Billing Mode from Pay-per-Use to Yearly/Monthly</p>
Changing the Specifications	Supported	Supported
Application Scenarios	Recommended for resources expected to be in use long-term. A cost-effective option for scenarios where the resource usage duration is predictable.	Recommended when the resource demands are likely to fluctuate and you want more flexibility.

2.2 Yearly/Monthly Billing

If you expect to use DB instances for a longer period, you can save money by selecting yearly/monthly billing. This section describes the billing rules for yearly/monthly DB instances.

Application Scenarios

If you want to ensure DB instance stability over a certain period of time, yearly/monthly billing is a good choice for the following types of workloads:

- Long-term workloads with stable resource requirements, such as official websites, online malls, and blogs.

- Long-term projects, such as scientific research projects and large-scale events.
- Workloads with predictable traffic bursts, for example, e-commerce promotions or festivals.
- Workloads with high data security requirements

Billing Items

The following table lists billing items of yearly/monthly DB instances.

Table 2-2 Items billed on a yearly/monthly basis

Billing Item	Description	Billing Factor	Billing Formula
(Mandatory) DB instance	Instance specifications include vCPUs, memory, and the number of nodes.	vCPUs, memory, and number of nodes	Specifications unit price x Required duration x Number of nodes For details about the unit price, see "Specification Price" in GaussDB(for MySQL) Pricing Details .
(Mandatory) Storage	Purchased storage in advance is billed at a yearly/monthly basis. However, if the actual usage exceeds your purchased storage, you will be billed for additional storage on a pay-per-use basis.	Storage space, which is charged based on the unified standard.	Storage space unit price x Storage space x Required duration For details about the unit price, see "Storage Space Price" in GaussDB(for MySQL) Pricing Details .

Billing Item	Description	Billing Factor	Billing Formula
(Mandatory) Backup space	<p>GaussDB(for MySQL) provides free backup storage equal to the amount of your purchased storage space.</p> <p>After the free backup space is used up, charges are applied based on the backup space pricing details. Pricing is listed on a per-hour basis, but bills are calculated based on the actual usage duration.</p>	Backup space, which is charged based on the unified standard.	<p>Backup space unit price x Billed backup space x Billed duration</p> <p>For details about the unit price, see "Backup Storage Price" in GaussDB(for MySQL) Pricing Details.</p> <p>NOTE The billed duration refers to the length of time the billed backup space was used for.</p>
(Optional) EIP bandwidth	<ul style="list-style-type: none"> DB instances can be accessed through a public network, and traffic fees are generated accordingly. You are not billed for traffic generated through a private network. 	<p>Bandwidth fees, traffic fees, and EIP retention fees (An EIP is required if your resources need to access a public network.)</p> <p>Billed by bandwidth.</p>	<p>Billed by fixed bandwidth</p> <p>For details, see "By Bandwidth" in GaussDB(for MySQL) Pricing Details.</p>
(Optional) Monitoring by Seconds	<p>One it is enabled, pricing is listed on a per-hour basis, but bills are calculated based on the actual usage duration. GaussDB(for MySQL) provides monitoring every 60 seconds for free.</p>	Monitoring frequency, which is charged based on the unified standard.	<p>Unit price of Monitoring by Seconds x Billed duration</p> <p>For details about the unit price, see Configuring Monitoring by Seconds.</p> <p>NOTE Billed duration: 1s or 5s (If Monitoring by Seconds is enabled, the monitoring interval can be set to 1 second or 5 seconds.)</p>

Suppose you want to purchase a one-month DB instance with 2 vCPUs and 8 GB of memory in the CN-Hong Kong region. The DB instance contains two nodes and

40 GB of storage. At the bottom of the **Buy DB Instance** page, you can view pricing details (excluding the backup space prices).

Figure 2-1 Price details (excluding backup space price)

Price	
Billed Resource	Amount
GaussDB instance	\$2,900.00 USD
GaussDB storage space	\$240.00 USD
Price	\$3,140.00 USD

The prices include:

- Instance specifications (including vCPUs and memory)
- Selected storage space

NOTE

The backup space price is not included. For details about the backup price, see the **Price calculator** page or the page for confirming instance settings.

- Price Calculator page

Backup Storage Price

Billing Method	Hourly	Currency
Linear billing	0.00004	Price per GB

- Confirming instance settings page

GaussDB(for MySQL) Functions Backup space Pay per use 1 \$100000GB

Billed Usage Period

A yearly/monthly DB instance is billed for the purchased duration. The billing starts when you activated or renewed the subscription, and ends at 23:59:59 of the expiry date.

For example, if you purchased a one-month DB instance on March 08, 2023, 15:50:04, the billed usage period is from March 08, 2023, 15:50:04 to April 08, 2023, 23:59:59.

Billing Examples

Suppose you purchased a yearly/monthly GaussDB(for MySQL) instance in CN-Hong Kong at 15:50:04 on March 8, 2023 with the following specifications:

- Instance specifications: dedicated edition, 2 vCPUs, 8 GB of memory, and 2 nodes
- Storage: 40 GB

Suppose subscription was for one month, and the subscription would be manually renewed for one month before it expired, the billing details would be as follows:

- Billed usage period 1: March 08, 2023, 15:50:04 to April 08, 2023, 23:59:59
 - Storage: 20 GB
 - Backup space: 20 GB (which is free)
 - EIP bandwidth: 6 Mbit/s
- Billed usage period 2: April 08, 2023, 23:59:59 to May 08, 2023, 23:59:59.
 - Storage: 20 GB
 - EIP bandwidth: 6 Mbit/s
 - Backup space: 30 GB

Of the 50 GB of backup space, 40 GB was free and 10 GB was billed from May 1, 2023, 23:59:59 to May 08, 2023, 23:59:59 (168 hours).
 - 1-second monitoring: Billed from May 4, 2023, 23:59:59 to May 08, 2023, 23:59:59 (96 hours).

The billing items include instance specifications (vCPUs, memory, and number of nodes), storage space, backup space, EIP bandwidth, and Monitoring by Seconds.

You will be billed for all usage periods. GaussDB(for MySQL) instances are billed individually as follows:

Table 2-3 Formulas for billing yearly/monthly DB instances

Resource	Formula	Unit Price
Instance specifications (vCPUs and memory)	Specifications unit price x Required duration x Number of nodes	See "Specification Price" in GaussDB(for MySQL) Pricing Details .
Storage space	Storage space unit price x Required duration x Storage (GB)	See "Backup Storage Price" in GaussDB(for MySQL) Pricing Details .
Backup space	Backup space unit price x Billed duration x (Backup space - Storage space) (GB) NOTE The billed duration refers to the length of time the billed backup space was used for.	See "Backup Storage Price" in GaussDB(for MySQL) Pricing Details .
EIP bandwidth	Billed by fixed bandwidth	See EIP Pricing Details .
Enabling Monitoring by Seconds	Unit price of Monitoring by Seconds x Billed duration	For details, see Configuring Monitoring by Seconds .

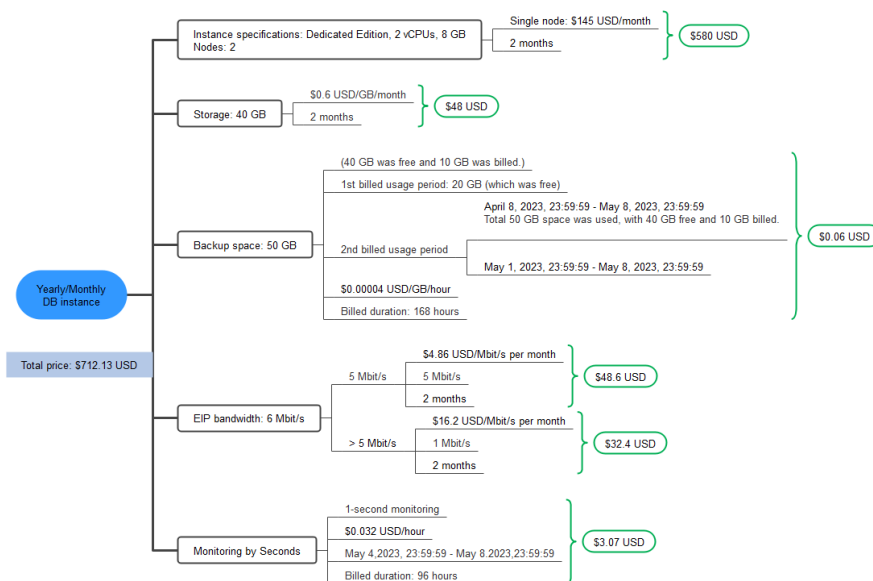
[Figure 2-2](#) shows the billing calculation.

NOTICE

The price in the figure is for reference only. The actual prices are subject to [GaussDB\(for MySQL\) Pricing Details](#).

Prices are calculated to two decimal places, with the third and later decimal places are truncated rather than rounded off.

Figure 2-2 Billing calculation example for a yearly/monthly instance (in CN-Hong Kong)



Price Change After Specification Change

If the specifications of a yearly/monthly DB instance no longer meet your needs, you can change the specifications on the console. The system will recalculate the price and either bill or refund you the difference.

- If you upgrade your DB instance specifications, you need to pay the difference in price.
- If you downgrade your DB instance specifications, Huawei Cloud will refund you the difference.

You are not advised to downgrade your DB instance to a lower specification because the instance performance may be affected.

Example of upgrade pricing (without any discount): Suppose you purchased a one-month DB instance (2 vCPUs | 8 GB and 3 nodes) in CN-Hong Kong on April 8, 2023, and you changed its specifications to 4 vCPUs | 16 GB and 2 nodes on April 18, 2023. The price of the original specifications was \$145 USD per month, and that for the new specifications were \$290 USD per month. The price difference will be calculated as follows:

$$\text{Price difference for the specification upgrade} = \text{Price for the new specifications} \times \text{Remaining period} \times \text{Number of nodes} - \text{Price for the original specifications} \times \text{Remaining period} \times \text{Number of nodes}$$

The remaining period in the formula is the remaining days of each calendar month divided by the maximum number of days in each calendar month.

In this example, Remaining period = 12 (Remaining days in April)/30 (Maximum number of days in April) + 8 (Remaining days in May)/31 (Maximum number of days in May) = 0.6581

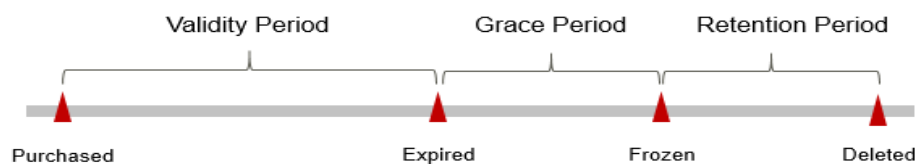
Cost of upgrade = \$190.85 USD (\$290 USD x 0.6581 x 2 - \$145 USD x 0.6581 x 2).

For more information, see [Pricing of a Changed Specification](#).

Impact of Expiration

[Figure 2-3](#) shows the statuses a yearly/monthly DB instance can go through throughout its lifecycle. After a DB instance is purchased, it enters the valid period and runs normally during this period. If the DB instance is not renewed after it expires, before being deleted, it first enters a grace period and then a retention period.

Figure 2-3 Lifecycle of a yearly/monthly DB instance



Expiration Reminder

The system will send you a reminder (by email, SMS, or in-app message) 7 days before a yearly/monthly DB instance expires to remind you to renew the subscription.

Impact of Expiration

If your yearly/monthly DB instance is not renewed after it expires, it changes to the **Expired** state and enters a grace period. During the grace period, you can access the DB instance but cannot:

- Change instance specifications
- Change the billing mode to pay-per-use
- Unsubscribe from the DB instance
- Create a read replica
- Change storage

If the yearly/monthly DB instance is not renewed after the grace period ends, its status turns to **Frozen** and it enters a retention period. You cannot perform any operations on the DB instance while it is in the retention period.

If the yearly/monthly DB instance is not renewed by the time the retention period ends, it will be released and data cannot be restored.

 NOTE

- During the retention period, you cannot access and use your DB instance but data in the DB instance will be retained. The retention period for Huawei Cloud International website is 15 days.
- During the grace period, you can access and use only some resources of your DB instance. The grace period for Huawei Cloud International website is 15 days.
- For details about renewals, see [Overview](#).

2.3 Pay-per-Use Billing

Pay-per-use billing means you pay nothing up front and are not tied into any contract or commitment. This section describes the billing rules of pay-per-use DB instances.

Application Scenarios

Pay-per-use billing is good for short-term, bursty, or unpredictable workloads that cannot tolerate any interruptions, such as applications for e-commerce flash sales, temporary testing, and scientific computing.

Billing Items

The following table lists billing items of pay-per-use DB instances.

Table 2-4 Items billed on a yearly/monthly basis

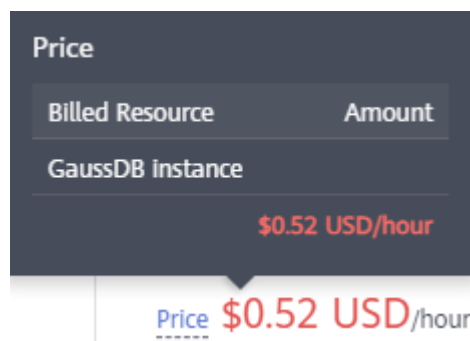
Billing Item	Description	Billing Factor	Billing Formula
(Mandatory) DB instance	Instance specifications include vCPUs, memory, and the number of nodes.	vCPUs, memory, and number of nodes Instance types of different specifications provide different compute and storage.	Specifications unit price x Required duration x Number of nodes For details about the unit price, see "Specification Price" in GaussDB(for MySQL) Pricing Details .
(Mandatory) Storage	Purchased storage in advance is billed at a yearly/monthly basis.	Storage space, which is charged based on the unified standard.	Storage space unit price x Storage space x Required duration For details about the unit price, see "Storage Space Price" in GaussDB(for MySQL) Pricing Details .

Billing Item	Description	Billing Factor	Billing Formula
(Mandatory) Backup space	After the free backup space is used up, charges are applied based on the backup space pricing details. Pricing is listed on a per-hour basis, but bills are calculated based on the actual usage duration.	Backup space, which is charged based on the unified standard.	<p>Backup space unit price x Billed backup space x Billed duration</p> <p>For details about the unit price, see "Backup Storage Price" in GaussDB(for MySQL) Pricing Details.</p> <p>NOTE The billed duration refers to the length of time the billed backup space was used for.</p>
(Optional) EIP bandwidth	<ul style="list-style-type: none"> DB instances can be accessed through a public network, and traffic fees are generated accordingly. You are not billed for traffic generated through a private network. 	<p>EIPs are required if your resources need to access a public network.</p> <p>Billing items: bandwidth fee, traffic fee, and IP address retention fee.</p> <p>EIP for a pay-per-use DB instance: billed by bandwidth, traffic, or shared bandwidth. You are also charged for IP reservation if you do not bind the EIP to any instance.</p>	<p>Billed by fixed bandwidth</p> <p>For details, see "By Bandwidth" in GaussDB(for MySQL) Pricing Details.</p>

Billing Item	Description	Billing Factor	Billing Formula
(Optional) Monitoring by Seconds	One it is enabled, pricing is listed on a per-hour basis, but bills are calculated based on the actual usage duration. GaussDB(for MySQL) provides monitoring every 60 seconds for free.	Monitoring frequency, which is charged based on the unified standard.	<p>Unit price of Monitoring by Seconds x Billed duration</p> <p>For details about the unit price, see Configuring Monitoring by Seconds.</p> <p>NOTE Billed duration: 1s or 5s (If Monitoring by Seconds is enabled, the monitoring interval can be set to 1 second or 5 seconds.)</p>

If you want to purchase a DB instance with 2 vCPUs, 8 GB of memory, and 2 nodes, the prices will be displayed as follows (excluding storage and backup space prices).

Figure 2-4 Example prices



The prices include:

Instance specifications (including vCPUs and memory)

NOTE

The storage and backup space prices are not included. For details about storage and backup prices, see the **Product Pricing Details** page of the [price calculator](#).

Billed Usage Period

Pay-per-use DB instance usage is calculated by the second and billed every hour. The billing starts when the DB instance is launched and ends when the DB instance is deleted.

 **NOTE**

It takes a certain time to create a DB instance. The billing starts from the **Completed** time on the **Instant Tasks** page in the task center.

For example, if you purchased a pay-per-use DB instance at 8:45:30 and deleted it at 8:55:30, you were billed for the 600 seconds from 8:45:30 to 8:55:30.

Billing Examples

Suppose you purchased a pay-per-use DB instance with 2 vCPUs and 8 GB of memory at 10:00:30 on April 18, 2023 and deleted the DB instance on at 10:45:46 on the same day. The DB instance with two nodes used 20 GB storage and 50 GB backup space.

Usage of 2,716 seconds from 10:00:30 to 10:45:46 (between 10:00:30 and 11:00:00)

- From 10:00:30 to 10:35:00, the backup space was free. From 10:35:00 to 10:45:46, the backup space was billed for 646 seconds.
- From 10:10:00 to 10:45:46, 1-second monitoring was billed for 2,146 seconds.

You will be billed for all usage periods. GaussDB(for MySQL) instances are billed individually as follows: The prices displayed in the pricing details are per hour, so you need to divide it by 3,600 to obtain the price for each second and then multiple the per-second price by the total number of seconds.

Table 2-5 Billing formulas

Billing Item	Formula	Unit Price
Instance specifications (vCPUs and memory)	Specifications unit price x Required duration x Number of nodes	See "Specification Price" in GaussDB(for MySQL) Pricing Details .
Storage	Storage space unit price x Required duration x Storage (GB)	See "Backup Storage Price" in GaussDB(for MySQL) Pricing Details .
Backup space	Backup space unit price x Billed duration x (Backup space – Storage space) (GB) NOTE The billed duration refers to the length of time the billed backup space was used for.	See "Backup Storage Price" in GaussDB(for MySQL) Pricing Details .

Billing Item	Formula	Unit Price
EIP bandwidth	Billed by fixed bandwidth NOTE If your pay-per-use EIP has no instance bound, you will be billed for the EIP reservation price.	See EIP Pricing Details .
Enabling Monitoring by Seconds	Unit price of Monitoring by Seconds x Billed duration	For details, see Configuring Monitoring by Seconds .

[Figure 2-5](#) shows the billing calculation.

NOTICE

When you delete a DB instance, its automated backups are also deleted, but its manual backups are still retained and will incur additional costs.

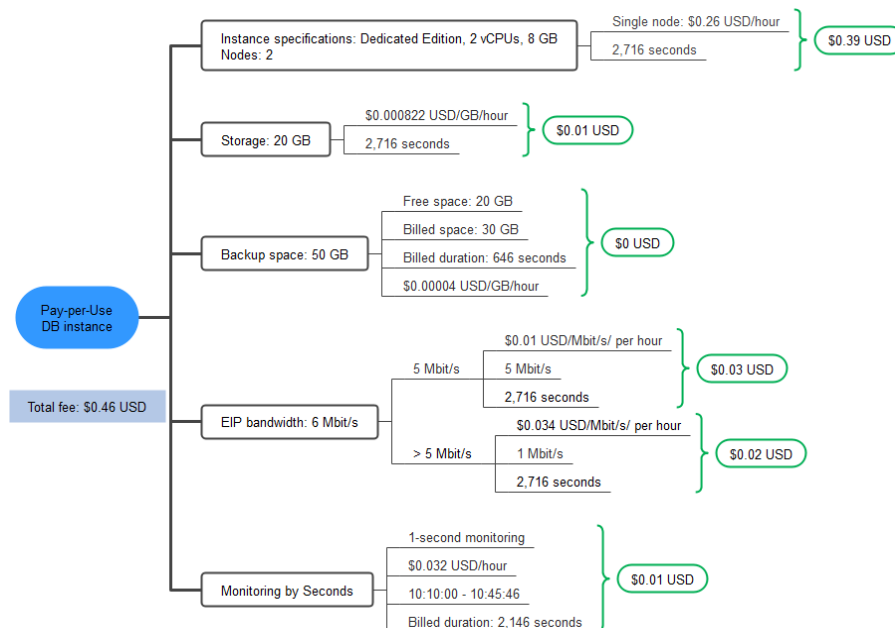
The price in the figure is for reference only. The actual prices are subject to [GaussDB\(for MySQL\) Pricing Details](#).

However, the amount due is truncated to the 2nd decimal place. The third and later decimal places are referred to as the truncated amounts.

From June 2021, the amounts before bill generation are no longer truncated. Only the total amount shown in the monthly bill is rounded off to the 2nd decimal place.

- On the **Billing > Bills > Bills** page of the Billing Center, the total amount in a monthly bill is slightly higher because the amounts are no longer truncated to the 2nd decimal place.
 - On the **Billing > Bills > Bills** page of the Billing Center, the amounts shown under **Details By Account** are rounded off. Therefore, there may be some discrepancies with the amounts shown in the monthly bill. To view the exact amounts (accurate to the 8th decimal place), customers can export the monthly bill in XLSX or CSV format.
-

Figure 2-5 Total price for a pay-per-use DB instance in CN-Hong Kong



Price Change After Specification Change

If you change the instance specifications of a pay-per-use DB instance, the original order will become invalid and a new order will be placed. You will be billed based on the new instance specifications.

If you change the instance specifications within a given hour, multiple records will be generated. Different records record the billing for different instance specifications.

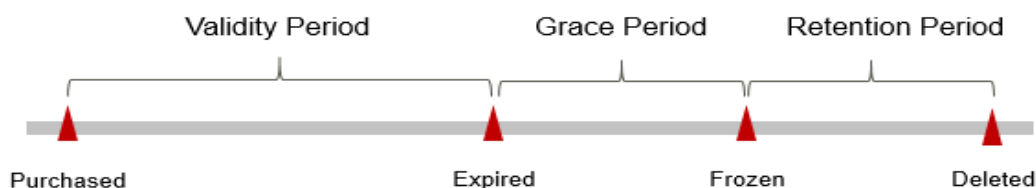
Suppose you purchased a pay-per-use DB instance (2 vCPUs | 8 GB) at 9:00:00 and changed the instance specifications to 4 vCPUs | 16 GB at 9:30:00. Two billing records were generated from 9:00:00 to 10:00:00.

- DB instance (2 vCPUs | 8 GB) usage from 9:00:00 to 9:30:00
- DB instance (4 vCPUs | 16 GB) usage from 9:30:00 to 10:00:00

Impacts of Arrears

Figure 2-6 shows the statuses a pay-per-use DB instance can have throughout its lifecycle. After a DB instance is purchased, it enters the valid period and runs normally during this period. If your account goes into arrears, the DB instance enters a grace period and then a retention period.

Figure 2-6 Life cycle of a pay-per-use DB instance



Arrears Reminder

The system will bill you for pay-per-use DB instances after each billing cycle ends. If your account goes into arrears, we will notify you by email, SMS, or in-app message.

Impacts of Arrears

If there is no top-up account with sufficient balance and no other payment method configured to pay for the resources used, your account goes into arrears, and the pay-per-use DB instance enters the grace period. You are still responsible for expenditures generated during the grace period. You can view the charges on the **Billing Center > Overview** page and pay any past due balance as needed.

If you do not bring your account balance current before the grace period expires, the DB instance status turns to **Frozen** and it enters a retention period. You cannot perform any operations on a pay-per-use DB instance in the **Frozen** status.

If you do not bring your account balance current before the retention period ends, your instance will be released, and data cannot be restored.

NOTE

- During the retention period, you cannot access and use your DB instance but data in the DB instance will be retained. The retention period for Huawei Cloud International website is 15 days.
- During the grace period, you can access and use only some resources of your DB instance. The grace period for Huawei Cloud International website is 15 days.
- For details about top-up, see [Topping Up an Account](#).

3 Billing Examples

Billing Scenario

At 16:00:00 on March 18, 2023, you purchased a pay-per-use DB instance at CN-Hong Kong.

- Specifications: 2 vCPUs | 8 GB
- Nodes: 2

After a period of time, the current instance no longer met business requirements. The specifications were upgraded to 4 vCPUs | 16 GB at 9:00:00 on March 20, 2023. As you intend to use the DB instance for a long time, you changed the billing mode from pay-per-use to yearly/monthly at 10:30:00 on March 20, 2023. The subscription duration was one month. How much can you be billed for the DB instance in March and April?

Billing Analysis

The usage of the DB instance can be divided into two parts, based on the billing mode.

- **Pay-per-use billing: March 18, 2023, 16:00:00 to March 20, 2023, 10:30:00**
 - March 18, 2023, 16:00:00 to March 20, 2023, 9:00:00
 - Instance specifications: 2 vCPUs, 8 GB
 - Nodes: 2
 - Storage: 20 GB
 - Backup space: 20 GB
 - March 20, 2023, 9:00:00 to March 20, 2023, 10:30:00
 - Instance specifications: 4 vCPUs | 16 GB
 - Nodes: 2
 - Storage: 10 GB
 - Backup space: 15 GB (5 GB was billed at a pay-per-use basis from March 20, 2023, 10:00:00 to March 20, 2023, 10:30:00)

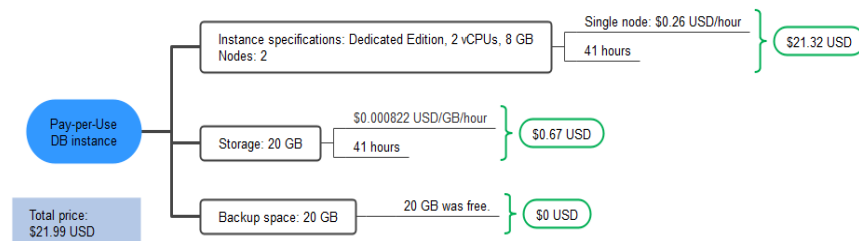
- EIP bandwidth: 6 Mbit/s
 - Monitoring by Seconds: enabled (Collection period was 1s).
- **Yearly/monthly billing: March 20, 2023, 10:30:00 to April 20, 2023, 23:59:59**
 - Instance specifications: 4 vCPUs | 16 GB
 - Nodes: 2
 - Storage: 80 GB
 - Backup space: 100 GB (20 GB was billed at a pay-per-use basis from April 10, 2023,23:59:59 to April 20, 2023, 23:59:59)
 - EIP bandwidth: 6 Mbit/s
 - Monitoring by Seconds: enabled (Collection period was 1s).
 - Billing period: 1 month

NOTICE

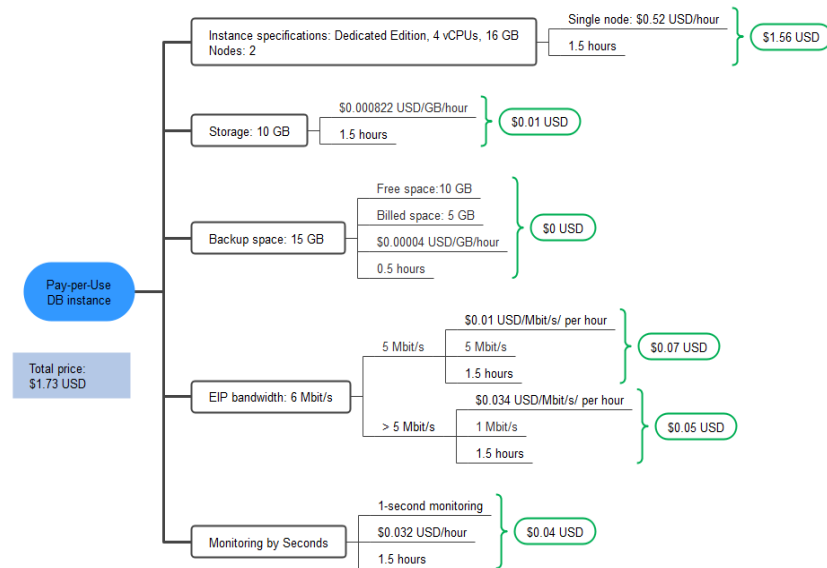
The price in the figure is for reference only. The actual prices are subject to [GaussDB\(for MySQL\) Pricing Details](#).

Price in the pay-per-use phase

1. You would be billed for the DB instance from 16:00:00 on March 18, 2023 to 9:00:00 on March 20, 2023, based on 2 vCPUs and 8 GB memory. The billed duration would be 41 hours. Monthly settlement was not used. The billed duration of each resource was as follows.

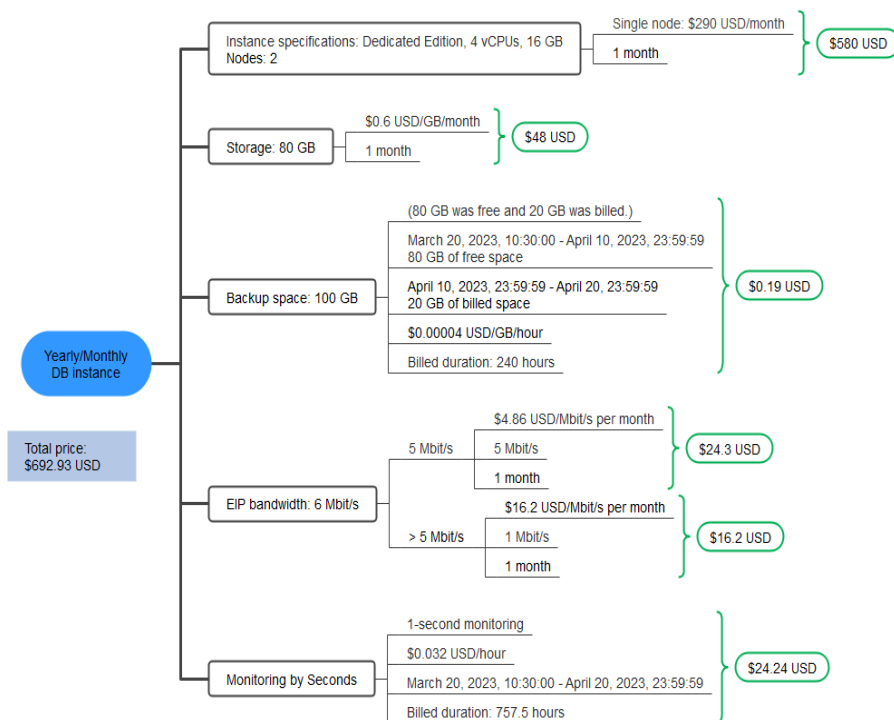


2. You would be billed for the DB instance from 9:00:00 on March 20, 2023 to 10:30:00 on March 20, 2023 based on 4 vCPUs and 16 GB of memory. The billing period would be 1.5 hours. Monthly settlement was not used. The billed duration of each resource was as follows.



Price in the yearly/monthly phase

From 10:30:00 on March 20, 2023 to 23:59:59 on April 20, 2023, the billing mode was yearly/monthly. The billing period was 1 month. The price was calculated as follows.



From March to April, the total expenditure generated by the DB instance was \$716.65 USD (21.99 + 1.73 + 692.93).

4 Billing Mode Changes

4.1 Overview

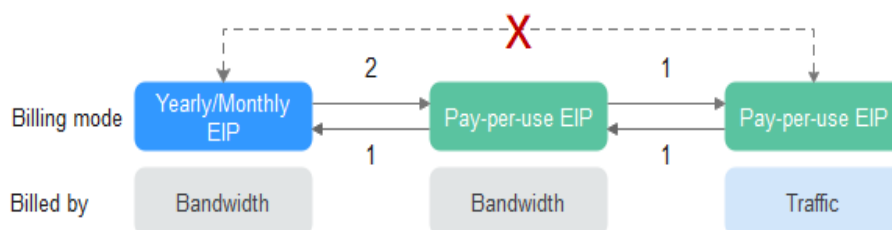
You can change the billing mode if it no longer meets your needs. [Table 4-1](#) lists the changeable DB instance billing items.

Table 4-1 Changeable DB instance billing items

Billing Item	Change Description	Reference
Instance specifications (vCPUs and memory)	<p>Changing the billing mode of a DB instance includes the changes to compute resources (vCPUs and memory) and storage space.</p> <ul style="list-style-type: none">• Change from pay-per-use to yearly/monthly to enjoy lower prices.• Change from yearly/monthly to pay-per-use to use the DB instance more flexibly. <p>NOTE Such a change takes effect only after the yearly/monthly subscription ends.</p>	<ul style="list-style-type: none">• Pay-per-Use to Yearly/Monthly• Yearly/Monthly to Pay-per-Use

Billing Item	Change Description	Reference
EIP	<ul style="list-style-type: none"> A yearly/monthly EIP can be changed to a pay-per-use EIP billed by bandwidth after the yearly/monthly subscription ends. A pay-per-use EIP billed by bandwidth can be changed to a yearly/monthly EIP. Pay-per-use EIPs billed by bandwidth can be changed to pay-per-use EIPs billed by traffic, and pay-per-use EIPs billed by traffic can be changed to pay-per-use EIPs billed by bandwidth. <p>For details, see Figure 4-1.</p>	<ul style="list-style-type: none"> Pay-per-Use to Yearly/Monthly Yearly/Monthly to Pay-per-Use

Figure 4-1 EIP billing mode change



- 1: The change takes effect immediately.
- 2: The change takes effect only after the yearly/monthly subscription period expires.
- x: The billing mode cannot be changed.

4.2 Pay-per-Use to Yearly/Monthly

If you have a pay-per-use DB instance that you expect to use for a long time, you can change it to yearly/monthly billing to reduce costs. Doing so will create an order. After you pay for the order, yearly/monthly billing will be applied immediately.

Suppose you bought a pay-per-use DB instance at 15:29:16 on April 18, 2023 and changed it to yearly/monthly billing at 16:30:30 on the same day. After you paid for the order, yearly/monthly billing was applied immediately. On the **Billing Center > Billing** page, three line items were generated.

- Pay-per-use expenditures for 15:29:16 to 16:00:00 on April 18, 2023
- Pay-per-use expenditures for 16:00:00 to 16:30:30 on April 18, 2023
- A single, yearly/monthly expenditure generated on April 18, 2023, 16:30:30

Constraints

Resources such as EIPs that are used by DB instances may not support the change with this instance. For details about their billing mode change rules and handling methods, see [Table 4-2](#).

Table 4-2 EIP billing mode change rules

Change	Change Description
From pay-per-use (billed by bandwidth) to yearly/monthly	Directly change it on the console. For details, see From Pay-per-Use (Billed by Bandwidth) to Yearly/Monthly .
From pay-per-use EIP (billed by traffic) to yearly/monthly	Perform two steps to change it on the console: 1. Change the EIP from billed by traffic to billed by bandwidth 2. Change the EIP to yearly/monthly billing
From billing by traffic (pay-per-use) to billing by bandwidth (pay-per-use)	Directly change it on the console. For details, see Pay-per-Use EIPs: From Billing By Traffic to By Bandwidth
From billing by bandwidth (pay-per-use) to billing by traffic (pay-per-use)	Directly change it on the console. For details, see Pay-per-Use EIPs: From Billing By Traffic to By Bandwidth

NOTICE


After the change is successful, the new billing mode is applied immediately.


Restrictions

- The billing of the primary node and read replicas for a pay-per-use instance cannot be changed separately to yearly/monthly.
- Pay-per-use DB instances in any of the following statuses cannot be changed to yearly/monthly DB instances: frozen, creation failed, changing instance specifications, scaling up, and creating read replicas.

Changing the Billing Mode of a DB Instance

Step 1 [Log in to the management console](#).

Step 2 Click  in the upper left corner and select a region and a project.

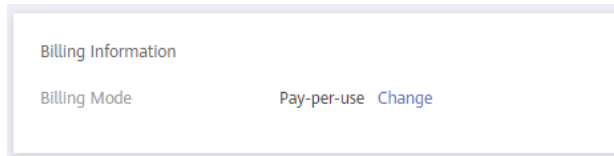
Step 3 Click  in the upper left corner of the page, choose **Databases** > **GaussDB(for MySQL)**.

Step 4 On the **Instances** page, locate the pay-per-use instance that you want to change to the yearly/monthly instance and choose **More** > **Change to Yearly/Monthly** in

the **Operation** column. On the displayed page, select your desired storage space and click **Next**.

Alternatively, click the instance name to go to the **Basic Information** page. In the **Billing Information** area, click **Change** next to the **Billing Mode** field. On the displayed page, select your desired storage space and click **Next**.

Figure 4-2 Changing the billing mode from pay-per-use to yearly/monthly




By default, the new storage space is rounded up to the nearest multiple of ten. For example, if the used storage space of your pay-per-use instance is 91 GB, the minimum storage space you can select when you change the billing mode to yearly/monthly is 100 GB.

- Step 5** Select how many months you want to renew the subscription for. The minimum duration is one month.
- If you do not need to modify your settings, click **Pay** to go to the payment page.
 - If you are not sure about the settings, the system will reserve your order. You can choose **Billing Center > Unpaid Orders** in the upper right corner and pay or cancel the order. In addition, the instance status is **Changing to Yearly/Monthly. Payment incomplete. Pay Now**.

Step 6 Select a payment method and click **Confirm**.

Step 7 View the results on the **Instances** page.

In the upper right corner of the instance list, click  to refresh the list. After the change completes, the instance status will change to **Available** and the billing mode will change to **Yearly/Monthly**.

----End


Changing the Billing Mode of Multiple Instance in Batches

NOTE

Only pay-per-use instances can be changed to yearly/monthly instances.
The status of pay-per-use instances must be **Available**.

Step 1 [Log in to the management console](#).

Step 2 Click  in the upper left corner and select a region and a project.

Step 3 Click  in the upper left corner of the page, choose **Databases > GaussDB(for MySQL)**.

Step 4 On the **Instances** page, select the desired instances and click **Change to Yearly/Monthly** above the instance list.

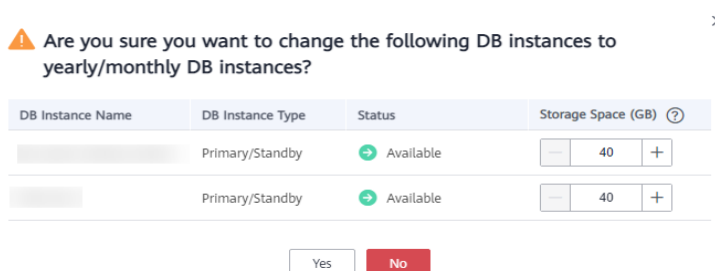
Figure 4-3 Changing pay-per-use instances to yearly/monthly in batches (1)



NameID	Description	DB Instanc...	DB Engine	Status	Billing Mode	Private IP ...	Read/Write Split...	Private Domain Name	Storage Type	Operation
388507674544558668		Primary/Stan... 2 vCPU 8 ...	GaussDB(for... Upgrade	Available	Pay-per-use Created on S...	192.168...	--	--	Shared	Log In View Metric More >
84e01212c342f5ac7e88c		Primary/Stan... 2 vCPU 8 ...	GaussDB(for... Upgrade	Available	Pay-per-use Created on S...	192.168...	--	--	Shared	Log In View Metric More >

Step 5 In the displayed dialog box, select storage space for the instances and click **Yes**.

Figure 4-4 Changing pay-per-use instances to yearly/monthly in batches (2)



⚠ Are you sure you want to change the following DB instances to yearly/monthly DB instances?

DB Instance Name	DB Instance Type	Status	Storage Space (GB)
	Primary/Standby	Available	40
	Primary/Standby	Available	40


Yes No

Step 6 Select how many months you want to renew the subscription for. The minimum duration is one month.

- If you do not need to modify your settings, click **Pay** to go to the payment page.
- If you are not sure about the settings, the system will reserve your order. You can choose **Billing Center > Unpaid Orders** in the upper right corner and pay or cancel the order. In addition, the instance status is **Changing to Yearly/Monthly. Payment incomplete. Pay Now**.

Step 7 Select a payment method and click **Pay**.

Step 8 View the results on the **Instances** page.

In the upper right corner of the instance list, click  to refresh the list. The instance status will become **Available** after the change is successful. The billing mode will change to **Yearly/Monthly**.

----End

4.3 Yearly/Monthly to Pay-per-Use

After creating a yearly/monthly DB instance, you can change it to pay-per-use billing to reclaim some costs and use it more flexibly.

Suppose you bought a yearly/monthly DB instance at 15:29:16 on April 18, 2023 and changed it to pay-per-use billing at 16:30:00 on May 18, 2023. On the **Billing Center > Billing** page, bills information is generated as follows:

- Yearly/Monthly billing: 15:29:16 on April 18, 2023 to 23:59:59 on May 18, 2023
- Pay-per-use billing: 00:00:00 on May 19, 2023 - End time of pay-per-use billing. A bill was generated every hour.

NOTICE

The pay-per-use billing mode will be applied only after the yearly/monthly billed duration ends and auto-renew will be not in effect.

Constraints

Resources such as EIPs that are used by DB instances may not support the change with this instance. For details about their billing mode change rules and handling methods, see [Table 4-3](#).

Table 4-3 EIP billing mode change rules

Change	Change Description
From yearly/monthly to pay-per-use upon expiration (billed by bandwidth)	Directly change it on the console. For details, see From Yearly/Monthly to Pay-Per-Use upon Expiration (Billed by Bandwidth) .
From yearly/monthly to pay-per-use upon expiration (billed by bandwidth)	Perform two steps to change it on the console: 1. Change the EIP to pay-per-use billed by bandwidth. 2. Change the EIP billed by traffic.


NOTICE

Pay-per-use billing will be applied only after the yearly/monthly billing ends.

Changing the Billing Mode from Yearly/Monthly to Pay-per-Use

Step 1 [Log in to the management console](#).


Step 2 Click  in the upper left corner and select a region and a project.

Step 3 Click  in the upper left corner of the page, choose **Databases > GaussDB(for MySQL)**.

Step 4 On the **Instances** page, locate the yearly/monthly instance that you want to change to pay-per-use instance and choose **More > Change to Pay-per-use** in the **Operation** column.

Alternatively, click the DB instance name to go to the **Basic Information** page. In the **Billing Information** area, click **Change** in the **Billing Mode** field.

- Step 5** On the displayed page, change the billing mode of the DB instance.
- Step 6** On the **Change to Pay-per-Use After Expiration** page, confirm the instance billing information and click **Change to Pay-per-Use**.
- Step 7** Wait until the billing mode is successfully changed and view and manage the instances on the **Instances** page.

In the upper right corner of the instance list, click  to refresh the list. After the change completes, the instance status will change to **Available** and the billing mode will change to **Pay-per-use**.

----End

5 Renewing Subscriptions

5.1 Overview

When to Renew Subscriptions

If a yearly/monthly DB instance is about to expire but you want to continue using it, you need to renew the DB instance subscription within a specified period, or resources, such as vCPUs, memory, will be automatically released, and data will be lost and cannot be restored.

Only yearly/monthly DB instance subscriptions can be renewed. If you use a pay-per-use instance, just ensure that your account has a valid payment method configured or a top-up account with a sufficient balance.

If you renew a DB instance before it expires, resources will be retained and you can continue using the DB instance. For details about DB instance statuses after they have expired and the associated impacts, see [Impact of Expiration](#).

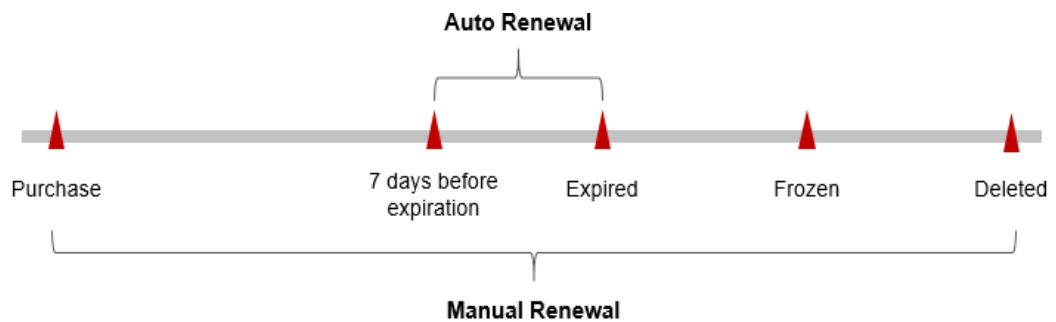
How to Renew Subscriptions

You can renew a yearly/monthly DB instance manually or automatically.

Table 5-1 Renewing a yearly/monthly DB instance

Method	Description
Manually Renewing a DB Instance	You can renew a yearly/monthly DB instance on the console any time before it is automatically deleted.
Auto-renewing a DB Instance	You can enable auto-renewal to automatically renew the DB instance before it expires. This prevents resources from being deleted in case you forget to renew a subscription.

You can select a method to renew a yearly/monthly DB instance based on the phase the DB instance is currently in.

Figure 5-1 Selecting a renewal method based on DB instance's current phase

- A DB instance is in the **Available** state after it is provisioned.
- When a DB instance subscription expires, the status will change from **Available** to **Expired**.
- If an expired DB instance is not renewed, it enters a grace period. If it is not renewed by the time the grace period expires, the DB instance will be frozen and enter a retention period.
- If you do not renew the subscription before the retention period expires, your resources will be automatically deleted.

NOTE

- During the retention period, you cannot access and use your DB instance but data in the DB instance will be retained. The retention period for Huawei Cloud International website is 15 days.
- During the grace period, you can access and use only some resources of your DB instance. The grace period for Huawei Cloud International website is 15 days.


You can enable auto-renewal any time before a DB instance expires. By default, the system will make the first attempt to charge your account for the renewal at 03:00 seven days before the expiry date. If this attempt fails, it will make another attempt at 03:00 every day until the subscription is renewed or expired. You can change the auto-payment date for renewal as required.


5.2 Manually Renewing a DB Instance

You can renew a yearly/monthly DB instance anytime on the console before it is automatically deleted.

Renewing a DB Instance on the Console

Step 1 [Log in to the management console.](#)

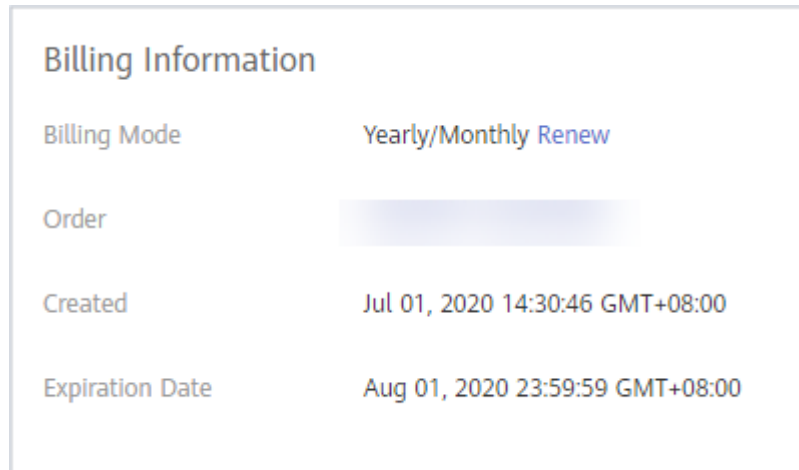
Step 2 Click  in the upper left corner and select a region and a project.

Step 3 Click  in the upper left corner of the page, choose **Databases > GaussDB(for MySQL)**.

Step 4 On the **Instances** page, locate the DB instance you want to renew and click **Renew** in the **Operation** column.

Alternatively, click the DB instance name to go to the **Basic Information** page. In the **Billing Information** area, click **Renew** in the **Billing Mode** field.

Figure 5-2 Renewing a DB instance



Step 5 On the displayed page, renew the DB instance.

----End

Renewing a Subscription in Billing Center

Step 1 Log in to the console.

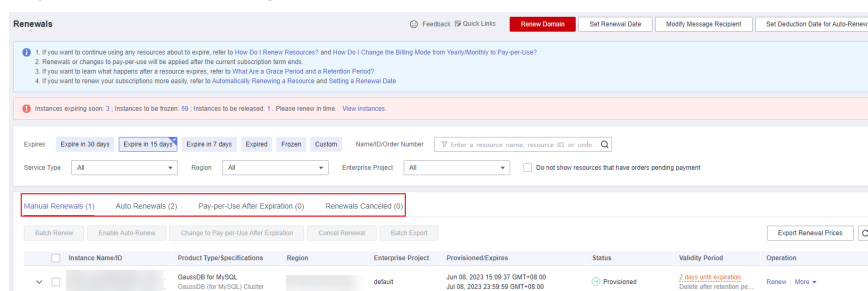
Step 2 Hover over **Billing & Costs** in the upper part of the console and choose **Renewal** from the drop-down list.

The **Renewals** page is displayed.

Step 3 Select the search criteria.

On the **Manual Renewals**, **Auto Renewals**, **Pay-per-Use After Expiration**, and **Renewals Canceled** pages, you can view the DB instances to be renewed.

Figure 5-3 Renewing a DB instance

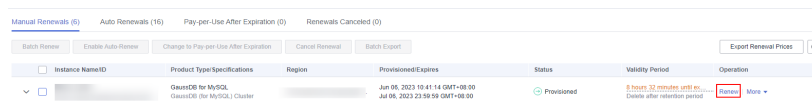


You can move all DB instances that need to be manually renewed to the **Manual Renewals** tab page. For details, see [Restoring to Manual Renewal](#).

Step 4 Manually renew one or more DB instances.

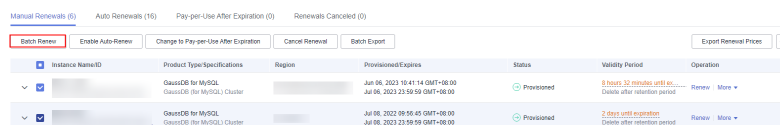
- Individual renewal: Locate a DB instance that you want to renew and click **Renew** in the **Operation** column.

Figure 5-4 Renewing a DB instance



- Batch renewal: Select multiple DB instances that you want renew and click **Batch Renew** in the upper left corner.

Figure 5-5 Renewing multiple DB instances



Step 5 Select a renewal duration and optionally select **Renew on the standard renewal date**. For details, see [Setting the Same Renewal Day for Yearly/Monthly Instances](#). Confirm the price and click **Pay**.

Step 6 Select a payment method and make your payment. Once the order is paid, the renewal is complete.

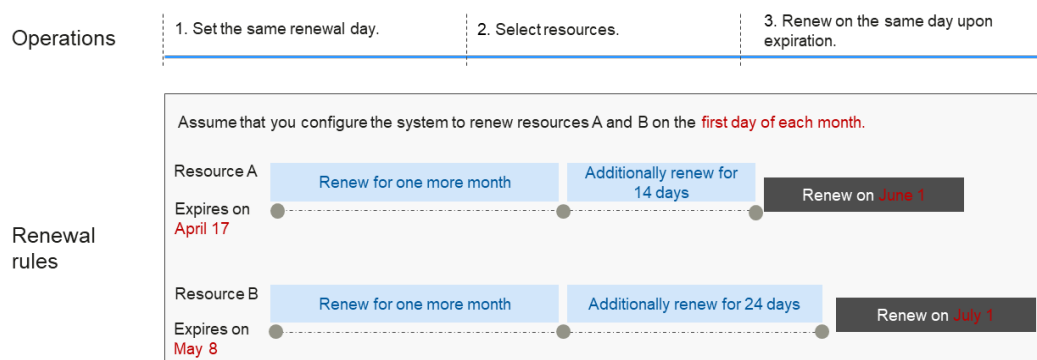
----End

Setting the Same Renewal Day for Yearly/Monthly Instances

If the DB instances have different expiry dates, you can set the same renewal day.

In [Figure 5-6](#), a user sets the same renewal day for two resources that will expire at different dates.

Figure 5-6 Setting the same renewal day for resources with different expiry dates



For details, see [Setting a Renewal Date](#).

5.3 Auto-renewing a DB Instance

Auto-renewal can prevent DB instances from being automatically deleted if you forget to manually renew them. The auto-renewal rules are as follows:

- The first auto-renewal date is based on when the DB instance expires and the billing cycle.
- The auto-renewal period of a DB instance depends on the subscription term.
 - Monthly subscriptions renew each month.
 - Yearly subscriptions renew each year.
- You can enable auto-renewal any time before a DB instance expires. By default, the system will make the first attempt to charge your account for the renewal at 03:00 seven days before the expiry date. If this attempt fails, it will make another attempt at 03:00 every day until the subscription is renewed or expired.
- After auto-renewal is enabled, you can still renew the DB instance manually if you want to. After a manual renewal is complete, auto-renewal is still valid, and fees start to be deducted seven days before the new subscription expires.
- By default, the renewal fee is deducted from your account seven days before the new expiry date. You can change this auto-renewal payment date as required.

For more information about auto-renewal rules, see [Auto-Renewal Rules](#).

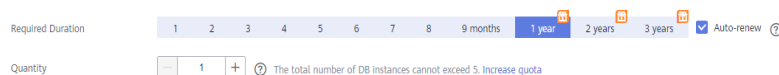
Prerequisites

The yearly/monthly DB instance is not expired.

Enabling Auto-Renewal During Purchase

You can enable auto-renewal on the **Buy DB Instance** page, as shown in [Figure 5-7](#). For details, see [Step 1: Buy a DB Instance](#).

Figure 5-7 Enabling auto-renewal



Enabling Auto-Renewal on the Renewals Page

Step 1 Log in to the console.

Step 2 Hover over **Billing & Costs** in the upper part of the console and choose **Renewal** from the drop-down list.

The **Renewals** page is displayed.

Step 3 Select the search criteria.

- On the **Auto Renewals** page, you can view the DB instances that auto-renewal has been enabled for.
- You can enable auto-renewal for DB instances on the **Manual Renewals**, **Pay-per-Use After Expiration**, and **Renewals Canceled** pages.

Figure 5-8 Renewing a DB instance

Instance Name/ID	Product Type/Specifications	Region	Provisioned Expires	Status	Validity Period	Operation
...	GaussDB for MySQL GaussDB for MySQL Cluster	...	Jun 06, 2023 10:41:14 GMT+08:00 Jul 06, 2023 22:59:59 GMT+08:00	Provisioned	7 hours 35 minutes until expiration Details after retention period	Renew More

Step 4 Enable auto-renewal for yearly/monthly DB instances.

- Enabling auto-renewal for a single DB instance: Select the instance for which you want to enable auto-renewal and click **Enable Auto-Renew** in the **Operation** column.

Figure 5-9 Enabling auto-renewal for a single DB instance

- Enabling auto-renewal for multiple DB instances at a time: Select the instances for which you want to enable auto-renewal and click **Enable Auto-Renew** above the list.

Figure 5-10 Enabling auto-renewal for multiple DB instances

Step 5 Select a renewal period, specify the auto-renewal times, and click **Pay**.

Figure 5-11 Enabling auto-renewal

1. Huawei Cloud starts deducting renewal fees from your account 7 days before the expiration of the current subscription term. Ensure that your account balance is sufficient.
 2. You can manually renew your resources at any time even if auto-renew is enabled. After a manual renewal is complete, auto-renew is still in effect, and Huawei Cloud will start deducting renewal fees from your account 7 days before the expiration of the new subscription term.
 3. You can pay for auto-renewal using your account balance, discounts, coupons, and stored-value cards. [Payment Rules for Auto-Renewal](#)

Instance Name/ID	Service ...	Current Configuration	Region	Billing M...	Validity Period	Current Auto-R...	Remaining ...	End Time
...	GaussD...	GaussDB (for MySQL)...	...	Monthly	7 hours 43 minut...	None	Unlimited	--

New Auto-Renew Period: 1 month, 3 months, 6 months, 9 months, 1 year

Auto-renewals Preset Auto-renewals

OK

----End

6 Bills

You can view the resource usage and bills for a different billing cycles on the **Bills** page in the Billing Center.

Bill Generation

Transaction records for yearly/monthly subscriptions are generated immediately after being paid for.


A pay-per-use DB instance is billed by the hour, day, or month, depending on the DB instance's usage type. For details, see [Bill Run for Pay-per-Use Resources](#).

You are not charged immediately after a record is generated. For example, if a pay-per-use DB instance (which is billed on an hourly basis) is deleted at 08:30, you will still have expenditures for the 08:00 to 09:00 hour. However, but you will not likely be billed for the 08:00 to 09:00 hour until about 10:00. On the **Bills** page of the Billing Center, select the **Bill Details** tab. **Expenditure Time** in the bill indicates the time when the pay-per-use resource is used.

Viewing Bills of a Specific Resource

Step 1 [Log in to the management console](#).

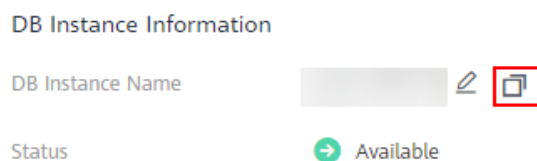
Step 2 Click  in the upper left corner and select a region and a project.

Step 3 Click  in the upper left corner of the page, choose **Databases** > **GaussDB(for MySQL)**.

Step 4 On the **Instances** page, click your instance name to go to the **Basic Information** page.

Step 5 Click the icon shown in the figure below to copy the instance name.

Figure 6-1 Copying the instance name



Step 6 On the top menu bar, choose **Billing & Costs > Bills**. The **Bills** page is displayed.


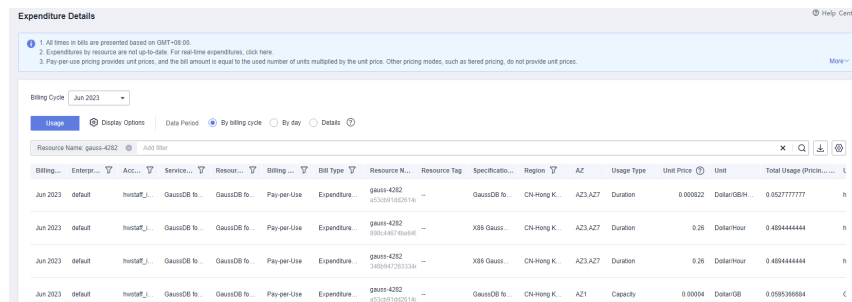
Step 7 On the **Bill Details** tab, select **Resource Name** as the filter criteria, enter the obtained instance name, and click the  icon.

Figure 6-2 Searching for a bill



By default, the bill details are displayed by usage and billing cycle. You can choose other display options as required. For details, see [Bills](#).

----End

Checking the Consistency of the Actual Usage and Billed Usage

Assume that you purchased a pay-per-use DB instance at 10:09:06 on April 8, 2023 and deleted it later that day, at 12:09:06.

- **Transaction Records**
Pay-per-use DB instance usage is calculated by the second and but billed on an hourly basis. You can check the transaction records against the actual usage. The billed resources are billed separately. Take storage as an example. For details, see [Table 6-1](#).

Table 6-1 GaussDB(for MySQL) transaction records

Service Type	GaussDB(for MySQL)
Resource Type	Storage
Billing Mode	Pay-per-use
Expenditure Time	For the period of time from 10:09:06 to 12:09:06 on April 8, 2023, 3 transaction records would be generated for the resource usage in the following periods: <ul style="list-style-type: none"> • 10:09:06 - 11:00:00 • 11:00:00 - 12:00:00 • 12:00:00 -12:09:06

List Price	<p>List price on the official website = Usage x Unit price x Capacity</p> <p>The DB instance was used for 3,054 seconds in the first period, and the unit price can be obtained on the GaussDB(for MySQL) Pricing Details.</p> <p>For example, if the storage was \$0.000822 USD/GB/hour. The list price for the first period = $(3054 \div 3600) \times 0.000822 \times 40 = \\0.0278932 USD. Similarly, you can calculate the storage list price for the other periods.</p>
Discounted Amount	<p>Discounts offered for cloud services, for example, commercial discounts, partner authorized discounts, and promotional discounts. It is the discounted amount based on the list price.</p>
Truncated Amount	<p>Huawei Cloud billing is calculated to the 8th decimal place.</p> <p>However, the amount due is truncated to the 2nd decimal place. The third and later decimal places are referred to as the truncated amounts.</p> <p>From June 2021, the amounts before bill generation are no longer truncated. Only the total amount shown in the monthly bill is rounded off to the 2nd decimal place.</p> <p>Take the first period as an example. The truncated amount is \$0.0078932 USD.</p>
Amount Due	<p>Amount due = List price - Discount amount - Truncated amount</p> <p>Take the first period as an example. If the discount amount is 0, the amount due is \$0.02 USD ($0.0278932 - 0 - 0.0078932$).</p>

- GaussDB(for MySQL) bill details

Bill details can display in multiple ways. By default, the bill details of a resource are displayed by usage and by billing cycle. [Table 6-2](#) illustrates the GaussDB(for MySQL) DB instance bill details, which can be used to check against the actual usage.

Table 6-2 GaussDB(for MySQL) bill details

Service Type	GaussDB(for MySQL)
Resource Type	Storage
Billing Mode	Pay-per-use
Resource Name/ID	<p>Specific DB instance name and ID.</p> <p>Example: gauss-ec81, df37e4ff6a2d4600b923e2a6555a6d70in07.volume</p>

Specifications	Storage
Usage Type	Duration for a pay-per-use DB instance
Unit Price	<p>When pay-per-use billing is used, the unit price is only provided if the amount is equal to the usage multiplied by the unit price. No unit price is provided in other pricing modes, for example, tiered pricing.</p> <p>You can search for the unit price for pay-per-use DB instances on the GaussDB(for MySQL) Pricing Details page.</p>
Unit	Displayed on the GaussDB(for MySQL) Pricing Details page. Example: USD/GB/hour
Usage	Depends on the unit of the unit price, which is USD/GB/hour. Storage usage is billed by the hour. Example: 2 hours.
Usage Unit	Hour
List Price	<p>List price on the official website = Usage x Unit price x Capacity</p> <p>The DB instance was used for 2 hours in total, and the unit price was obtained on the GaussDB(for MySQL) Pricing Details page.</p> <p>The list price = 2 x 0.000822 x 40 = \$0.06576 USD (The storage was 40 GB and unit price was \$0.000822 USD/GB/hour)</p>
Discounted Amount	Discounts offered for cloud services, for example, commercial discounts, partner authorized discounts, and promotional discounts. It is the discounted amount based on the list price.
Amount Due	Amount that should be paid for used cloud services after discounts are applied.

7 Arrears

If your configured payment method is unable to pay for your bill, your account will be in arrears. You will need to update your payment method or to top up your account in a timely manner if you want to continue using your DB instance.

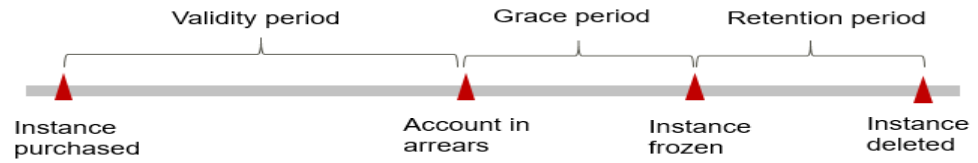
Arrears Reason

If your DB instance is not billed at a yearly/monthly basis, your account falls into arrears any time your configured payment method is unable to pay for the used resources on the pay-per-use basis.

Arrears Impact

- **Yearly/Monthly**
This is a pre-paid billing mode, so you can continue using yearly/monthly DB instances even if your account is in arrears. However, you cannot perform operations such as purchasing new DB instances, upgrading the instance specifications, or renewing DB instances, because they will generate new expenditures.
- **Pay-Per-Use**
If your configured payment method is unable to pay a bill for a pay-per-use instance, the DB instance enters a grace period. After you top up your account, Huawei Cloud will bill you for expenditures generated by the DB instance during the grace period. You can view the expenditures on the **Overview** page of the Billing Center.
If your account is still in arrears after the grace period ends, the DB instance enters the retention period and the status turns to **Frozen**. You cannot perform any operations on the DB instance.
After the retention period ends, the compute resources (vCPUs and memory) and EIPs will be released and data cannot be restored.

Figure 7-1 Life cycle of a pay-per-use DB instance



NOTE


- During the retention period, you cannot access and use your DB instance but data in the DB instance will be retained. The retention period for Huawei Cloud International website is 15 days.
- During the grace period, you can access and use only some resources of your DB instance. The grace period for Huawei Cloud International website is 15 days.

Avoiding and Handling Arrears

Make sure you have a valid payment method configured as soon as possible after your account is in arrears. For details, see [Topping Up an Account](#).

If a DB instance is no longer used, you can delete it to avoid generating further expenditures.

To help make sure your account never falls into arrears, you can configure the **Balance Alert** on the **Overview** page of the Billing Center. Then, any time an expenditure quota drops to below the threshold you specify, Huawei Cloud automatically notifies you by SMS or email.

Step 4 Click  in the upper left corner of the page, choose **Databases > GaussDB(for MySQL)**.


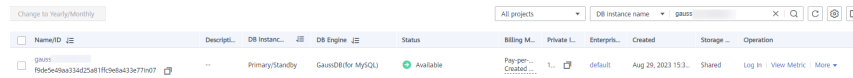
Step 5 Enter the name of the DB instance copied in **Step 3** in the search box and click .

Figure 8-2 Searching for a DB instance



NameID	Descrpt.	DB Instanc.	DB Engine	Status	Billing M.	Private L.	Enterprise	Created	Storage	Operation
gauss-19d5e42ba33425481fcd9eb433e771e07		Primary/Standby	GaussDB(for MySQL)	Available	Pay-per-Used	1	default	Aug 29, 2023 15:3...	Shared	Log In View Metric More

Step 6 Locate the DB instance and click **More > Delete** in the **Operation** column. Ensure that the DB instance has been removed from the list.

 **NOTE**

The system usually deducts fees of the last settlement period within one hour after the products are used. As a result, after a pay-per-use resource is deleted, the bill information may still exist. For example, if you delete a pay-per-use DB instance at 08:30, the expenditures for that hour from 08:00 to 09:00 are usually not billed until about 10:00.

----End

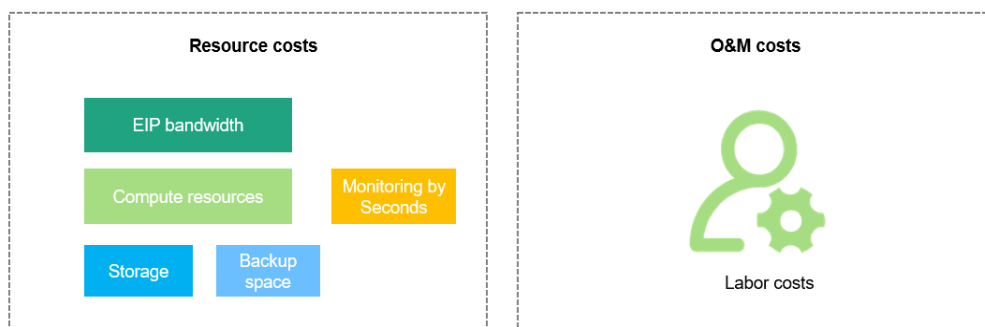
9 Cost Management

The following describes how to manage GaussDB(for MySQL) costs to help maximize return on your investment.

9.1 Cost Composition

GaussDB(for MySQL) costs consist of two parts:

- Resource costs: compute resource cost and storage resource cost. For details, see [Billing Modes](#).
- O&M costs: labor costs incurred during the use of DB instances.



Huawei Cloud [Cost Center](#) helps you manage resource costs with ease. However, you need to identify, manage, and optimize O&M costs by yourself.

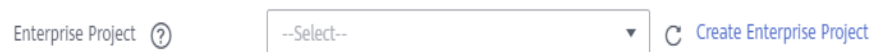
9.2 Cost Allocation

A good cost accountability system is a prerequisite for cost management. It ensures that departments, business teams, and owners are accountable for their respective cloud costs. An enterprise can allocate cloud costs to different teams or projects so as to have a clear picture of their respective costs.

Huawei Cloud [Cost Center](#) provides various tools for you to group costs in different ways. You can experiment with these tools and find a way that works best for you.

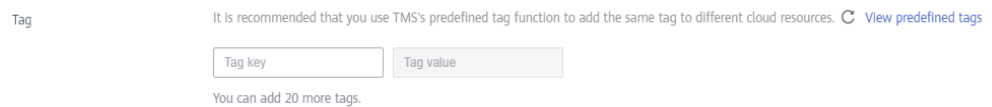
- By linked account**
 The enterprise master account can manage costs by grouping the costs of its member accounts by linked account. For details, see [Viewing Costs by Linked Account](#).
- By enterprise project**
 Before allocating costs, enable Enterprise Project Management Service (EPS) and plan your enterprise projects based on your organizational structure or service needs. When purchasing cloud resources, select an enterprise project so that the costs of the resources will be allocated to the selected enterprise project. For details, see [Viewing Costs by Enterprise Project](#).

Figure 9-1 Selecting an enterprise project



- By cost tag**
 You use tags to sort your Huawei Cloud resources in a variety of different ways, for example, by purpose, owner, or environment. The following is the process of managing costs by predefined tags (recommended).

Figure 9-2 Adding a tag



For details, see [Viewing Costs by Cost Tag](#).

- By cost category**
 You can use cost categories provided by [Cost Center](#) to split shared costs. Shared costs are the costs of resources (compute, network, storage, or resource packages) shared across multiple departments or the costs that cannot be directly split by cost tag or enterprise project. These costs are not directly attributable to a singular owner, and they cannot be categorized into a singular cost type. In this case, you can define cost splitting rules to fairly allocate these costs among teams or business units. For details, see [Viewing Cost By Cost Category](#).

9.3 Cost Analysis

To precisely control and optimize your costs, you need a clear understanding of what parts of your enterprise incurred different costs. **Cost Center** visualizes your original costs and amortized costs using various dimensions and display filters for cost analysis so that you can analyze the trends and drivers of your service usage and costs from a variety of perspectives or within different defined scopes.

You can also use cost anomaly detection provided by **Cost Center** to detect unexpected expenses in a timely manner. In this way, costs can be monitored, analyzed, and traced.

For details, see [Performing Cost Analysis to Explore Costs and Usage](#) and [Enabling Cost Anomaly Detection to Identify Anomalies](#).

9.4 Cost Optimization

You can identify resources with high costs based on the analysis results in the cost center, determine the causes of high costs, and take optimization measures accordingly.

Resource Optimization

Cloud Eye helps you monitor resource usage, identify idle resources, and find opportunities to save costs. You can also identify resources with high costs based on the results of **Cost Analysis** and take optimization measures accordingly.

- View GaussDB(for MySQL) monitoring metrics on Cloud Eye, such as the CPU, memory, and disk usage. If the current configuration is too high, you can reduce the configuration by changing the specifications.
- Monitor idle GaussDB(for MySQL) resources and deletes idle instances in a timely manner.
- If your services have low requirements on performance and stability, purchase a general-purpose DB instance to reduce your costs. For example, in the same specifications (32 vCPUs and 128 GB of memory), the cost of a general-purpose DB instance is 30% lower than that of a dedicated DB instance.

Billing Mode Selection

Different types of services have different requirements on resource usage periods, so the most economical billing mode for one resource may not be the best option for another resource.

- For mature services that tend to be stable for the long term, select yearly/monthly billing.
- For short-term, unpredictable services that experience traffic bursts and cannot afford to be interrupted, select pay-per-use billing.
- Monitor the lifecycle of instances and renew yearly/monthly resources that are about to expire in a timely manner.

Automatic O&M

- For yearly/monthly and pay-per-use DB instances: Configure auto scaling policies for DB instances on the **Basic Information** page. When configuring auto scaling policies, you can enable or disable **Auto Scale-up** or **Auto Scale-down**. The scaling type includes changing instance specifications or the number of read replicas. For details, see [Configuring Auto Scaling Policies](#).
- Serverless instances: Configure minimum billing unit and scaling scope for DB instances. DB instance resources automatically grow based on workload. For details, see [Step 1: Buy a DB Instance](#).