

**TaurusDB**

# Billing

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# 1 Billed Items

## 1.1 TaurusDB Instance Billed Items

You will be billed for the instance specifications, storage space, and backup space. For details, see [Table 1-1](#).

**Table 1-1** Billed items

Billed Item	Billing Factor	Billing Mode	Billing Formula
(Mandatory) DB instance	vCPUs, memory, and number of nodes	Yearly/ Monthly, pay-per-use, and serverless	<b>Specifications unit price x Required duration x Number of nodes</b> For details about the unit price, see "Specification Price" in <a href="#">TaurusDB Pricing Details</a> .
(Mandatory) Storage	Storage space, which is billed based on the unified standard	Yearly/ Monthly, pay-per-use, and serverless	<b>Storage space unit price x Storage space x Required duration</b> For details about the unit price, see "Storage Space Price" in <a href="#">TaurusDB Pricing Details</a> .

Billed Item	Billing Factor	Billing Mode	Billing Formula
(Mandatory) Backup space	Backup space, which is billed based on the unified standard	Yearly/ Monthly, pay-per-use, and serverless	<p><b>Backup space unit price x Billed backup space x Billed duration</b></p> <p>For details about the unit price, see "Backup Storage Price" in <a href="#">TaurusDB Pricing Details</a>.</p> <p><b>NOTE</b> The billed duration refers to the length of time the billed backup space was used for.</p>
(Optional) EIP bandwidth	<p>Bandwidth, traffic, and EIP reservation (An EIP is required if a DB instance needs to access the Internet.)</p> <p>EIP for a yearly/monthly DB instance: billed by bandwidth</p>	Yearly/ Monthly, pay-per-use, and serverless	<p><b>Billed by fixed bandwidth</b></p> <p>For details about the unit price, see "By Bandwidth" in <a href="#">EIP Pricing Details</a>.</p>
(Optional) Monitoring by Seconds	Monitoring frequency, which is billed based on the unified standard	Yearly/ Monthly, pay-per-use, and serverless	<p><b>Unit price of Monitoring by Seconds x Billed duration</b></p> <p>For details about the unit price, see <a href="#">Configuring Monitoring by Seconds</a>.</p> <p><b>NOTE</b> Billed duration: 1s or 5s (If Monitoring by Seconds is enabled, the monitoring interval can be set to 1s or 5s.)</p>
(Optional) HTAP instance	If you create a standard HTAP instance for a TaurusDB instance, you will be billed for the HTAP instance.	Yearly/ Monthly and pay-per-use	For details, see <a href="#">HTAP Instance Billed Items</a> .
(Optional) Cross-region backup	If cross-region backup is enabled, you will be billed for backup space and network traffic required for dumping cross-region backups.	Yearly/ Monthly and pay-per-use	For details, see <a href="#">TaurusDB Cross-Region Backup Billed Items</a> .
(Optional) Proxy instance	Proxy instances are free.	Yearly/ Monthly and pay-per-use	N/A

Billed Item	Billing Factor	Billing Mode	Billing Formula
(Optional) DRS migration	If you use Data Replication Service (DRS) for data migration, you will be billed based on the DRS pricing standard.	Yearly/ Monthly and pay-per-use	For details, see <a href="#">DRS Billing</a> .

## 1.2 HTAP Instance Billed Items

If you create a standard HTAP instance for a TaurusDB instance, you will be billed for the HTAP instance.

- Billed Items

**Table 1-2** Billed items

Billed Item	Description
HTAP instance	You are billed for the selected instance specifications on a pay-per-use or yearly/monthly basis.
Storage	You are billed for the selected storage on a pay-per-use or yearly/monthly basis.
Public network traffic	HTAP instances are accessible from both private and public networks, but only the traffic from public networks is billed.

- Billing Standards

 **NOTE**

Standard HTAP instances provide both FE and BE nodes at the same price.

**Table 1-3** Pricing details of instance specifications (pay-per-use)

Instance Specifications	Region	Price (USD/Hour)
4 vCPUs   16 GB	CN North-Beijing4, CN East-Shanghai1, CN South-Guangzhou, and CN South-Guangzhou-InvitationOnly	0.37
	AP-Singapore	0.544
	AF-Johannesburg	0.563

Instance Specifications	Region	Price (USD/Hour)
8 vCPUs   32 GB	CN North-Beijing4, CN East-Shanghai1, CN South-Guangzhou, and CN South-Guangzhou-InvitationOnly	0.75
	AP-Singapore	1.088
	AF-Johannesburg	1.126
16 vCPUs   64 GB	CN North-Beijing4, CN East-Shanghai1, CN South-Guangzhou, and CN South-Guangzhou-InvitationOnly	1.49
	AP-Singapore	2.176
	AF-Johannesburg	2.253
32 vCPUs   128 GB	CN North-Beijing4, CN East-Shanghai1, CN South-Guangzhou, and CN South-Guangzhou-InvitationOnly	2.98
	AP-Singapore	4.352
	AF-Johannesburg	4.506
64 vCPUs   256 GB	CN North-Beijing4, CN East-Shanghai1, CN South-Guangzhou, and CN South-Guangzhou-InvitationOnly	5.96
	AP-Singapore	8.704
	AF-Johannesburg	9.011
88 vCPUs   352 GB	CN North-Beijing4, CN East-Shanghai1, CN South-Guangzhou, and CN South-Guangzhou-InvitationOnly	8.19
	AP-Singapore	11.968
	AF-Johannesburg	12.386

**Table 1-4** Pricing details of storage specifications (pay-per-use)

Storage Specifications	Region	Price (USD/GB/Hour)
Ultra-high I/O	CN North-Beijing4, CN East-Shanghai1, CN South-Guangzhou, and CN South-Guangzhou-InvitationOnly	0.00022
	AP-Singapore	0.00028
	AF-Johannesburg	0.00032
Extreme SSD	CN North-Beijing4, CN East-Shanghai1, CN South-Guangzhou, and CN South-Guangzhou-InvitationOnly	0.00065
	AP-Singapore	0.001
	AF-Johannesburg	0.001

**Table 1-5** Pricing details of instance specifications (yearly/monthly)

Instance Specifications	Region	Price (USD/Month)	Price (USD/Year)
4 vCPUs   16 GB	CN North-Beijing4, CN East-Shanghai1, CN South-Guangzhou, and CN South-Guangzhou-InvitationOnly	177.2	1,772
	AP-Singapore	285.224	2,852.24
	AF-Johannesburg	271.83	2,718.3
8 vCPUs   32 GB	CN North-Beijing4, CN East-Shanghai1, CN South-Guangzhou, and CN South-Guangzhou-InvitationOnly	354.4	3,544
	AP-Singapore	570.448	5,704.48
	AF-Johannesburg	543.66	5,436.6
16 vCPUs   64 GB	CN North-Beijing4, CN East-Shanghai1, CN South-Guangzhou, and CN South-Guangzhou-InvitationOnly	708.81	7,088.1
	AP-Singapore	1,140.896	11,408.96
	AF-Johannesburg	1,087.33	10,873.3



Instance Specifications	Region	Price (USD/ Month)	Price (USD/ Year)
32 vCPUs   128 GB	CN North-Beijing4, CN East-Shanghai1, CN South-Guangzhou, and CN South-Guangzhou-InvitationOnly	1,417.61	14,176.1
	AP-Singapore	2,281.792	22,817.92
	AF-Johannesburg	2,174.66	21,746.6
64 vCPUs   256 GB	CN North-Beijing4, CN East-Shanghai1, CN South-Guangzhou, and CN South-Guangzhou-InvitationOnly	2,835.22	28,352.2
	AP-Singapore	4,563.584	45,635.84
	AF-Johannesburg	4,349.31	43,493.1
88 vCPUs   352 GB	CN North-Beijing4, CN East-Shanghai1, CN South-Guangzhou, and CN South-Guangzhou-InvitationOnly	3,898.43	38,984.3
	AP-Singapore	6,274.928	62,749.28
	AF-Johannesburg	5,980.26	59,802.6

**Table 1-6** Pricing details of storage specifications (yearly/monthly)

Storage Specifications	Region	Price (USD/GB/ Month)	Price (USD/GB/ Year)
Ultra-high I/O	CN North-Beijing4, CN East-Shanghai1, CN South-Guangzhou, and CN South-Guangzhou-InvitationOnly	0.154	1.54
	AP-Singapore	0.204	2.04
	AF-Johannesburg	0.231	2.31
Extreme SSD	CN North-Beijing4, CN East-Shanghai1, CN South-Guangzhou, and CN South-Guangzhou-InvitationOnly	0.308	3.08
	AP-Singapore	0.448	4.48
	AF-Johannesburg	0.462	4.62

## 1.3 TaurusDB Cross-Region Backup Billed Items

If cross-region backup is enabled for your TaurusDB instance, you will be billed for backup space and network traffic required for dumping cross-region backups.

### Billing

Table 1-7 Billing

Specification Code	Pricing
gaussdb.mysql.crossreg.backup.space	<ul style="list-style-type: none"><li>Regions in China (excluding Hong Kong): \$0.000157 USD/GB/hour</li><li>Hong Kong and regions outside China: \$0.00022 USD/GB/hour</li></ul>

# 2 Billing Modes

## 2.1 Comparison of Billing Modes

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	Serverless
Payment	Prepaid Billed by the subscription term you purchase	Postpaid Billed for what you use	Postpaid Billed for what you use
Billed Usage Period	Billed by the subscription term you purchase	Calculated by the second but billed every hour	Calculated by the second but billed every hour

<b>Billed Item</b>	<p>Instance specifications (vCPUs and memory), storage space, backup space, EIP, and monitoring by seconds</p> <p><b>NOTE</b> 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 manual delete manual backups.</p>	<p>Instance specifications (vCPUs and memory), storage space, backup space, EIP, and monitoring by seconds</p> <p><b>NOTE</b> 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 manual delete manual backups.</p>	<p>Instance specifications (vCPUs and memory), storage space, backup space, EIP, and monitoring by seconds</p> <p><b>NOTE</b> 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 manual delete manual backups.</p>
<b>Changing the Billing Mode</b>	<p>Yearly/Monthly can be changed to pay-per-use.</p> <p>The change takes effect only after the yearly/monthly subscription expires. For details, see <a href="#">Yearly/Monthly to Pay-per-Use</a>.</p>	<p>Pay-per-use can be changed to yearly/monthly. For details, see <a href="#">Pay-per-Use to Yearly/Monthly</a>.</p>	<p>N/A</p>
<b>Changing the Specifications</b>	<p>Supported</p>	<p>Supported</p>	<p>Supported</p>
<b>Application Scenario</b>	<p>Recommended for resources expected to be in use long-term. A cost-effective option for scenarios where the resource usage duration is predictable.</p>	<p>Recommended when the resource demands are likely to fluctuate and you want more flexibility.</p>	<p>The instance capacities automatically change based on application requirements.</p>

## 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

### Billed Items

You are billed for the following items on a yearly/monthly basis.

Table 2-2 Billed items

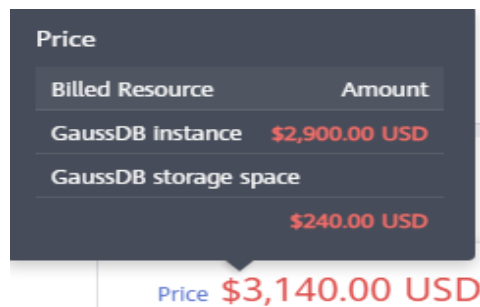
Billed Item	Description	Billing Factor	Billing Formula
(Mandatory ) DB instance	Instance specifications include vCPUs, memory, and the number of nodes.	vCPUs, memory, and number of nodes	<b>Specifications unit price x Required duration x Number of nodes</b>  For details about the unit price, see "Specification Price" in <a href="#">TaurusDB Pricing Details</a> .
(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 billed based on the unified standard	<b>Storage space unit price x Storage space x Required duration</b>  For details about the unit price, see "Storage Space Price" in <a href="#">TaurusDB Pricing Details</a> .

Billed Item	Description	Billing Factor	Billing Formula
(Mandatory ) Backup space	<p>TaurusDB provides free backup space 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 billed based on the unified standard	<p><b>Backup space unit price x Billed backup space x Billed duration</b></p> <p>For details about the unit price, see "Backup Storage Price" in <a href="#">TaurusDB Pricing Details</a>.</p> <p><b>NOTE</b> 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"> <li>DB instances can be accessed through a public network, and traffic fees are generated accordingly.</li> <li>You are not billed for traffic generated through a private network.</li> </ul>	<p>Bandwidth, traffic, and EIP reservation (An EIP is required if a DB instance needs to access the Internet.)</p> <p>EIP for a yearly/monthly DB instance: billed by bandwidth</p>	<p>Billed by fixed bandwidth</p> <p>For details about the unit price, see "By Bandwidth" in <a href="#">EIP Pricing Details</a>.</p>
(Optional) Monitoring by Seconds	TaurusDB provides monitoring every 60 seconds for free, but you are billed for Monitoring by Seconds. Its pricing is listed on a per-hour basis, but bills are calculated based on the actual usage duration.	Monitoring frequency, which is billed based on the unified standard	<p><b>Unit price of Monitoring by Seconds x Billed duration</b></p> <p>For details about the unit price, see <a href="#">Configuring Monitoring by Seconds</a>.</p> <p><b>NOTE</b> Billed duration: 1s or 5s (If Monitoring by Seconds is enabled, the monitoring interval can be set to 1s or 5s.)</p>
(Optional) HTAP instance	Standard HTAP instances are in OBT and are free.	N/A	N/A

Billed Item	Description	Billing Factor	Billing Formula
(Optional) Cross-region backup	If cross-region backup is enabled, you will be billed for backup space and network traffic required for dumping cross-region backups.	Backup space and network traffic required for dumping cross-region backups	For details, see <a href="#">TaurusDB Cross-Region Backup Billed Items</a> .
(Optional) Proxy instance	Proxy instances are free.	N/A	N/A
(Optional) DRS migration	If you use Data Replication Service (DRS) for data migration, you will be billed based on the DRS pricing standard.	For details, see <a href="#">DRS Billing</a> .	For details, see <a href="#">DRS Billing</a> .

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)



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

GasDBforMySQL Instance Backup space Pay per use 1 \$0.00004GB

## 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 DB 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 billed 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. TaurusDB resources are billed individually as follows.

**Table 2-3** Billing formulas

Billed Item	Formula	Unit Price
Instance specifications (vCPUs and memory)	Specifications unit price x Required duration x Number of nodes	See "Specification Price" in <a href="#">TaurusDB Pricing Details</a> .
Storage space	Storage space unit price x Required duration x Storage (GB)	See "Storage Space Price" in <a href="#">TaurusDB Pricing Details</a> .
Backup space	Backup space unit price x Billed duration x (Backup space – Storage space) (GB) <b>NOTE</b> The billed duration refers to the length of time the billed backup space was used for.	See "Backup Storage Price" in <a href="#">TaurusDB Pricing Details</a> .
EIP bandwidth	Billed by fixed bandwidth	See <a href="#">EIP Pricing Details</a> .
Enabling Monitoring by Seconds	Unit price of Monitoring by Seconds x Billed duration	See <a href="#">Configuring Monitoring by Seconds</a> .

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

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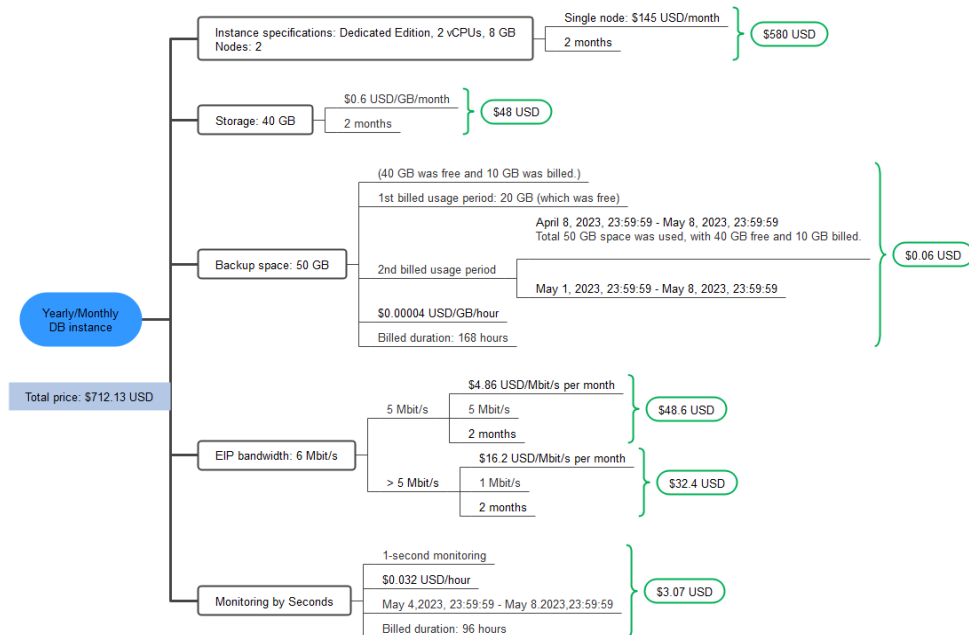
**NOTICE**

The prices in the figure are for reference only. The actual prices are subject to [TaurusDB Pricing Details](#).

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

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**Figure 2-2** Billing calculation example for a yearly/monthly DB 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 2 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:

Price difference for the specification upgrade = Price for the new specifications × Remaining period × Number of nodes - Price for the original specifications × Remaining period × 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

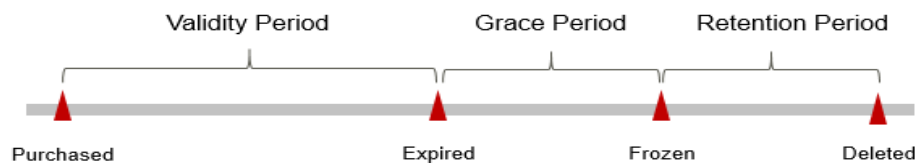
Cost of upgrade = \$190.85 USD (\$290 USD × 0.6581 × 2 - \$145 USD × 0.6581 × 2).

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

## Impact of Expiration

**Figure 2-3** shows the statuses a yearly/monthly DB instance can have 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.

### Billed Items

You are billed for the following items on a pay-per-use basis.

**Table 2-4** Billed items

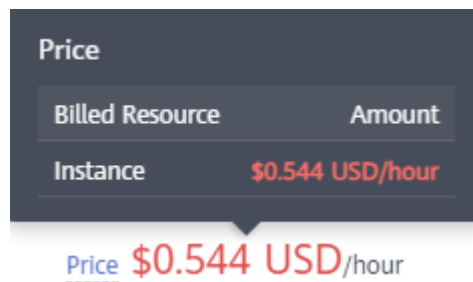
Billed Item	Description	Billing Factor	Billing Formula
(Mandatory ) DB instance	Instance specifications include vCPUs, memory, and the number of nodes.	vCPUs, memory, and number of nodes  Instance types of different specifications provide different compute and storage.	<b>Specifications unit price x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

Billed 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 billed based on the unified standard	<p><b>Backup space unit price x Billed backup space x Billed duration</b></p> <p>For details about the unit price, see "Backup Storage Price" in <a href="#">TaurusDB Pricing Details</a>.</p> <p><b>NOTE</b> 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"> <li>DB instances can be accessed through a public network, and traffic fees are generated accordingly.</li> <li>You are not billed for traffic generated through a private network.</li> </ul>	<p>Bandwidth, traffic, and EIP reservation (An EIP is required if a DB instance needs to access the Internet.)</p> <p>EIP for a pay-per-use DB instance: billed by bandwidth, traffic, or shared bandwidth. You are also billed for IP reservation if you do not bind the EIP to any instance.</p>	<p>Billed by fixed bandwidth</p> <p>For details about the unit price, see "By Bandwidth" in <a href="#">EIP Pricing Details</a>.</p>
(Optional) Monitoring by Seconds	TaurusDB provides monitoring every 60 seconds for free, but you are billed for Monitoring by Seconds. Its pricing is listed on a per-hour basis, but bills are calculated based on the actual usage duration.	Monitoring frequency, which is billed based on the unified standard	<p><b>Unit price of Monitoring by Seconds x Billed duration</b></p> <p>For details about the unit price, see <a href="#">Configuring Monitoring by Seconds</a>.</p> <p><b>NOTE</b> Billed duration: 1s or 5s (If Monitoring by Seconds is enabled, the monitoring interval can be set to 1s or 5s.)</p>

Billed Item	Description	Billing Factor	Billing Formula
(Optional) HTAP instance	Standard HTAP instances are in OBT and are free.	N/A	N/A
(Optional) Cross-region backup	If cross-region backup is enabled, you will be billed for backup space and network traffic required for dumping cross-region backups.	Backup space and network traffic required for dumping cross-region backups	For details, see <a href="#">TaurusDB Cross-Region Backup Billed Items</a> .
(Optional) Proxy instance	Proxy instances are free.	N/A	N/A
(Optional) DRS migration	If you use Data Replication Service (DRS) for data migration, you will be billed based on the DRS pricing standard.	For details, see <a href="#">DRS Billing</a> .	For details, see <a href="#">DRS Billing</a> .

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 (2 vCPUs | 8 GB and 2 nodes) at 10:00:30 on April 18, 2023 and deleted the DB instance at 10:45:46 on the same day. The DB instance 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 are billed for all usage periods. TaurusDB resources are billed individually as described in [Table 2-5](#). 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

Billed Item	Formula	Unit Price
Instance specifications (vCPUs and memory)	Specifications unit price x Required duration x Number of nodes	See "Specification Price" in <a href="#">TaurusDB Pricing Details</a> .
Storage space	Storage space unit price x Required duration x Storage (GB)	See "Storage Space Price" in <a href="#">TaurusDB Pricing Details</a> .
Backup space	Backup space unit price x Billed duration x (Backup space – Storage space) (GB) <b>NOTE</b> The billed duration refers to the length of time the billed backup space was used for.	See "Backup Storage Price" in <a href="#">TaurusDB Pricing Details</a> .

Billed Item	Formula	Unit Price
EIP bandwidth	Billed by fixed bandwidth  <b>NOTE</b> If your pay-per-use EIP has no instance bound, you will be billed for the EIP reservation price.	See <a href="#">EIP Pricing Details</a> .
Enabling Monitoring by Seconds	Unit price of Monitoring by Seconds x Billed duration	See <a href="#">Configuring Monitoring by Seconds</a> .

Figure 2-5 shows the billing calculation.

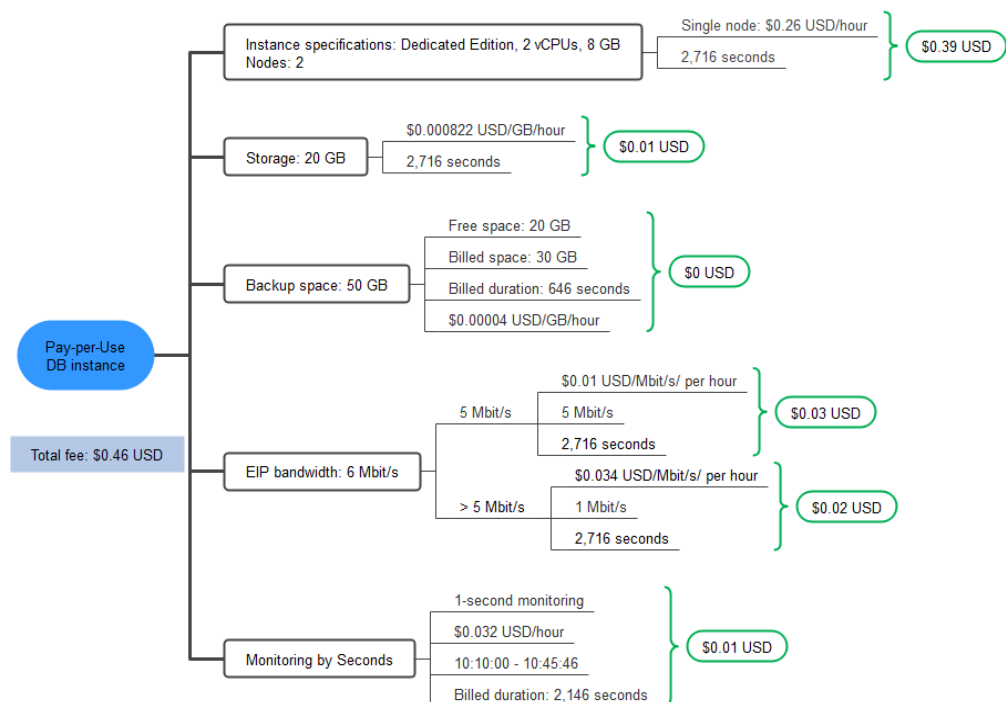
**NOTICE**

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 prices in the figure are for reference only. The actual prices are subject to [TaurusDB 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.

Figure 2-5 Billing calculation example of 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.

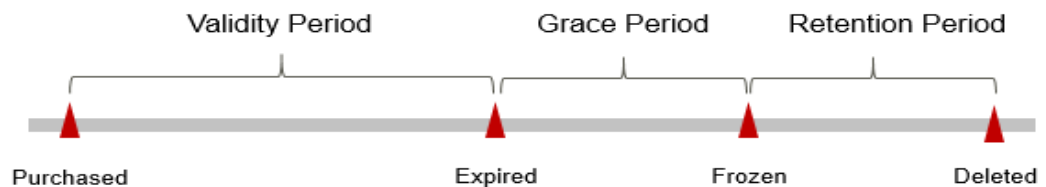
Suppose you purchased a pay-per-use DB instance (2 vCPUs | 8 GB) at 9:00:00 and changed the instance specifications to 4 vCPUs | 16 GB at 9:30:00. Two billing records were generated from 9:00:00 to 10:00:00.

- 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** Lifecycle 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 your account is insufficient to pay your amount due, 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 > 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](#).

## 2.4 Serverless Billing

The capacities of serverless DB instances automatically change based on application requirements. You can start using the DB instance first and then pay as you go.

### Billed Items

**Table 2-6** Billed items

Billed Item	Description
DB instance	You are billed for the selected instance specifications. The billing starts immediately after the instance is purchased. For details, see <a href="#">Billing Rules</a> .
Storage	You do not need to select storage when purchasing a DB instance. Storage will be scaled up dynamically based on how much data needs to be stored. It is billed hourly on a pay-per-use basis.
Backup space	TaurusDB provides free backup space equal to the amount of your used storage space. If the backup space usage exceeds 100% of your provisioned database storage, the additional part will be billed based on the backup pricing.
(Optional) Public network traffic	TaurusDB instances are accessible from both private and public networks, but only the traffic from public networks is billed.
(Optional) HTAP instance	Standard HTAP instances are in OBT and are free.

### Billing Rules

The billing unit is TCU. 1 TCU is approximately equal to 1 vCPU and 2 GB of memory. The detailed fees are as follows:

**Table 2-7** Billing rules (USD/TCU/hour)

Region	Unit Price (USD/TCU/Hour)
CN North-Beijing 4, CN East-Shanghai 1, and CN South-Guangzhou	0.063
AP-Singapore	0.19

# 3 Billing Examples

---

## Billing Scenario

At 16:00:00 on March 18, 2023, you purchased a pay-per-use DB instance in 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)

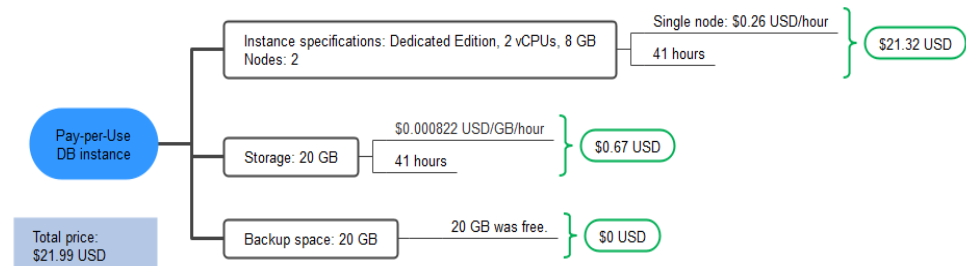
- EIP bandwidth: 6 Mbit/s
  - Monitoring by Seconds: enabled (Collection period was 1s).
- **Yearly/monthly billing: March 20, 2023, 10:30:00 to April 20, 2023, 23:59:59**
  - Instance specifications: 4 vCPUs | 16 GB
  - Nodes: 2
  - Storage: 80 GB
  - Backup space: 100 GB (20 GB was billed at a pay-per-use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

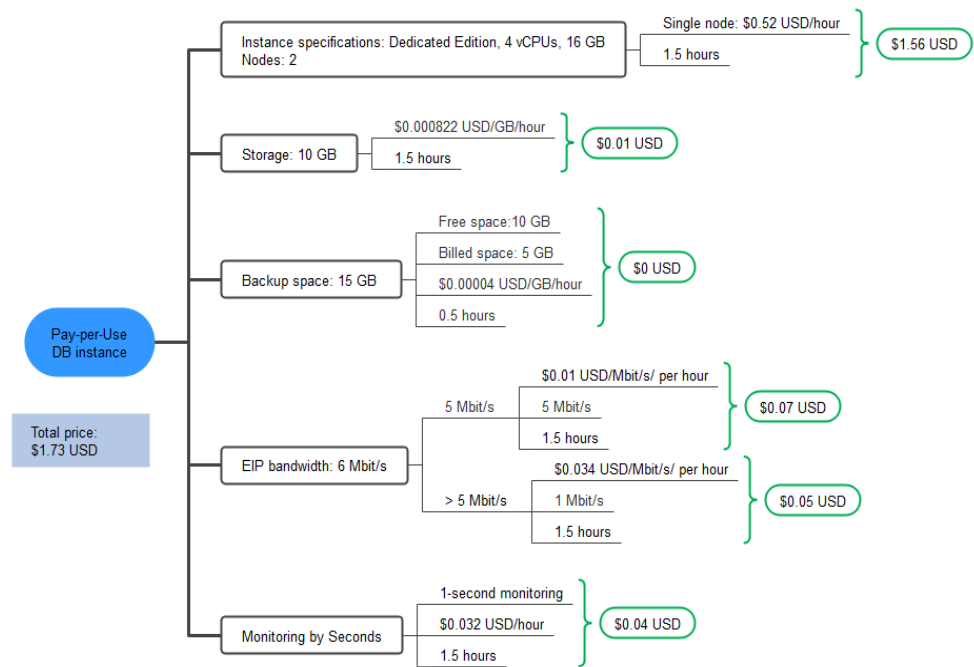
The prices in the figures are for reference only. The actual prices are subject to [TaurusDB Pricing Details](#).

**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.

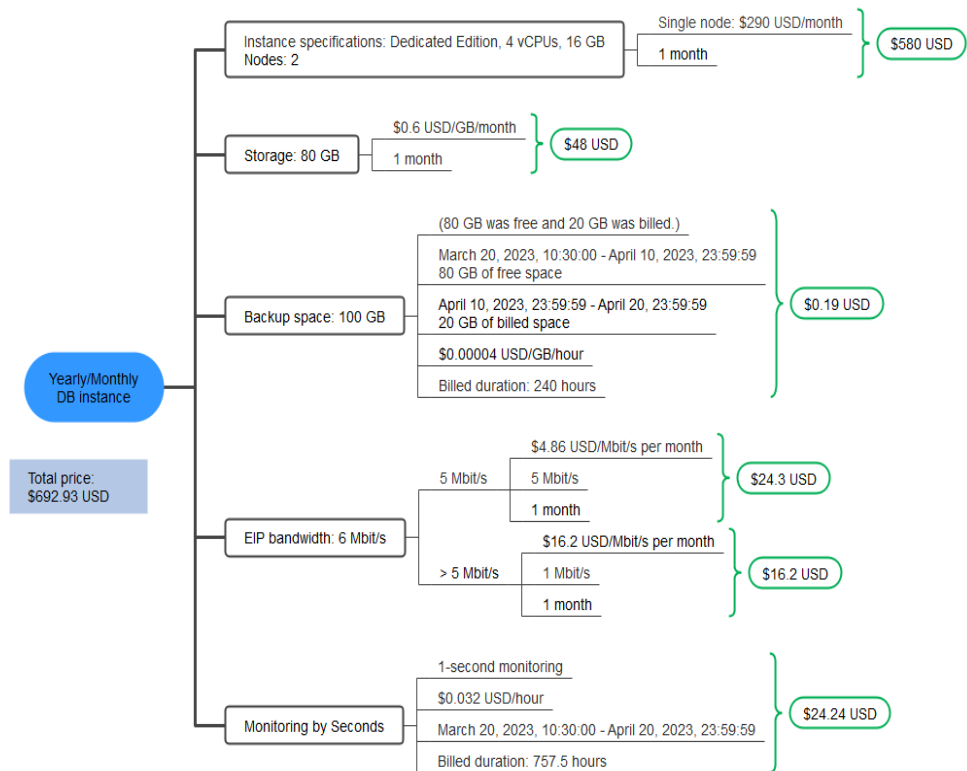


2. You would be billed for the DB instance from 9:00:00 on March 20, 2023 to 10:30:00 on March 20, 2023 based on 4 vCPUs and 16 GB of memory. The billing period would be 1.5 hours. Monthly settlement was not used. The billed duration of each resource was as follows.



**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 for 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 billed items.

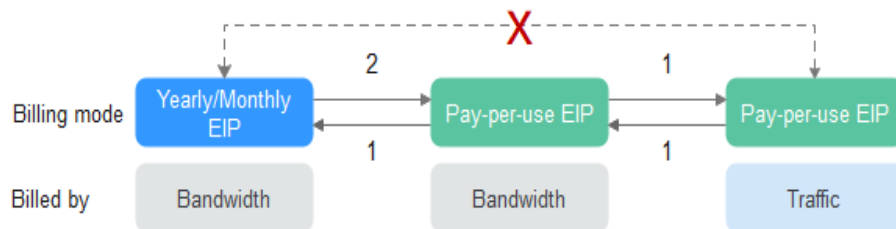
**Table 4-1** Changeable DB instance billed items

Billed 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"><li>• Change from pay-per-use to yearly/monthly to enjoy lower prices.</li><li>• Change from yearly/monthly to pay-per-use to use the DB instance more flexibly.</li></ul> <p><b>NOTE</b> Such a change takes effect only after the yearly/monthly subscription ends.</p>	<ul style="list-style-type: none"><li>• <a href="#">Pay-per-Use to Yearly/Monthly</a></li><li>• <a href="#">Yearly/Monthly to Pay-per-Use</a></li></ul>



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

**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 purchased 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 > Bills > Expenditure Items** 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 a DB instance may not support the change with this DB 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 <a href="#">From Pay-per-Use (Billed by Bandwidth) to Yearly/Monthly</a> .
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 <a href="#">Pay-per-Use EIPs: From Billing By Traffic to By Bandwidth</a>
From billing by bandwidth (pay-per-use) to billing by traffic (pay-per-use)	Directly change it on the console. For details, see <a href="#">Pay-per-Use EIPs: From Billing By Traffic to By Bandwidth</a>

### NOTICE


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

- The billing mode of the primary node and read replicas for a pay-per-use DB 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 Single DB Instance

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

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

**Step 3** Click  in the upper left corner of the page and choose **Databases > TaurusDB**.

**Step 4** On the **Instances** page, locate the pay-per-use DB instance that you want to change to the yearly/monthly DB instance and choose **More > Change to Yearly/Monthly** in the **Operation** column. On the displayed page, select your desired storage space and click **OK**.

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

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

#### Billing Information


Billing Mode	Created
Pay-per-use <a href="#">Change</a>	Nov 27, 2024 10:04:46 GMT+08:00

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 > Unpaid Orders** in the upper right corner and pay or cancel the order. 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. The instance status will become **Available** after the change is successful. The billing mode will change to **Yearly/Monthly**.


----End


## Changing the Billing Mode of DB Instances in Batches

### NOTE

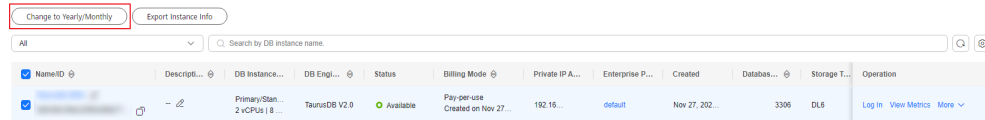
Only pay-per-use instances can be changed to yearly/monthly instances.  
The status of pay-per-use instances must be **Available**.

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

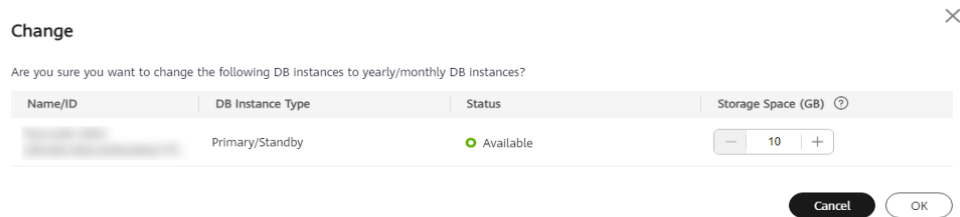
**Step 2** Click  in the upper left corner and select a region and project.

**Step 3** Click  in the upper left corner of the page and choose **Databases > TaurusDB**.

**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

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


**Figure 4-4** Changing pay-per-use instances to yearly/monthly in batches

**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 > Unpaid Orders** in the upper right corner and pay or cancel the order. The instance status is **Changing to Yearly/Monthly. Payment incomplete. Pay Now.**

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

**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 purchased 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 > Bills > Expenditure Items** page, bills were 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 a DB instance may not support the change with this DB 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 <a href="#">From Yearly/Monthly to Pay-Per-Use upon Expiration (Billed by Bandwidth)</a> .
From yearly/monthly to pay-per-use upon expiration (billed by traffic)	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 project.
- Step 3** Click  in the upper left corner of the page, choose **Databases > TaurusDB**.
- Step 4** On the **Instances** page, locate the yearly/monthly DB 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** under **Billing Mode**.
- 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](#).

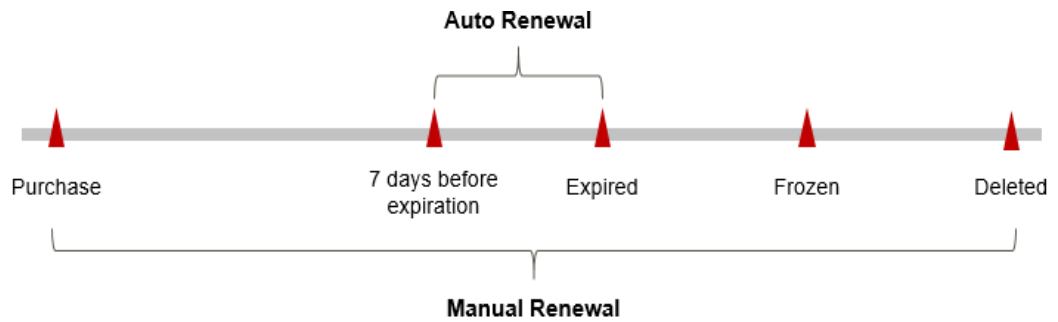
### How to Renew Subscriptions

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

**Table 5-1** Renewing a yearly/monthly DB instance

Method	Description
<a href="#">Manually Renewing a DB Instance</a>	You can renew a yearly/monthly DB instance on the console any time before it is automatically deleted.
<a href="#">Auto-renewing a DB Instance</a>	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 the 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 expires. 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 on the console any time 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 project.

**Step 3** Click  in the upper left corner of the page, choose **Databases > TaurusDB**.

**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** under **Billing Mode**.



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

----End

## Renewing a Subscription in Billing Center

**Step 1** Log in to the console.

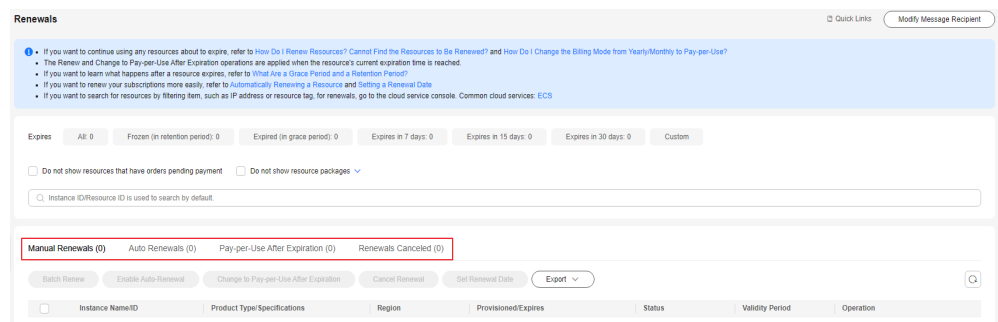
**Step 2** On the top menu bar, choose **Billing > Renewal**.

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 5-2** 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.
- Batch renewal: Select multiple DB instances that you want renew and click **Batch Renew** in the upper left corner.

**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.

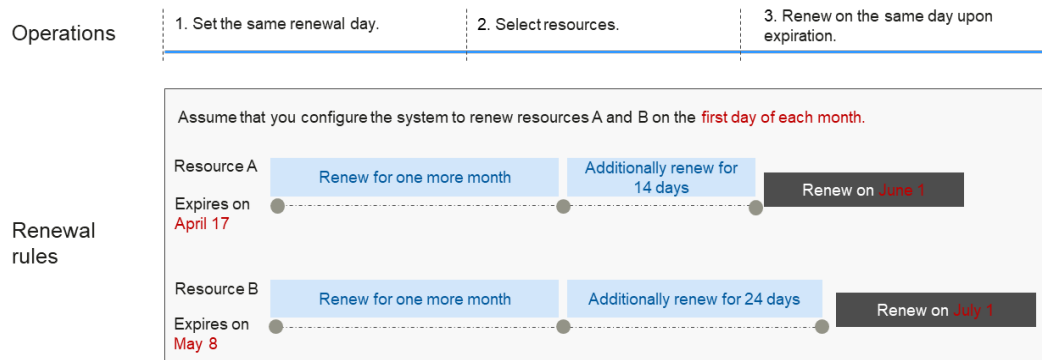
----End

## 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 5-3](#), a user sets the same renewal day for two resources that will expire at different dates.

**Figure 5-3** 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 expires.
- 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 5-4](#). For details, see [Buying a DB Instance](#).

**Figure 5-4** Enabling auto-renewal



## Enabling Auto-Renewal on the Renewals Page

**Step 1** Log in to the console.

**Step 2** On the top menu bar, choose **Billing > Renewal**.

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.

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

- Enabling auto-renewal for a single DB instance: Locate the instance that you want to enable auto-renewal for and choose **More > Enable Auto-Renew** in the **Operation** column.
- Enabling auto-renewal for multiple DB instances at a time: Select the instances that you want to enable auto-renewal for and click **Enable Auto-Renew** above the list.

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

----End

# 6 Bills

You can view the resource usage and bills for different billing cycles on the **Billing** 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. Choose **Billing > Bills > Expenditure Items**. **Expenditure Time** in the bill indicates the time when the pay-per-use instance is used.

## Viewing Bills of a Specific Resource

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

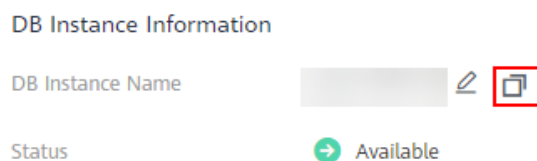
**Step 2** Click  in the upper left corner and select a region and project.


**Step 3** Click  in the upper left corner of the page, choose **Databases > TaurusDB**.

**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 of the console, choose **Billing > Bills**. The **Dashboard** page is displayed.
- Step 7** Choose **Expenditure Details**, select **Resource Name** as the filter criteria, enter the obtained instance name, and click the  icon.

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.

- Expenditure items  
Pay-per-use DB instance usage is calculated by the second but billed on an hourly basis. You can check the expenditure items against the actual usage. The billed resources are billed separately. For details, see [Table 6-1](#) (taking storage as an example).

**Table 6-1** TaurusDB expenditure items

<b>Service Type</b>	TaurusDB
<b>Resource Type</b>	TaurusDB storage
<b>Billing Mode</b>	Pay-per-use
<b>Expenditure Time</b>	For the period of time from 10:09:06 to 12:09:06 on April 8, 2023, three expenditure items would be generated for the resource usage in the following periods: <ul style="list-style-type: none"><li>10:09:06 - 11:00:00</li><li>11:00:00 - 12:00:00</li><li>12:00:00 - 12:09:06</li></ul>
<b>List Price</b>	List price on the official website = Usage x Unit price x Capacity The DB instance was used for 3,054 seconds in the first period, and the unit price can be obtained on the <a href="#">TaurusDB Pricing Details</a> page. 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.

<b>Discounted Amount</b>	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.
<b>Truncated Amount</b>	<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>
<b>Amount Due</b>	<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>

- Expenditure details  
Expenditure details can be displayed in multiple ways. By default, the expenditure details of a resource are displayed by usage and by billing cycle. [Table 6-2](#) illustrates the DB instance expenditure details, which can be used to check against the actual usage (taking storage as an example).

**Table 6-2** TaurusDB expenditure details

<b>Service Type</b>	TaurusDB
<b>Resource Type</b>	TaurusDB storage
<b>Billing Mode</b>	Pay-per-use
<b>Resource Name/ID</b>	DB instance name and ID Example: gauss-ec81, df37e4ff6a2d4600b923e2a6555a6d70in07.volume
<b>Specifications</b>	TaurusDB storage
<b>Usage Type</b>	Duration for a pay-per-use DB instance

<b>Unit Price</b>	<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 <a href="#">TaurusDB Pricing Details</a> page.</p>
<b>Unit</b>	Displayed on the <a href="#">TaurusDB Pricing Details</a> page. Example: USD/GB/hour
<b>Total Usage</b>	Depends on the unit of the unit price, which is USD/GB/hour. Storage usage is billed by hour. Example: 2 hours.
<b>Usage Unit</b>	Hour
<b>List Price</b>	<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 <a href="#">TaurusDB Pricing Details</a> page. List price = <math>2 \times 0.000822 \times 40 = \\$0.06576</math> USD (The storage was 40 GB and unit price was \$0.000822 USD/GB/hour.)</p>
<b>Discounted Amount</b>	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.
<b>Amount Due</b>	Amount that should be paid for used cloud services after discounts are applied.

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# 7 Arrears

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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.

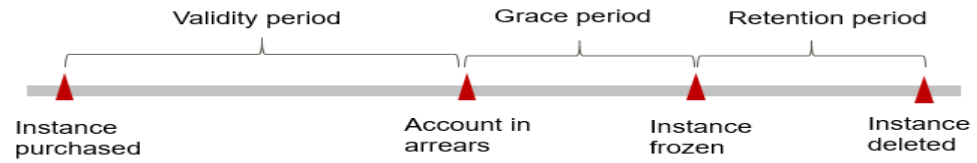
## Arrears Reason

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 DB 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** Lifecycle 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.

# 8 Billing Termination

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## Yearly/Monthly DB Instances

When you purchase a yearly/monthly resource, for example, a yearly/monthly DB instance, you make a one-time up-front payment. By default, the billing automatically stops when the purchased subscription expires.

- If you no longer need a DB instance, but the subscription has not yet expired, you can unsubscribe from it. Depending on what coupons were used for the purchase and on if 5-day unconditional unsubscription rules apply, Huawei Cloud may issue you a refund. For details about unsubscription rules, see [Unsubscriptions](#).
- If you have enabled auto-renewal but no longer wish to automatically renew the subscription, disable it before the auto-renewal date (7 days before the expiration date by default) to avoid unexpected expenditures.

## Pay-per-Use DB Instances

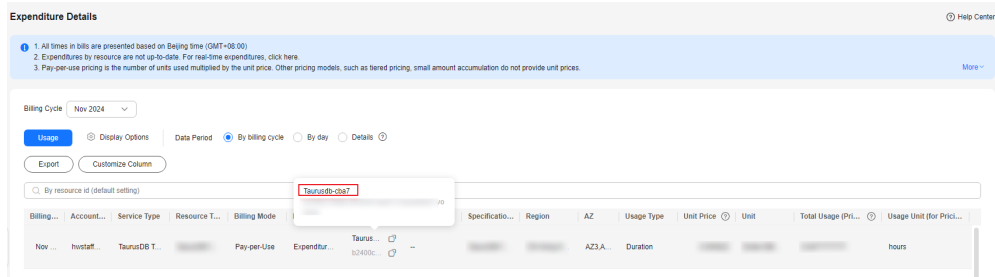
If pay-per-use resources, for example, pay-per-use DB instances, are no longer required, delete them in a timely manner.


## Searching for DB Instances from Bills and Stopping Billing


To ensure that all DB instances are deleted, you can search the billing records by instance name, and then delete the DB instances you identify in this way.

- Step 1** [Log in to the management console](#).
- Step 2** On the top menu bar of the console, choose **Billing > Bills**. The **Dashboard** page is displayed.
- Step 3** On the **Expenditure Details** page of the Billing Center, copy the resource name.

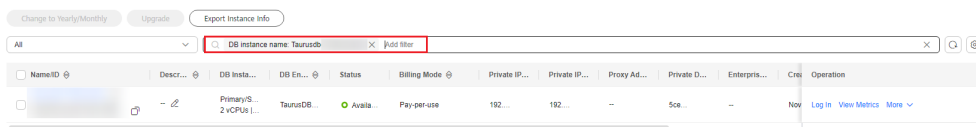
**Figure 8-1** Copying a DB instance name



**Step 4** Click  in the upper left corner of the page, choose **Databases > TaurusDB**.

**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



**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 DB instance (which is billed on an hourly basis) at 08:30, the expenditures for that hour from 08:00 to 09:00 are usually not billed until about 10:00.

----End

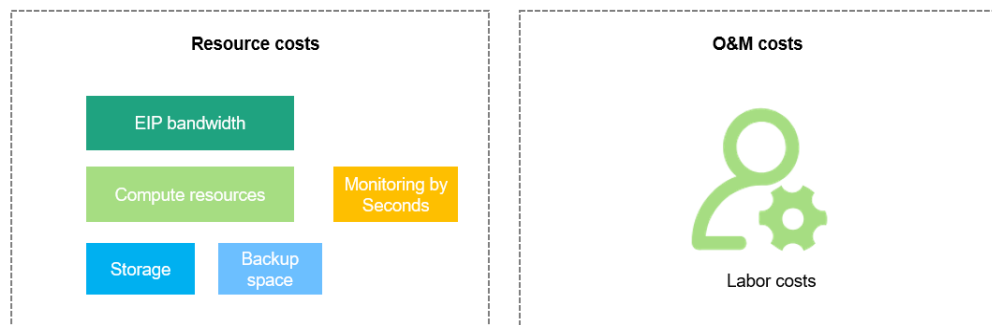
# 9 Cost Management

The following describes how to manage TaurusDB costs to help maximize return on your investment.

## 9.1 Cost Composition

TaurusDB 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](#).

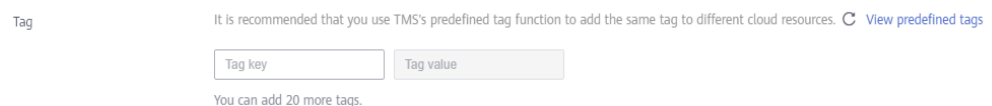
**Figure 9-1** Selecting an enterprise project



- **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 TaurusDB 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 specifications.
- Monitor idle TaurusDB resources and delete 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

- 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 for a DB Instance](#).
- Serverless DB instances: Configure minimum billing unit and scaling scope for DB instances. DB instance resources automatically grow based on workloads. For details, see [Buying a DB Instance](#).