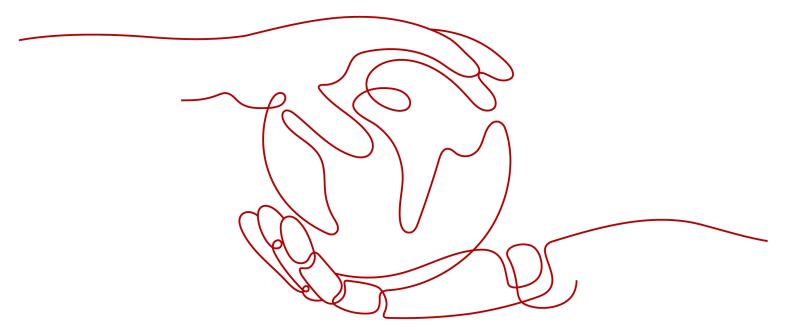
Cloud Backup and Recovery

Billing

Issue 01

Date 2025-03-24





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Cloud Backup an	d Recovery
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Billing Overview

In this document, you will learn about how CBR resources 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 and pay-per-use billing modes. Each one has different advantages and disadvantages.

Yearly/Monthly: You pay upfront for the amount of time you expect to use the CBR resources 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 CBR resources first and then pay as you go. For details about the two billing modes, see **2.1 Overview**.

You can also change the billing mode later if it no longer meets your needs. For details, see **5.1 Overview**.

Billed Items

You will be billed for the storage capacity and optionally the replication traffic. For details about the billing factors and formulas for each billed item, see 3 Billed Items.

For details about the billing samples and the billing for each item, see 4 Billing Examples.

Renewing Subscriptions

After a yearly/monthly CBR vault expires, it cannot be used properly. If you want to continue using a vault after it expires, you need to renew the vault subscription within the specified period. Otherwise, backups in this vault will be automatically released, and data may be lost.

You can renew your subscriptions manually or automatically. For more details, see **6.1 Overview**.

Viewing Bills

You can choose **Billing & Costs** > **Bills** to check the CBR transactions and bills. For details, see **7 Bills**.

Arrears

If there is not a sufficient account balance to pay for your bill or expenditures generated for the replication traffic, your account will go into arrears. If you

want to continue using your CBR resources, you will need to top up your account in a timely manner. For details, see **8 Arrears**.

• Stopping Billing

If you no longer need to use your CBR resources, you can unsubscribe from or delete them to stop the billing. For details, see **9 Billing Termination**.

Managing Costs

CBR costs are classified into resource costs and O&M costs. You can allocate, analyze, and optimize CBR costs to save more money. For details, see **10 Cost Management**.

2 Billing Modes

- 2.1 Overview
- 2.2 Yearly/Monthly Billing
- 2.3 Pay-per-Use Billing
- 2.4 Traffic Packages

2.1 Overview

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

- Yearly/Monthly is a prepaid billing. 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. There are no wasted resources.

Table 2-1 describes the differences between the two billing modes.

Table 2-1 Differences between billing modes

Billing Mode	Yearly/Monthly	Pay-per-Use
Payment	Prepaid	Postpaid
Billing Method	Billed by the subscription term you purchase	Calculated by the hour but billed every day
Billed Items	Disk backup vaults, server backup vaults, SFS Turbo backup vaults, hybrid cloud backup vaults, and replication vaults	Disk backup vaults, server backup vaults, SFS Turbo backup vaults, hybrid cloud backup vaults, replication vaults, and cross-region replication traffic

Billing Mode	Yearly/Monthly	Pay-per-Use
Changing the Billing Mode	Yearly/Monthly can be changed to pay-per-use only after the yearly/monthly subscription duration ends.	Pay-per-use can be changed to yearly/monthly.
Changing the Specifications	Vault capacities can only be expanded.	Vault capacities can be expanded.
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 resources for a longer period, you can save money by selecting yearly/monthly billing when purchasing vaults. This section describes the billing rules for yearly/monthly CBR resources.

Application Scenarios

If you want to ensure resource 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

Yearly/Monthly CBR resources are billed based on the purchased duration. Any operations performed on the CBR resources will not affect their yearly/monthly charges.

Billed Usage Period

A yearly/monthly CBR resource is billed for the purchased duration. The billing starts from 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 server backup vault on March 8, 2023, 15:50:04, the billed usage period was from March 8, 2023, 15:50:04 to April 8, 2023, 23:59:59.

Billing Examples

Suppose you purchased a 100-GB server backup vault for a month on March 8, 2023, 15:50:04, and renewed the subscription for one more month before the initial subscription expired. The following usage periods would be billed.

Billed Usage Period	Formula	Price
Period 1 (one month): March 8, 2023, 15:50:04 to April 8, 2023, 23:59:59	Specificatio n unit price x Vault	\$0.2 USD/GB-month x 100 GB x 1 month = \$20 USD
Period 2 (one month): April 8, 2023, 23:59:59 to May 8, 2023, 23:59:59	capacity x Purchased duration	\$0.2 USD/GB-month x 100 GB x 1 month = \$20 USD

NOTICE

The preceding prices are for reference only. For details, see CBR Pricing Details.

Price Change After Specification Change

If the specifications of a yearly/monthly CBR resource 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 resource specifications, you need to pay the difference in price.
- If you downgrade your resource specifications, Huawei Cloud will refund you the difference.

Suppose you purchased a 100-GB server backup vault for a month on April 8, 2023 and expanded the vault capacity to 200 GB on April 18, 2023. The price of the original specifications was \$20 USD/month, and that for the new specifications was \$40 USD/month. The price difference will be calculated as follows:

Price difference for the specification upgrade = Price for the new specifications x Remaining period - Price for the original specifications x Remaining period

The remaining period 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.

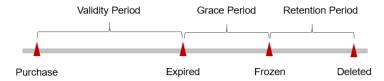
Cost of upgrade = $$40 \text{ USD } \times 0.6581 - $20 \text{ USD } \times 0.6581 = 13.162 USD

For more information, see **Pricing of a Changed Specification**.

Impact of Expiration

Figure 2-1 shows the statuses a yearly/monthly CBR resource can go through throughout its lifecycle. After a CBR resource is purchased, it enters the valid period and works normally during this period. If the resource is not renewed after it expires, before being deleted, it first enters a grace period and then a retention period.

Figure 2-1 Lifecycle of a yearly/monthly CBR resource



Expiration Reminder

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

Impact of Expiration

If your yearly/monthly CBR resource is not renewed after it expires, it changes to the **Expired** state and enters a grace period.

If the yearly/monthly CBR resource 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 resource while it is in the retention period.

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

∩ NOTE

• For details about renewal, see **6.1 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 for pay-per-use CBR resources.

Application Scenarios

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

Billed Usage Period

The minimum billed usage period of a vault is an hour regardless of when you purchase it. For example, if you purchased a pay-per-use vault at sometime

between 18:00 to 19:00, the usage period of an hour would be billed (18:00 to 19:00).

Billing Formula

Vault unit price per GB x Vault capacity x Purchased duration

Billing Examples

Suppose that you purchased a 1,000-GB server backup vault. In a region that charges \$0.00028 USD/GB-hour for single-AZ server backup vaults and \$0.00042 USD/GB-hour for multi-AZ backup vaults, the vault price would be as follows:

- Single-AZ vault: \$0.28 USD (\$0.00028 USD/GB-hour x 1,000 GB x 1 hour)
- Multi-AZ vault: \$0.42 USD (\$0.00042 USD/GB-hour x 1,000 GB x 1 hour)

NOTICE

The preceding prices are for reference only. For details, see CBR Pricing Details.

Price Change After Specification Change

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

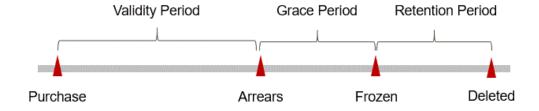
For example, if you purchased a 100-GB, pay-per-use disk backup vault at 09:00:00 and expanded its capacity to 200 GB at 16:30:00 on the same day, the following items would be billed:

- 100 GB vault from 09:00:00 to 16:00:00
- 200 GB vault from 16:00:00 to 00:00:00 on the next day

Impact of Arrears

Figure 2-2 shows the statuses a pay-per-use CBR resource can go through throughout its lifecycle. After a CBR resource is purchased, it enters the valid period and works normally during this period. If your account goes into arrears, the resource enters a grace period and then a retention period.

Figure 2-2 Life cycle of a pay-per-use CBR resource



Arrears Reminder

The system will bill you for pay-per-use resources 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 your pay-per-use CBR resources enter a grace period. You are still responsible for expenditures generated during the grace period. You can view the expenditures on the **Billing** > **Overview** page and pay any past due balance. Huawei Cloud will automatically deduct the expenditures after you top up the account.

If you do not bring your account balance current before the grace period expires, the resources turn to **Frozen** and enter a retention period. You cannot perform any operations on a pay-per-use resource in the **Frozen** status.

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

∩ NOTE

• For details about renewal, see 6.1 Overview.

2.4 Traffic Packages

Traffic Package Description

When backups or vaults are replicated across regions, cross-region replication traffic is charged for the source region.

A cross-region replication traffic package can be used to cover the Internet outbound traffic generated for replicating data from a source vault to a destination vault in another region.

You can purchase yearly/monthly traffic packages to save money. If you continue to use resources after your packages are used up or expire, you will be billed on a pay-per-use basis.

NOTICE

CBR traffic packages cannot be unsubscribed from, so it is recommended that you purchase traffic packages based on the data volume and validity period you require.

Packages are region-specific and cannot be used across regions. A purchased package can only be used in the replication source region.

Packages are used to cover your resource usage first, and the package remaining quota is refreshed every month. Any usage beyond the package quota will be billed on a pay-per-use basis. Package quota defines the available traffic volume you can use within a month from when you bought the package.

If you do not have any replication traffic package, you will be billed for the replication traffic on a pay-per-use basis. Buy a replication traffic package based on the size of backups to be replicated.

A traffic package can only be used to cover traffic usages. Any capacity usage during replication cannot be covered by the traffic package.

For details, see the cross-region replication pricing at **Product Pricing Details**.

Traffic Package Use Sequence

If there are multiple traffic packages with the same attributes, packages with an earlier expiration time will be used first.

Scons	ria
Scena	HO

Suppose you purchased two in the region.

- Package A (100 GB) took effect on October 1, 2022 and was valid for two months (expired on December 1, 2022).
- Package B (500 GB) took effect on October 10, 2022 and was valid for two months (expired on December 10, 2022).

moners (expired on December 10, 2022).		
Use Sequence		
From Oct. 1 to Oct. 9	Only package A was effective. During this period, package A was used. If the customer replicated more than 100 GB of data, the usage in excess of 100 GB would be billed on a pay-per-use basis.	
From Oct. 10 to Nov. 30	Both packages A and B were effective. During this period, package A was preferentially used. If the customer replicated more than 100 GB of data, then package B would be used. If the customer replicated more than 600 GB of data, the usage in excess of 600 GB would be billed on a pay-per-use basis.	
From Dec. 1 to Dec. 9	Package A was expired. Only package B was effective. During this period, package B was used. If the customer replicated more than 500 GB of data, the usage in excess of 500 GB would be billed on a pay-per-use basis.	

Both packages A and B were expired. You would be billed on a pay-per-use basis.
a pay-per-use basis.

Purchasing a Traffic Package

- **Step 1** Log in to the CBR console.
 - 1. Log in to the management console.
 - 2. Click in the upper left corner and select a region.
 - 3. Click and choose **Storage** > **Cloud Backup and Recovery**. Select a backup type from the left navigation pane.
- **Step 2** Click **Buy CBR Replication Traffic Package** in the upper right corner.
- **Step 3** Select a package type and usage duration.
- **Step 4** Confirm the information, click **Next**, and complete the payment.

----End

3 Billed Items

Billing Description

You are billed for the storage capacity and optionally the data traffic required for backup replication. Pricing of the storage capacity varies with vault types. The details are described as follows.

Billing Examples

For example, on March 8, 2023 15:50:04, suppose you purchased a 100-GB, yearly/monthly server backup vault in the CN North-Beijing4 region and used 40 GB of the storage space. You also purchased a 200-GB, yearly/monthly replication vault in the CN South-Guangzhou region and replicated data from the backup vault to the replication vault, without using the acceleration service. Suppose you renewed the subscription for one more month before the initial subscription expired. The following usage periods would be billed:

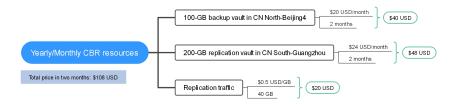
- March 8, 2023, 15:50:04 to April 8, 2023, 23:59:59
- April 8, 2023, 23:59:59 to May 8, 2023, 23:59:59

Figure 3-1 shows how the total price is calculated.

NOTICE

The preceding prices are for reference only. For details, see CBR Pricing Details.

Figure 3-1 Total price for yearly/monthly CBR resources



4 Billing Examples

Billing Scenario

A user purchased a 100-GB server backup vault in the CN North-Beijing4 region at 15:00:00 on March 18, 2023 and used 40 GB of the storage space. After a period of time, the user found that the current specifications no longer met service requirements and purchased a 200-GB replication vault (acceleration not used) in the CN South-Guangzhou region at 09:00:00 on March 20, 2023. Since the user wanted to use the vaults long term, the user then changed both vaults to yearly/monthly billing with a one-month duration at 10:00:00 on March 20, 2023. So how much will the user be billed for the vaults in March and April?

Billing Analysis

Total prices of the two vaults involve both pay-per-use and yearly/monthly usage:

- Pay-per-use usage: March 18, 2023, 15:00:00 to March 20, 2023, 10:00:00
- Yearly/monthly usage: March 20, 2023, 10:00:00 to April 20, 2023, 23:59:59

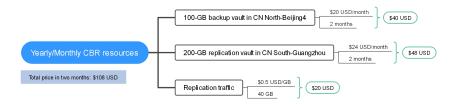
Pay-per-use

- From March 18, 2023, 15:00:00 to March 20, 2023, 09:00:00, the 100-GB backup vault was used for 42 hours, so the price would be \$1.176 USD (\$0.00028 USD/GB-hour x 100 GB x 42 hours).
- From March 20, 2023, 09:00:00 to March 20, 2023, 10:00:00, both the 100-GB backup vault and 200-GB replication vault were used for an hour, so the total price would be \$0.084 USD (\$0.00028 USD/GB-hour x 100 GB x 1 hour + \$0.00028 USD/GB-hour x 200 GB x 1 hour).

Yearly/Monthly

From March 20, 2023, 10:00:00 to April 20, 2023, 23:59:59, both vaults were used for a month, so the price would be calculated as follows.

Figure 4-1 Total price for yearly/monthly CBR resources



From March to April, the total price of the vaults would be \$65.26 USD (1.176+0.084+64).

NOTICE

The preceding prices are for reference only. For details, see CBR Pricing Details.

5 Billing Mode Changes

- 5.1 Overview
- 5.2 Pay-per-Use to Yearly/Monthly

5.1 Overview

CBR supports both pay-per-use and yearly/monthly billing as well as resource packages. You can change to yearly/monthly billing if pay-per-use billing no longer meets your needs. For the changeable billed items, see **3 Billed Items**.

Table 5-1 Differences between billing modes

Billing Mode	Yearly/Monthly	Pay-per-Use
Payment	Prepaid	Postpaid
Billing Method	Billed by the subscription term you purchase	Calculated by the hour but billed every day
Billed Items	Disk backup vaults, server backup vaults, SFS Turbo backup vaults, hybrid cloud backup vaults, and replication vaults	Disk backup vaults, server backup vaults, SFS Turbo backup vaults, hybrid cloud backup vaults, replication vaults, and cross-region replication traffic
Changing the Billing Mode	Yearly/Monthly can be changed to pay-per-use only after the yearly/ monthly subscription duration ends.	Pay-per-use can be changed to yearly/monthly.
Changing the Specifications	Vault capacities can only be expanded.	Vault capacities can be expanded.

Billing Mode	Yearly/Monthly	Pay-per-Use
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.

5.2 Pay-per-Use to Yearly/Monthly

CBR supports both pay-per-use and yearly/monthly billing as well as resource packages. You can change to yearly/monthly billing if pay-per-use billing no longer meets your needs. For the changeable billed items, see 3 Billed Items. If you have a pay-per-use vault 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 a user bought a pay-per-use server backup vault at 15:29:16 on April 18, 2023 and changed it to yearly/monthly billing at 16:30:30 on the same day. After the user paid for the order, yearly/monthly billing was applied immediately. On the **Billing & Costs** > **Bills** page, two line items were generated, one for each of the hours the vault was used on a pay-per-use basis, and one for the yearly/monthly subscription:

- Pay-per-use expenditures for April 18, 2023, 15:00:00 to April 18, 2023, 17:00:00
- Yearly/Monthly expenditure for April 18, 2023, 16:30:30 to May 18, 2023, 23:59:59

Prerequisites

The vault billing mode is pay-per-use.

Pay-per-Use to Yearly/Monthly

- **Step 1** Log in to the CBR console.
 - 1. Log in to the management console.
 - 2. Click \bigcirc in the upper left corner and select a region.
 - 3. Click and choose **Storage** > **Cloud Backup and Recovery**. Select a backup type from the left navigation pane.

----End

- **Step 1** Find the target vault and choose **More** > **Change Billing Mode** in the **Operation** column.
- **Step 2** Select the required duration for the vault, confirm information, and click **Pay**.

Step 3 Return to the vault list. You can see that the vault's **Billing Mode** has changed to **Yearly/Monthly**.

----End

6 Renewing Subscriptions

- 6.1 Overview
- 6.2 Manually Renewing a Vault
- 6.3 Auto-renewing a Vault

6.1 Overview

When to Renew Subscriptions

If a yearly/monthly CBR vault is about to expire but you want to continue using it, you need to renew the vault subscription within a specified period, or backups will be automatically released, and data will be lost and cannot be restored.

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

If you renew the vault before it expires, backups will be retained and you can continue using the vault. For details about vault statuses after they have expired and the associated impacts, see **Impact of Expiration**.

How to Renew Subscriptions

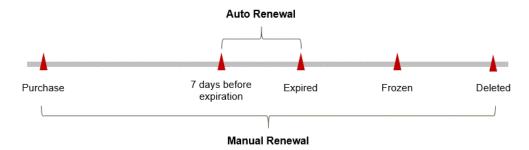
You can renew a yearly/monthly vault manually or automatically.

Table 6-1 Renewing a yearly/monthly vault

Method	Description
6.2 Manually Renewing a Vault	You can renew a yearly/monthly vault anytime on the console before it is automatically deleted.
6.3 Auto- renewing a Vault	You can enable auto-renewal to automatically renew a vault 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 vault based on the phase the vault is currently in.

Figure 6-1 Vault lifecycle



- A vault is in the Running state after it is provisioned.
- When a vault subscription expires, the vault status will change to Expired.
- If an expired vault is not renewed, it enters a grace period. If it is not renewed by the time the grace period expires, the vault 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.

You can enable auto-renewal anytime before a vault 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.

6.2 Manually Renewing a Vault

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

Renewing a Vault on the Console

Step 1 Log in to the CBR console.

- 1. Log in to the management console.
- 2. Click \bigcirc in the upper left corner and select a region.
- 3. Click and choose **Storage** > **Cloud Backup and Recovery**. Select a backup type from the left navigation pane.
- **Step 2** In the vault list, select the yearly/monthly vault to be renewed.
- **Step 3** Choose **More** > **Renew** in the **Operation** column.

- Step 4 Select a renewal duration and optionally select Renew on the standard renewal date. For details, see Setting the Same Renewal Day for Yearly/Monthly Resources. Confirm the price and click Pay.
- **Step 5** Select a payment method and make your payment. Once the order is paid for, the renewal is complete.

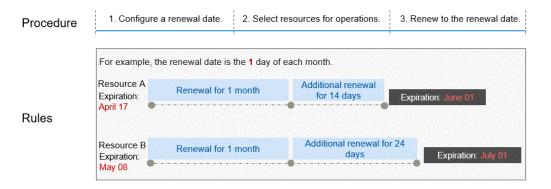
----End

Setting the Same Renewal Day for Yearly/Monthly Resources

If the vaults have different expiry dates, you can set the same renewal day, for example, the first day of each month, to make it easier to manage renewals.

In Figure 6-2, a user sets the same renewal day for two resources that will expire at different dates.

Figure 6-2 Setting the same renewal day for resources with different expiry dates



6.3 Auto-renewing a Vault

Auto-renewal can prevent vaults 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 vault expires and the billing cycle.
- The auto-renewal period of a vault depends on the subscription term. For example, if you select a three-month renewal period, the vault subscription will be renewed for three months each time before expiry.
- You can enable auto-renewal anytime before a vault 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 vault manually if you want to. After a manual renewal is complete, auto-renewal is still valid, and the renewal charge will be deducted from your account seven days before the new expiry date.

• By default, the renewal charge is deducted from your account seven days before the new expiry date. You can change this auto-renewal payment date as required.

Prerequisites

The yearly/monthly vault is not expired.

Enabling Auto-Renewal During Purchase

You can enable auto-renewal on the vault purchase page, as shown in Figure 6-3.

Figure 6-3 Enabling auto-renewal



7 Bills

You can view the resource usage and bills for 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.

Pay-per-use resources are billed by the hour, day, or month, depending on their usage types. The vault usage is billed by the day.

Viewing Bills of a Specific Resource

- **Step 1** Log in to the CBR console.
 - 1. Log in to the management console.
 - 2. Click \bigcirc in the upper left corner and select a region.
 - 3. Click ____, choose **Storage** > **Cloud Backup and Recovery**, and select a backup type from the left navigation pane.
- **Step 2** Find the target vault and click the icon shown in the figure below to copy the vault ID.



Step 3 On the top menu bar, choose **Billing** > **Bills**.

The **Dashboard** page is displayed.

Step 4 In the navigation pane on the left, choose **Billing > Expenditure Details**. Select **Resource ID** as the filter criteria, enter the resource ID copied in **step 2** to search for the bill of the resource.



----End

Checking the Consistency of the Actual Usage and Billed Usage

Suppose a user purchased a 100-GB, pay-per-use server backup vault at 17:00:00 on April 8, 2023 and deleted it later on that day at 18:20:00.

• Transaction Records

Pay-per-use vault usage is calculated by the hour but billed every day.

Table 7-1 Server backup vault transaction records

Service Type	Server backup vault		
Resource Type	CBR		
Billing Mode	Pay-per-use		
Expenditur e Time	For the period from 17:00:00 to 18:20:00, one transaction record would be generated for the vault usage in the following period: April 8, 2023 17:00:00 to April 8, 2023 19:00:00		
List Price	List price on the official website = Usage period x Unit price x Capacity In this example, the vault price would be \$0.056 USD (2 hours x \$0.00028 USD/GB-hour x 100 GB)		
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.		
Truncated Amount	Huawei Cloud billing is calculated to the 8th decimal place. However, the amount due is truncated to the 2nd decimal place. The third and later decimal places are referred to as the truncated amounts.		
Amount Due	Amount due = List price - Discount amount - Truncated amount In this example, if the discount amount is 0, the amount due is \$0.05 USD (0.056 - 0 - 0.006).		

Server backup vault bill details

Bill details can be displayed in multiple ways. By default, the bill details of a resource are displayed by usage and by billing cycle. The following table illustrates the vault bill details, which can be used to check against the actual usage.

Table 7-2 Server backup vault bill details

Comiss	Comicar hadrum varult		
Service Type	Server backup vault		
Resource Type	CBR		
Billing Mode	Pay-per-use		
Resource Name/ID	Name and ID of the server backup vault vault-3537 and bb6bc912-7a3a-4888-822d-df99a8539bb5 in this example		
Specificat ions	Capacity of the server backup vault 100 GB in this example		
Usage Type	Duration for pay-per-use server backup vaults		
Unit Price	You can search for the unit price for pay-per-use vaults on the Product Pricing Details page.		
Unit	You can query the unit price on the Product Pricing Details page. USD/GB-hour in this example		
Usage	Depends on the unit of the unit price, which, for a server backup vault, is USD/GB-hour. Vault usage is calculated by the hour. 2 hours in this example		
Usage Unit	Hour		
List Price	List price on the official website = Usage period x Unit price x Vault capacity The vault was used for 2 hours in total, and the unit price can be obtained on the Product Pricing Details page. In a region that charges \$0.00028 USD/GB-hour, the user would be billed \$0.056 USD (2 x 0.00028 x 100).		
Discount ed Amount	Discounts offered for CBR, 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 CBR resources after discounts are applied.		

8 Arrears

If there is not a sufficient account balance to pay for your bill and there is no other payment method configured, your account will go into arrears. If you want to continue using your CBR resources, you will need to top up your account in a timely manner.

Arrears Reason

- Your configured payment method or top-up account cannot pay for the amount generated for you pay-per-use vaults.
- Your configured payment method or top-up account cannot pay for the generated replication traffic.

Arrears Impact

Yearly/Monthly

This is a pre-paid billing mode, so you can continue using yearly/monthly CBR resources even if your account is in arrears. However, you cannot perform operations such as purchasing new vaults, upgrading vault specifications, or renewing vaults, because they will generate new expenditures.

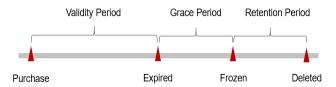
Pay-per-Use

If your account is insufficient to pay your amount due, your account goes into arrears, and your pay-per-use CBR resources enter a grace period. You are still responsible for expenditures generated during the grace period. You can view the expenditures on the **Billing** > **Overview** page and pay any past due balance. Huawei Cloud will automatically deduct the expenditures after you top up the account.

If you do not bring your account balance current before the grace period expires, the resources turn to **Frozen** and enter a retention period, during which your vaults and backups are retained, you can view your backup data, but you cannot perform operations like creating backups, restoring from backups, or adding tags. If you do not bring your account balance current before the retention period ends, your CBR resources will be released and data cannot be restored.

For details about the retention period, see **Service Suspension and Resource Release**.

Figure 8-1 Life cycle of a pay-per-use CBR resource



Ⅲ NOTE

Huawei Cloud defines different grace periods and retention periods for different levels of customers.

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 **Making Repayments (Postpaid Direct Customers)**.

If data stored in vaults is no longer used, you can delete them to avoid 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, anytime an expenditure quota drops to below the threshold you specify, Huawei Cloud automatically notifies you by SMS or email.

If your account is in arrears, address the issue in a timely manner.

9 Billing Termination

Yearly/Monthly Resources

When you purchase a yearly/monthly resource, such as a yearly/monthly server backup vault or disk backup vault, 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 resource, but the subscription has not yet expired, you
 can unsubscribe from it. Depending on what coupons were used for the
 purchase, 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.

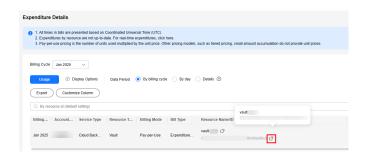
Pay-per-Use Resources

If pay-per-use resources, such as pay-per-use server backup vaults and disk backup vaults, are no longer used, delete them.

Searching for Resources from Bills and Stopping Billing

To ensure that all related resources are deleted, you can search the billing records by resource ID, and then delete the resources you identify in this way.

- **Step 1** Log in to the management console. On the top menu bar, choose **Billing** > **Bills**. The **Dashboard** page is displayed.
- **Step 2** In the navigation pane on the left, choose **Billing** > **Expenditure Details**.. Click the icon shown in the following figure to copy the resource ID.



Step 3 Choose Storage > Cloud Backup and Recovery.

Go to the corresponding backup page based on your resource specifications.

Step 4 Select the region where the resource is located, choose **ID** from the drop-down list and enter the copied resource ID. Click the Q icon to search for the resource.



Step 5 Click **More** > **Delete** in the **Operation** column to delete the vault and check that the vault no longer appears in the list.

□ NOTE

You are billed one hour after the resource usage is calculated, so a bill may still be generated after the pay-per-use resource is deleted. For example, if you delete a vault (which is billed on an hourly basis) at 08:30, the expenditures for the hour from 08:00 to 09:00 are usually not billed until about 10:00.

----End

10 Cost Management

As you migrate more of your services to the cloud, managing cloud costs becomes more important. For example, you may be more concerned with cost management when using CBR. The following describes how to manage costs in terms of cost composition, allocation, analysis, and optimization. Optimizing costs can help you maximize return on investment.

Cost Composition

CBR costs consist of two parts:

- Resource costs: cost of resources and resource packages, depending on the billed items of CBR. For details, see 3 Billed Items.
- O&M costs: labor costs incurred during the use of CBR.
 CBR costs



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 10-1 Selecting an Enterprise Project for a vault

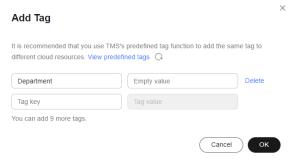


By cost tag

You can 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 10-2 Adding tags for a vault



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**.

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 from various dimensions and display filters for cost analysis. You can analyze the trends and drivers of your service usage and costs from a variety of perspectives.

In the **Cost Center**, you can also detect cost anomalies 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.

Cost Optimization

Cost control

You can create different types of budgets on the **Budgets** page of Cost Center to track your costs against the budgeted amount you specified. If the budget thresholds you defined are reached, Cost Center will send alerts to the recipients you configured. You can also create budget reports and specify recipients to receive budget alerts if any at a frequency you configured. Suppose you wanted to create a monthly budget of \$2,500 USD for pay-peruse CBR resources and expected to receive an alert if the forecasted amount exceeds 80% of the budgeted amount and the usage amount exceeds 70% of the budgeted amount. You can refer to the following budget information.

Figure 10-3 Basic budget information

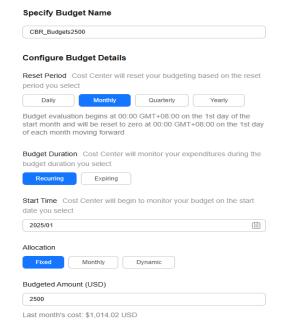


Figure 10-4 Defining the budget scope

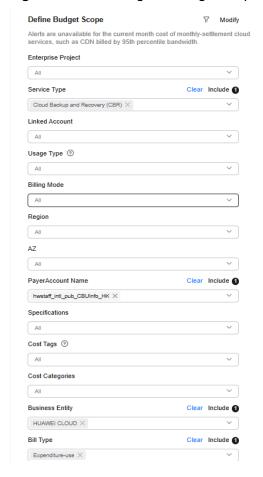


Figure 10-5 Setting a budget alert



For details, see **Enabling Forecasting and Creating Budgets to Track Costs and Usage**.

Resource rightsizing

Cost Center analyzes your historical vault usages to identify idle vaults and generate resource rightsizing recommendations. These rightsizing opportunities are places where you can reduce costs. You can also identify resources with high costs based on the analyses on the **Cost Analysis** page and use Cloud Eye to monitor resource usage. By doing this, you can determine the causes of high costs and take optimization measures accordingly. You can:

- Monitor resource usage and evaluate whether the current configuration is more than you need, for example, you can monitor the usage of vaults.
- Identify idle resources, for example, there may be unused vaults.

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.

O&M automation

Huawei Cloud also provides various O&M products to help you improve O&M efficiency and reduce O&M labor costs. The following are examples of such products:

- Auto capacity expansion: You can enable auto capacity expansion for your vaults. After it is enabled, vault capacity will be automatically expanded to 1.25 times of the original capacity when the original capacity is used up. Use this function when the volume of your service data grows fast.
- Auto association: You can enable auto association for your vaults. In this
 way, CBR can automatically associate unprotected resources to vaults and
 perform periodic backups based on the applied backup policy. Use this
 function when you have a large amount of resources.

11 Billing FAQ

- 11.1 How Is CBR Billed?
- 11.2 What Is the Billing Cycle of Pay-per-Use Vaults?
- 11.3 How Do I Disable CBR?
- 11.4 How Do I Unsubscribe from CSBS or VBS Resource Packages?
- 11.5 Why Is a Message Displayed Indicating Insufficient User Rights When I Create a Policy?
- 11.6 What Can I do If a Yearly/Monthly-Billed Vault Is About to Expire?
- 11.7 How Do I Unsubscribe from a Vault?
- 11.8 What Should I Do If the Fee Is Too High When I Expand the Capacity of a Vault?
- 11.9 Why Are CBR Backups Displayed on the VBS Console?
- 11.10 How Do I Purchase a CBR Replication Traffic Package?
- 11.11 What Resources Do I Need to Implement Cross-Region Backup Replication?

11.1 How Is CBR Billed?

Billing Items

You are billed for the storage space and the data traffic generated if backup replication is used. Pricing of the storage space varies with vault types. See details in the following table.

Category	Billing Item	Description	Billing Mode
Storage space	Disk backup vault	If cloud disks need to be backed up, buy disk backup vaults to store the backups.	Pay-per-use Yearly/ Monthly

Category	Billing Item	Description	Billing Mode
	Server backup vault	If cloud servers (without applications) need to be backed up, buy server backup vaults to store the backups.	Pay-per-use Yearly/ Monthly
	SFS Turbo backup vault	If SFS Turbo file systems need to be backed up, buy SFS Turbo backup vaults to store the backups.	Pay-per-use Yearly/ Monthly
	Database server backup vault	If cloud servers (with applications) need to be backed up, buy database server backup vaults to store the backups.	Pay-per-use Yearly/ Monthly
		You need to enable Application-Consistent Backup on the Buy Server Backup Vault page before using database server backup vaults. For more information, see Application-Consistent Backup.	
	Hybrid cloud backup vault	If backups of on-premises VMware VMs need to be stored, buy hybrid cloud backup vaults.	Pay-per-use Yearly/ Monthly
	Replication vault	If you need to replicate backups to another region, buy replication vaults in the destination region.	Pay-per-use Yearly/ Monthly
Data traffic	Outbound traffic over the Internet	If hybrid cloud backups on the cloud are used to restore data to on-premises IDCs, outbound traffic is charged.	Free for a limited time

Billing Examples

Example 1

Purchase a pay-per-use vault for cloud servers without databases deployed:

If a user purchases a 400-GB server backup vault for their 100-GB cloud server in the EU-Dublin region, the user is billed for the 400-GB server backup vault in CBR.

Example 2

Purchase a pay-per-use vault for cloud servers with databases deployed:

If a user purchases an 800-GB database server backup vault for their 100-GB database server in the EU-Dublin region, the user is billed for the 800-GB database server backup vault in CBR.

11.2 What Is the Billing Cycle of Pay-per-Use Vaults?

Pay-per-use billing means you pay nothing up front and are not tied into any contract or commitment.

Pay-per-use vault usage is calculated by the hour but billed every day. The minimum billed usage period of a vault is an hour regardless of when you purchase it.

For example, if you purchased a pay-per-use vault at sometime between 18:00 to 19:00, the usage period of an hour would be billed (18:00 to 19:00).

11.3 How Do I Disable CBR?

If you have enabled CBR when purchasing an ECS but want to disable it afterward, go to the CBR console and then delete all vaults on the cloud server backup, cloud disk backup, SFS Turbo backup, and hybrid cloud backup pages. See Figure 11-1.

- If a message is displayed indicating that the ECS backup cannot be deleted, check whether the backup has been used to create an image and whether the image has been deleted.
- If you have not migrated resources to CBR, switch back to the CSBS or VBS console page to delete the backups.
- To delete CSBS backups displayed on the VBS console page, go to the Backups tab page on CSBS Console.

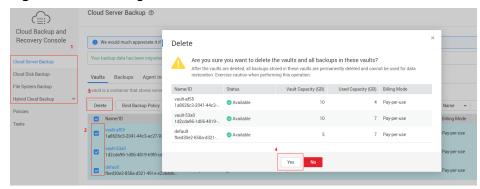


Figure 11-1 Deleting vaults

11.4 How Do I Unsubscribe from CSBS or VBS Resource Packages?

If you want to migrate resources from CSBS and VBS to CBR, the original yearly/monthly CSBS and VBS packages cannot be migrated. In this case, you can

unsubscribe from the packages yourself or **create a service ticket**. For details about the unsubscription rules, see **Unsubscription Rules**.

Unsubscribing from a Resource Package By Self Service

- **Step 1** Log in to CSBS Console.
- **Step 2** Click **Billing** in the upper right corner of the page to go to the Billing Center.
- **Step 3** In the left navigation pane, choose **Orders** > **Unsubscriptions** to view the resources you purchased.
- **Step 4** Select an unwanted resource package and click **Unsubscribe**. See **Figure 11-2**.

Figure 11-2 Unsubscribing from a resource package

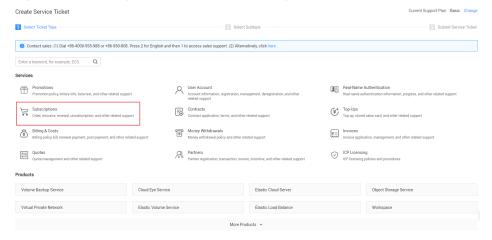


----End

Unsubscribing from a Resource Package By Submitting a Service Ticket

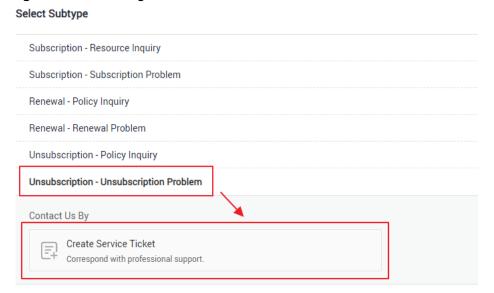
- **Step 1** Log in to the management console.
- Step 2 In the upper right corner of the page, choose Service Tickets > Create Service Ticket. The Create Service Ticket page is displayed. Click Subscriptions on the Select Ticket Type tab page.

Figure 11-3 Going to the Subscriptions page

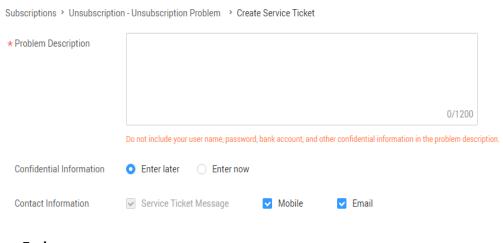


Step 3 On the **Select Subtype** tab page, choose **UnsubscriptionsUnsubscription - Unsubscription Problem > Create Service Ticket**.

Figure 11-4 Creating a service ticket



Step 4 Enter a description, for example, "unsubscribe from CSBS/VBS resource packages", in the text box next to **Problem Description** and set other parameters as required. Then click **Submit**.



----End

11.5 Why Is a Message Displayed Indicating Insufficient User Rights When I Create a Policy?

If your account is in arrears or has no balance, you cannot create policies or add tags.

If there is not a sufficient account balance to pay for your bill and there is no other payment method configured, your account will go into arrears. If you want

to continue using your CBR resources, you will need to top up your account in a timely manner.

11.6 What Can I do If a Yearly/Monthly-Billed Vault Is About to Expire?

After a yearly/monthly-billed vault expires, the system will not automatically change you to the pay-per-use mode. For details about the resource handling during the retention period, see **Service Suspension and Resource Release**. If the resource package is not renewed before the retention period expires, the resource will be deleted.

- If you want to continue to use the vault, choose **More** > **Renew** in the **Operation** column of the vault to renew your subscription.
- If you do not need the vault anymore, choose More > Delete in the
 Operation column of the vault, or you can wait for the system to
 automatically delete it when the subscription expires.

11.7 How Do I Unsubscribe from a Vault?

If you no longer need a vault billed in yearly/monthly mode to store backups, you can unsubscribe from the vault in either of the following methods. For details about the unsubscription rules, see **Unsubscription Rules**.

Method 1

- **Step 1** Log in to the CBR console.
- **Step 2** Click the **Vaults** tab and locate the target vault. Click **More** > **Unsubscribe** in the **Operation** column.
- **Step 3** Complete the unsubscription operations as prompted.

----End

Method 2

- **Step 1** Log in to the CBR console.
- **Step 2** Click **Billing** in the upper right corner of the page to go to the Billing Center.
- **Step 3** In the left navigation pane, choose **Orders** > **Unsubscriptions** to view the yearly/monthly vaults you purchased.
- **Step 4** Select an unwanted vault and click **Unsubscribe**. See **Figure 11-5**.

Figure 11-5 Unsubscribing from a resource package



----End

11.8 What Should I Do If the Fee Is Too High When I Expand the Capacity of a Vault?

Symptom

A user purchases a yearly-billed vault (1 to 3 years). After the vault has been used for a period of time, the user wants to expand the capacity. However, the expansion cost is unexpectedly high.

Possible Cause

Due to system restrictions, when expanding a vault in the current yearly package, the fee cannot be calculated on the common yearly/monthly basis.

Solution

- 1. Plan the vault capacity properly before you purchase a yearly/monthly vault.
- 2. If you still want to expand the vault capacity, renew the vault by making up the used duration.

For example, if you have purchased a vault for two years and need to expand its capacity after using it for six months, you need to renew the vault for another six months to add up to a two-year package. Then you can expand the vault on a relatively preferential price.

11.9 Why Are CBR Backups Displayed on the VBS Console?

If you have migrated data from CSBS and VBS to CBR, and created a backup on the CBR console, the same backup record will be generated on the VBS console page.

This is due to the underlying mechanism. The VBS console displays all backups generated by CBR, CSBS, and VBS. However, these backups will not be billed repeatedly.

To delete a CBR or CSBS backup, go to the corresponding console to delete it, and then it will no longer be displayed on the VBS console.

11.10 How Do I Purchase a CBR Replication Traffic Package?

CBR provides replication traffic packages. If you buy a package, the quota in the package is used for billing first. Any usage exceeding the package is billed based on the pay-per-use basis.

A package is bound to a specific region. The purchased package can be used only in the bound region. This region must be the source region of the replication.

Package resetting rules: During billing, the quota in the package is deducted first. Remaining quotas are cleared upon the monthly reset, and excessive usage is billed on the pay-per-use basis. The quota of a package defines the available traffic within one month from the date you bought the package.

Procedure

- **Step 1** Log in to the CBR console.
 - 1. Log in to the management console.
 - 2. Click in the upper left corner and select a region.
 - 3. Choose Storage > Cloud Backup and Recovery > Cloud Server Backup.
- Step 2 Click Buy CBR Replication Traffic Package in the upper right corner.
- **Step 3** Select a package type and usage duration.
- **Step 4** Confirm the information, click **Next**, and complete the payment.

----End

11.11 What Resources Do I Need to Implement Cross-Region Backup Replication?

To replicate backups to a different region, buy or create the following resources:

- 1. Cloud server backup vault in the source region. This vault is used to store cloud server backups generated in the production region.
- 2. Cloud server replication vault in the destination region. This vault is used to store cloud server backups replicated to the disaster recovery region.
- 3. (Optional) Cross-region replication traffic package. This package can be used to deduct the replication traffic generated during replication.

If a replication traffic package is not available, you will be billed for the replication traffic based on a pay-per-use basis. Buy a replication traffic package based on the size of the backups to be replicated. A traffic package can only be used to deduct traffic fees. Any capacity fee generated during replication cannot be deducted by the traffic package.