# Multi-Site High Availability Service (MAS)

# **MAS Billing**

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# **Contents**

1 Billing Description	1
2 Billing Modes	2
2.1 Overview	
2.2 Yearly/Monthly	
2.3 Pay-per-Use	
3 Billing Items	7
4 Renewal	
4.1 Overview	
4.2 Manual Renewal	
4.3 Auto Renewal	
5 Arrears	12
6 Billing Termination	

# Billing Description

In this document, you will learn about how Multi-Site High Availability Service (MAS) is billed, how you can renew subscriptions, and what happens if your account goes into arrears.

#### • Billing mode

There are yearly/monthly and pay-per-use billing modes to meet your requirements.

- Yearly/Monthly: You pay for the service for the period specified in the order before using it. Therefore, ensure that your account balance is sufficient before placing an order.
- Pay-per-use: You can use the service first, and will be billed for the function modules and nodes you used and the usage duration.

For details, see **2 Billing Modes**.

• Billing items

MAS is billed based on the function modules, multi-active instances, and nodes.

For details about the billing factors and formulas of each billing item, see **3 Billing Items**.

#### • Renewal

Renew pay-per-use MAS instances within the specified period manually or automatically. Otherwise, MAS resources will be deleted and the data may be lost. For details, see **4.1 Overview**.

Arrears

Your account goes into arrears when the balance cannot cover the bill you need to pay. To continue using your cloud resources, top up your account in time. For details, see **5** Arrears.

#### • Billing termination

If you no longer need to use your cloud service, you can unsubscribe from or delete it to stop the billing. For details, see **6 Billing Termination**.

# **2** Billing Modes

2.1 Overview

- 2.2 Yearly/Monthly
- 2.3 Pay-per-Use

# 2.1 Overview

Pay-per-use and yearly/monthly billing modes are supported.

- Yearly/Monthly is a prepaid mode. You need to pay first, and will be billed for your subscription period. The longer the period, the larger the discount. This mode is suitable for long-term, stable services.
- Pay-per-use is a postpaid mode. You are billed for the function modules and nodes you used and the usage duration. The fees are calculated in hours and settled by hour. This allows you to adjust resource usage easily. You neither need to prepare for resources in advance, nor end up with excessive or insufficient preset resources. This mode is suitable for scenarios with traffic bursts, such as e-commerce.

 Table 2-1 compares the two billing modes.

Billing ModeYearly/MonthlyPay-per-us		Pay-per-use	
Payment	Prepaid Billed by the required duration specified in your order	Postpaid Billed by the function modules, nodes, and usage duration	
Billing CycleBilled by the required duration specified in your order		Calculated in hours and settled by hour	
Billing Mode Change	Not supported	Not supported	

Specifications Change	Not supported	Not supported
Billed Item	MAS instances	Numbers of the function modules and nodes
Application Scenario	Recommended for long-term use. Suitable and price- friendly for scenarios where the resource usage duration can be estimated.	Recommended if you want more flexibility. Suitable for scenarios where resource demands fluctuate.

# 2.2 Yearly/Monthly

If you expect to use resources for a longer period, you can save money by selecting yearly/monthly billing. You can pre-purchase cloud service resources at discounted prices. This section describes the billing rules for yearly/monthly MAS instances.

# **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:

- Running for a long time with constant resources: For example, enterprise official websites, online malls, and blogs. Yearly/Monthly billing provides higher cost-efficiency.
- Long-term: For example, scientific research projects and large-scale events. Yearly/Monthly billing ensures stable resource supply throughout the project period.
- Predictable service peaks: For example, e-commerce promotions, festivals, and holidays. Resource insufficiency can be avoided by purchasing resources in advance for peak demands.
- High data security: For services that require high data security, yearly/monthly billing facilitates continuous usage of the resources.

# Billing Cycle

The billing period of yearly/monthly MAS instances is determined by purchase duration (UTC+8). The billing starts when you activated or renewed the subscription (precise to hours), and ends at 23:59:59 of the expiry date.

For example, if you purchased a MAS instance for one month at 15:50:04 on Oct 16, 2023, the billing period is from Oct 16, 2023, 15:50:04 to Nov 16, 2023, 23:59:59.

## Billing Example

Assume that you purchased a yearly/monthly MAS instance for one month at 15:50:04 on Oct 16, 2023, and will manually renew it for another month before it expires:

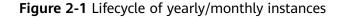
- The first billing period: Oct 16, 2023, 15:50:04 to Nov 16, 2023, 23:59:59
- The second billing period: Nov 16, 2023, 23:59:59 to Dec 16, 2023, 23:59:59

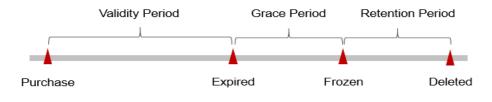
You need to pay for each billing period in advance. The billing formula is as follows: Unit price of instance specifications x Purchased duration.

For example, if the monthly price of the instance is USD2000, the total fee for the preceding two billing periods is  $2000 \times 2 = USD4000$ .

#### Impact of Expiration

**Figure 2-1** describes the status of each stage of a yearly/monthly MAS instance. After you purchase an instance, it runs properly during the billing period, which is also called "validity period". If the instance is not renewed in time, it goes into the grace period and then the retention period.





#### **Expiration reminder**

From the 7th day before a yearly/monthly MAS instance expires, the system will send an expiration reminder through the email address or mobile number you used to create your Huawei Cloud account or through internal messages.

#### Impact after expiration

If your yearly/monthly MAS resource is not renewed, it goes into the grace period and changes to the **Expired** state. You can still view the instance during this period.

If you do not renew your yearly/monthly MAS instance before the grace period ends, it goes into the retention period and its status turns to **Frozen**. You cannot perform any operations on your yearly/monthly MAS instance in the retention period.

If you still do not renew your yearly/monthly MAS instance before the retention period ends, the instance will be released, and the data cannot be restored.

#### **NOTE**

- Both the grace and retention periods are 15 days.
- For details about renewals, see 4.1 Overview.

# 2.3 Pay-per-Use

Pay-per-use is a billing mode in which you pay after using the service. This mode is recommended if you do not need any prepayment or long-term commitment. This section describes the billing rules for pay-per-use MAS instances.

## **Application Scenarios**

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

## **Billing Cycle**

The usage of pay-per-use MAS resources is calculated by hour and settled every hour (UTC+8). Once settlement is complete, a new billing cycle starts. Billing starts when a MAS instance is created and ends when the instance is deleted.

#### **Billing Example**

Assume you purchased a pay-per-use MAS instance at 09:30:00 on Oct 16, 2023 and then deleted it at 11:00:00 on Oct 16, 2023. The following usage periods will be billed:

- The first billing period is 9:00:00 to 10:00:00. You will be billed for 0.5 hours from 09:30:00 to 10:00:00.
- The second billing period is 10:00:00 to 11:00:00. You will be billed for 1 hour from 10:00:00 to 11:00:00.

You need to pay for each billing period. The billing formula is as follows: Unit price of instance specifications x Billing duration. For details, see **Pricing Details**.

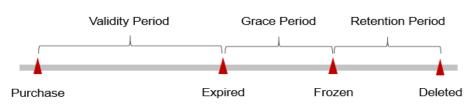
The unit price of this pay-per-use instance is USD3/hour. The total fee for the two billing periods is  $3 \times (0.5 + 1) = USD4.5$ .

#### NOTICE

The prices are for reference only. Actual prices are subject to those in **MAS Pricing Details**.

## Impact of Arrears

**Figure 2-2** describes the status of a pay-per-use MAS instance in each stage. After you purchase a MAS instance, the instance is running properly within the billing period, this period is the validity period. When the automatic billing of a pay-per-use MAS instance leads to arrears on your account, the account status turns to arrears, and your MAS instance enters the grace period and retention period accordingly.



#### Figure 2-2 Lifecycle of a pay-per-use MAS resource

#### Arrears alert

The system will deduct fees for pay-per-use resources at the end of each billing cycle. You will be notified by email, SMS, or internal messages when your account is in arrears.

#### Impact of arrears

When your account is in arrears due to automatic fee deduction for pay-per-use MAS instances, the account status turns to arrears. Pay-per-use resources are not stopped immediately. You need to pay the fees of your pay-per-use resource incurred during the grace period. To view the fees, go to the **Billing Center** > **Overview** page. Huawei Cloud will deduct the fees after you top up your account.

If you do not pay the arrears within the grace period, the instance enters the retention period and its status turns to **Frozen**. You cannot perform any operations on pay-per-use resources in the retention period.

If you do not pay the arrears within the retention period, your MAS instance will be released, and data will be lost.

**NOTE** 

- Both the grace and retention periods are 15 days.
- For details about how to make repayment, see Making Repayments (Postpaid Direct Customers).

# **3** Billing Items

# Description

MAS is billed based on the function modules, multi-active instances, and nodes. **Table 3-1** lists the details.

Billing Items	Description	Billing Mode	Formula
Multi-Active instance	Billed by the number of instances and the billing mode	Yearly/Monthly or pay-per-use	Unit price of an instance x Number of instances
Function module	Billed by the number of function modules at different pricing levels	Pay-per-use	Unit price of a feature x Number of features
Node	Billed by the number of nodes	Pay-per-use	Unit price of a node x Number of nodes

Table 3-1 Billing items of MAS

# **4** Renewal

4.1 Overview

4.2 Manual Renewal

4.3 Auto Renewal

# 4.1 Overview

## Introduction

Yearly/Monthly MAS instances cannot run after their subscription expires. To continue using them, renew your subscription within the specified period. Otherwise, your instance resources will be deleted, and your data will be lost and cannot be restored.

Only yearly/monthly MAS instances can be renewed. Pay-per-use MAS instances can run as long as you have sufficient account balance.

If your subscription is renewed before it expires, all resources are retained and your MAS instances are not affected. For details about the status of a MAS instance after it expires, see **Impact of Expiration**.

## Renewal

Table 4-1 describes how to renew MAS instances.

Table 4-1	Renewing a	subscription
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Method	Description
4.2 Manual Renewal	Renew the subscription anytime on the console as long as the instance is not automatically deleted due to expiration.
4.3 Auto Renewal	After auto-renewal is enabled, the instance is automatically renewed before the subscription expires. This prevents resources from being automatically deleted in the event that you forget to manually renew the subscription.

You can renew your subscription across the lifecycle of your yearly/monthly MAS instance, as shown in **Figure 4-1**.

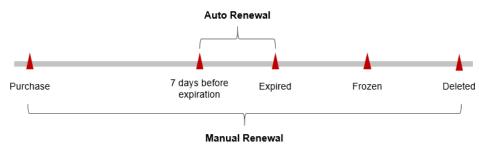


Figure 4-1 Lifecycle of a MAS instance

- A MAS instance is in the **Running** state from the time when it is purchased to the time when it expires.
- After the instance expires, its status changes to **Expired**.
- If the instance is not renewed upon expiration, it enters the grace period. If it is not renewed after the grace period ends, the status changes to **Frozen**.
- If you do not renew your subscription after the grace period ends, your instance enters the retention period. If you do not renew the subscription within the retention period, your instance will be automatically deleted.

#### **NOTE**

Both the grace and retention periods are 15 days.

Auto-renewal can be enabled anytime before a MAS instance expires. The system attempts to automatically renew the instance at 03:00 seven days before the instance expires. If the fee deduction fails, there will be one attempt at 03:00 every day until the instance expires or the renewal is successful. By default, fees are deducted seven days before your subscription expires. You can change this deduction date as required.

# 4.2 Manual Renewal

Renew the subscription anytime on the console as long as the instance is not automatically deleted due to expiration.

### Renewing a Subscription in the Billing Center

- 1. Go to the **Billing > Renewal** page.
- 2. Set the search criteria.

You can view all resources to be renewed on the **Manual Renewals**, **Auto Renewals**, **Pay-per-Use After Expiration**, and **Renewals Canceled** pages, and manually renew the resources.

All resources that need to be manually renewed can be moved to the **Manual Renewals** tab page. For details, see **Restoring to Manual Renewal**.

- 3. Manually renew resources.
  - Separate renewal: Click **Renew** in the **Operation** column of the desired resource.
  - Batch renewal: Check the boxes for the desired resources, and click Batch Renew in the upper left corner.
- 4. Select a renewal duration and determine whether to enable **Renewal Date**. Confirm the fee and click **Pay**.

For details about how to renew MAS instances on a specific day in each month, see **Setting a Renewal Date**.

5. Select a payment method and confirm the payment. After you pay the order, the renewal is complete.

### Setting a Renewal Date

If you have multiple MAS instances with different expiration dates, you can set a fixed expiration date to facilitate routine management and renewal.

In **Figure 4-2**, a user sets the same renewal day for two resources that will expire at different dates.

Figure 4-2 Setting a fixed renewal date

Procedure	1. Configure a renewal date.	2. Select resources for operations.	3. Renew to the renewal date.
Rules	For example, the renewal date is t Resource A Expiration: April 17	Additional renewal	Expiration: June 01
	Resource B Expiration: May 08	Month Additional renewal for days	Expiration: July 01

For details, see **Setting a Renewal Date**.

# 4.3 Auto Renewal

Auto-renewal is easier and prevents MAS instances from being automatically deleted if you forget to manually renew them. The auto-renewal rules are as follows:

- The first auto-renewal date and billing cycle are calculated based on the expiration date of the MAS instance.
- The auto-renewal duration is customized by you. For example, if you select 3month renewal duration, your instance is automatically renewed for three months before each expiration.
- Auto-renewal can be enabled anytime before a MAS instance expires. The system attempts to automatically renew the instance at 03:00 seven days before the instance expires. If the fee deduction fails, there will be one

attempt at 03:00 every day until the instance expires or the renewal is successful.

- After auto-renewal is enabled, you can still manually renew your instance. After a manual renewal is complete, auto-renewal is still valid, and fees start to be deducted seven days before the new subscription expires.
- Fees are deducted seven days before your subscription expires. You can change this deduction date as required.

Learn about Auto-Renewal Rules before enabling auto-renewal.

### Prerequisites

Your yearly/monthly instance has not expired.

### **Enabling Auto-Renewal**

- 1. Go to the **Billing > Renewal** page.
- 2. Set the search criteria. For example, set **Service Type** to **Multi-Site High Availability Service**.
  - For resources on the Manual Renewals, Auto Renewals, and Renewals
     Canceled pages, you can set the billing mode to change to pay-per-use upon expiration.
  - Under the **Pay-per-Use After Expiration** tab, you can view the resources whose billing mode will change to pay-per-use upon expiration.
- 3. Enable auto-renewal for yearly/monthly resources.
  - Separate auto-renewal: Choose More > Enable Auto-Renew in the Operation column for the desired MAS instance.
  - Batch auto-renewal: Select the desired MAS instances and click Enable Auto-Renew above the list.
- 4. Select a renewal period, specify the desired auto-renewal times, and click **Pay**.

# **5** Arrears

Your account goes into arrears when the balance cannot cover the bill you need to pay. To continue using your cloud resources, top up your account in time.

## **Impact of Arrears**

• Yearly/Monthly

For MAS instances billed on a yearly/monthly basis, you have paid for the resources in advance. Even if your account is in arrears, existing yearly/ monthly MAS instances can still be used. However, you cannot perform operations that involve fees, such as modifying instance specifications and renewing orders.

Pay-per-use

When your account is in arrears due to automatic fee deduction for pay-peruse MAS instances, the account status turns to arrears. Pay-per-use resources are not stopped immediately. You need to pay the fees of your pay-per-use resource incurred during the grace period. To view the fees, go to the **Billing Center** > **Overview** page. Huawei Cloud will deduct the fees after you top up your account.

If your account is still in arrears after the grace period ends, the resources enter the retention period and their status turns to **Frozen**. You cannot perform any operations on these resources.

If you do not pay the arrears within the retention period, your MAS instance will be released, and data will be lost.

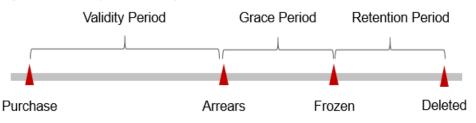


Figure 5-1 Lifecycle of a pay-per-use MAS instance

### D NOTE

Both the grace and retention periods are 15 days.

# **Avoiding and Handling Arrears**

Delete unnecessary MAS instances to avoid unexpected fees. After an instance is deleted, data cannot be restored. To save cache data, back up and download it in advance.

Enable balance alert on the **Billing Center** > **Overview** page. When the total amount of the available quota and all coupons is lower than the threshold, you will be notified by SMS or email.

If your account is in arrears, top up your account as soon as possible. For details, see **Top-Up and Repayment**.

# **6** Billing Termination

## Yearly/Monthly Resources

You pay for a yearly/monthly MAS instance when you purchase it. Billing automatically stops when the 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 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 the auto-renewal function, disable it before the autorenewal deduction date (seven days before the expiration date by default) to avoid unexpected fees.

### Pay-per-Use Resources

If a pay-per-use MAS instance is no longer needed, you can delete it to stop billing.

## 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. The following provides the details:

- 1. Choose **Billing > Transactions and Detailed Bills**.
- 2. Copy the ID of the resource to be deleted.
- 3. Click in the navigation pane on the left and choose **Business Applications** > **Multi-Site High Availability Service**. MAS instances are displayed.
- 4. Select **ID** from the filter criteria, enter the resource ID copied in **2**, and click **Q** to search for the resource.

You can also copy the resource name in **2** and set the search filter to **Name** to search for the instance by name.

5. Click **Delete** to delete the instance.