

# Web Application Firewall

## Billing Description

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# 1 Overview

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In this document, you will learn about how Web Application Firewall (WAF) is billed, how you can renew subscriptions and manage costs, and what happens if your account goes into arrears.

- **Billing modes**

WAF provides two billing modes, yearly/monthly and pay-per-use billing, to meet requirements in different scenarios. Yearly/Monthly: You pay upfront for the amount of time you expect to use the service 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 billing is a postpaid mode. In this mode, you pay for what you used. For more details, see [Overview](#).

- **Billing Items**

WAF billing items include the edition, expansion packages, and number of instances. For details about WAF billing items and calculation formulas, see [Billing Items](#).

Different billing calculation formulas are used based on billing modes. For details about billing examples, see [Billing Examples](#).

- **Renewal**

If you do not renew your yearly/monthly-billed cloud WAF before it expires, WAF will stop protecting your website. If you want to continue using WAF, you need to renew it within the specified period, or all configurations of the domain name will be deleted from WAF. For more details about renewal, see [Overview](#).

- **Bills**

You can choose **Billing & Costs > Bills** and view bills and expenditures for WAF resources. For details, see [Bills](#).

- Your account goes into arrears when your account balance cannot cover the bill you need to pay. If your account is in arrears, the website may lose protection. You need to top up your account in a timely manner. For details, see [About Arrears](#).

- **Billing termination**

If you no longer need a cloud service resource, you can unsubscribe from or delete it to stop the billing. For details, see [Billing Termination](#).

- **Cost management**

When WAF is used, the major cost is resource costs. You can manage costs from cost composition, allocation, analysis, and optimization. For details, see [Cost Management](#).

# 2 Billing Modes

## 2.1 Overview

WAF supports yearly/monthly (prepaid) and pay-per-use (postpaid) billing. For cloud WAF, both billing modes are supported. For dedicated WAF instances, only pay-per-use billing is supported.

- Yearly/monthly billing: You need to pay the bill for the required duration.
- Pay-per-use billing: You are billed for the number of protected domain names, number of customized rules, and number of forwarded requests.

**Table 2-1** Differences between billing modes

Billing Mode	Yearly/Monthly	Pay-per-use
Payment Method	Prepaid	Postpaid
Metering Period	Billed by the purchase period specified in the order	<ul style="list-style-type: none"><li>• Cloud mode: The bills for protected domain names are settled on an hourly basis. The bills for custom protection rules are settled every 24 hours. The bills for requests are settled monthly.</li><li>• Dedicated mode: Instances are billed by the second, and bills are settled on an hourly basis.</li></ul>
Billing Item	Cloud mode: service edition, domain expansion package, QPS expansion package, and rule expansion package	<ul style="list-style-type: none"><li>• Cloud mode: the number of domain names, the number of custom rules, and the number of requests</li><li>• Dedicated mode: the number of instances</li></ul>

<b>Application Scenario</b>	This billing mode is cost-effective and suitable when the duration of resource usage is predictable. The yearly/monthly mode is recommended for long-term users.	This mode is ideal when you want more flexibility and control on WAF usage.
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## 2.2 Yearly/Monthly Billing

Yearly/Monthly billing is a prepaid billing mode in which you pay before using resources. It is suitable when your resource requirements are fixed because you can pay less by using longer. In the yearly/monthly billing mode, we offer discounts to you. This topic describes the billing rules of yearly/monthly WAF resources.

### Application Scenario

In yearly/monthly billing mode, you need to pay for a required duration in advance. This mode is suitable for long-term and relatively fixed service requirements. The yearly/monthly billing mode is recommended for the following scenarios:

- Stable services: enterprises' official websites, online malls, blogs, and others. Yearly/Monthly billing provides higher cost efficiency.
- Long-term projects: scientific research projects, large-scale events, and others. Yearly/Monthly billing facilitates stable supply of resources throughout the project.
- Service peak estimation: e-commerce promotion season, festivals, holidays, and others. Resources insufficiency can be avoided by pre-purchasing resources for peak demands.
- High data security: For services that require high data security, yearly/monthly billing facilitates continuous usage of the resources.

### Billing items

Cloud mode: service edition, domain expansion package, QPS expansion package, and rule expansion package

### Billing Period

The billing period of a yearly/monthly WAF instance is determined by required duration (UTC+8:00). The billing period starts from the time you activate or renew your subscription (precise to seconds), and ends at 23:59:59 on the expiration date.

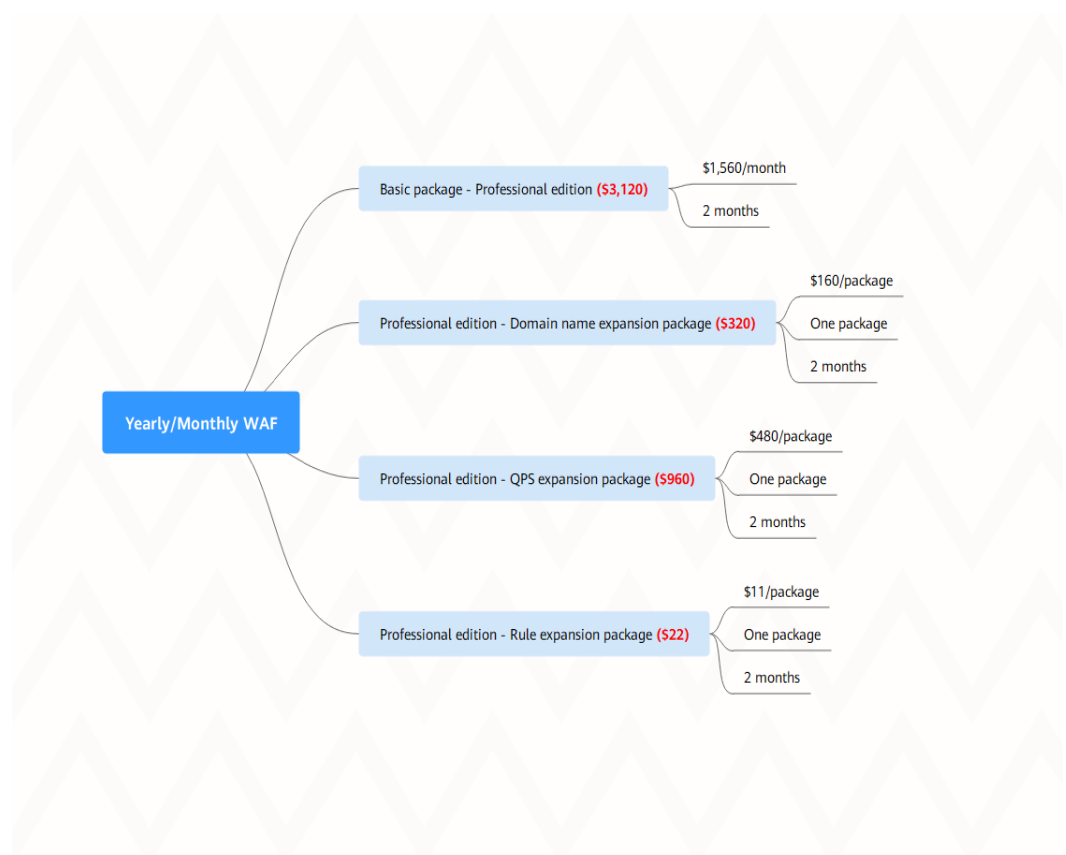
For example, if you purchased a WAF instance for one month on Mar 08, 2023, 15:50:04, the billing period is from Mar 08, 2023, 15:50:04 to Apr 08, 2023, 23:59:59.

## Billing Examples

Take the yearly/monthly billing mode as an example. Assume that you purchased a professional edition cloud WAF instance at 15:50:04 on July 8, 2023, along with one domain name, QPS, and rule expansion packages. Your subscription is one month and you manually renew the subscription for one month before the subscription expires. The billing details are as follows:

- The first billing cycle is from 15:50:04 on July 8, 2023 to 23:59:59 on Aug. 8, 2023.
- The second billing cycle is from 23:59:59 on Aug. 8, 2023 to 23:59:59 on Sep. 8, 2023.

Figure 2-1 Yearly/Monthly billing details



## Impact on Billing After Specification Change

If the specifications of the current yearly/monthly cloud WAF edition do not meet your service requirements, you can change the specifications on the WAF console. Specifically, you can change the WAF edition you are using, scale up or down domain expansion packages, QPS expansion packages, and rule expansion packages.

- Edition upgrade or expansion package quantity increase: You need to pay for the price difference.
- Edition scale-down or expansion package quantity reduction: You will get a refund of the price difference.



If you have used the functions that are included only in the edition you are using, changing to a lower edition is not supported.

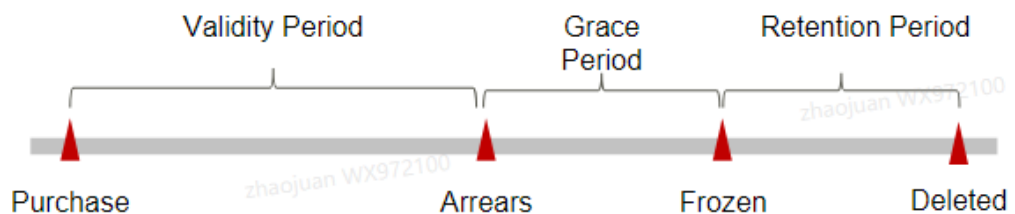
**Specification upgrade fee = New edition price × Remaining period - Old specification price × Remaining period**

The remaining period in the formula is the remaining days of each calendar month divided by the maximum days of corresponding calendar month. For more information, see [Pricing of a Changed Specification](#).

## Impacts of Expiration

[Figure 2-2](#) describes the status of each stage of a yearly/monthly WAF instance. After purchase, the WAF instance runs properly within the billing period, and this period is the validity period. When the Kafka instance expires and you do not renew it, it goes into the grace period and then the retention period.

**Figure 2-2** Resource Lifecycle



### Expiration Reminder

From the 7th day before a yearly/monthly WAF instance expires, the system will send an expiration reminder to the creator of the account by email, SMS, and internal message.

### Impact After Expiration

If you do not renew a yearly/monthly WAF instance, the instance enters a grace period. During the grace period, you can use WAF to protect websites.

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

- During this period, WAF only forwards traffic but does not check it against your protection policies.
- When this period ends, resources will be cleared, that is, all configurations of your domain names will be deleted. During the clearing period, domain names are pointed back to origin servers by default. However, services on your domain names may not run properly because there may be inconsistencies between your configured protocols and ports.

#### NOTE

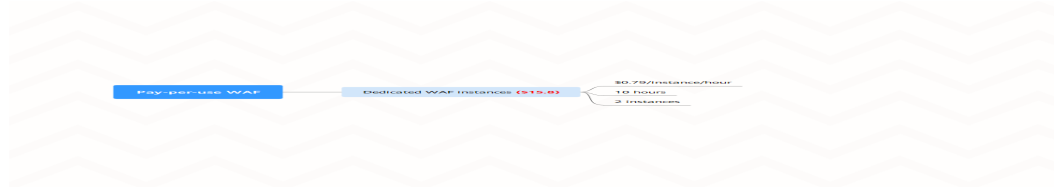
For details about renewal, see [Overview](#).



If you purchased two pay-per-use dedicated WAF instances at 08:00:00 on June 8, 2023 and deleted them at 18:00:00 on that day, the billing duration is 10 hours. The billing details are as follows:

- Number of WAF instances: 2
- WAF instance specifications: WI-100

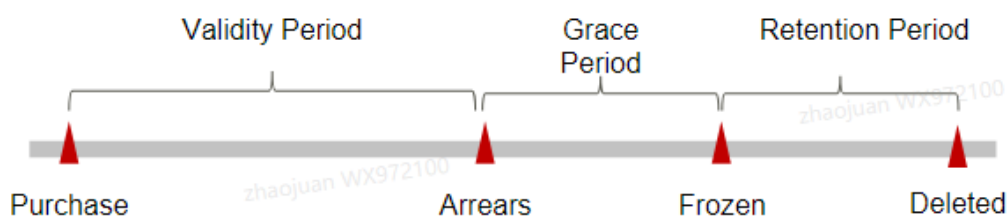
**Figure 2-4** Pay-per-use billing for dedicated WAF instances



## Impacts of Arrears

**Figure 2-5** describes the status of pay-per-use WAF resources in different periods. After you purchase WAF resources, the phase during which the resources run properly within the billing cycle is the validity period. If your account is in arrears due to failed payment for the pay-per-use WAF resources, the resources enter the grace period and then retention period.

**Figure 2-5** Resource Lifecycle



### Arrears notifications

The system deducts fees from your account balance for pay-per-use resources at the end of each billing cycle. If your account goes into arrears, we will notify you by email, SMS, or internal message.

### Arrears impacts

If you purchase pay-per-use dedicated WAF instances or cloud WAF, fees are deducted from your account balance. Your account may fall into arrears if the balance cannot cover the fees. If your account gets into arrears, WAF enters the grace period and still protects your website during this period. You need to pay the pay-per-use resource fees incurred during the grace period. To view the fees, go to the **Billing Center > Overview** page. The system will charge the fees once you top up your account.

If you do not pay the overdue fees within the grace period, the resource enters the retention period and the resource status changes to **Frozen**. In the retention period, you cannot perform any operation on the pay-per-use resources, and WAF only forwards website requests without examining any traffic.

If the fees still fail to be paid when the retention period ends, domain name configurations in WAF will be deleted. During the clearing period, domain names are pointed back to origin servers by default. However, services on your domain names may not run properly because there may be inconsistencies between your configured protocols and ports.

# 3 Billing Items

You are billed for WAF instances you select based on the billing mode you specify.

## About Billing

Figure 3-1 WAF billing modes

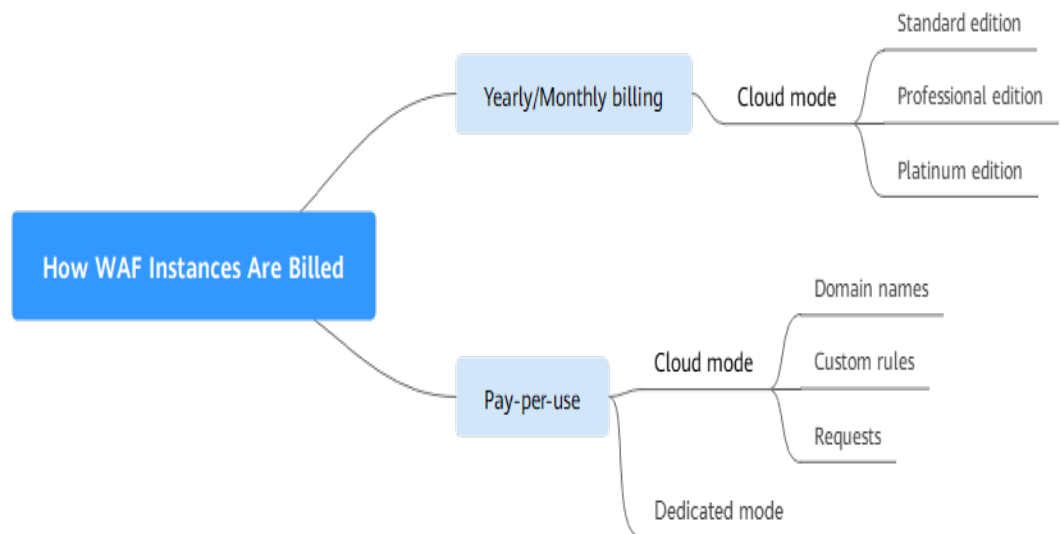


Table 3-1 Billing items

WAF Mode	Billing Mode	Billing Item	Description
Cloud Mode	Yearly/ Monthly	Edition (mandatory)	Billed for the edition you purchase. WAF standard, professional, and platinum editions are paid services. For details, see <a href="#">Edition Differences</a> .
		Domain Expansion Package (optional)	Billed based on the number of purchased domain expansion packages

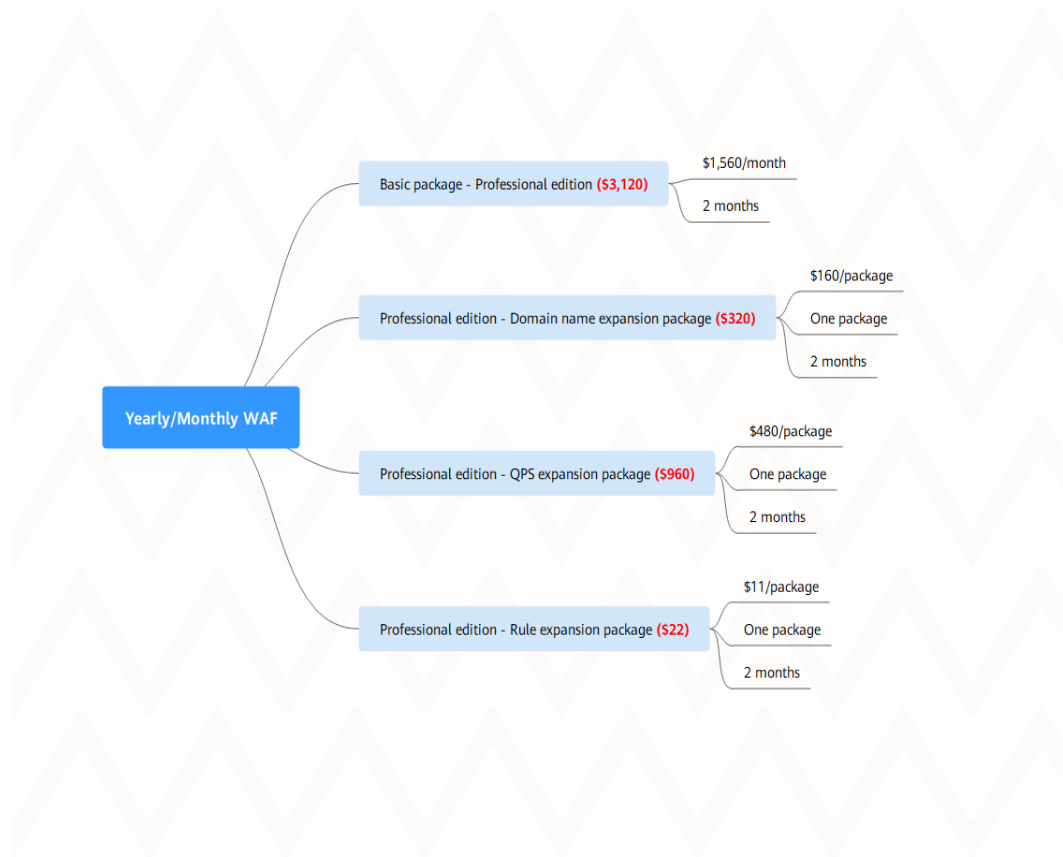
WAF Mode	Billing Mode	Billing Item	Description
		(Optional) QPS expansion package	Billed based on how many packages you purchased
		Rule Expansion Package (optional)	Billed based on how many packages you purchased
		Required duration	Billed on a yearly or monthly basis.
	Pay-per-use billing	<ul style="list-style-type: none"> <li>Number of domain names</li> <li>Number of custom rules</li> <li>Number of requests</li> </ul>	<ul style="list-style-type: none"> <li>Number of domain names. Billed on an hourly basis. Once a domain name is added during the billing period, it will be billed no matter when it is deleted.</li> <li>Number of customized rules: Billed on a daily basis. The billing is calculated at 00:00:00 every day.</li> <li>Number of requests: Bills are settled on a monthly basis.</li> </ul>
Dedicated Mode	Pay-per-use billing	Number of instances	Billed for what you use

## Billing Examples

Take the yearly/monthly billing mode as an example. Assume that you purchased a professional edition cloud WAF instance at 15:50:04 on July 8, 2023, along with one domain name, QPS, and rule expansion packages. Your subscription is one month and you manually renew the subscription for one month before the subscription expires. The billing details are as follows:

- The first billing cycle is from 15:50:04 on July 8, 2023 to 23:59:59 on Aug. 8, 2023.
- The second billing cycle is from 23:59:59 on Aug. 8, 2023 to 23:59:59 on Sep. 8, 2023.

Figure 3-2 Yearly/Monthly billing details



# 4 Billing Examples

WAF supports yearly/monthly (prepaid) and pay-per-use (postpaid) billing. For cloud WAF, both billing modes are supported. For dedicated WAF instances, only pay-per-use billing is supported.

## Billing Scenarios

Assume that a customer purchased a professional edition cloud WAF instance at 15:50:00 on May 1, 2023, along with one domain name, QPS, and rule expansion packages. The subscription duration is one month. After one month, the customer manually renewed the subscription for another month.

In June, the customer needed to use WAF to protect a website (the service servers are deployed on Huawei Cloud), and the website can access WAF only through an IP address. As cloud WAF cannot support connections over IP addresses, the customer purchased two dedicated WAF instances at 08:00:00 on June 8, 2023 and deleted these two instances at 18:00:00 on the same day. The specifications are as follows:

- Number of WAF instances: 2
- WAF instance specifications: WI-100

So, how much is the fee from May to June? Let's start from scratch.

## Billing Analysis

In this example, the billing consists two parts based on the billing modes.

Cloud mode: From 15:50:00 on May 1, 2023 to 23:59:59 on July 1, 2023, resources are billed on a yearly/monthly basis.

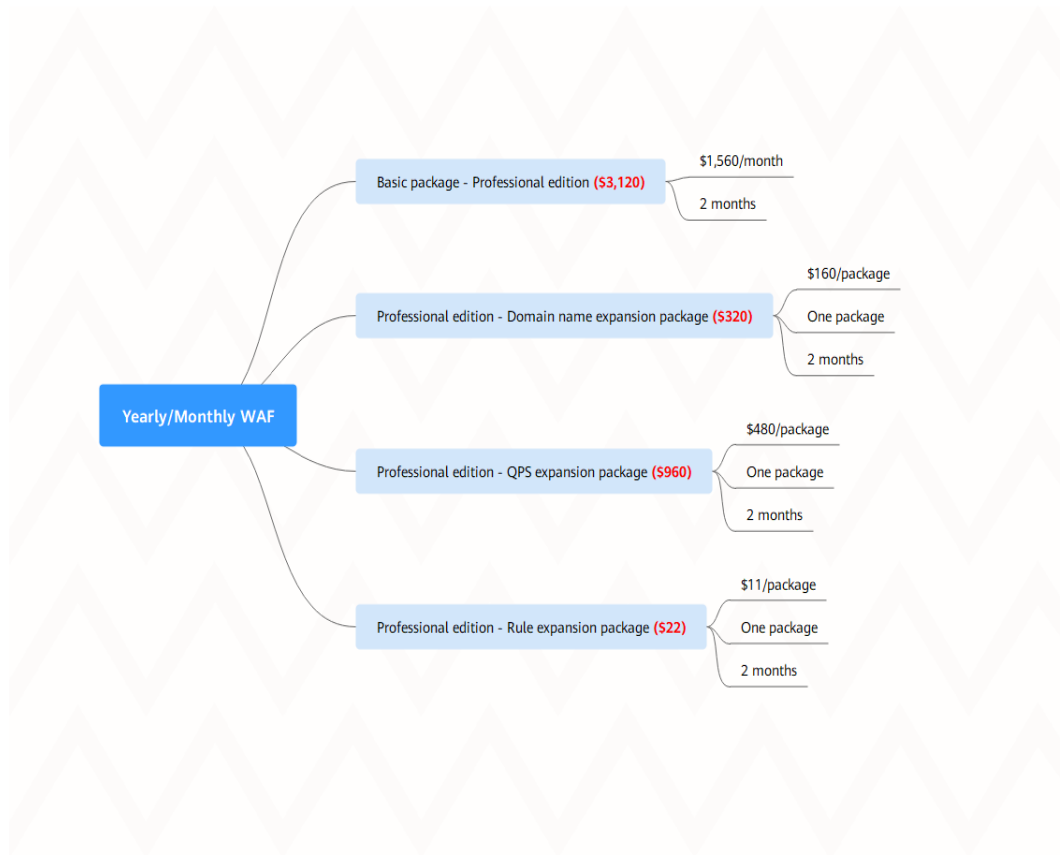
Dedicated mode: From 8:00:00 on June 8, 2023 to 18:00:00 on June 8, 2023, resources are billed on a pay-per-use basis. The billing duration is 10 hours.

## Yearly/Monthly Billing for Cloud Mode

As we mentioned above, the yearly/monthly billing started at 15:50:00 on May 1, 2023 and ended at 23:59:59 on July 1, 2023, and the customer had purchased a domain expansion package, a QPS expansion package, and a rule expansion package for two months. The fees are calculated as follows:



Figure 4-1 Yearly/Monthly billing details

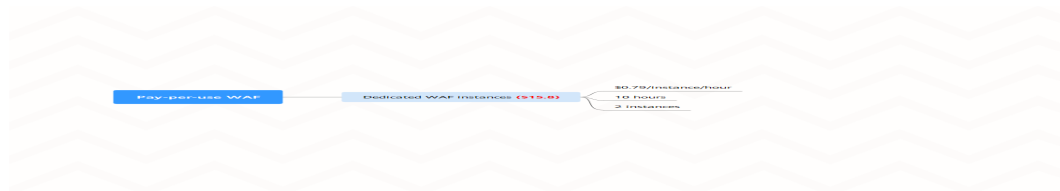


As we can see, from May to June, the fee of the cloud WAF is  $3,120 + 320 + 960 + 22 = \$4,422$  USD.

### Pay-per-Use Billing for Dedicated WAF Instances

As we mentioned earlier, the pay-per-use billing started at 08:00:00 on June 08, 2023 and ended at 18:00:00 on June 08, 2023, and the billing duration is 10 hours. The fee is calculated based on the instance specifications.

Figure 4-2 Pay-per-use billing for dedicated WAF instances



From May to June, the total fee for using WAF is  $4,422 + 15.8 = \$4,437.8$  USD.

# 5 Renewing Your Subscription

## 5.1 Overview

Only yearly/monthly WAF instances can be renewed. If you use pay-per-use WAF instances, you only need to ensure that your account has a valid payment method configured or a top-up account with a sufficient balance.

### Introduction

If you do not renew a yearly/monthly-billed cloud WAF instance upon its expiration, a retention period is available for you.

- During this period, WAF only forwards traffic but does not check it against your protection policies.
- When this period ends, resources will be cleared, that is, all configurations of your domain names will be deleted. During the clearing period, domain names are pointed back to origin servers by default. However, services on your domain names may not run properly because there may be inconsistencies between your configured protocols and ports.

To prevent security issues from occurring, it is recommended that you renew the cloud WAF instance before its retention period expires. If the cloud WAF instance expires, it does not impact other services.

### Renewal Functions

[Table 5-1](#) lists the functions related to renew yearly/monthly-billed WAF instance.

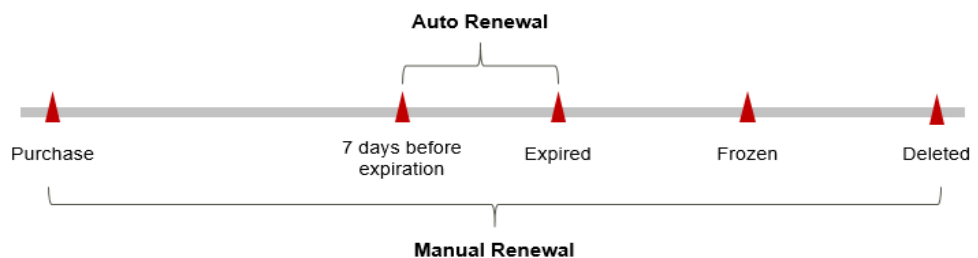
**Table 5-1** Renewal-related functions

Features	Description
<a href="#">Manually Renewing WAF</a>	You can renew a yearly/monthly WAF instance on the WAF console anytime as long as it has not been deleted automatically.

Features	Description
<b>Auto-renewing WAF</b>	After auto-renewal is enabled, WAF automatically renews the subscription before the subscription expires. This prevents resources from being automatically deleted if you forget to manually renew the subscription.

In different phases of the lifecycle of a yearly/monthly WAF instance, you can choose a renewal mode best fits your needs. For details, see [Figure 5-1](#).

**Figure 5-1** WAF instance lifecycle



- WAF is running properly from the time it was purchased to the time it expires. The working mode is **Enabled**.
- If you do not renew your subscription before the instance expires, the instance enters the grace period first.
- If it still failed to be renewed when the grace period expires, the instance enters the retention period. If you do not renew it within the retention period, the resource will be deleted automatically.


Auto-renewal can be enabled before your WAF instance expires. The system will automatically renew your WAF instance at 3:00 a.m. on the seventh day before it expires. If the auto-renewal fails, the system will try again at 3:00 a.m. every day until WAF expires or the renewal is successful. Renewing resources 7 days before expiration is a default value. You can change it if needed.


## 5.2 Manually Renewing WAF

You can renew a yearly/monthly WAF instance on the WAF console anytime as long as it has not been deleted automatically.



### Renewing a Subscription on the Management Console

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

**Step 2** Click  in the upper left corner of the management console and select a region or project.

- Step 3** Click  in the upper left corner and choose **Security > Web Application Firewall** to go to the **Dashboard** page.
- Step 4** In the navigation pane on the left, choose **Instance Management > Product Details**.
- Step 5** In the cloud instance row, click **Renew**.
- Step 6** (Optional) Set **Renewal Date**. By default, the renewal time is set to 23:59:59 GMT +08:00 on the first day of each month.
- Step 7** Click **Pay**.
- End

## Renewing a Subscription in the Billing Center

- Step 1** Log in to the management console.
- Step 2** Click  in the upper left corner of the management console and select a region or project.
- Step 3** Click  in the upper left corner and choose **Security > Web Application Firewall** to go to the **Dashboard** page.
- Step 4** In the upper right corner of the page, choose **Billing & Costs > Renewal**. The **Renewals** page is displayed.
- Step 5** On the renewal management page, complete the renewal.
- End

## 5.3 Auto-renewing WAF

Auto-renewal reduces the management cost of manual renewals and prevents protected domain names from being automatically deleted if you forget to manually renew the subscription. The auto-renewal rules are as follows:

- The first auto-renewal date and billing cycle are calculated based on the expiration date of your WAF instance.
- The WAF auto-renewal duration is of your choice. For example, if you select a 3-month duration, WAF automatically renews the subscription for 3 months before each expiration.
- Auto-renewal can be enabled before your WAF instance expires. The system will automatically renew your WAF instance at 3:00 a.m. on the seventh day before it expires. If the auto-renewal fails, the system will try again at 3:00 a.m. every day until WAF expires or the renewal is successful.
- You can still perform a manual renewal even when auto-renewal is enabled. After a manual renewal is complete, auto-renewal is still in effect, and the system will start deducting renewal fees from your account 7 days before the new subscription expires.

- By default, the system automatically deducts fees from your account 7 days before your instance expires. You can change the renewal date to another day if needed, for example, 6 days or 5 days before the instance expires.

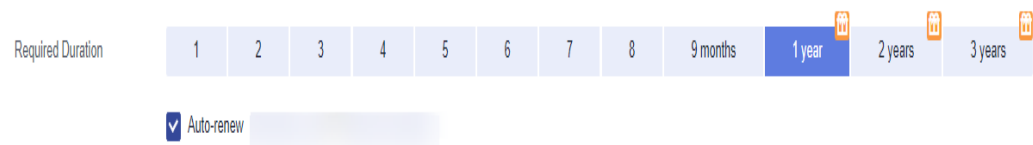
## Prerequisites

The yearly/monthly-billed WAF instance you want to enable auto-renewal for has not expired.

## Enabling Auto-renewal on the WAF Purchase Page

You can enable auto-renewal on the page for purchasing WAF, as shown in [Figure 5-2](#). For more details, see [Purchasing Cloud WAF](#).

Figure 5-2 Auto-renew



## Enabling Auto-renewal on the Renewals Page

- Step 1** Log in to the management console.
- Step 2** In the upper right corner of the page, choose **Billing & Costs > Renewal**. The **Renewals** page is displayed.
- Step 3** Customize search criteria.
  - On the **Auto Renewals** page, you can view the resources for which auto-renewal has been enabled.
  - You can enable auto-renewal for resources on the **Manual Renewals, Pay-per-Use After Expiration**, and **Renewals Canceled** pages.
- Step 4** Locate the target instance and click **Enable Auto-Renew** in the **Operation** column.
- Step 5** Select the renewal duration and the number of auto-renewal times.
- Step 6** Click **OK**.

For more details, see [Enabling Auto-Renewal](#).

----End

# 6 Bills

You can view bills in the **Billing Center** to learn about the usage and billing details of the resource in a certain period.

## Bill Reporting Period

After you pay for a yearly/monthly resource, a bill is reported to the billing system in real time for settlement.

The usage of pay-per-use resources is reported to the billing system at a fixed interval. The settlement period for pay-per-use WAF instances is as follows:

- Cloud mode: The bills for protected domain names are settled on an hourly basis. The bills for custom protection rules are settled every 24 hours. The bills for requests are settled monthly.
- Dedicated mode: Instances are billed by the second, and bills are settled on an hourly basis.

You are not charged immediately after a record is generated. For example, if a pay-per-use dedicated WAF instance (which is billed on an hourly basis) is deleted at 08:30, you will not likely be billed for the period from 08:00 to 09:00 until about 10:00. On the **Billing Center > Billing > Transactions and Detailed Bills > Transaction Bills** page, **Expenditure Time** indicates the time when a pay-per-use product is used.

## Viewing Bills

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

**Step 2** In the upper right corner of the page, choose **Billing & Costs > Bills**.

**Step 3** In the navigation tree on the left, choose **Billing > Expenditure Details**.

**Step 4** Set **Settings** to **Resource Name or ID** and **Data Period** to **By billing cycle, By day, or Details**.

- To view bills for yearly/monthly WAF, select **Resource Type: Web Application Firewall** in the search box.
- To view bills for dedicated pay-per-use WAF instances, select **Resource Type: Web Application Firewall Instance** in the search box.

- To view bills for cloud pay-per-use WAF, select **Resource Type: Web Application Firewall Payperuse Domain** in the search box.
- To view bills for protection rules used in cloud pay-per-use WAF, select **Resource Type: Web Application Firewall Payperuse Rule** in the search box.
- To view bills for requests protected by cloud pay-per-use WAF, select **Resource Type: Web Application Firewall Payperuse Request** in the search box.
- To view bills for rule expansion packages, select **Resource Type: Web Application Firewall Rule Expansion Package** in the search box.
- To view bills for domain name expansion packages, select **Resource Type: Web Application Firewall Domain Expansion Package** in the search box.
- To view bills for QPS expansion packages, select **Resource Type: Web Application Firewall QPS Expansion Package** in the search box.

----End

# 7 About Arrears

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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 your account is in arrears, the service cannot work. You need to top up your account in a timely manner.

## Arrears Reasons

You have purchased and used dedicated WAF instances or pay-per-use cloud WAF, but your account balance cannot cover the fees for resources you have used.

## About Arrears

- Yearly/Monthly billing

If you purchase the yearly/monthly cloud WAF, you pay the bill when you make the purchase. If your account is in arrears, you can still use WAF to protect the website that has been connected to the cloud WAF. However, you cannot perform other operations that may incur fees, such as upgrading WAF specifications or renewing subscriptions.

- Pay-per-use billing

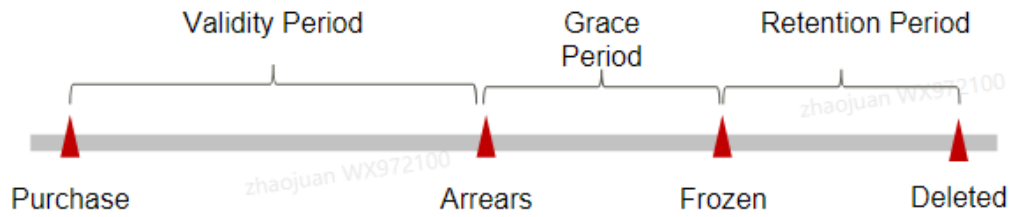
If you purchase pay-per-use dedicated WAF instances or cloud WAF, fees are deducted from your account balance. Your account may fall into arrears if the balance cannot cover the fees. If your account gets into arrears, WAF enters the grace period and still protects your website during this period. You need to pay the pay-per-use resource fees incurred during the grace period. To view the fees, go to the **Billing Center > Overview** page. The system will charge the fees once you top up your account.

If you do not pay the overdue fees within the grace period, the resource enters the retention period and the resource status changes to **Frozen**. In the retention period, you cannot perform any operation on the pay-per-use resources, and WAF only forwards website requests without examining any traffic.

If the fees still fail to be paid when the retention period ends, domain name configurations in WAF will be deleted. During the clearing period, domain names are pointed back to origin servers by default. However, services on your domain names may not run properly because there may be inconsistencies between your configured protocols and ports.



Figure 7-1 Resource Lifecycle



## Avoiding and Handling Arrears

You need to top up your account once it is in arrears.

You can delete dedicated instance you no longer need to avoid unnecessary fee.

Configure the **Balance Alert** function on the **Billing Center > Overview** page. When the total amount of the available quota, general cash coupons, and cash coupons is lower than the threshold, the system automatically notifies you by SMS or email.

If your account is in arrears, top up your account in time.

# 8 Billing Termination

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To prevent resource waste and unnecessary fees, you can stop billing for unused resources.

## Yearly/Monthly Resources

For yearly/monthly-billed resources, such as a yearly/monthly WAF instance, you pay the bills when you purchase them. Billing automatically stops when the subscription expires.

- If you have enabled the auto-renewal function, disable it before the auto-renewal deduction date (seven days before the expiration date by default) to avoid unexpected fees.

## Pay-per-Use Resources

If you no longer need a pay-per-use cloud WAF instance, you can disable the billing on the **Product Details** page on the WAF console. If you no longer need a pay-per-use dedicated WAF instance, you can delete it on the **Instance Management > Dedicated Engine** page. The billing stops upon the deletion.

# 9 Cost Management

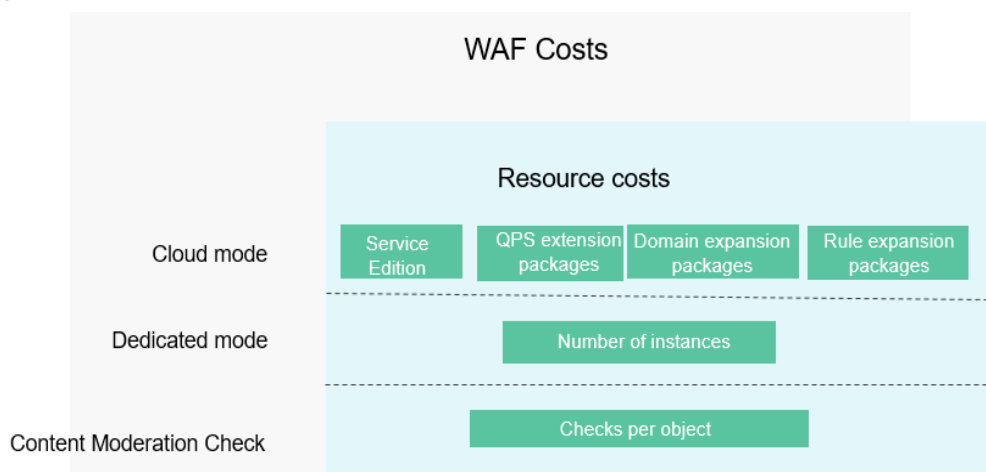
As more and more enterprises move workloads to the cloud, cloud costs are drawing more attention. When it comes to WAF, how we can use it while controlling management costs at a low level is also our concern. The following describes how to manage costs from four dimensions: cost composition, allocation, analysis, and optimization, to help maximize return on your investment.

For pay-per-use dedicated WAF instances, costs for all billing items can be allocated by tags and enterprise projects. For yearly/monthly cloud WAF, costs for all billing items can be allocated by enterprise projects only.

## Cost Composition

The costs of using WAF depend on the service edition and resource packages you use. Billing items are different for each edition. For details, see [Billing Items](#).

**Figure 9-1** WAF Costs



## Cost Allocation

A good cost accountability system is the basis of cloud financial management. It ensures that departments, business teams, and owners are accountable for their

respective cloud costs. Allocate costs to different teams or projects so that organizations have a clear picture of their respective costs.

We provide multiple tools for you to optimize cost allocation in Cost Center.

- **Allocate costs by linked account.**

The enterprise master account can categorize the costs of its member accounts by linked account to manage the accounting of those member accounts. For details, see [Viewing Costs by Linked Account](#).

- **Allocate costs by enterprise project.**

Before allocating costs, enable Enterprise Project Management Service (EPS) and plan your enterprise projects based on your organizational structure or businesses. Select an enterprise project for a newly purchased cloud resource so that the costs of that resource will be allocated to the selected enterprise project. For details, see [Viewing Costs by Enterprise Project](#).

All WAF billing items can be allocated by enterprise projects.

- a. **Enable Enterprise Project.**

Complete real-name authentication, and then enable Enterprise Project. For details, see [Enabling the Enterprise Project Function](#).

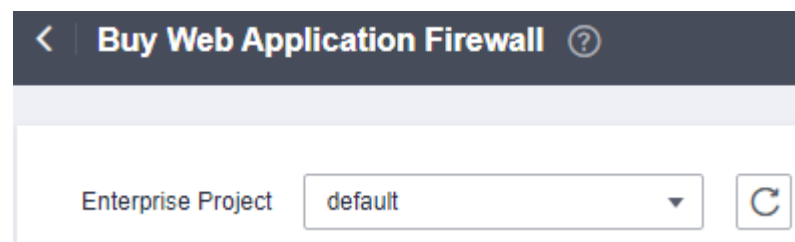
- b. **Create an enterprise project.**

Create an enterprise project based on your department or business needs. For details, see [Creating an Enterprise Project](#).

- c. **Select an enterprise project when purchasing WAF.**

Select an enterprise project in the **Enabled** state for a newly purchased WAF instance so that the costs of the WAF instance will be allocated based on the selected enterprise project.

**Figure 9-2** Enterprise Project



- d. **Viewing Costs by Enterprise Project**

When viewing cost data by enterprise project, you are advised to summarize data based on amortized costs. For details, see [Viewing Costs by Enterprise Project](#).

- **Allocate costs by cost tag.**

Huawei Cloud assigns tags to your cloud resources so they can be sorted in different ways, for example, by purpose, owner, or environment. The following is the process of managing costs by predefined tags. For WAF, only the fees of all billing items in dedicated mode can be managed using tags. The procedure is as follows:

- a. Adding a predefined tag

Go to the TMS console and create predefined tags. For details, see [Creating Predefined Tags](#).

b. **Activating cost tags**

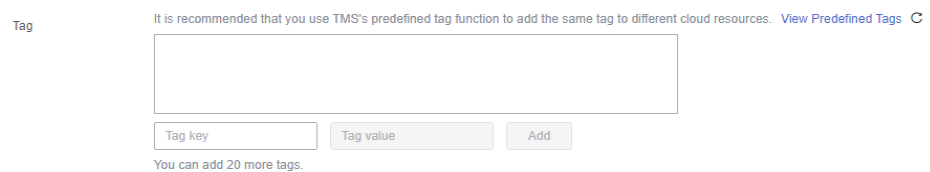
For details, see [Activating Cost Tags](#). You can view activated cost tags on the **Cost Analysis** or **Budgets** page.

If you activate some tags, they will be used to organize your resource costs generated thereafter. If you want to use tags to analyze the cost data generated before tag activation, export the bill details file and analyze the data based on the **Resource Tag** field in the file.

c. **Add tags to WAF resources.**

On the page for purchasing a WAF instance, select a created predefined tag.

**Figure 9-3** Adding a tag



d. **View cost data by the cost tag.**

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

- **Allocate costs by cost category.**

You can use **Cost Categories** in Cost Center to split shared costs. Shared costs include the costs for the 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 configured for the resources. These costs are not directly attributable to a singular owner, and hence cannot be categorized into a singular cost category. 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 accurately control and optimize your costs, you need a clear understanding of what parts of your enterprise incurred different costs. Cost Center visualizes original costs and amortized costs in various dimensions and through filters so that you can analyze service usage costs, trends, and factors from a variety of perspectives and scopes.

You can also use **Cost Anomaly Detection** in 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](#).

## 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 and send alerts to the recipients you configured if the thresholds you defined are

reached. You can also create budget reports and Huawei Cloud will periodically generate and send to the recipients you configured on a schedule you set.

For example, an enterprise needs to create a quarterly cost budget for WAF. The quarterly budget is \$5,000 USD. The system should send an alarm when the forecast amount is greater than 80% of the budget amount. Then, the created budget is as follows:

Figure 9-4 Basic budget information

<b>Budget Details</b>	
* Budget Name	WAF
* Reset Period	Daily Monthly <b>Quarterly</b> Yearly Budget evaluation moving forward.
* Budget Duration	<b>Recurring</b> Expiring
* Start Time	2023 Q3
* Allocation	<b>Fixed</b> Quarterly Dynamic
* Budgeted Amount (USD)	5000 Last quarter's cost: \$20,394.62 USD

Figure 9-5 Budget Scope

Service Type	Include	▲
Web Application Firewall (WAF)		1
Linked Account	All	▼
Region	All	▼
Specifications	All	▼
Usage Type	All	▼
Cost Tag	All	▼
Cost Categories	All	▼
Enterprise Project	All	▼
Business Entity	Include	▼
[Redacted]		1
Bill Type	All	▼
Billing Mode	Include	▲
Yearly/Monthly		1
AZ	All	▼

**Figure 9-6** Configure budget alerts

(Optional) Alert Thresholds

Thresholds    Alerts are sent when the actual cost is higher than 80% (¥16,000.00) of the forecasted cost.

[Add threshold](#)

Recipients

[Select From Contacts](#)

For details, see [Introduction](#).

- **Resource optimization**

Cost Center can help monitor the historical expenditures and resource usage of the WAF service, identify idle resources, and provide optimization suggestions so that you can reduce costs as much as possible. You can also identify resources with high costs based on the analysis results in the [cost analysis](#) phase, use Cloud Eye to monitor resource usage, determine the causes of high costs, and take optimization measures accordingly.

## Related Operations

**Creating a Budget:** You can create budget reminders based on daily, monthly, quarterly, and yearly costs and resource usage. If your actual costs or usage exceeds the budget threshold you configured, you will receive an alert.

# 10 Billing FAQs

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## 10.1 How Is WAF Billed?

Cloud WAF is billed on a yearly/monthly basis (prepaid), and dedicated WAF instances are billed on a pay-per-use basis. This means the standard, professional edition, and platinum editions are billed yearly/monthly as they provide cloud WAF. For cloud WAF billed yearly/monthly, domain name, bandwidth, and rule expansion packages are provided at an extra cost. You will be billed for the WAF instance and expansion packages you selected based on the billing mode you specified.

For price details, see [Product Pricing Details](#).

## 10.2 Can WAF Continue Protecting a Domain Name When It Expires?

After your cloud WAF instance expires, there is a retention period.

- During this period, WAF only forwards traffic but does not check it against your protection policies.
- When this period ends, resources will be cleared, that is, all configurations of your domain names will be deleted. During the clearing period, domain names are pointed back to origin servers by default. However, services on your domain names may not run properly because there may be inconsistencies between your configured protocols and ports.

To prevent security issues from occurring, it is recommended that you renew the cloud WAF instance before its retention period expires. If the cloud WAF instance expires, it does not impact other services.

## 10.3 How Do I Unsubscribe from WAF?

This topic describes how to unsubscribe from a WAF instance billed yearly/monthly.



If you want to unsubscribe from a dedicated WAF billed on a pay-per-use basis, on the WAF console, choose **Instance Management > Dedicated Engine**. Then, delete the dedicated WAF instance you no longer need. The billing stops upon the deletion.

If you want to unsubscribe from a cloud WAF instance billed on a pay-per-use basis, on the WAF console, choose **Instance Management > Product Details**, disable the pay-per-use billing for the cloud WAF instance.

 **NOTE**

- If you use a member account, grant the BSS Administrator permission to it so that you can unsubscribe from HSS using this member account.
- If you want to unsubscribe from a dedicated WAF instance, **delete it**. The billing stops when the instance is deleted.

## Prerequisites

- Before you unsubscribe from a cloud WAF instance, ensure that you have resolved the protected website domain name to the origin server IP addresses, or the website will become unreachable after the unsubscription.
- You have enabled the service port on the origin server before unsubscribing from a cloud WAF.

## Precautions

To reuse the configurations of a WAF instance, ensure that the original WAF instance you unsubscribed from and the new WAF instance you are purchasing are in the same region. Otherwise, you have to connect domain name to the new WAF instance and configure protection rules again. For details, see [Can I Retain the Original Configurations When I Unsubscribe from a WAF Instance and Then Purchase Another One?](#)

## Procedure

- Step 1** Log in to the management console.
- Step 2** In the upper right part of the page, click **Billing & Costs** to go to the **Billing Center** page.
- Step 3** In the navigation pane on the left, choose **Orders > Unsubscriptions**.
- Step 4** Complete the unsubscription operations.

----End

## 10.4 Can I Retain the Original Configurations When I Unsubscribe from a WAF Instance and Then Purchase Another One?

For a WAF instance billed on a yearly/monthly basis, after you unsubscribe from it, you can enable another WAF instance billed on either yearly/monthly or pay-per-use basis.

- If you choose the pay-per-use billing mode, the configurations for the original WAF instance can be saved and used for the newly enabled WAF instance.
- If you choose the yearly/monthly billing mode, the configurations for the original WAF instance can be saved and used for the newly enabled WAF instance only when they are in the same region. If they are not in the same region, such configurations are not saved.

## Unsubscribed WAF Instance and Newly Purchased WAF Instance Billed on a Yearly/Monthly Basis in the Same Region

After you unsubscribe from a WAF instance, its configurations are retained for 24 hours.

After you unsubscribe from WAF, WAF suspends the protection for your domain names. After purchasing WAF again, you only need to switch the WAF working mode of the domain name to **Enabled**. WAF then starts protecting the domain name based on the protection rules configured on WAF.

- For details about unsubscription, see [How Do I Unsubscribe from WAF?](#)
- For details about how to purchase a WAF instance, see [Buying WAF](#).
- For details about how to switch WAF working mode, see [Switching a Working Mode](#).

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### NOTICE

To retain your configurations of the original WAF instance after you unsubscribe, purchase a new WAF instance within 24 hours.

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## Unsubscribed WAF Instance and Newly Purchased WAF Instance Billed on a Yearly/Monthly Basis Not in the Same Region

After you unsubscribe from a WAF instance, its configurations are not saved.

After you purchase a WAF instance again, add the domain name to the new WAF instance and configure protection rules again.

- For details about unsubscription, see [How Do I Unsubscribe from WAF?](#)
- For details about how to get started, see [Getting Started](#).

# A Change History

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Release Date	Description
2024-03-12	This issue is the second official release. Modified the following content: <ul style="list-style-type: none"><li>• <a href="#">Overview</a></li><li>• <a href="#">Billing Examples</a></li><li>• <a href="#">Bills</a></li></ul>
2023-12-27	This issue is the first official release.