Elastic Cloud Server

Billing

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1 Billing Overview

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

- **Billing Modes**

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

  – Yearly/Monthly: You pay upfront for the amount of time you expect to use the ECS for. You will need to make sure you have a top-up account with a sufficient balance or have a valid payment method configured first.

  – Pay-per-use: You can start using the ECS first and then pay as you go.

  – Spot pricing: ECS prices are adjusted gradually based on long-term trends in supply and demand for spot instance capacity.

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

- **Billing Items**

  You will be billed for instance flavors, images, EVS disks, and EIPs.

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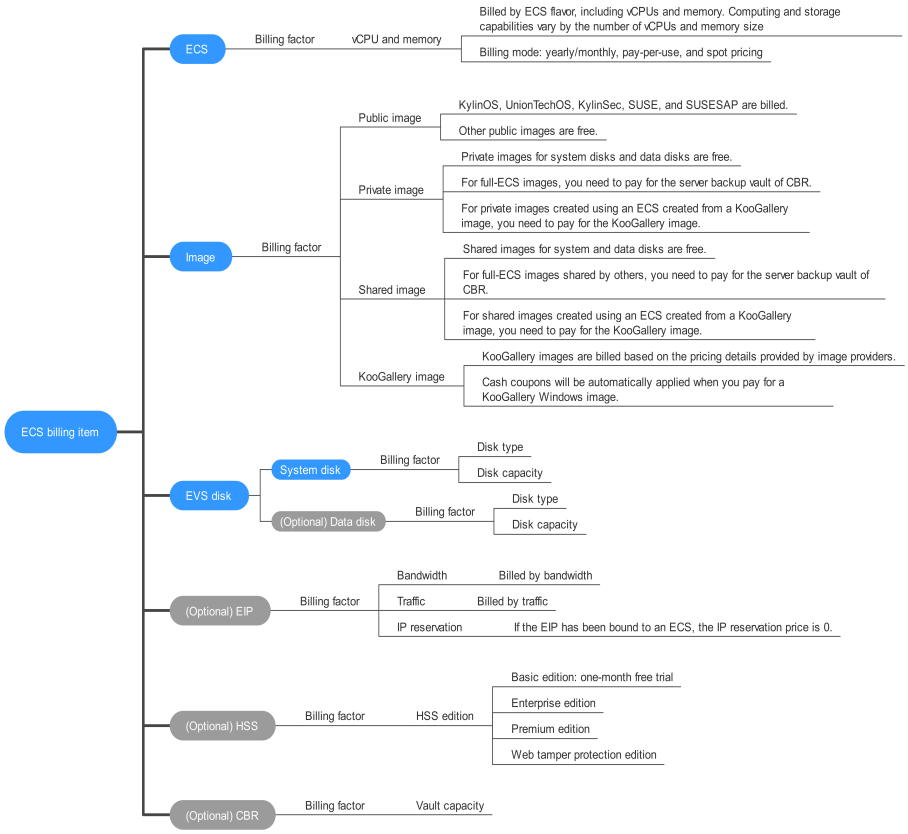
Figure 1-1 ECS billing items



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

For more information about the billing samples and the billing for each item, see **Billing Examples**.

- **Renewing Subscriptions**

  After a yearly/monthly ECS expires, it cannot run properly. If you want to continue using an ECS after it expires, you need to renew the ECS subscription within the specified period. Otherwise, resources, such as vCPUs, memory, and EVS disks, will be automatically released, and data may be lost. You can renew your subscriptions manually or automatically. For more details, see **Overview**.

- **Viewing Bills**

  You can choose **Billing** > **Bills** to check the ECS transactions and bills. For details, see **Bills**.

- **Arrears**

  If there is not a sufficient account balance to pay your bill and there is no other payment method configured, your account will go into arrears. If you want to continue using your cloud services, you will need to top up your account in a timely manner. For details, see **Arrears**.

- **Stopping Billing**

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

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- **Managing Costs**

  You can allocate, analyze, and optimize costs to save more money. For details, see **Cost Management**.

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2 Billing Modes

2.1 Overview

There are yearly/monthly, pay-per-use, and spot pricing 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 period, the higher the discount. Yearly/Monthly billing is a good option for long-term, stable services.
- Pay-per-use is a postpaid billing mode. You pay as you go and just pay for what you use. The ECS usage is calculated by the second but billed every hour. This mode allows you to adjust resource usage easily. You do not need to prepare resources in advance, and will not have excessive or insufficient preset resources. Pay-per-use is a good option for scenarios where there are sudden traffic bursts, such as e-commerce promotions.
- Spot pricing is a postpaid billing mode. ECS prices are adjusted gradually based on long-term trends in supply and demand for spot instance capacity. The ECS usage is calculated by the second but billed every hour. Spot instances are made available at a discounted rate, but their performance is the same as ECSs billed in other modes. If inventory resources are insufficient or the market price exceeds your expected price, the spot ECS will be reclaimed. Spot pricing applies when you want to drive down cloud costs.

  There are spot instances and spot block instances.

  - ECSs that use spot pricing are called spot instances.

    You need to set a maximum price you are willing to pay for a spot instance. The maximum price must be greater than or equal to the market price but less than or equal to the pay-per-use price. If inventory resources are insufficient or the market price rises above your maximum price, the spot instance will be reclaimed.
  - Spot instances with a predefined duration are called spot block instances.

    When purchasing a spot block instance, you need to set a predefined duration and the number of durations. During the predefined duration, your spot block instance will run continuously and will not be interrupted. If it is terminated by the system, you will not be billed for the resource

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usage within the predefined duration. If you delete it within the predefined duration, you will be billed based on the usage duration.

Table 2-1 lists the differences between the billing modes.

Table 2-1 Differences between billing modes

Billing Mode	Yearly/Monthly	Pay-per-Use	Spot Pricing (for Spot Instances)	Spot Pricing (for Spot Block Instances)
Payment	Prepaid Billed by the subscription term you purchase	Postpaid Billed by usage duration.	Postpaid Billed at the market price, which varies according to the changes in supply and demand. The start price is the market price when the ECS was purchased. The ECS is then billed at the market price every hour.	Postpaid Billed based on the usage duration and predefined duration. After the ECS is released, a new line item is generated on each hour.

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Conditions for Purchase	N/A	N/A	You need to set a maximum price you are willing to pay for a spot instance. • If your maximum price is greater than or equal to the market price and the inventory resources are sufficient, you will be provisioned with a spot instance. This spot instance will be billed at the current market price. • If your maximum price is less than the market price, you will not be provisioned with a spot instance.	You need to set a predefined duration and the number of durations. Prices vary depending on the predefined duration.
Billing Method	Billed by the subscription term you purchase	Calculated by the second but billed every hour	Calculated by the second but billed every hour	Calculated by the second but billed every hour
Billing Items	Compute resources (vCPUs and memory), images, EVS disks, and EIPs	Compute resources (vCPUs and memory), images, EVS disks, and EIPs	Compute resources (including vCPUs and memory)	Compute resources (including vCPUs and memory)

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Billing for Stopped ECSs	Stopping an ECS has no impact on the billing of a yearly/monthly ECS. ECSs are billed based on the subscription term you purchase.	• After a common ECS is stopped, basic resources (vCPUs, memory, image, and GPUs) will not be billed. Other resources (EVS disks, EIPs, and bandwidth) associated with the ECS instance will continue to be billed. • After a special ECS instance is stopped, its resources will be retained and continue to be billed.	• After a common ECS is stopped, basic resources (vCPUs, memory, image, and GPUs) will not be billed. Other resources (EVS disks, EIPs, and bandwidth) associated with the ECS instance will continue to be billed. • After a special ECS instance is stopped, its resources will be retained and continue to be billed.	The ECS will continue to be billed after it is stopped. To stop the ECS from being billed, delete it and its associated resources.

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		NOTE
		• Common instances include:
		  • Non-bare-metal instances
		  • Instances without local disks
		  • Instances without FPGA cards
		• Special instances include:
		  • Bare metal instances
		  • ECSs attached with local disks, such as disk-intensive ECSs and ultra-high I/O ECSs
		  • ECSs with FPGA cards
			NOTE
			• Common instances include:
			  • Non-bare-metal instances
			  • Instances without local disks
			  • Instances without FPGA cards
			• Special instances include:
			  • Bare metal instances
			  • ECSs attached with local disks, such as disk-intensive ECSs and ultra-high I/O ECSs
			  • ECSs with FPGA cards	

Changing the Billing Mode	Yearly/Monthly can be changed to pay-per-use. For details, see **Yearly/ Monthly to Pay-per-Use**.	Pay-per-use can be changed to yearly/monthly. For details, see **Pay-per-Use to Yearly/ Monthly**.	Spot pricing cannot be changed to pay-per-use or yearly/monthly.	Spot pricing cannot be changed to pay-per-use or yearly/monthly.
Changing the Specifications	Supported	Supported	Not supported	Not supported
System Disk Detachment	Supported	Supported	Not supported	Not supported

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Conditions for Reclaiming	N/A	N/A	• The market price is higher than the maximum price you are willing to pay. • The inventory resources are insufficient. • You release the ECS instances voluntarily.	• The inventory resources are insufficient. • You release the ECS instances voluntarily.
Application Scenarios	A cost-effective option for scenarios where the resource usage duration is predictable. Recommended for resources expected to be in use in the long term.	Recommended when the resource demands are likely to fluctuate and you want more flexibility.	Ideal for stateless, cost-sensitive applications that can tolerate interruptions. Not recommended for workloads that need to run for a long time or that require high stability.	Ideal for stateless, cost-sensitive applications that can tolerate interruptions. Not recommended for workloads that need to run for a long time or that require high stability.

2.2 Yearly/Monthly Billing

Yearly/Monthly is a prepaid billing mode. If you expect to use resources for a longer period, you can save money by selecting the yearly/monthly billing mode. You can pre-purchase cloud service resources at discounted prices. This section describes the billing rules for yearly/monthly ECS 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. The yearly/monthly billing provides high cost-effectiveness.

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- Long-term projects, such as scientific research projects and large-scale events. The yearly/monthly billing ensures stable resource supply throughout the subscription period.
- Workloads with predictable traffic bursts, for example, e-commerce promotions or festivals. The yearly/monthly billing allows you to purchase resources in advance to avoid resource insufficiency in peak hours.
- Workloads with high data security requirements. The yearly/monthly billing ensures that you can use resources continuously within the subscription period.

Billing Items

A yearly/monthly ECS instance consists of compute resources (vCPUs and memory), EVS disks, an image, and an EIP. You are billed for the following items on a yearly/monthly basis.

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

Billing Item	Description
Compute resources	ECS vCPUs and memory are billed on a yearly/monthly basis.
Image	If an image, including a KooGallery image, was created along with a yearly/monthly ECS, the image is also billed on yearly/monthly basis. **NOTE** • Among the public images, KylinOS, UnionTechOS, KylinSec, SUSE, and SUSESAP are billed. Other public images are free. • Private images for system disks and data disks can be used for free. For full-ECS images, you will be billed for using the server backup vault of CBR. • Shared images for system disks and data disks can be used for free. For full-ECS image shared by others, you will be billed for using the server backup vault of CBR. • The prices of KooGallery images are determined by the image providers.
EVS disks	If an EVS disk (a system disk or a data disk) is created along with a yearly/monthly ECS, the EVS is also billed on a yearly/monthly basis.
EIP	In some cases, you will be billed for the EIP reservation price. If an EIP is purchased along with a yearly/monthly ECS, you will not be billed for the reservation price.
EIP bandwidth	If an EIP is purchased along with a yearly/monthly ECS and the EIP is billed by bandwidth, the bandwidth is also billed on a yearly/monthly basis.
EIP traffic	If an EIP is purchased with a yearly/monthly ECS and the EIP is billed by traffic, you are billed for the actual traffic used.

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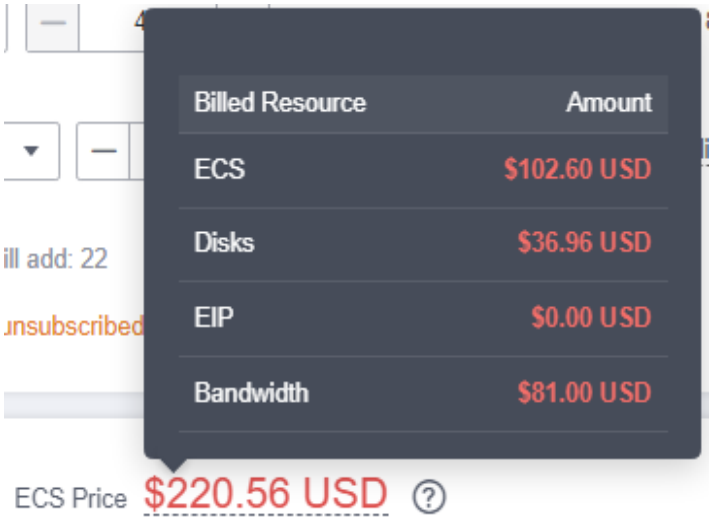
If you want to purchase a yearly/monthly ECS with a Linux image, a data disk, and an EIP that is billed by bandwidth, the prices will be displayed as follows.

Figure 2-1 Example prices



The prices include:

- The ECS flavor (vCPUs and memory)
- The EVS disks (system disks and data disks)
- The EIP bandwidth

Billed Usage Period

A yearly/monthly ECS is billed for the purchased duration (UTC+08:00). The billing starts when you activated or renewed the subscription, and ends at 23:59:59 of the expiration date.

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

Billing Examples

Suppose you purchased a one-month ECS subscription (c7n.large.2 with a CentOS 7.9 64-bit image and a bandwidth of 6 Mbit/s) on March 08, 2023, 15:50:04, and renewed the subscription for one more month before the initial subscription expired. That would include two usage periods:

- March 08, 2023, 15:50:04 to April 08, 2023, 23:59:59
- April 08, 2023, 23:59:59 to May 08, 2023, 23:59:59

You are billed for both usage periods. ECS resources are billed individually as follows.

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Table 2-3 Formulas for billing yearly/monthly ECS resources

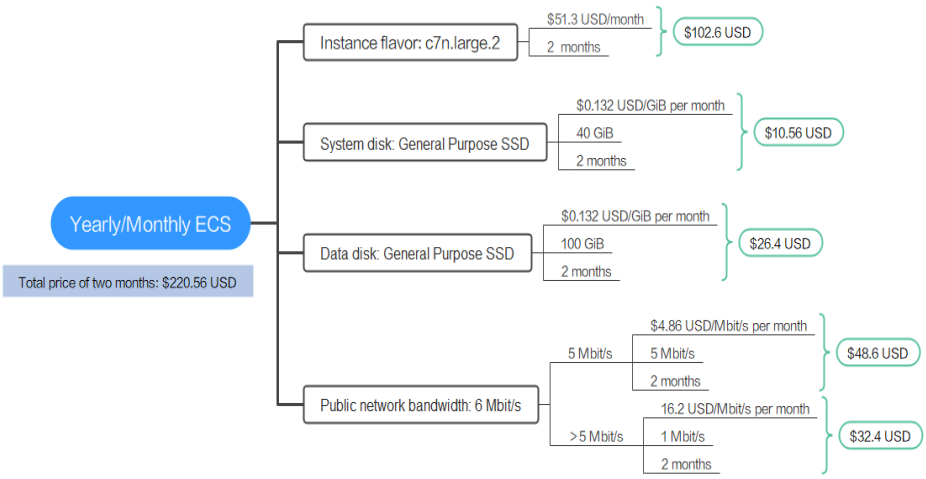
Resource	Formula	Unit Price
ECS (compute resources including vCPUs and memory)	Unit price of the ECS flavor x Required duration	For details, see **Specification Price** in **ECS Pricing Details**.
Images	Unit price of the image x Required duration	See the price displayed on the purchase page or the KooGallery.
EVS disks (system disks and data disks)	Unit price of an EVS disk x Required duration	See **EVS Pricing Details** or **Disk Price** in **ECS Pricing Details**.
EIP bandwidth	Tiered pricing based on fixed bandwidth. • 0 Mbit/s to 5 Mbit/s (included): billed at a fixed unit price per Mbit/s • Greater than 5 Mbit/s: billed at a different price per Mbit/s	The unit price and whether tiered pricing is used vary depending on regions. For details, see **EIP Pricing Details** or **Bandwidth Price** in **ECS Pricing Details**.

Figure 2-2 shows how the total price is calculated.

NOTICE

The prices in the figure are just examples. The actual prices are those displayed on **ECS Pricing Details**.

Figure 2-2 Total price for a yearly/monthly ECS



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Price Change After Specification Change

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

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

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

Suppose you purchased a one-month c7n ECS (2 vCPUs and 4 GiB) on April 8, 2023 and upgraded the specifications to 2 vCPU and 8 GiB on April 18, 2023. The price of the original specifications was $51.3 USD/month, and that for the new specifications was $62.97 USD/month. The price difference will be calculated as follows:

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

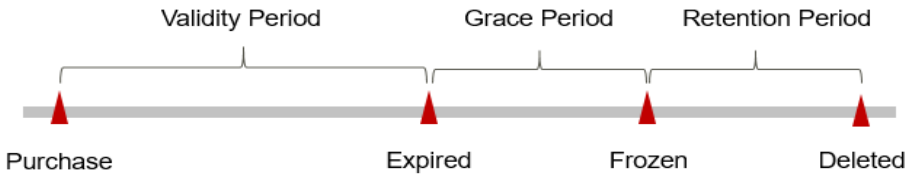
The remaining period is the remaining days of each calendar month divided by the maximum number of days in each calendar month. In this example, remaining period = 12 (Remaining days in April)/30 (Maximum number of days in April) + 8 (Remaining days in May)/31 (Maximum number of days in May) = 0.6581. Cost of upgrade = $62.97 USD x 0.6581 – $51.3 USD x 0.6581 = $7.68 USD

For more information, see **Prices for Changing Resource Specifications**.

Impact of Expiration

Figure 2-3 shows the statuses a yearly/monthly ECS can have throughout its lifecycle. After an ECS is purchased, it enters the subscription term and runs normally during this period. If the ECS is not renewed after it expires, before being deleted, it first enters a grace period and then a retention period.

Figure 2-3 Lifecycle of a yearly/monthly ECS



Expiration Reminder

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

Impact of Expiration

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

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  - Change the ECS flavor
  - Change the OS
  - Expand the EVS disk capacity
  - Change the bandwidth size
- If the yearly/monthly ECS 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 ECS while it is in the retention period.
- If the yearly/monthly ECS is not renewed by the time the retention period ends, the compute resources (vCPUs and memory), EVS disks, and EIPs will be released and data cannot be restored.

NOTE

- For details about renewals, see **Overview**.

2.3 Pay-per-Use Billing

Pay-per-use billing means you pay nothing up front and are not tied into any contract or commitment. This section describes the billing rules for pay-per-use ECS 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 e-commerce flash sales, temporary testing, and scientific computing.

Billing Items

A pay-per-use ECS instance consists of compute resources (vCPUs and memory), EVS disks, an image, and an EIP. You are billed for the following resources on a pay-per-use basis.

Table 2-4 Items billed on a pay-per-use basis

Billing Item	Description
ECS	ECS vCPUs and memory are billed on a pay-per-use basis.

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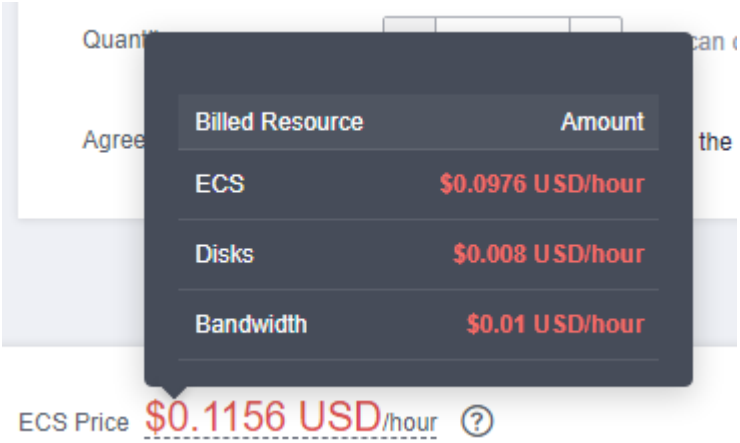
Billing Item	Description
Images	If an image, including a KooGallery image, is created along with a pay-per-use ECS, this image is also billed on a pay-per-use basis. **NOTE** • Among the public images, KylinOS, UnionTechOS, KylinSec, SUSE, and SUSESAP are billed. Other public images are free. • Private images for system disks and data disks can be used for free. For full-ECS images, you will be billed for using the server backup vault of CBR. • Shared images for system disks and data disks can be used for free. For full-ECS image shared by others, you will be billed for using the server backup vault of CBR. • The prices of KooGallery images are determined by the image providers.
EVS disks	If an EVS disk (a system disk or a data disk) is created with a pay-per-use ECS, this EVS disk is also billed on a pay-per-use basis.
EIP bandwidth	If an EIP is purchased with a pay-per-use ECS and the EIP is billed by bandwidth, you are billed for the bandwidth on a pay-per-use basis.
EIP traffic	If an EIP is purchased with a pay-per-use ECS and the EIP is billed by traffic, you are billed for the actual traffic used.

If you want to purchase a pay-per-use ECS with a Linux image, a data disk, and an EIP that is billed by bandwidth, the prices will be displayed as follows.

Figure 2-4 Example prices



The prices include:

- The ECS flavor (vCPUs and memory)
- The EVS disks (system disks and data disks)

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- The EIP bandwidth

Billed Usage Period

Pay-per-use ECS usage is calculated by the second and billed every hour (UTC +08:00). The billing starts when the ECS instance is launched and ends when the instance is deleted.

NOTE

It takes a certain time to launch an ECS instance. The billing starts from the **Launched** time on the ECS **Summary** page.

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

Billing Examples

Suppose you purchased an ECS (c7n.large.2 with a CentOS 7.9 64-bit image and a bandwidth of 6 Mbit/s) on April 18, 2023, 9:59:30 and deleted it on April 18, 2023, 10:45:46. Two usage periods will be billed:

- Usage of 30 seconds from 9:59:30 to 10:00:00
- Usage of 2,746 seconds from 10:00:00 to 10:45:46

You are billed for both usage periods. ECS resources are billed individually as described in **Table 2-5**. The price displayed in the pricing details is per hour, so you need to divide it by 3,600 to obtain the price for each second and then multiply the per-second price by the total number of seconds.

Table 2-5 Formulas for billing pay-per-use ECS resources

Resource	Formula	Unit Price
ECS (compute resources including vCPUs and memory)	Unit price of the ECS flavor x Required duration	For details, see **Specification Price** in **ECS Pricing Details**.
Images	Unit price of the image x Required duration	See the price displayed on the purchase page or the KooGallery.
EVS disks (system disks and data disks)	Unit price of an EVS disk x Required duration	See **EVS Pricing Details** or **Disk Price** in **ECS Pricing Details**.

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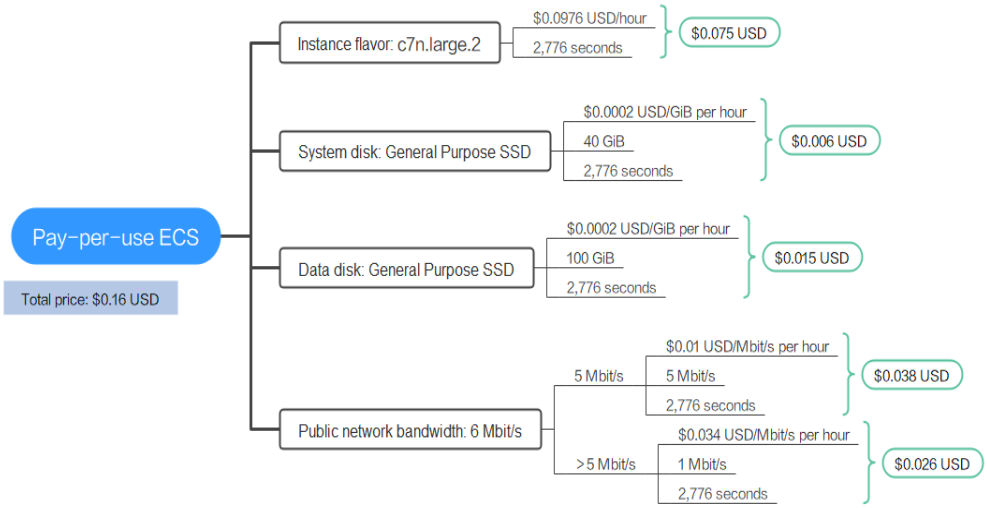
Resource	Formula	Unit Price
EIP bandwidth	Tiered pricing based on fixed bandwidth • 0 Mbit/s to 5 Mbit/s (included): billed at a fixed unit price per Mbit/s • Greater than 5 Mbit/s: billed at a different price per Mbit/s	The unit price and whether tiered pricing is used vary depending on regions. For details, see **EIP Pricing Details** or **Bandwidth Price** in **ECS Pricing Details**.

Figure 2-5 shows how the total price is calculated.

NOTICE

The prices in the figure are just examples. The actual prices are those displayed on **ECS Pricing Details**.

Figure 2-5 Total price for a pay-per-use ECS



Price Change After Specification Change

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

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

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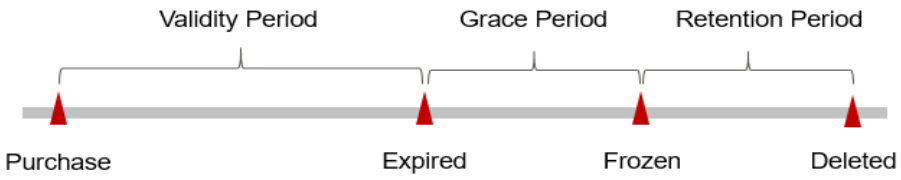
For example, if you purchased a pay-per-use ECS instance s6.medium.2 (1 vCPU and 2 GiB) at 9:00:00 and changed the flavor to s6.medium.4 (1 vCPU and 4 GiB) at 9:30:00, the following items will be billed:

- s6.medium.2 ECS usage from 9:00:00 to 9:30:00
- s6.medium.4 ECS usage from 9:30:00 to 10:00:00

Impact of Arrears

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

Figure 2-6 Lifecycle of a pay-per-use ECS



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.

Impact of Arrears

- If your account is insufficient to pay your amount due:

  Your account will go into arrears and the ECS will enter the grace period. Pay-per-use resources are not stopped immediately. You are still responsible for expenditures generated during the grace period. You can view the expenditures on the **Billing Center** > **Overview** page and pay any past due balance as needed.
- If you do not bring your account balance current before the grace period expires:

  The ECS status turns to **Frozen** and it enters a retention period.
- If you do not bring your account balance current before the retention period ends:

  The compute resources (vCPUs and memory), EVS disks, and EIPs will be released and the data cannot be restored.

NOTE

- For details about the grace period and retention period, see **What Is a Grace Period of Huawei Cloud? How Long Is It?** and **What Is a Retention Period of Huawei Cloud? How Long Is It?**
- For details about topping up your account, see **Topping Up an Account**.

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Billing for a Stopped ECS

The billing for a stopped pay-per-use ECS varies according to the ECS type.

Table 2-6 Billing for a stopped ECS

Instance Type	Description	Billing Item	Billed or Not	Action on Resources
Common instances	Common instances include: • Non-bare-metal instance • Instances without local disks • Instances without FPGA cards	ECS (compute resources including vCPUs and memory)	No	• If ECSs are created from public resource pools, basic resources (vCPUs and memory) are no longer retained. The ECS may fail to be started due to insufficient resources. Wait patiently and try again later. • If ECSs are created on a DeH or in an edge AZ, basic resources (vCPUs and memory) will be retained.
		Image	No	Resources are retained but are not billed.
		GPU	No	After GPU-accelerated ECSs without local disks attached are stopped, GPU resources are no longer retained.
		EVS disks (system and data disks)	Yes	The resources are still billed based on the billing rules.
		EIP bandwidth	Yes	The resources are still billed based on the billing rules. • EIP bandwidth price: pay-per-use EIPs (by bandwidth) • Shared bandwidth price For details, see **EIP Billing**.

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Instance Type	Description	Billing Item	Billed or Not	Action on Resources
Special instances	Special instances include: • Bare metal instances • Instances with local disks such as disk-intensive, ultra-high I/O ECSs. • ECSs with FPGA cards	ECS (compute resources including vCPUs and memory)	Yes	The ECS resources are still billed based on the billing rules. To stop the billing, you need to delete the instance and its associated resources.
		Image	Yes	
		GPU	Yes	
		EVS disks (system and data disks)	Yes	
		EIP bandwidth	Yes	

2.4 Spot Pricing (for Spot Instances)

ECSs that use spot pricing are called spot instances. You need to set a maximum price you are willing to pay for a spot instance. The maximum price must be greater than or equal to the market price but less than or equal to the pay-per-use price.

You can purchase a spot instance at a discounted price, but their performance is the same as ECSs billed in other modes. If inventory resources are insufficient or the market price exceeds your expected price, your ECS resources will be automatically released and the spot instance will be reclaimed. Compared with pay-per-use and yearly/monthly ECSs, spot instances offer the same performance at a lower price.

Application Scenarios

Spot instances are a good option if you want to enjoy the same performance at a lower price.

- Applicable scenarios

  Image rendering, stateless web services, DNA sequencing, offline analysis, function computing, batch computing, sample analysis, CI/CD, and test.

  NOTE

  When the market price is higher than the maximum price you are willing to pay or the inventory resources are insufficient, the spot instances will be reclaimed. Therefore, back up data when using such ECSs.

- Inapplicable scenarios

  The applications need to run for a long time or deliver a high level of stability.

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Billing Items

A spot instance consists of compute resources (vCPUs and memory), EVS disks, an image, and an EIP. You are billed for the following items:

Table 2-7 Billing items

Spot instance resources billed	Description
Market Price	The ECS (with vCPUs and memory) is billed at the market price.
Images	If an image, including a pay-per-use KooGallery image, is created along with a spot instance, this image is billed on a pay-per-use basis. **NOTE** • Among the public images, KylinOS, UnionTechOS, KylinSec, SUSE, and SUSESAP are billed. Other public images are free. • Private images for system disks and data disks can be used for free. For full-ECS images, you will be billed for using the server backup vault of CBR. • Shared images for system disks and data disks can be used for free. For full-ECS image shared by others, you will be billed for using the server backup vault of CBR. • The prices of KooGallery images are determined by the image providers.
EVS disks	If an EVS disk (a system disk or a data disk) is created with a spot instance, this EVS disk is billed on a pay-per-use basis.
EIP bandwidth	If an EIP is purchased along with a spot instance and the EIP is billed by bandwidth, you are billed for the bandwidth on a pay-per-use basis.
EIP traffic	If an EIP is purchased with a spot instance and the EIP is billed by traffic, you are billed for the actual traffic used.

If you want to purchase a spot instance with a Linux image, a data disk, and an EIP that is billed by bandwidth, and set the maximum price, the prices will be displayed as follows.

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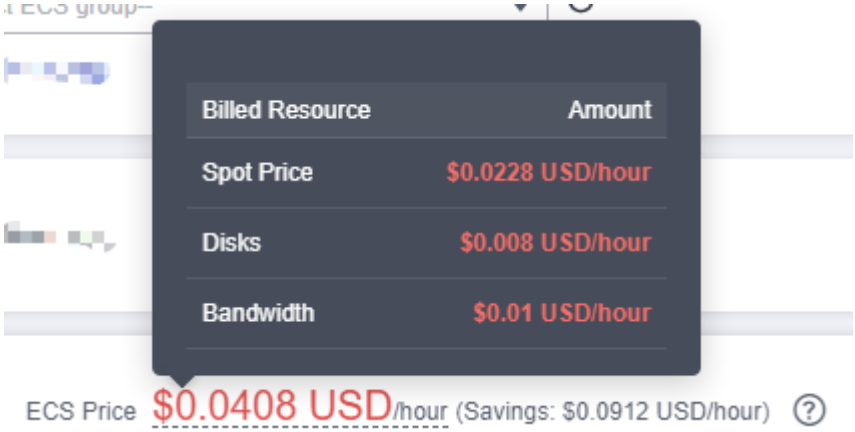
Figure 2-7 Example prices (for a spot instance)



The prices include:

- The market price for the current specifications (including vCPUs and memory)
- The EVS disks (system disks and data disks)
- The EIP bandwidth

Billing Principles

The market price for ECSs fluctuates due to supply-and-demand changes. You can purchase spot instances at a low market price to reduce computing costs.

When purchasing a spot instance, you need to set the maximum price you are willing to pay for a specified flavor. A higher price means a higher probability of getting a spot instance.

- If the maximum price you are willing to pay is greater than or equal to the current market price and the inventory resources are sufficient, you will be provisioned with a spot instance. This spot instance will be billed at the current market price.
- If the maximum price you are willing to pay is less than the current market price, you will not be provisioned with a spot instance.

After purchasing a spot instance, you can use it like the other types of ECS. The system will periodically compare the maximum price you are willing to pay with the market price and check the inventory resources.

- If the price you are willing to pay is greater than or equal to the market price and the inventory resources are sufficient, you can continue using the spot instance.
- If the price you are willing to pay is less than the market price or the inventory resources are insufficient, you will be notified that the spot instance will be released, and then deleted in about 5 minutes.

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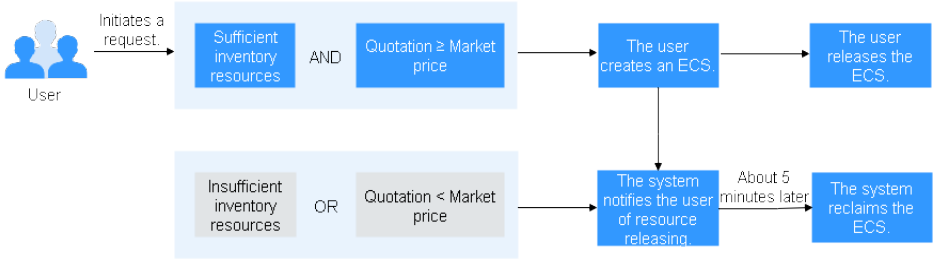
Figure 2-8 Lifecycle of a spot instance



Billed Usage Period

The spot instance usage is calculated by the second and billed every hour (UTC +08:00). The billing starts when the spot instance is launched and ends when the spot instance is deleted (including when the market price is higher than what you are willing to pay or the inventory resources are insufficient).

NOTE

It takes a certain time to launch a spot instance. The billing starts from the **Launched** time on the ECS **Summary** page.

For example, if you purchased a spot instance at 8:45:30 and deleted it at 8:55:30, you are billed for the 600 seconds from 8:45:30 to 8:55:30.

Billing Examples

A spot instance is billed by the usage duration (in seconds). The unit price is the market price when the spot instance is purchased. When the market price is higher than what you are willing to pay or the inventory resources are insufficient, the spot instance will be released.

Suppose you purchased a spot instance (c6.large.4 with a CentOS 7.9 64-bit image, a data disk, a bandwidth of 6 Mbit/s, and a preset maximum price of $0.0428 USD/hour) on April 18, 2023, 8:30:00. The spot instance was released on April 18, 2023, 10:30:00, because the market price was higher than what you are willing to pay.

You are billed for the usage of 7,200 seconds.

Table 2-8 Billed usage of the spot instance

Billed Hour	Billed Usage Period	Usage Duration	Market Price	Your Maximum Price	Market Price VS Your Maximum Price	Unit Price of the Spot Instance
8:00:00 – 9:00:00	8:30:00 – 9:00:00	1,800 seconds	$0.0228 USD/ hour	$0.0428 USD/ hour	Market price < Your maximum price	$0.0228 USD/ hour

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Billed Hour	Billed Usage Period	Usage Duration	Market Price	Your Maximum Price	Market Price VS Your Maximum Price	Unit Price of the Spot Instance
9:00:00 – 10:00:00	9:00:00 – 10:00:00	3,600 seconds	$0.0328 USD/ hour	$0.0428 USD/ hour	Market price < Your maximum price	$0.0328 USD/ hour
10:00:00 – 11:00:00	10:00:00 – 10:30:00	1,800 seconds	$0.0428 USD/ hour	$0.0428 USD/ hour	Market price = Your maximum price	$0.0428 USD/ hour

You are billed for all usage periods. ECS resources are billed individually as described in **Table 2-9**. The price displayed in the pricing details is per hour, so you need to divide it by 3,600 to obtain the price for each second and then multiply the per-second price by the total number of seconds.

Table 2-9 Formulas for billing a spot instance

Resource	Formula	Unit Price
ECS (compute resources including vCPUs and memory)	Unit price of the ECS flavor x Required duration	For details, see **Specification Price** in **ECS Pricing Details**.
Images	Unit price of the image x Required duration	See the price displayed on the purchase page or the KooGallery.
EVS disks (system disks and data disks)	Unit price of an EVS disk x Required duration	See **EVS Pricing Details** or **Disk Price** in **ECS Pricing Details**.
EIP bandwidth	Tiered pricing based on fixed bandwidth. • 0 Mbit/s to 5 Mbit/s (included): billed at a fixed unit price per Mbit/s • Greater than 5 Mbit/s: billed at a different price per Mbit/s	See **EIP Pricing Details** or **Bandwidth Price** in **ECS Pricing Details**.

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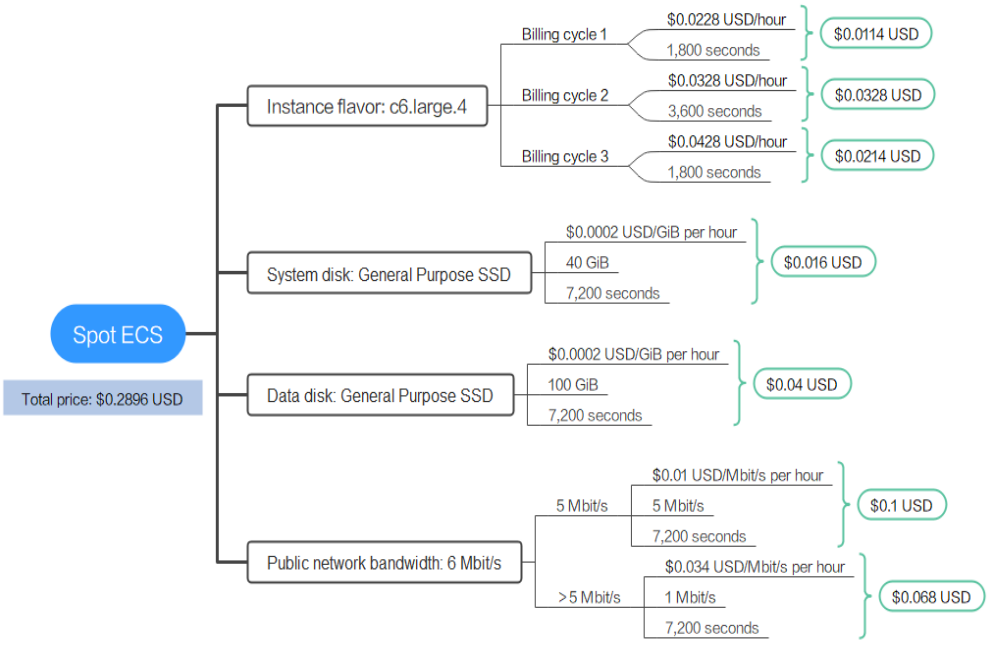
Figure 2-9 shows how the total price is calculated.

NOTICE

The prices in the figure are just examples. The actual prices are those displayed on ECS Pricing Details.

Figure 2-9 Total price for a spot instance



Price Change After Specification Change

Spot instance specifications cannot be changed.

Impact of Arrears

Figure 2-10 shows the statuses a spot instance can have throughout its lifecycle. After a spot instance is purchased, it enters the validity period and runs normally during this period. If your account goes into arrears, the instance enters a grace period and then a retention period.

Figure 2-10 Lifecycle of a spot instance

Arrears Reminder

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The system will bill you for a spot instance after each billing cycle ends. If your account goes into arrears, we will notify you by email, SMS, or in-app message.

Impact of Arrears

- If your account is insufficient to pay your amount due:

  Your account will go into arrears, and the spot instance will enter the grace period. Spot instance resources are not stopped immediately. You are still responsible for expenditures generated during the grace period. You can view the expenditures on the **Billing Center** > **Overview** page and pay any past due balance as needed.
- If you do not bring your account balance current before the grace period expires:

  The ECS status turns to **Frozen** and it enters a retention period. You cannot perform any operations on the ECS.
- If you do not bring your account balance current before the retention period ends:

  The compute resources (vCPUs and memory), EVS disks, and EIPs will be released and the data cannot be restored.

NOTE

- For details about the grace period and retention period, see **What Is a Grace Period of Huawei Cloud? How Long Is It?** and **What Is a Retention Period of Huawei Cloud? How Long Is It?**
- For details about topping up your account, see **Topping Up an Account**.

Billing for a Stopped Spot Instance

The billing for a stopped spot instance varies according to the ECS type.

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Table 2-10 Billing for a stopped ECS

Instance Type	Description	Billing Item	Billed or Not	Action on Resources
Common instances	Common instances include: • Non-bare-metal instance • Instances without local disks • Instances without FPGA cards	ECS (compute resources including vCPUs and memory)	No	• If ECSs are created from public resource pools, basic resources (vCPUs and memory) are no longer retained. The ECS may fail to be started due to insufficient resources. Wait patiently and try again later. • If ECSs are created on a DeH or in an edge AZ, basic resources (vCPUs and memory) will be retained.
		Image	No	Resources are retained but are not billed.
		GPU	No	After GPU-accelerated ECSs without local disks attached are stopped, GPU resources are no longer retained.
		EVS disks (system and data disks)	Yes	The resources are still billed based on the billing rules.
		EIP bandwidth	Yes	The resources are still billed based on the billing rules. • EIP bandwidth price: pay-per-use EIPs (by bandwidth) • Shared bandwidth price For details, see **EIP Billing**.

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Instance Type	Description	Billing Item	Billed or Not	Action on Resources
Special instances	Special instances include: • Bare metal instances • Instances with local disks such as disk-intensive, ultra-high I/O ECSs. • ECSs with FPGA cards	ECS (compute resources including vCPUs and memory)	Yes	The ECS resources are still billed based on the billing rules. To stop the billing, you need to delete the instance and its associated resources.
		Image	Yes	
		GPU	Yes	
		EVS disks (system and data disks)	Yes	
		EIP bandwidth	Yes	

Conditions for Reclaiming

Huawei Cloud may reclaim your spot instance at any time. When it is being reclaimed, you cannot use it to create an image.

A spot instance may be reclaimed when:

- The market price is higher than the maximum price you would be willing to pay.
- The inventory resources are insufficient.

  NOTE

  - If a spot instance is reclaimed for either of the preceding reasons, the first hour of usage is not billed.
  - In the first settlement period (settled by hour), the instance is billed, regardless of whether it is running.
  - It takes 5 minutes to reclaim a spot instance. If during that 5 minutes, the spot price hour is exceeded, any time in excess of that hour will be billed at the new market price.
  - The spot instance price is updated every hour. After a spot instance is restarted, or it is stopped and then started, it is billed at the market price when the ECS starts.

Back up data on spot instances. You can configure the ECS to notify you of an upcoming release. For details, see **Purchasing a Spot ECS**.

2.5 Spot Pricing (for Spot Block Instances)

Spot instances with a predefined duration are called spot block instances. When purchasing a spot block instance, you need to set a predefined duration and the number of durations. Prices vary depending on the predefined duration.

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You can buy spot block instances at an ultra-low price but they may be reclaimed when resources are insufficient.

You can purchase a spot block instance at a discounted price, but their performance is the same as ECSs billed in other modes. If inventory resources are insufficient, your ECS resources will be automatically released and the spot block instance will be reclaimed. Compared with pay-per-use and yearly/monthly ECSs, spot block instances offer the same performance at a lower price.

Application Scenarios

Spot block instances are a good option if you want to enjoy the same performance at a lower price.

- Applicable scenarios

  Image rendering, stateless web services, DNA sequencing, offline analysis, function computing, batch computing, sample analysis, CI/CD, and test.

  NOTE

  When the predefined duration is reached or the inventory resources are insufficient, the spot block instances will be reclaimed. Therefore, back up data when using such ECSs.

- Inapplicable scenarios

  The applications need to run for a long time or deliver a high level of stability.

Billing Items

A spot block instance consists of compute resources (vCPUs and memory), EVS disks, an image, and an EIP. You are billed for the following items:

Table 2-11 Billing items for spot block instances

Billing Item	Description
Spot block ECS	The spot block ECS (vCPUs and memory) is billed by the predefined duration and the number of durations.
Images	If an image, including a pay-per-use KooGallery image, is created along with a spot block instance, this image is billed on a pay-per-use basis. **NOTE** • Among the public images, KylinOS, UnionTechOS, KylinSec, SUSE, and SUSESAP are billed. Other public images are free. • Private images for system disks and data disks can be used for free. For full-ECS images, you will be billed for using the server backup vault of CBR. • Shared images for system disks and data disks can be used for free. For full-ECS image shared by others, you will be billed for using the server backup vault of CBR. • The prices of KooGallery images are determined by the image providers.

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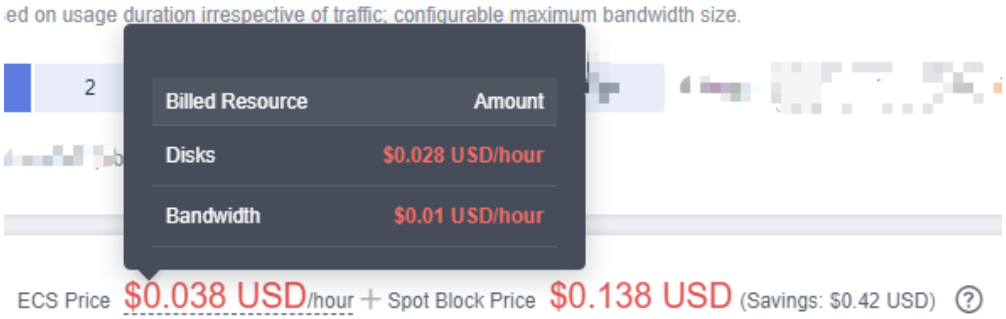
Billing Item	Description
EVS disks	If an EVS disk (a system disk or a data disk) is created with a spot block instance, this EVS disk is billed on a pay-per-use basis.
EIP bandwidth	If an EIP is purchased along with a spot block instance and the EIP is billed by bandwidth, you are billed for the bandwidth on a pay-per-use basis.
EIP traffic	If an EIP is purchased with a spot block instance and the EIP is billed by traffic, you are billed for the actual traffic used.

Suppose you plan to purchase a Linux spot block instance with a predefined duration of 6 hours, a data disk, and an EIP billed by bandwidth. the prices will be displayed as follows.

Figure 2-11 Example prices (for a spot block instance)



The prices include:

- The selected spot block instance
- The EVS disks (system disks and data disks)
- The EIP bandwidth

Billing Principles

When purchasing a spot block instance, you need to select a predefined duration (1 to 6 hours). This predefined duration determines the total price of the spot block instance. It is also the minimum time for a spot block instance.

After a spot block instance is purchased, when the predefined duration is reached or the inventory resources are insufficient, the spot block instance enters the **Reclaiming** state and will then be released. You can release a spot block instance at any time. After it is released, you are billed for the actual usage duration.

Huawei Cloud will try every effort to ensure the proper running of your spot block instance. However, in extreme cases, it may be released within seconds. Therefore, back up data when using a spot block instance.

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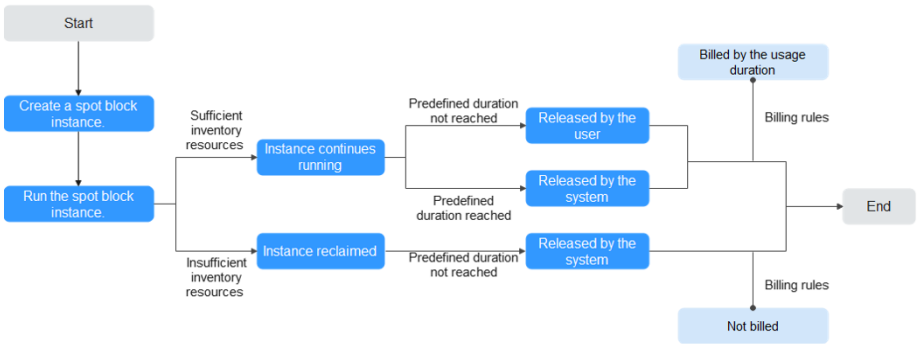
> **NOTE**
>
> If a spot block instance is terminated by the cloud platform, you will not be billed for the resource usage within the predefined duration. If you release it within the predefined duration, you will be billed for the actual usage duration.

Generally, the instance that has been used for a short period of time is preferentially reclaimed to minimize service loss. However, you are advised to optimize the application design to ensure that services can work properly even if the instance is reclaimed. You can release a spot block instance to test whether the application can work properly after the instance is reclaimed.

Figure 2-12 Lifecycle of a spot block instance



Billed Usage Period

The usage of a spot block instance is calculated by the second and billed every hour (UTC+08:00). The billing starts when the spot block instance is launched and ends when the instance is deleted. An instance is deleted after it is released by you, or automatically released when the predefined duration is reached.

> **NOTE**
>
> It takes a certain time to launch a spot block instance. The billing starts from the **Launched** time on the ECS **Summary** page.

For example, if you purchased a spot block instance at 8:45:30 and deleted it at 8:55:30, you are billed for the 600 seconds from 8:45:30 to 8:55:30.

Billing Example 1: The instance expires normally.

Suppose you purchased a spot block instance (c6.large.4 with a CentOS 7.9 64-bit image, a data disk, a bandwidth of 6 Mbit/s, and a predefined duration of 2 hours) on April 18, 2023, 8:30:00. The instance was terminated upon expiration at 10:30:00 on the same day.

You are billed for the usage of 7,200 seconds.

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Table 2-12 Billed usage periods for the spot block instance

Billed Hour	Billed Usage Period	Billed Duration	Unit Price of Instance
8:00:00 – 9:00:00	8:30:00 – 9:00:00	1,800 seconds	$0.029 USD/hour The unit price varies according to the predefined duration. Check the unit price on the console.
9:00:00 – 10:00:00	9:00:00 – 10:00:00	3,600 seconds	
10:00:00 – 11:00:00	10:00:00 – 10:30:00	1,800 seconds	

You are billed for all usage periods. ECS resources are billed individually as described in **Table 2-13**. The price displayed in the pricing details is per hour, so you need to divide it by 3,600 to obtain the price for each second and then multiply the per-second price by the total number of seconds.

Table 2-13 Formulas for billing a spot block instance

Resource	Formula	Unit Price
ECS (compute resources including vCPUs and memory)	Unit price of the ECS flavor x Required duration	See **Specifications Price** in **ECS Pricing Details**.
Images	Unit price of the image x Required duration	See the price displayed on the purchase page or the KooGallery.
EVS disks (system disks and data disks)	Unit price of an EVS disk x Required duration	See **EVS Pricing Details** or **Disk Price** in **ECS Pricing Details**.
EIP bandwidth	Tiered pricing based on fixed bandwidth. • 0 Mbit/s to 5 Mbit/s (included): billed at a fixed unit price per Mbit/s • Greater than 5 Mbit/s: billed at a different price per Mbit/s	See **EIP Pricing Details** or **Bandwidth Price** in **ECS Pricing Details**.

Figure 2-13 shows how the total price is calculated.

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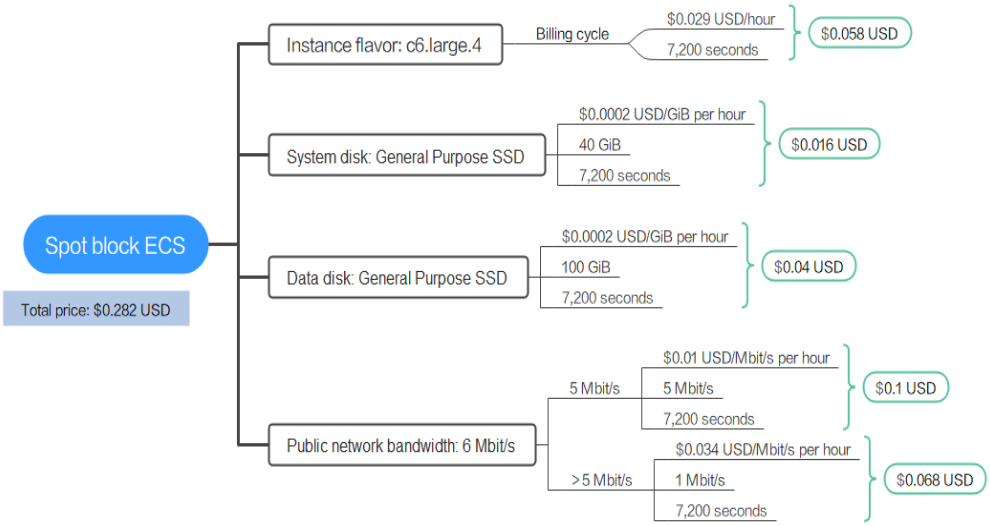
NOTICE

The prices in the figure are examples only. The actual prices are those displayed on **ECS Pricing Details**.

Figure 2-13 (Example 1) Total price for a spot block instance



Billing Example 2: The User Releases a Spot Block Instance in Advance.

Suppose you purchased a spot block instance (c6.large.4 with a CentOS 7.9 64-bit image, a data disk, a bandwidth of 6 Mbit/s, and a predefined duration of 2 hours) on April 18, 2023, 8:30:00. One hour and forty-five minutes later, you released the instance and the instance was terminated.

You are billed for the usage of 6,300 seconds.

Table 2-14 Billed usage periods for the spot block instance

Billed Hour	Billed Usage Period	Billed Duration	Unit Price of Instance
8:00:00 – 9:00:00	8:30:00 – 9:00:00	1,800 seconds	$0.029 USD/hour The unit price varies according to the predefined duration. Check the unit price on the console.
9:00:00 – 10:00:00	9:00:00 – 10:00:00	3,600 seconds	
10:00:00 – 11:00:00	10:00:00 – 10:15:00	900 seconds	

You are billed for all usage periods. ECS resources are billed individually as described in **Table 2-15**. The price displayed in the pricing details is per hour, so you need to divide it by 3,600 to obtain the price for each second and then multiply the per-second price by the total number of seconds.

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Table 2-15 Formulas for billing a spot block instance

Resource	Formula	Unit Price
ECS (compute resources including vCPUs and memory)	Unit price of the ECS flavor x Required duration	See **Specifications Price** in **ECS Pricing Details**.
Images	Unit price of the image x Required duration	See the price displayed on the purchase page or the KooGallery.
EVS disks (system disks and data disks)	Unit price of an EVS disk x Required duration	See **EVS Pricing Details** or **Disk Price** in **ECS Pricing Details**.
EIP bandwidth	Tiered pricing based on fixed bandwidth. • 0 Mbit/s to 5 Mbit/s (included): billed at a fixed unit price per Mbit/s • Greater than 5 Mbit/s: billed at a different price per Mbit/s	See **EIP Pricing Details** or **Bandwidth Price** in **ECS Pricing Details**.

Figure 2-14 shows how the total price is calculated.

NOTICE

The prices in the figure are examples only. The actual prices are those displayed on **ECS Pricing Details**.

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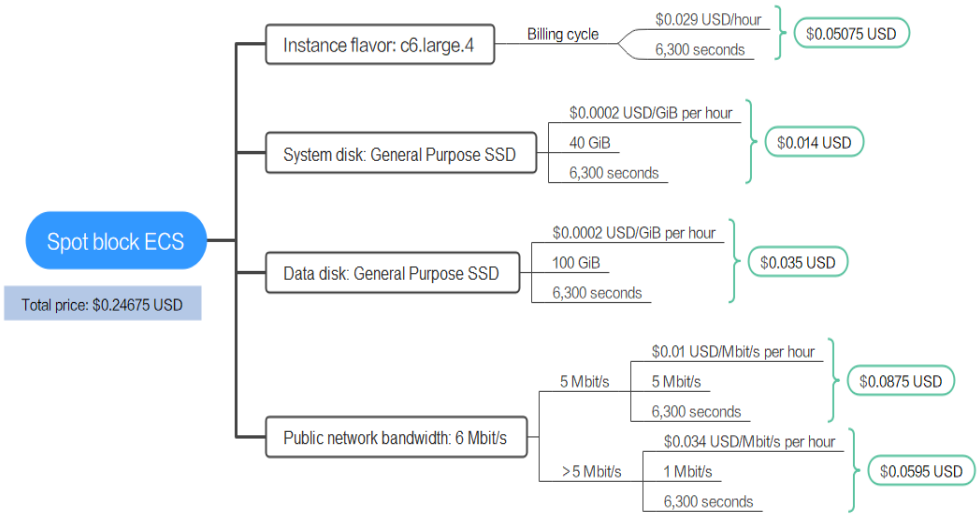
Figure 2-14 (Example 2) Total price for a spot block instance



Billing Example 3: The System Releases the Spot Block Instance in Advance.

Suppose you purchased a spot block instance (c6.large.4 with a CentOS 7.9 64-bit image, a bandwidth of 6 Mbit/s, and a predefined duration of 6 hours) on April 18, 2023, 8:30:00. The instance was released by the system due to insufficient resources and was terminated at 12:30:00 on the same day.

You are billed for the usage of 14,400 seconds.

Table 2-16 Billed usage periods for the spot block instance

Billed Hour	Billed Usage Period	Billed Duration	Unit Price of Instance
8:00:00 – 9:00:00	8:30:00 – 9:00:00	1,800 seconds	$0 USD/hour The instance is released by the system before the predefined duration is reached. Therefore, the instance is free of charge.
9:00:00 – 10:00:00	9:00:00 – 10:00:00	3,600 seconds	
10:00:00 – 11:00:00	10:00:00 – 11:00:00	3,600 seconds	
11:00:00 – 12:00:00	11:00:00 – 12:00:00	3,600 seconds	
12:00:00 – 13:00:00	12:00:00 – 12:30:00	1,800 seconds	

You are billed for all usage periods. ECS resources are billed individually as described in **Table 2-17**. The price displayed in the pricing details is per hour, so you need to divide it by 3,600 to obtain the price for each second and then multiply the per-second price by the total number of seconds.

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Table 2-17 Formulas for billing a spot block instance

Resource	Formula	Unit Price
ECS (compute resources including vCPUs and memory)	Unit price of the ECS flavor x Required duration	See **Specifications Price** in **ECS Pricing Details**.
Images	Unit price of the image x Required duration	See the price displayed on the purchase page or the KooGallery.
EVS disks (system disks and data disks)	Unit price of an EVS disk x Required duration	See **EVS Pricing Details** or **Disk Price** in **ECS Pricing Details**.
EIP bandwidth	Tiered pricing based on fixed bandwidth. • 0 Mbit/s to 5 Mbit/s (included): billed at a fixed unit price per Mbit/s • Greater than 5 Mbit/s: billed at a different price per Mbit/s	See **EIP Pricing Details** or **Bandwidth Price** in **ECS Pricing Details**.

Figure 2-15 shows how the total price is calculated.

NOTICE

The prices in the figure are examples only. The actual prices are those displayed on **ECS Pricing Details**.

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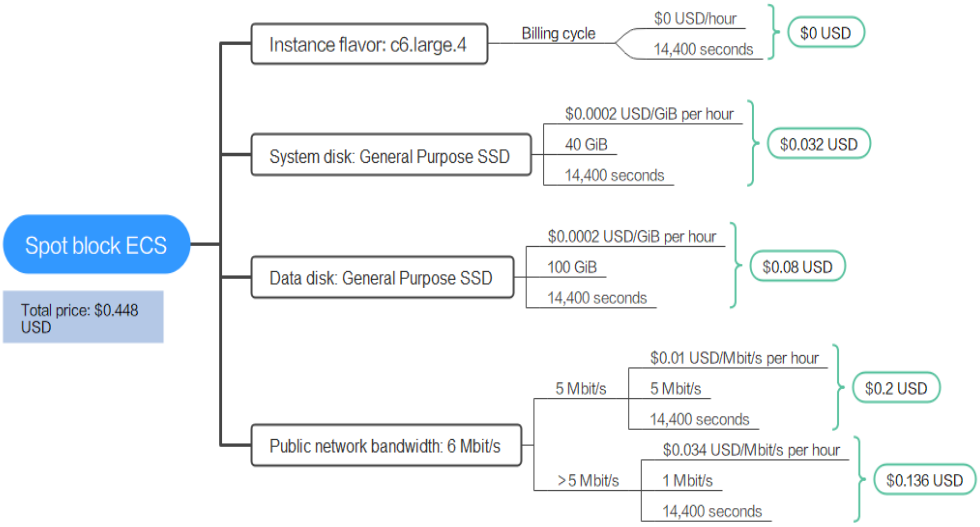
Figure 2-15 (Example 3) Total price for a spot block instance



Price Change After Specification Change

Spot block instance specifications cannot be changed.

Impact of Arrears

Figure 2-16 shows the statuses a spot block instance can have throughout its lifecycle. After a spot block instance is purchased, it enters the validity period and runs normally during this period. If your account goes into arrears, the instance enters a grace period and then a retention period.

Figure 2-16 Lifecycle of a spot block instance

Arrears Reminder

The system will bill you for a spot block instance after each billing cycle ends. If your account goes into arrears, we will notify you by email, SMS, or in-app message.

Impact of Arrears

- If your account is insufficient to pay your amount due:

  Your account will go into arrears, and the spot block instance will enter the grace period. Spot block instance resources are not stopped immediately. You are still responsible for expenditures generated during the grace period. You can view the expenditures on the **Billing Center** > **Overview** page and pay any past due balance as needed.

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- If you do not bring your account balance current before the grace period expires:

  The spot block instance status turns to **Frozen** and it enters a retention period. You cannot perform any operations on the ECS.
- If you do not bring your account balance current before the retention period ends:

  The compute resources (vCPUs and memory), EVS disks, and EIPs will be released and the data cannot be restored.

NOTE

- For details about the grace period and retention period, see **What Is a Grace Period of Huawei Cloud? How Long Is It?** and **What Is a Retention Period of Huawei Cloud? How Long Is It?**
- For details about topping up your account, see **Topping Up an Account**.

Billing for a Stopped Spot Block Instance

A spot block instance is billed even after it is stopped.

Conditions for Reclaiming

A spot block instance can be released by the user or reclaimed by the system.

- The user proactively releases the instance.

  After finishing using a spot block instance, you can release it to save money.

  a. Log in to the management console.
  b. Choose Compute > Elastic Cloud Server.
  c. Select the spot block instance to be deleted.
  d. Click **Delete** in the upper part of the ECS list or click **Delete** in the **Operation** column.

     The system disk will be released together with the spot block instance. However, you need to manually delete the data disk, bandwidth, and EIP. You can also choose to delete the EIP and data disk together with the spot block instance. If they are not manually released, they will continue to be billed.
- The system reclaims the instance.

  Back up data in a timely manner, because the system will reclaim the instance when the predefined duration is reached or system resources are insufficient. The instance and system disk are deleted when the instance is reclaimed. However, the data disk, network bandwidth, EIP, SFS Turbo file system, and other services will not be deleted. You need to delete them if required.

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NOTE

- In extreme cases, for example, when system resources are insufficient, Huawei Cloud will reclaim spot block instances (with a predefined duration of 1–6 hours) and the usage of such instances will not be billed. For details, see **Billing Example 3: The System Releases the Spot Block Instance in Advance.**.
- After CDRs are generated for a spot block instance, you will be billed for the usage. If your account is insufficient to pay the amount due, your resources will be frozen. You can view the amount due in Billing Center. To prevent resources from being stopped or released, top up your account in a timely manner. If your account goes into arrears, pay immediately.

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3 Billing Items

Billing

You will be billed for instance flavors, images, EVS disks, and EIP bandwidths. For details, see **Table 3-1**.

NOTE

The billing items marked with asterisks (*) are mandatory.

Table 3-1 ECS billing items

Billing Item	Description	Billing Mode	Formula
*ECS	Billed by ECS flavor, including vCPUs and memory. Computing and storage capabilities vary by the number of vCPUs and memory size. If a pay-per-use or spot ECS is stopped, the ECS flavor and image will no longer be billed. To save money, you can temporarily stop the ECSs that you do not need at that moment. For details, see **Billing for a Stopped ECS** (pay-per-use) or **Billing for a Stopped Spot Instance** (spot pricing).	Yearly/ Monthly, pay-per-use, and spot pricing	Unit price x Required duration For details about the unit price, see **Specifications Price** on **ECS Pricing Details**.

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Billing Item	Description	Billing Mode	Formula
*Image	• Among the public images, KylinOS, UnionTechOS, KylinSec, SUSE, and SUSESAP are billed. Other public images are free. • Private images for system disks and data disks can be used for free. For full-ECS images, you will be billed for using the server backup vault of CBR. • Shared images for system disks and data disks can be used for free. For full-ECS image shared by others, you will be billed for using the server backup vault of CBR. • The prices of KooGallery images are determined by the image providers.	Yearly/ Monthly, pay-per-use, and spot pricing	Unit price x Required duration The unit price of an image is that displayed on the purchase page and KooGallery.
*EVS disk (system disk)	Billed by EVS disk type and capacity. When you purchase an ECS, a 40 GiB system disk is selected by default. You can select a higher capacity as required. Regardless of whether you use the disk, you will be billed right away after purchasing it.	Yearly/ monthly and pay-per-use	Unit price x Required duration For details about the EVS disk unit price, see **Disk Price** on **ECS Pricing Details** or **EVS Pricing Details**.
EVS disk (data disk)	If you have additional storage requirements, you need to purchase more data disks. Billed by EVS disk type and capacity.	Yearly/ monthly and pay-per-use	Unit price x Required duration

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Billing Item	Description	Billing Mode	Formula
EIP bandwidth	An EIP is required if the ECS needs to access the Internet. Billed by bandwidth, traffic, and the EIP reservation price. • EIP for a yearly/monthly ECS: billed by bandwidth • EIP for a pay-per-use ECS: billed by bandwidth, traffic, or shared bandwidth. You are also billed for EIP reservation if you do not bind the EIP to any instance. **NOTE** If the EIP has been bound to an ECS, the EIP reservation price is 0.	Yearly/monthly and pay-per-use You can purchase a bandwidth add-on package or a shared traffic package.	Tiered pricing based on fixed bandwidth • 0 Mbit/s to 5 Mbit/s (included): billed at a fixed unit price per Mbit/s • Greater than 5 Mbit/s: billed at a different price per Mbit/s For details about the unit price, see **Bandwidth Price** on **ECS Pricing Details** or **EIP Pricing Details**.

If you configure advanced settings, such as Host Security Service (HSS)and Cloud Backup and Recovery (CBR), you need to also pay for these services. For details, see **Table 3-2**.

Table 3-2 Billing items for advanced settings

Billing Item	Description
Host Security Service	You can use the HSS basic or enterprise edition to protect your ECSs. • The HSS basic edition (one-month free trial) provides basic protection, account cracking protection, weak password detection, and malicious program detection. • The HSS enterprise edition provides vulnerability fixing, anti-virus protection, and DJCP MLPS certification. Additional charges apply. For details, see **HSS Pricing Details**.
Cloud Backup and Recovery	You can purchase a backup vault to store backups generated by the ECSs. You are billed based on the vault capacity. For details, see **CBR Pricing Details**.

Billing Examples

Suppose you purchased a one-month ECS subscription (c7n.large.2 with a CentOS 7.9 64-bit image and a bandwidth of 6 Mbit/s) on March 08, 2023, 15:50:04, and

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renewed the subscription for one more month before the initial subscription expired. That would include two usage periods:

- March 08, 2023, 15:50:04 to April 08, 2023, 23:59:59
- April 08, 2023, 23:59:59 to May 08, 2023, 23:59:59

You need to pay for each billing cycle first. Resources are billed individually. The billing formula is shown in **Table 3-3**.

Table 3-3 Formulas for billing yearly/monthly ECS resources

Resource	Formula	Unit Price
ECS (compute resources including vCPUs and memory)	Unit price of the ECS flavor x Required duration	For details, see **Specification Price** in **ECS Pricing Details**.
Images	Unit price of the image x Required duration	See the price displayed on the purchase page or the KooGallery.
EVS disks (system disks and data disks)	Unit price of an EVS disk x Required duration	See **EVS Pricing Details** or **Disk Price** in **ECS Pricing Details**.
EIP bandwidth	Tiered pricing based on fixed bandwidth. • 0 Mbit/s to 5 Mbit/s (included): billed at a fixed unit price per Mbit/s • Greater than 5 Mbit/s: billed at a different price per Mbit/s	The unit price and whether tiered pricing is used vary depending on regions. For details, see **EIP Pricing Details** or **Bandwidth Price** in **ECS Pricing Details**.

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

NOTICE

The prices in the figure are just examples. The actual prices are those displayed on **ECS Pricing Details**.

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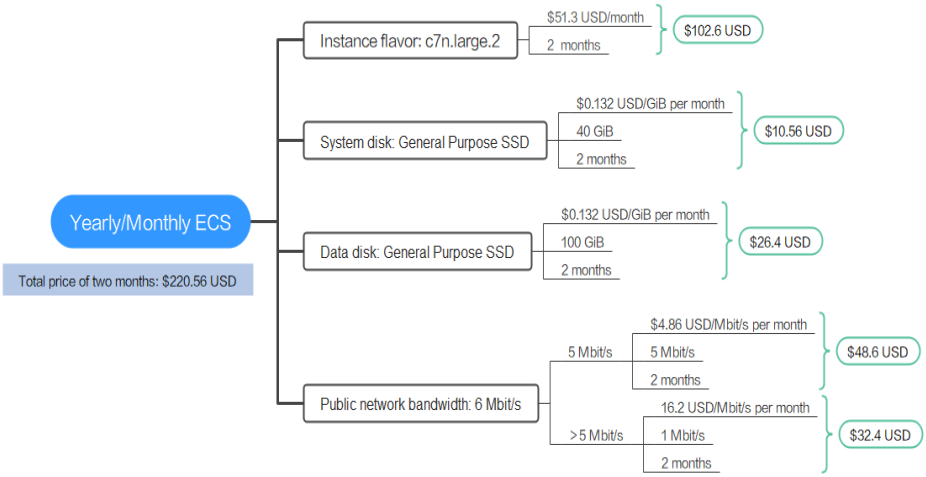
Figure 3-1 Total price for a yearly/monthly ECS



Reference

- For billing examples of each billing item in pay-per-use mode, see **Billing Examples**.
- For billing examples of each billing item in spot pricing mode, see **Billing Examples**.
- For billing examples of each billing item in spot block mode, see **Billing Example 1: The instance expires normally.**, **Billing Example 2: The User Releases a Spot Block Instance in Advance.**, and **Billing Example 3: The System Releases the Spot Block Instance in Advance.**.

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4 Billing Examples

Billing Scenario

A user purchased a pay-per-use ECS at 15:30:00 on March 18, 2023. The ECS configuration is as follows:

- Specifications: c7n.large.2 2 vCPUs | 4 GiB
- Image: CentOS 7.9 64bit
- System disk: General Purpose SSD | 40 GiB
- Data disk: General Purpose SSD | 100 GiB
- Public network bandwidth: 6 Mbit/s

After a period of time, the user found that the current ECS specifications no longer met service requirements and updated the specifications to c7.xlarge.2 (4 vCPUs, 8 GiB memory) at 09:00:00 on March 20, 2023. Since the user wanted to use the ECS long term, the user then changed the ECS to yearly/monthly billing with a one-month duration at 10:30:00 on the same day. So how much will the user be billed for this ECS in March and April?

Billing Analysis

The total price of this ECS involves both pay-per-use and yearly/monthly usage:

- Pay-per-use usage: March 18, 2023, 15:30:00 to March 20, 2023, 10:30:00
- Yearly/monthly usage: March 20, 2023, 10:30:00 to April 20, 2023, 23:59:59

Pay-per-use

From March 18, 2023, 15:30:00 to March 20, 2023, 09:00:00, a c7n.large.2 flavor ECS was used for 41.5 hours, so the price would be calculated as follows.

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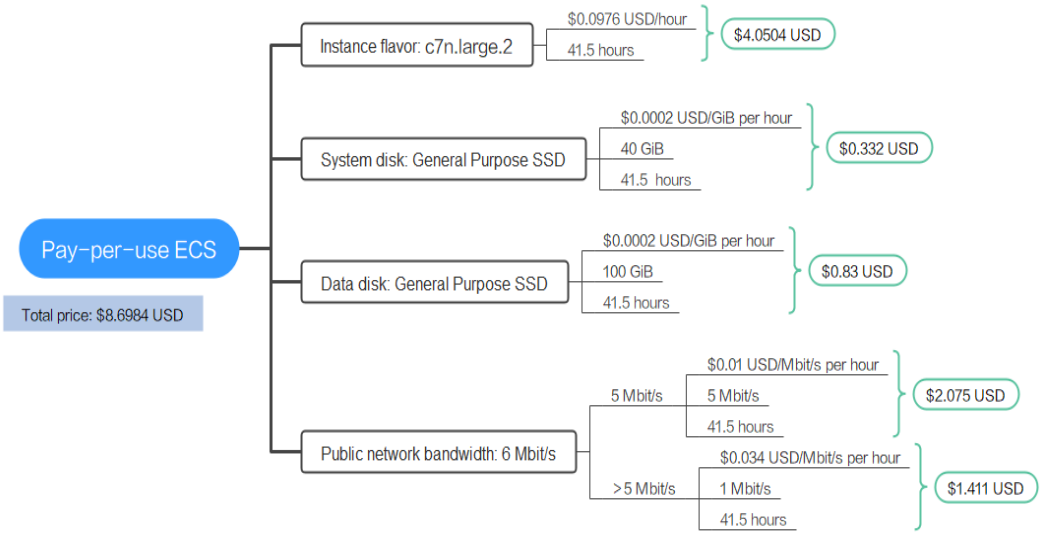
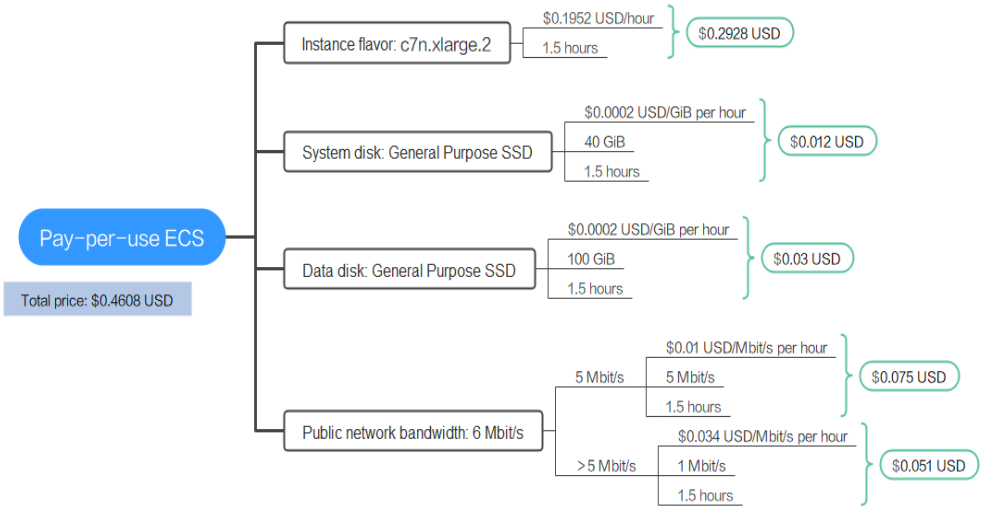
Figure 4-1 Total price for a pay-per-use ECS 1



From March 20, 2023, 09:00:00 to March 20, 2023, 10:30:00, a c7n.xlarge.2 flavor ECS was used for 1.5 hours, so the price would be calculated as follows.

Figure 4-2 Total price for a pay-per-use ECS 2



Yearly/Monthly

From March 20, 2023, 10:30:00 to April 20, 2023, 23:59:59, an ECS purchased using yearly/monthly billing was used for one month, so the price would be calculated as follows.

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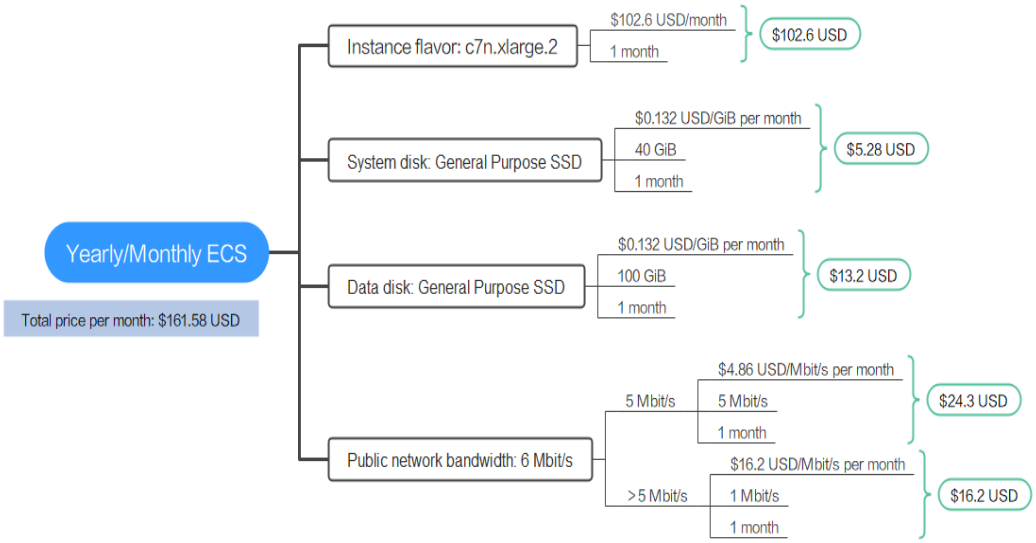
Figure 4-3 Total price for a yearly/monthly ECS



From March to April, the total price of this ECS is $170.7392 USD (8.6984 + 0.4608 + 161.58).

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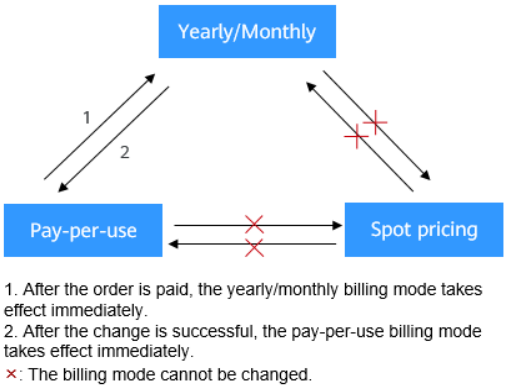
5 Billing Mode Changes

5.1 Overview

You can change the billing mode if it no longer meets your needs. **Table 5-1** lists the changeable ECS billing items.

Figure 5-1 ECS billing mode changes



NOTE

Only yearly/monthly and pay-per-use ECSs support billing mode changes. Spot ECSs do not support billing mode changes.

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Table 5-1 Changeable ECS billing items

Billing Item	Change Description	Reference
ECS specifications (vCPUs and memory)	Changing the billing mode of an ECS includes the changes to compute resources (vCPUs and memory) and the system disk. • Change from pay-per-use to yearly/monthly to enjoy lower prices. • Change from yearly/monthly to pay-per-use to use the ECS more flexibly. **NOTE** Changing from yearly/monthly to pay-per-use takes effect immediately.	• **Pay-per-Use to Yearly/Monthly** • **Yearly/Monthly to Pay-per-Use**
EVS disk	Changing the billing mode independently from the ECS billing mode is not supported. You must attach an EVS disk to an ECS and initiate the change on the ECS side.	• **Pay-per-Use to Yearly/Monthly** • **Yearly/Monthly to Pay-per-Use**
EIP	• A yearly/monthly EIP can be changed to a pay-per-use EIP billed by bandwidth after the yearly/monthly subscription ends. • A pay-per-use EIP billed by bandwidth can be changed to a yearly/monthly EIP. • Pay-per-use EIPs billed by bandwidth can be changed to pay-per-use EIPs billed by traffic, and pay-per-use EIPs billed by traffic can be changed to pay-per-use EIPs billed by bandwidth. For details, see **Figure 5-2**.	• **Pay-per-Use to Yearly/Monthly** • **Yearly/Monthly to Pay-per-Use**

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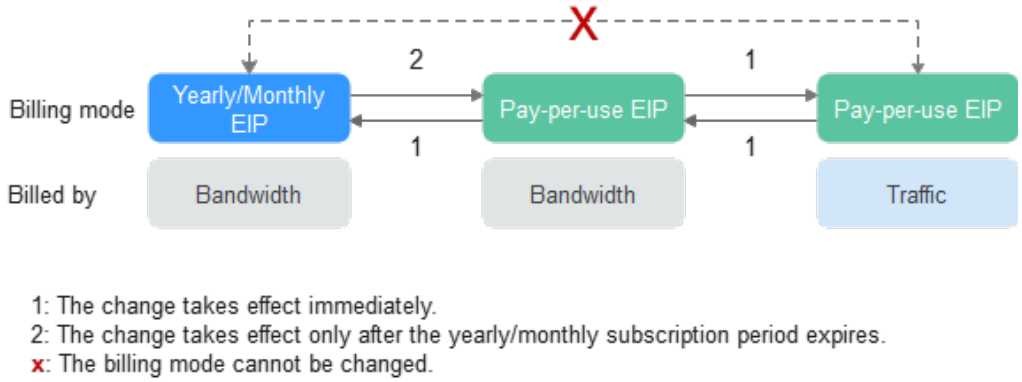
Figure 5-2 EIP billing mode change



5.2 Pay-per-Use to Yearly/Monthly

If you have a pay-per-use ECS 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 ECS 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 Center** > **Billing** page, three line items were generated:

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

Constraints

Resource such as EVS disks and the EIP that are used by an ECS may not support the change with this ECS. For details about their billing mode change rules and handling methods, see **Table 5-2** and **Table 5-3**.

Table 5-2 EVS disk billing mode change rules

Disk Type	Billing Mode	Shared Disk	Change to Yearly/ Monthly Billing with ECS	Handling Measure
Local disk	N/A	No	N/A	None
DSS or DESS disk	Yearly/ Monthly (storage pool's billing mode)	No	N/A	None

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Disk Type	Billing Mode	Shared Disk	Change to Yearly/ Monthly Billing with ECS	Handling Measure
EVS disk	Pay-per-use	No	Supported (excluding Extreme SSD V2 disks)	None
EVS disk	Pay-per-use	Yes	Not supported	Change the disk to yearly/monthly billing on the EVS console. For details, see **Billing for Disks**.
EVS disk	Yearly/ Monthly	No	Not supported	None. The disk is already a yearly/ monthly disk.
EVS disk	Yearly/ Monthly	Yes	Not supported	None. The disk is already a yearly/ monthly disk.

Table 5-3 EIP billing mode change rules

Resource	Billing Mode	Billing By	Bandwidth Type	Change to Yearly/ Monthly Billing with ECS	Handling Measure
EIP	Pay-per-use	Bandwidth	Dedicated	Supported	None
EIP	Pay-per-use	Traffic	Dedicated	Not supported	On the EIP console, change the EIP from being billed by traffic to being billed by bandwidth and then change it to the yearly/ monthly billing. For details, see **Changing EIP Billing Mode**.
EIP	Pay-per-use	Bandwidth	Shared	Not supported	Change the EIP to yearly/monthly billing on the EIP console. For details, see **Changing EIP Billing Mode**.

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Resource	Billing Mode	Billing By	Bandwidth Type	Change to Yearly/ Monthly Billing with ECS	Handling Measure
EIP	Yearly/ Monthly	Bandwidth	Dedicated or shared	Not supported	None. The EIP is already a yearly/ monthly EIP.

Prerequisites

- The ECS billing mode is pay-per-use.
- The ECS status is **Running** or **Stopped**.

Procedure

Step 1 Log in to the management console.

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

Step 3 Click and choose **Compute** > **Elastic Cloud Server**.

Step 4 In the ECS list, locate the target ECS.

Step 5 In the **Operation** column, choose **More** > **Change to Yearly/Monthly**.

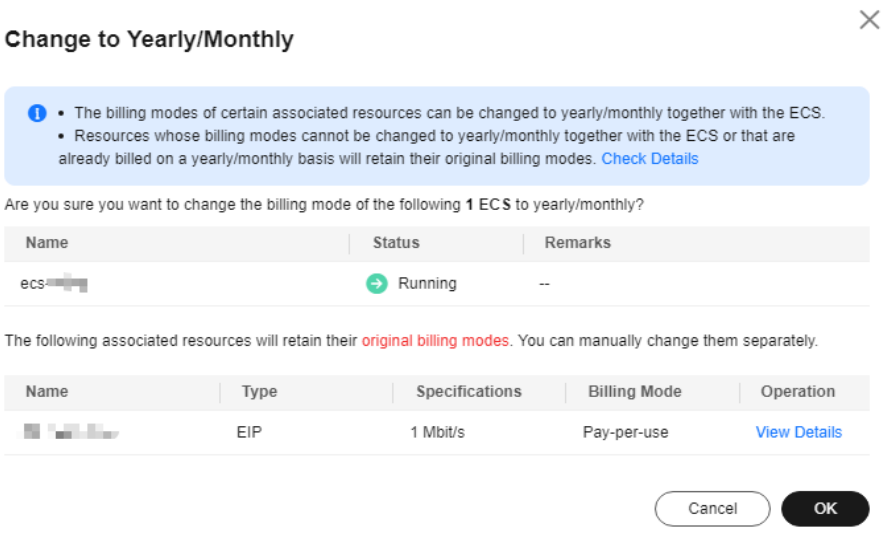
NOTE

The billing mode of multiple ECSs can be changed in batches. The procedure is as follows:

1. Select the target ECSs.
2. On the top of the ECS list, choose **More** > **Change to Yearly/Monthly**.

Step 6 On the **Change to Yearly/Monthly** page, confirm the information and click **OK**.

Figure 5-3 Changing to yearly/monthly



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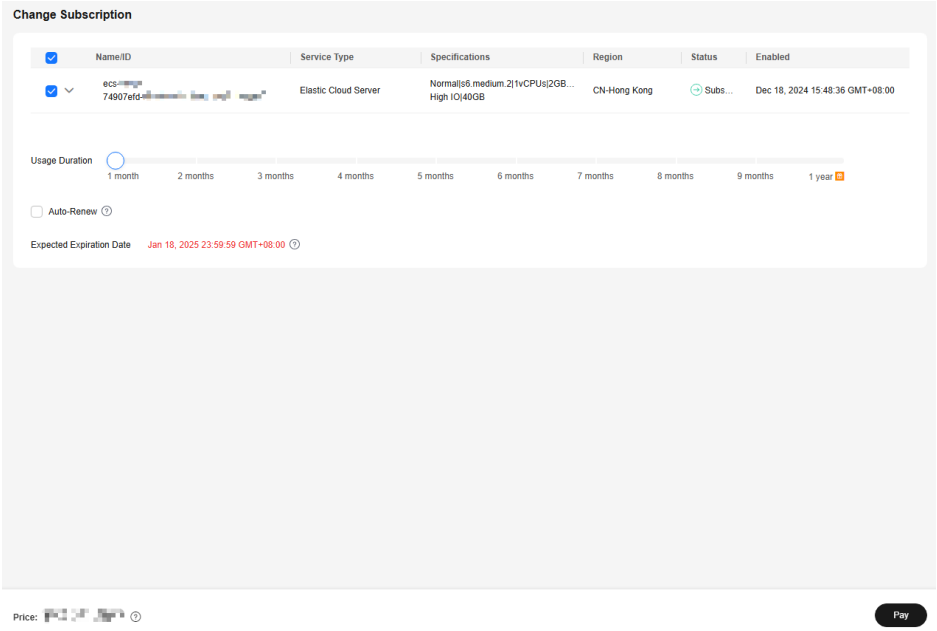
Step 7 Select the usage duration, determine whether to enable auto-renewal, confirm the expected expiration date and price, and click **Pay**.

Figure 5-4 Changing the subscription



Step 8 Select a payment method and make your payment. Once the order is paid, yearly/monthly billing is applied.

----End

5.3 Yearly/Monthly to Pay-per-Use

After creating a yearly/monthly ECS, you can change it to pay-per-use for more flexibility, and you can recoup part of what you paid for the subscription.

NOTE

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

Constraints

- Changing from yearly/monthly to pay-per-use is supported only after you have passed real-name authentication.
- The billing mode can only be changed from yearly/monthly to pay-per-use for ECSs whose order status is **Provisioned**. You can view the order status on the **Billing** > **Renewal** page.
- A maximum of 100 ECSs can be changed from yearly/monthly to pay-per-use at a time.
- The billing modes of products in a solution portfolio cannot be changed from yearly/monthly to pay-per-use.

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Prerequisites

You need to change from yearly/monthly to pay-per-use on the **Billing** > **Renewal** page.

Procedure

Step 1 Log in to the management console.

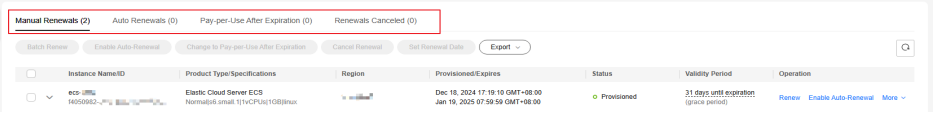
Step 2 On the top menu bar, choose **Billing** > **Renewal**.

The **Renewals** page is displayed.

Step 3 Select the search criteria.

- Under the **Pay-per-Use After Expiration** tab, you can view the resources that already have changed to pay-per-use upon expiration configured.
- Under the **Manual Renewals**, **Auto Renewals**, and **Renewals Canceled** tabs, you can change the resources to pay-per-use billing upon expiration.

Figure 5-5 Renewals



Step 4 Change yearly/monthly resources to pay-per-use billing upon expiration.

- Single ECS: Select the ECS you want to change the billing mode and choose **More** > **Change to Pay-per-Use After Expiration** in the **Operation** column.
- Multiple ECSs: Select the ECSs you want to change their billing modes and click **Change to Pay-per-Use After Expiration** above the ECS list.

Step 5 Confirm the change details and click **Change to Pay-per-Use**.

----End

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6 Subscription Renewal

6.1 Overview

When to Renew Subscriptions

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

Only yearly/monthly ECS subscriptions can be renewed. If you use pay-per-use and spot ECSs, just ensure that your account has sufficient balance to pay your amount due. For details, see **Topping Up an Account**.

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

How to Renew Subscriptions

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

Table 6-1 Renewing a yearly/monthly ECS

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

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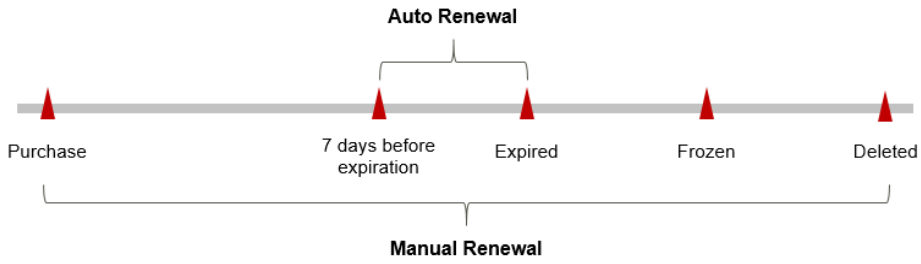
Figure 6-1 Selecting a renewal method based on ECS's current phase



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

NOTE

For details about the grace period and retention period, see **What Is a Grace Period of Huawei Cloud? How Long Is It?** and **What Is a Retention Period of Huawei Cloud? How Long Is It?**

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

6.2 Manually Renewing an ECS

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

Renewing a Subscription on the Console

Step 1 Log in to the management console.

Step 2 Click ☰ in the navigation tree and choose **Compute** > **Elastic Cloud Server**.

Step 3 On the **Elastic Cloud Server** page, select the yearly/monthly ECS to be renewed.

Step 4 Choose **More** > **Renew** in the **Operation** column.

NOTE

You can renew multiple yearly/monthly ECSs at a time.

1. Select the yearly/monthly ECSs to be renewed.
2. On the top of the ECS list, choose **More** > **Renew**.

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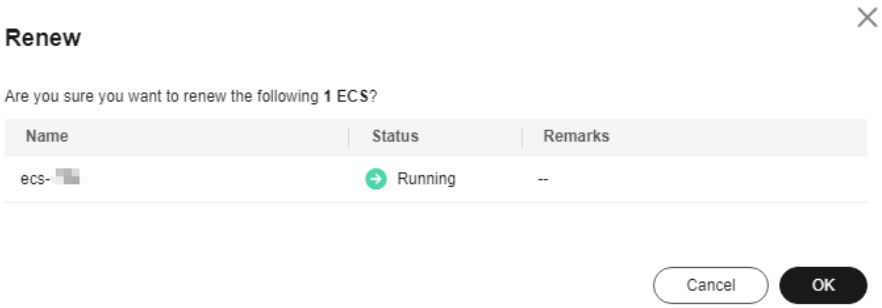
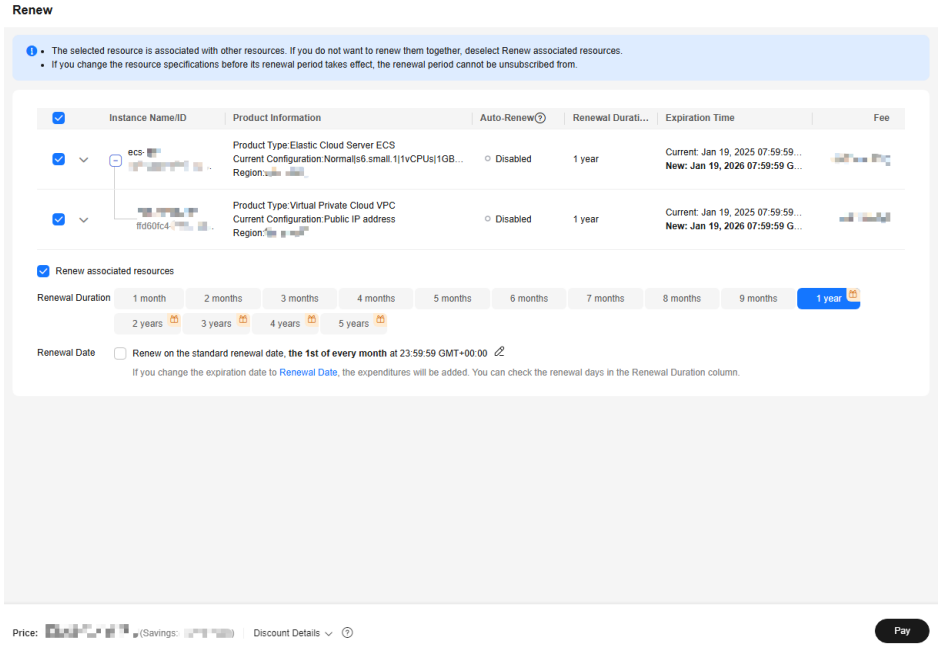
Step 5 On the **Renew** page, confirm the information and click **OK**.

Figure 6-2 Renewing a yearly/monthly ECS



Step 6 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**.

Figure 6-3 Confirming renewal



Step 7 Select a payment method and make your payment. Once the order is paid for, the renewal is complete.

----End

Renewing a Subscription in Billing Center

Step 1 Log in to the management console.

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

The **Renewals** page is displayed.

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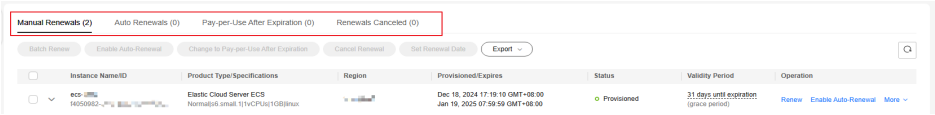
Step 3 Set the search criteria.

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

Figure 6-4 Renewal management



You can move all resources that need to be manually renewed to the **Manual Renewals** tab. For details, see **Restoring to Manual Renewal**.

Step 4 Manually renew resources.

- Individual renewal: Click **Renew** in the **Operation** column for the desired resource.
- Batch renewal: Check the boxes for the desired resources, and click **Batch Renew** in the upper left corner.

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

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

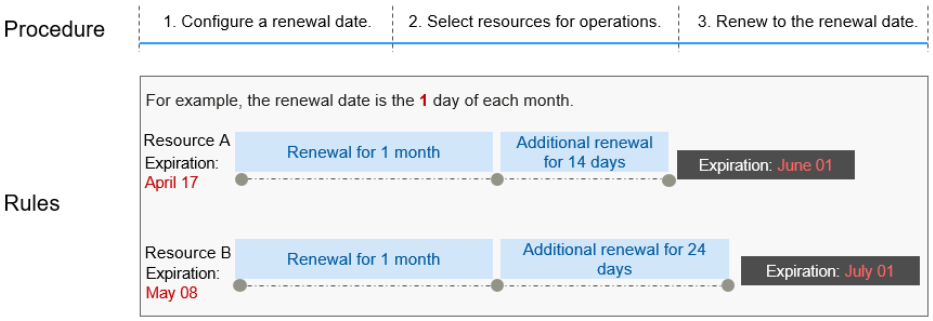
----End

Setting the Same Renewal Day for Yearly/Monthly Resources

If the ECSs have different expiry dates or the ECSs and attached EVS disks 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 6-5**, a user sets the same renewal day for two resources that will expire at different dates.

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



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

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6.3 Auto-renewing an ECS

Auto-renewal can prevent ECSs 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 ECS expires and the billing cycle.
- The auto-renewal period of an ECS varies depending on how you enable auto-renewal.
- You can enable auto-renewal anytime before an ECS expires. By default, the system will make the first attempt to charge your account for the renewal at 03:00 seven days before the expiration date. If this attempt fails, it will make another attempt at 03:00 every day until the subscription is renewed or expires.
- After auto-renewal is enabled, you can still renew the ECS manually if you want to. After a manual renewal is complete, auto-renewal is still valid, and the renewal payment will be deducted from your account seven days before the new expiration date.
- By default, the renewal payment is deducted from your account seven days before the new expiration date. You can change this auto-renewal payment date as required.

For more information about auto-renewal rules, see **Auto-Renewal Rules**.

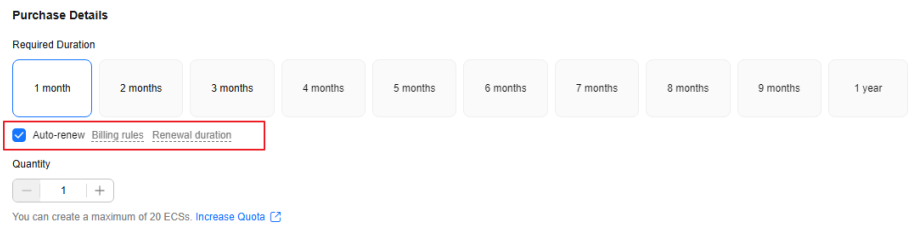
Prerequisites

The yearly/monthly ECS is not expired.

Enabling Auto-Renewal During Purchase

You can enable auto-renewal on the ECS purchase page. For details, see **Purchasing a Custom ECS**.

Figure 6-6 Enabling auto-renewal



The auto-renewal period of an ECS depends on the subscription term.

- Monthly subscriptions renew each month.
- Yearly subscriptions renew each year.

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Enabling Auto-Renewal on the Renewals Page

Step 1 Log in to the management console.

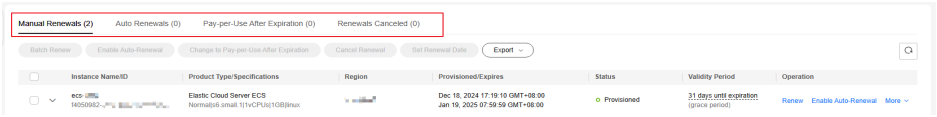
Step 2 On the top menu bar, choose **Billing** > **Renewal**.

The **Renewals** page is displayed.

Step 3 Set the search criteria.

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

Figure 6-7 Renewals



Step 4 Enable auto-renewal for yearly/monthly resources.

- Enabling auto-renewal for a single resource: Select the ECS for which you want to enable auto-renewal and choose **More** > **Enable Auto-Renew** in the **Operation** column.
- Enabling auto-renewal for multiple resources at a time: Select the ECSs for which you want to enable auto-renewal and click **Enable Auto-Renew** above the list.

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

If auto-renewal is enabled on the **Renewals** page, the auto-renewal period is subject to the selected renewal period and number of auto-renewals. For example, if you select three months renewal period and do not select **Preset Auto-renewals**, your subscription is automatically renewed for three months before each expiration.

----End

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7 Bills

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

Billing Generation

- Yearly/Monthly: Transaction records for yearly/monthly subscriptions are generated immediately after being paid for.
- Pay-per-use: A pay-per-use resource is billed by the hour, day, or month, depending on the resource's usage type. The ECS usage is billed by the hour. For details, see **Bill Run for Pay-per-Use Resources**.
- Spot pricing: ECSs billed on a spot pricing basis are settled by hour.

The expenditure deduction time of pay-per-use and spot resources may be later than the settlement period. For example, if a pay-per-use ECS (settled by hour) is deleted at 08:30, the expenditure generated during 08:00 to 09:00 is usually deducted at about 10:00. In the Billing Center, choose **Billing** > **Expenditure Items** in the left navigation pane, **Expenditure Time** in the bill indicates the time when the pay-per-use or spot pricing resource is used.

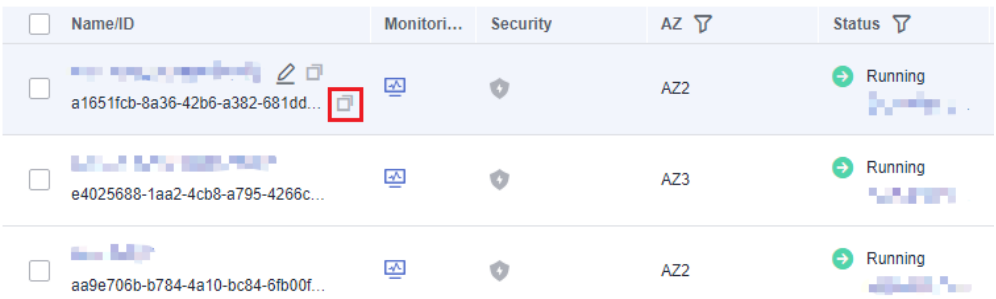
Viewing Bills of a Specific Resource

Step 1 Log in to the management console and choose **Compute** > **Elastic Cloud Server**.

The **Elastic Cloud Server** page is displayed.

Step 2 Click the icon shown in the figure below to copy the resource ID.

Figure 7-1 Copying the resource ID



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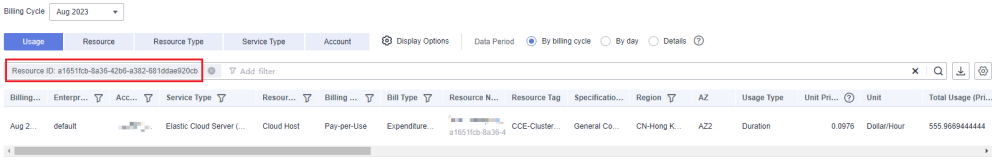
Step 3 On the top menu bar, choose **Billing** > **Bills**.

The **Bills** page is displayed.

Step 4 Choose **Billing** > **Expenditure Details** in the left navigation pane. Select **Resource ID** as the filter criteria, enter the resource ID obtained in **Step 2**, and click the icon.

Figure 7-2 Searching for a bill



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

----End

Checking the Consistency of the Actual Usage and Billed Usage

Assume that you purchased a pay-per-use ECS (c6.large.2, 2 vCPUs | 4 GiB memory) at 10:09:06 on April 8, 2023 and deleted it later that day, at 12:09:06.

- ECS expenditure items

  Pay-per-use ECS usage is calculated by the second and billed on an hourly basis. You can check the expenditure items against the actual usage. For details, see **Table 7-1**.

  Table 7-1 ECS expenditure items

Service Type	ECS
Resource Type	ECS
Billing Mode	Pay-per-Use
Expenditure Time	For the period of time from 10:09:06 to 12:09:06 on April 8, 2023, three transaction records would be generated for the resource usage in the following periods: • 2023/04/08 10:09:06 - 2023/04/08 11:00:00 • 2023/04/08 11:00:00 - 2023/04/08 12:00:00 • 2023/04/08 12:00:00 - 2023/04/08 12:09:06

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List Price	List price on the official website = Usage x Unit price The ECS was used for 3,054 seconds in the first period, and the unit price can be obtained on the **ECS Pricing Details** page. For example, if the unit price is $0.093 USD/hour, the list price for the first period = (3054 ÷ 3600) x 0.093 = $0.078895 USD. Similarly, you can calculate the ECS list price for the other periods.
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. Take the first period as an example. The truncated amount is $0.000895 USD.
Amount Due	Amount due = List price – Discount amount – Truncated amount Take the first period as an example. If the discount amount is 0, the amount due is $0.078 USD (0.078895 – 0 – 0.000895).

- ECS expenditure details

  Expenditure details can be displayed in multiple ways. By default, the bill details of a resource are displayed by usage and by billing cycle. **Table 7-2** illustrates the ECS bill details, which can be used to check against the actual usage.

  Table 7-2 ECS expenditure details

Service Type	ECS
Resource Type	ECS
Billing Mode	Pay-per-Use
Resource Name/ID	ECS name and ID Example: ecs-8e89, 5770765b-f1ee-40ba-ba7e-0f01a093e8ee
Specifications	ECS specifications Example: c6.large.2, 2 vCPUs | 4 GiB memory
Usage Type	Duration for a pay-per-use ECS

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Unit Price	When pay-per-use billing is used, the unit price is only provided if the amount is equal to the usage multiplied by the unit price. No unit price is provided in other pricing modes, for example, tiered pricing. You can search for the unit price for pay-per-use ECSs on the **ECS Pricing Details** page.
Unit	Displayed on the **ECS Pricing Details** page. Example: USD/hour
Usage	Depends on the unit of the unit price, which, for an ECS, is USD/hour. ECS usage is billed by the hour. Example: 2 hours (from 10:09:06 on April 8, 2023 to 12:09:06 on April 8, 2023)
Usage Unit	Hour
List Price	List price on the official website = Usage x Unit price The ECS is used for 2 hours in total, and the unit price is obtained on the **ECS Pricing Details** page. For example, if the unit price is $0.093 USD/hour, the list price = 2 x 0.093 = $0.186 USD.
Discounted Amount	Discounts offered for cloud services, for example, commercial discounts, partner authorized discounts, and promotional discounts. It is the discounted amount based on the list price.
Amount Due	Amount that should be paid for used cloud services after discounts are applied.

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8 Arrears

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

Arrears Reason

- For a pay-per-use or spot ECS, the account balance is insufficient due to continuous expenditure deduction.
- After a pay-per-use or spot ECS is deleted, its associated resources (such as EVS disks and EIPs) that are not deleted together with the ECS continuously generate costs.

Impact of Arrears

- Yearly/Monthly

  This is a prepaid billing mode, so you can continue using yearly/monthly ECS resources even if your account is in arrears. However, you cannot perform operations such as purchasing new ECSs, upgrading the ECS specifications, or renewing ECSs, because they will generate new expenditures.

- Pay-per-use/Spot

  If your configured payment method is unable to pay a bill for pay-per-use or spot resources, the resources enter a grace period. After you top up your account, Huawei Cloud will bill you for expenditures generated by the resources during the grace period. You can view the arrears on the **Overview** page of the Billing Center.

  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.

  After the retention period ends, if you still do not pay for arrears, the compute resources (vCPUs and memory), EVS disks, and EIPs will be released and cannot be restored.

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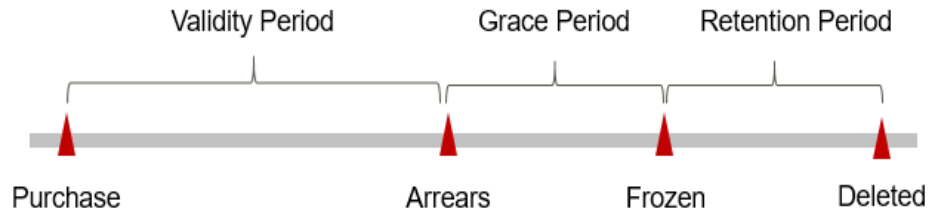
Figure 8-1 Lifecycle of a pay-per-use or spot ECS



NOTE

For details about the grace period and retention period, see **What Is a Grace Period of Huawei Cloud? How Long Is It?** and **What Is a Retention Period of Huawei Cloud? How Long Is It?**

Avoiding and Handling Arrears

Make sure that your account has sufficient balance to pay your amount due. For details, see **Topping Up an Account**.

If an ECS is no longer used, you can delete it and its associated resources to avoid generating further expenditures.

To help make sure your account never falls into arrears, you can configure the **Balance Alert** on the **Overview** page of the Billing Center. Then, 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. If the resource usage for your service is stable, you can change the billing mode to yearly/monthly to save money. For details, see **Yearly/Monthly Billing**.

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9 Billing Termination

Yearly/Monthly Resources

When you purchase a yearly/monthly resource, such as a yearly/monthly ECS or EVS disk, 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 and on if 5-day unconditional unsubscription rules apply, Huawei Cloud may issue you a refund. For details about unsubscription rules, see **Unsubscriptions**.
- If you have enabled auto-renewal but no longer wish to automatically renew the subscription, disable it before the auto-renewal date (7 days before the expiration date by default) to avoid unexpected expenditures.

Pay-per-Use Resources

If pay-per-use resources, such as pay-per-use ECSs and EVS disks, are no longer required, delete them in a timely manner because the associated EVS disks and bandwidth are still billed even if the ECSs are already stopped.

Spot Resources

If spot resources, such as spot ECSs, are no longer required, delete them in a timely manner because the associated EVS disks and bandwidth are still billed even if the ECSs are already stopped.

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

The **Dashboard** page is displayed.

Step 2 On the **Expenditure Details** page of the Billing Center, click the icon shown in the following figure to copy the resource ID.

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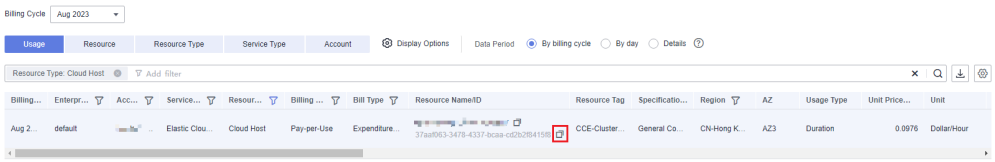
Figure 9-1 Copying the resource ID

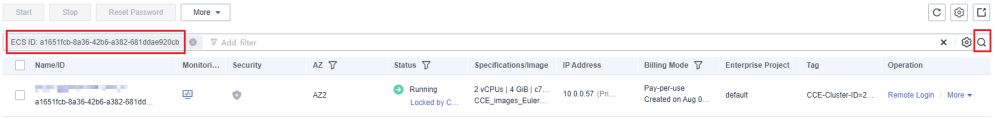


Step 3 Log in to the console and choose **Compute** > **Elastic Cloud Server**.

The **Elastic Cloud Server** page is displayed.

Step 4 Select the region where the resource is located, select **ECS ID** and enter the resource ID copied in step **Step 2**. Click the icon to search for the resource.

Figure 9-2 Searching for the resource



Step 5 Click **More** > **Delete** in the **Operation** column to delete the ECS. Ensure that the resource does not exist 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 or spot resource is deleted. For example, if you delete an ECS (which is billed on an hourly basis) at 08:30, the expenditures for that hour from 08:00 to 09:00 are usually not billed until about 10:00.

----End

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10 Cost Management

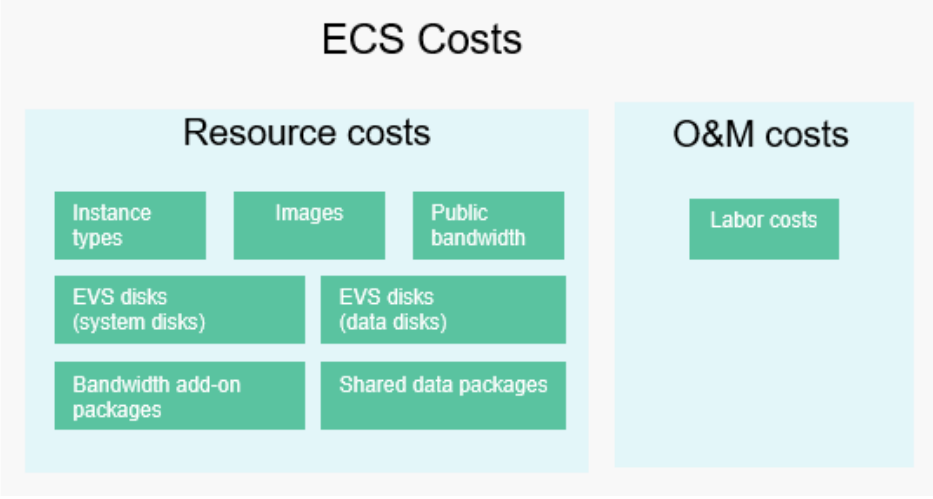
As you migrate more of your services to the cloud, managing cloud costs becomes more important. For example, you may be more concerned with cost management when using ECSs. The following describes how to manage costs in terms of cost composition, allocation, analysis, and optimization. Optimizing costs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

Cost Composition

ECS costs consist of two parts:

- Resource costs: cost of resources and resource packages, depending on the billing items of ECSs. For details, see **Billing Items**.
- O&M costs: labor costs incurred during the use of ECSs.

Figure 10-1 ECS costs



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

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

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respective cloud costs. An enterprise can allocate cloud costs to different teams or projects 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.

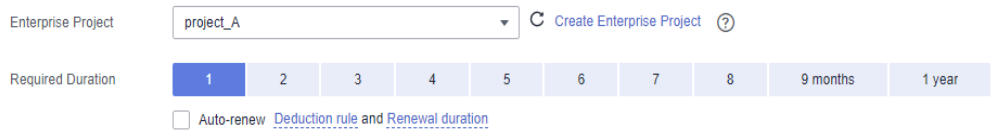
- **By linked account**

  The enterprise master account can manage costs by grouping the costs of its member accounts by linked account. For details, see **Viewing Costs By Cost Category**.

- **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**.

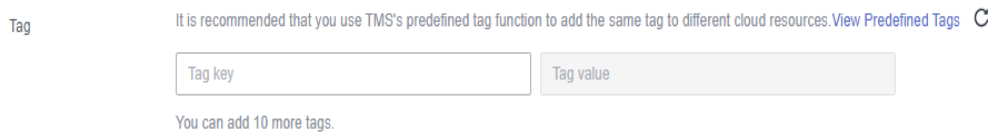
  Figure 10-2 Selecting an enterprise project for an ECS

- **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 10-3 Adding tags for an ECS

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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 using various dimensions and display filters for cost analysis so that you can analyze the trends and drivers of your service usage and costs from a variety of perspectives or within different defined scopes.

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

For details, see **Performing Cost Analysis to Explore Costs and Usage** and **Enabling Cost Anomaly Detection to Identify Anomalies**.

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 want to create a monthly budget of $2,000 USD for pay-per-use ECSs and expect to receive an alert if the forecasted amount exceeds 80% of the budgeted amount. You can refer to the following budget information.

  Figure 10-4 Basic budget information

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Figure 10-5 Defining the budget scope

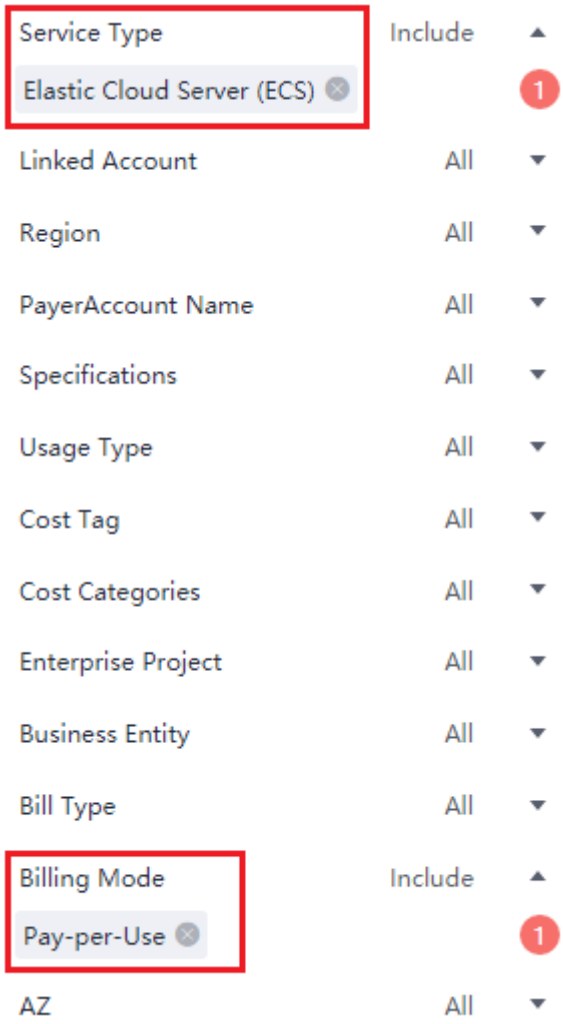
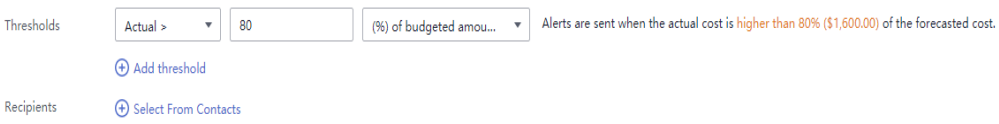


Figure 10-6 Setting a budget alert



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

- **Resource rightsizing**

  Cost Center analyzes your historical CPU and other resource usage to identify idle ECS resources 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:

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  - Monitor resource usage and evaluate whether the current configuration is more than you need, for example, you can monitor the usage of CPUs, memory, EVS disks, and bandwidth.
  - Identify idle resources, for example, there may be unattached EVS disks or unbound EIPs.

- **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 the yearly/monthly billing.
  - For short-term, unpredictable services that experience traffic bursts and cannot afford to be interrupted, select the pay-per-use billing.
  - For stateless web services and offline analysis services, select the spot pricing 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 Scaling**: You can automatically and continuously maintain instance clusters that use different billing modes, are distributed across AZs, and have different instance specifications. Use this service when there is a clear distinction between peak and off-peak workloads.
  - **Auto Launch Group**: In just a few clicks, you can deploy instance clusters that use different billing modes, are distributed across AZs, and have different instance specifications. Use this method when stable computing power needs to be quickly delivered and spot instances need to be used to reduce costs.
  - **Resource Formation Service**: Resource stacks with multiple cloud resources and dependencies can be deployed and maintained with just a few clicks. Use this service to deliver the entire system or clone an environment.
  - **Application Operations Management**: Groups of O&M operations can be defined as services to make it much easier to execute various O&M tasks. Use this service for scheduled O&M, batch O&M, and cross-region O&M.

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11 Billing FAQ

11.1 Billing Modes

11.1.1 What Are the Differences Between Yearly/Monthly and Pay-per-Use Billing Modes?

Yearly/Monthly

Yearly/Monthly is a prepaid billing mode and is cost-effective for long-term use.

Note the following when using a yearly/monthly ECS:

1. A created yearly/monthly ECS cannot be deleted. If such an ECS is not required anymore, unsubscribe from it. To do so, switch to the **Elastic Cloud Server** page, locate the target ECS, and choose **More** > **Unsubscribe** in the **Operation** column.
2. A detached system disk can be used as a data disk for any ECSs, but can only be used as a system disk for the ECS where it was attached before.
3. A detached data disk that is purchased together with an ECS can only be used as a data disk for this ECS.

Pay-per-Use

Pay-per-use billing is a postpaid billing mode in which an ECS will be billed based on usage frequency and duration. ECSs are billed by second. The system generates a bill every hour based on the usage duration and deducts the billed amount from the account balance. A pay-per-use ECS can be provisioned and deleted at any time.

In the pay-per-use billing mode, ECSs are billed by the second. The price per second of each type of ECS can be obtained by dividing their hourly price by 3600. Obtain the hourly price on the **Product Pricing Details** page.

For example, if you purchase a pay-per-use ECS priced $0.68 USD/hour, the ECS will be billed based on the usage duration by the second.

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- If you use the ECS for 30 minutes, you need to pay for $0.34 USD (0.68/3,600 × 30 × 60).
- If you use the ECS for 1 hour and 30 minutes, you need to pay for $1.02 USD (0.68/3,600 × 90 × 60).

NOTE

If a pay-per-use ECS is stopped and then restarted, the startup may fail due to insufficient resources. In such a case, change the ECS flavor or wait several minutes before attempting another restart.

Which One Is More Cost-Effective?

The yearly/monthly payment is more cost-effective than the pay-per-use payment for a longer usage duration. Yearly/Monthly is ideal when your resource usage duration is predictable. Pay-per-use is recommended when you want more flexibility and control on ECS usage. Pay-per-use ECSs can be provisioned or deleted at any time.

11.1.2 Will I Be Billed After ECSs Are Stopped?

ECSs support multiple billing modes. Whether you will continue to be billed after ECSs are stopped depend on the billing mode of the stopped ECSs.

- Yearly/Monthly: a prepaid billing mode. You are billed based on the subscription term you purchase. Stopping ECSs does not affect the billing.
- Spot pricing (for spot block): a postpaid billing mode. You are billed based on the usage duration and predefined duration. After ECSs are stopped, you will continue to be billed.
- Pay-per-use and spot pricing (for spot instances): a postpaid billing mode. You are billed based on the usage duration. Whether you are billed after ECSs are stopped depends on the instance type. For details about the billing policy for stopped ECSs, see **Table 11-1**.

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Table 11-1 Billing for a stopped ECS

Instance Type	Description	Billing Item	Billed or Not	Action on Resources
Common instances	Common instances include: • Non-bare-metal instance • Instances without local disks • Instances without FPGA cards	ECS (compute resources including vCPUs and memory)	No	• If ECSs are created from public resource pools, basic resources (vCPUs and memory) are no longer retained. The ECS may fail to be started due to insufficient resources. Wait patiently and try again later. • If ECSs are created on a DeH or in an edge AZ, basic resources (vCPUs and memory) will be retained.
		Image	No	Resources are retained but are not billed.
		GPU	No	After GPU-accelerated ECSs without local disks attached are stopped, GPU resources are no longer retained.
		EVS disks (system and data disks)	Yes	The resources are still billed based on the billing rules.
		EIP bandwidth	Yes	The resources are still billed based on the billing rules. • EIP bandwidth price: pay-per-use EIPs (by bandwidth) • Shared bandwidth price For details, see **EIP Billing**.

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Instance Type	Description	Billing Item	Billed or Not	Action on Resources
Special instances	Special instances include: • Bare metal instances • Instances with local disks such as disk-intensive, ultra-high I/O ECSs. • ECSs with FPGA cards	ECS (compute resources including vCPUs and memory)	Yes	The ECS resources are still billed based on the billing rules. To stop the billing, you need to delete the instance and its associated resources.
		Image	Yes	
		GPU	Yes	
		EVS disks (system and data disks)	Yes	
		EIP bandwidth	Yes	

NOTE

For a stopped pay-per-use ECS, the startup may fail due to insufficient resources. Please wait for several minutes before attempting another restart or changing the ECS specifications.

For details, see **How Can I Stop an ECS from Being Billed?**

If you want to use an ECS for a long time, you can change its billing mode from pay-per-use to yearly/monthly to reduce cost. For details, see **Changing Pay-per-Use to Yearly/Monthly**.

11.1.3 Can I Switch Between Yearly/Monthly and Pay-per-Use Billing Modes?

Yes, you can switch between yearly/monthly and pay-per-use payments.

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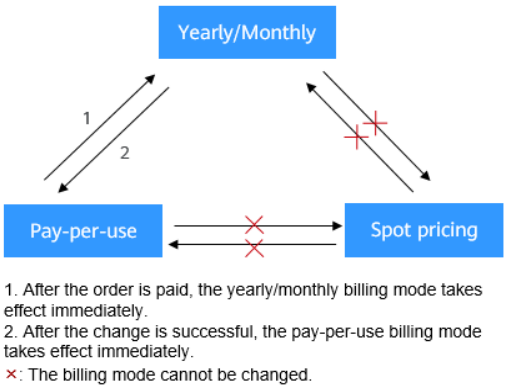
Figure 11-1 ECS billing mode changes



- Changing pay-per-use to yearly/monthly

  Pay-per-use is a postpaid billing mode in which your ECS is billed by usage duration. You can create or delete such an ECS at any time.

  If you want to use an ECS for a long time, you can change its billing mode from pay-per-use to yearly/monthly to reduce cost. For details, see **Changing Pay-per-Use to Yearly/Monthly**.

- Changing yearly/monthly to pay-per-use

  Yearly/Monthly is a prepaid billing mode in which your ECS will be billed based on service duration. This cost-effective mode is ideal when the duration of ECS usage is predictable.

  If you require a more flexible billing mode, in which your ECS will be billed based on the actual usage, you can change the billing mode from yearly/monthly to pay-per-use. This billing mode change (from yearly/monthly to pay-per-use) takes effect immediately. For details, see **Changing Yearly/Monthly to Pay-per-Use**.

  NOTE

  - You have passed real-name authentication.
  - You can change the billing mode from yearly/monthly to pay-per-use only for ECSs whose status is **Provisioned** on the **Renewals** page.
  - The billing modes of products in a solution portfolio cannot be changed from yearly/monthly to pay-per-use.

11.1.4 FAQs About ECS Frozen, Deletion, and Unsubscription

Why Are My ECSs Released?

After you purchase ECSs on Huawei Cloud but you do not complete the payment or renewal, the purchased ECSs will enter a grace period. If you still do not complete the payment or renewal after the grace period is ended, your ECS will enter a retention period. The ECS cannot provide services during the retention

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period. If you still do not complete the payment or renewal after the retention period is ended, your data stored in the ECS will be deleted and the ECS will be released. For details, see **Resource Suspension and Release**.

Can I Back Up My Data on the ECS When It Is Frozen?

No. If your ECS is frozen due to arrears, you can back up data only after you top up your account.

How Do I Unfreeze a Frozen ECS?

- Frozen due to arrears: You can renew or top up your account to unfreeze your ECS. You can renew or delete the ECSs that are frozen due to arrears. Only yearly/monthly ECSs that have not expired can be unsubscribed.
- Frozen due to violation detected by Huawei Cloud: You can renew or delete such ECSs. Only yearly/monthly ECSs that have not expired can be unsubscribed.
- Frozen due to violation detected by the public security department: You can renew such ECSs, but cannot delete them. Such frozen ECSs cannot be unsubscribed although they are displayed on the unsubscription page.

What Is the Impact on Services When Resources Are Frozen, Unfrozen, or Released?

- When resources are frozen, resource access and usage are restricted, which will interrupt your services. For example, if a server is frozen, it will be automatically stopped.
- When resources are unfrozen, constraints on resources are removed, but you need to check and restore your services. For example, after a yearly/monthly ECS is unfrozen, it will be automatically started. After a pay-per-use ECS is unfrozen, you need to start it manually.
- When resources are released, data stored on the resources will be deleted and cannot be retrieved.

How Do I Renew an ECS?

After an ECS billed on a yearly/monthly basis expires, renew it on the **Renewals** page of the management console. For details, see **Renewal Management**.

How Do I Restore an Unsubscribed or Deleted ECS?

After an unsubscription is complete, the ECS will be permanently deleted and cannot be restored. You are advised to purchase a new ECS if you still want to use ECSs.

How Do I Delete an ECS?

- Pay-per-use ECS: On the ECS list page, select the target ECS, click **More** in the **Operation** column, and choose **Delete**.
  - Read details about deleting ECSs carefully.
  - Choose to delete the unneeded EIP and attached data disks together with the ECS to avoid generating costs.

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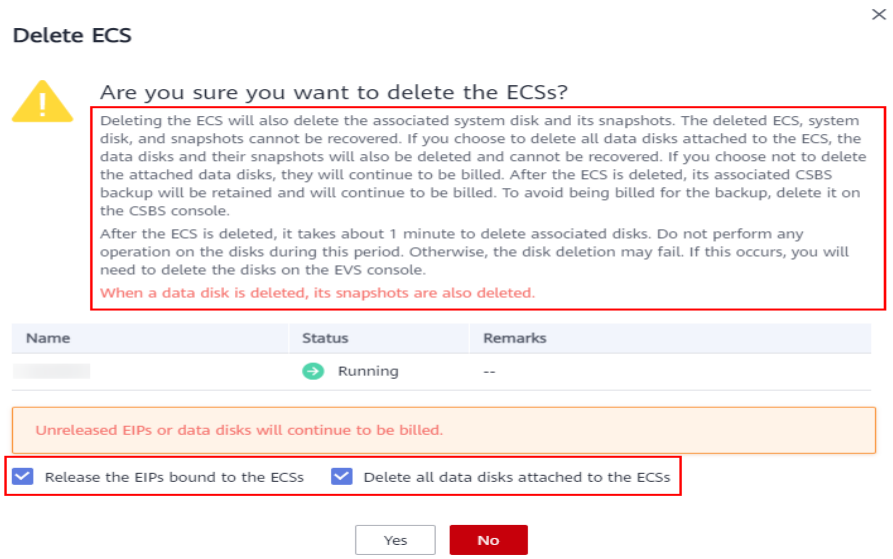
Figure 11-2 Deleting pay-per-use ECSs



- Yearly/Monthly ECS: On the ECS list page, select the target ECS, click **More** in the **Operation** column, and choose **Unsubscribe**.

  For details about unsubscription rules and procedure, see **How Do I Unsubscribe from ECSs?**

How Do I Restore a Released ECS or EVS Disk?

Data cannot be restored if an ECS or EVS disk was not backed up before it is released.

For details about how to back up an ECS and restore data using a backup, see **Backing Up ECS Data**.

How Do I Configure CBR and HSS for My ECS?

You can choose to purchase CBR and HSS together with your ECSs during the purchase process. They are not configured by default.

You can view the backup policy on the CBR console and associate the policy with your ECS. HSS takes effect only after the agent is installed on an ECS.

Figure 11-3 Cloud Backup and Recovery

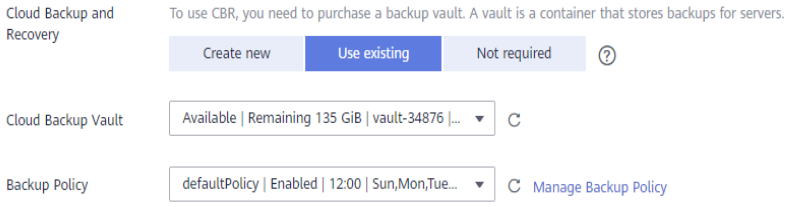


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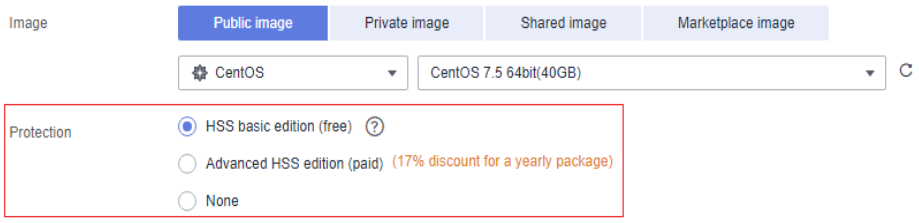
Figure 11-4 Enabling HSS



11.1.5 How Can I Stop an ECS from Being Billed?

- After a pay-per-use or spot ECS is stopped (excluding bare metal ECSs or ECSs with local disks or FPGAs attached), its basic resources (vCPUs, memory, image, and GPUs) will no longer be billed, but its associated resources such as EVS disks (system and data disks), EIPs, and bandwidth will continue to be billed separately.

  To stop the ECS from being billed, delete it and its associated resources.
- Spot block ECSs, pay-per-use or spot ECSs with local disks attached (such as disk-intensive, ultra-high I/O, H2, P1, and P2 ECSs), pay-per-use or spot FPGA-based ECSs (such as Fp1 and Fp1c ECSs), and pay-per-use or spot bare metal ECSs will continue to be billed after they are stopped. To prevent such ECSs from being billed, delete them and their associated resources.
- For yearly/monthly resources such as yearly/monthly ECSs or EVS disks, your pay for them when you are purchasing them. The billing automatically stops when the subscription expires. If you stop using the resource before the subscription expires, you will not be eligible for a refund.

This section uses a pay-per-use ECS as an example to describe how you are billed after the ECS is deleted. **Table 11-2** lists the resources associated with the ECS.

Table 11-2 Billing example of a pay-per-use ECS

Resources	Description	Billing Mode
ECS basic resources	vCPUs, memory, image, and GPUs	Pay-per-use
EVS disks	System disk	Pay-per-use
	Data disk	Pay-per-use
EIP	N/A	Pay-per-use

After the ECS is deleted, it is billed as follows:

- ECS basic resources: no longer billed
- EVS disks
  - System disk: no longer billed
  - Data disks: no longer billed if you have selected **Delete the data disks attached to the following ECSs** when you were deleting the ECS. Otherwise, the data disks will continue to be billed.

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- EIP: If you select **Release the EIPs bound to the ECSs** when deleting the ECS, the EIP will no longer be billed. Otherwise, the EIP will continue to be billed.

11.1.6 FAQs About Spot ECSs

About Spot ECSs

1. Why is my spot ECS released even when I have sufficient account balance?

   A spot ECS may be released at any time based on the changes in market price or supply and demand. For example, if the market price at a certain time is higher than the maximum price you are willing to pay, or if there are a large number of demands that the ECS resource supply cannot meet, the system automatically reclaims your spot ECS.

2. Can I change a spot ECS to a pay-per-use or yearly/monthly ECS?

   No.

3. Which resources are included in the price discount of a spot ECS?

   The price discount applies only to the vCPUs and memory of a spot ECS. The prices of other resources, such as the system disk, data disk, and bandwidth, are the same as those of ECSs billed on a pay-per-use basis.

4. How can I bid for a spot ECS?

   When you purchase a spot ECS, you are required to set the maximum price you are willing to pay. If the maximum price is higher than the market price and inventory resources are sufficient, you can purchase your spot ECS. The spot ECS is billed depending on the market price.

5. What is the relationship between the maximum price I am willing to pay for a spot ECS and the market price?

   Your spot ECS will run only if the maximum price you are willing to pay is higher than the market price. If the maximum price is lower than the market price, purchasing the spot will ECS fail, or the spot ECS that you have already purchased will be reclaimed. A spot ECS is billed based on market price, regardless of the maximum price you set.

6. If I have multiple spot ECSs and all the ECSs start to run at the same time, will the billing be the same for all of them?

   The billing will be the same for spot ECSs of the same series with the same specifications.

7. Can I obtain the market price before purchasing the spot ECS?

   Yes. When you purchase a spot ECS on the management console, you can view the market price range and historical prices of the ECS after you select an ECS flavor.

8. How is a spot ECS billed?

   Spot ECSs are billed by the second, and the billing period is 1 hour.

9. When does the billing duration for a spot ECS start and end?

   The duration starts from the time when the spot ECS is purchased to the time when it is released either manually or automatically.

10. Will a stopped spot ECS continue to be billed?

    For details, see **Table 11-3**.

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Table 11-3 Billing of stopped spot ECSs

Item	Spot Pricing
Spot ECSs without local disks or FPGAs attached, or non-bare metal ECSs	After the ECS is stopped, basic resources including vCPUs, memory, image, and GPUs are no longer billed. The resources associated with the ECS, such as EVS disks (including system and data disks), EIPs, and bandwidth, are separately billed.
Spot ECSs with local disks attached, FPGA-based ECSs, or bare metal ECSs	The ECS will continue to be billed after it is stopped. To stop the ECS from being billed, delete it and its associated resources.

11.2 Renewal and Unsubscription

11.2.1 How Can I Renew ECSs?

Yearly/monthly ECSs are unavailable after the subscription expires. If you want to continue using them, you need to renew the ECS subscription within a specified period. Otherwise, resources, such as vCPUs, memory, and EVS disks, will be automatically released, and data will be lost and cannot be restored.

On the ECS console, locate the ECS you want to renew and choose **More** > **Renew** in the **Operation** column. You can renew the subscription manually or automatically.

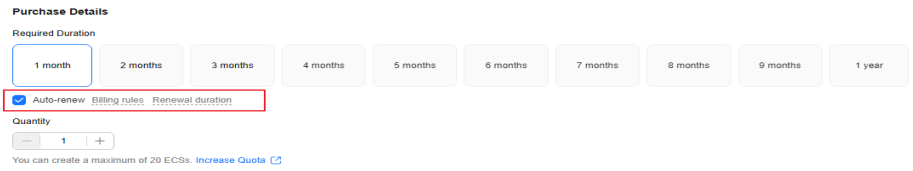
For details, see **Overview**.

11.2.2 How Can I Automatically Renew a Yearly/Monthly ECS?

Solution

1. Select **Auto renew** when purchasing a yearly/monthly ECS.
   On the **Buy ECS** page, select **Auto renew** under **Required Duration**.

   Figure 11-5 Auto renew

2. Select the EIP bound to the target ECS for automatic renewal.
   Auto renew is provided for the ECSs and EVS disks when you purchase them. To enable automatic renewal for EIPs, perform the following operations:

   a. Log in to the management console and click **Billing** > **Renewal** in the upper right corner.
      The **Renewals** page is displayed.

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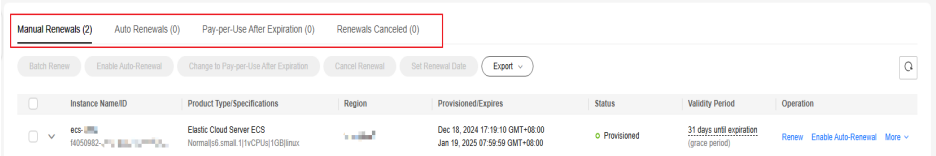
b. Select the EIP for automatic renewal.

Figure 11-6 Enable Auto-Renew



11.2.3 How Do I Unsubscribe from ECSs?

A yearly/monthly ECS can be unsubscribed, including the renewed resources and the resources that are being used. After the unsubscription, the ECS can no longer be used. A handling fee will be charged for unsubscribing from a resource.

Notes

- Unsubscribing from an ECS involves the renewed resources and the resources that are being used. After the unsubscription, the ECS is unavailable.
- Solution product portfolios can only be unsubscribed from as a whole.
- If an order contains resources in a primary-secondary relationship, you need to unsubscribe from the resources separately.
- For details about how to unsubscribe from a resource, see **Unsubscription Rules**.

Procedure

NOTICE

Before requesting an unsubscription, ensure that you have migrated or backed up any data saved on the ECS that will be unsubscribed from. After the unsubscription is complete, the ECS and any data it contains will be permanently deleted.

1. Go to the **Unsubscriptions** page.
2. Click the **Unsubscribe from In-Use Resources** tab.
3. Unsubscribe from a single resource or from resources in a batch.
   - To unsubscribe from a single resource, click **Unsubscribe** for the target resource.
   - To unsubscribe from resources in a batch, select the target resources from the resource list and click **Batch Unsubscribe** in the upper part of the resource list.
4. View the unsubscription information, select **I have confirmed that a handling fee will be charged for this unsubscription**, and click **Unsubscribe**.

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11.2.4 Will I Receive a Notification If My Account Balance Is Insufficient?

You can set the balance alert function in the Billing Center. The system checks your account balance and sends a notification if your balance is less than or equal to your set threshold. Set the alert threshold based on your resource usage.

1. Log in to the management console and click **Billing** in the upper right corner.

   The **Overview** page of the Billing Center is displayed.
2. In the **Available Credit** area on the **Overview** page, toggle on or off **Balance Alert** to enable or disable the balance alert function.
3. In the displayed **Enable Balance Alerts** dialog box, set **Threshold**.
4. Click **OK** to complete the setting of the balance alert function.

   After the setting, you can click **Modify** next to **Alert Threshold** to modify the alert threshold.
5. With balance alert enabled, when the sum of your account balance, cash coupons, and flexi-purchase coupons goes below the threshold, the recipients will receive a notification for 1-3 days by SMS and email.

   You can modify the recipients that receive the balance alerts at **SMS & Email Settings** > **Finance** > **Account balance** in the Message Center.

   After receiving a balance alert, top up your account or disable unnecessary resources in a timely manner to avoid affecting the normal use of cloud resources or to stop unnecessary fees from being generated.

11.2.5 Will I Receive a Notification of Account Balance Changes?

Yes. You will receive a notification of account balance changes via emails or SMS messages, such as account top-ups or balance adjustment.

For details about the notification scenarios and types, see **Message Receiving and Management**.

You can manage message receiving. For details, see **How Do I Manage Message Receiving?**

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