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## Document conventions

<table>
<thead>
<tr>
<th>Style</th>
<th>Description</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Danger" /></td>
<td>A danger notice indicates a situation that will cause major system changes, faults, physical injuries, and other adverse results.</td>
<td><strong>Danger:</strong> Resetting will result in the loss of user configuration data.</td>
</tr>
<tr>
<td><img src="image" alt="Warning" /></td>
<td>A warning notice indicates a situation that may cause major system changes, faults, physical injuries, and other adverse results.</td>
<td><strong>Warning:</strong> Restarting will cause business interruption. About 10 minutes are required to restart an instance.</td>
</tr>
<tr>
<td><img src="image" alt="Notice" /></td>
<td>A caution notice indicates warning information, supplementary instructions, and other content that the user must understand.</td>
<td><strong>Notice:</strong> If the weight is set to 0, the server no longer receives new requests.</td>
</tr>
<tr>
<td><img src="image" alt="Note" /></td>
<td>A note indicates supplemental instructions, best practices, tips, and other content.</td>
<td><strong>Note:</strong> You can use Ctrl + A to select all files.</td>
</tr>
<tr>
<td><img src="image" alt="Closing angle brackets" /></td>
<td>Closing angle brackets are used to indicate a multi-level menu cascade.</td>
<td>Click Settings &gt; Network &gt; Set network type.</td>
</tr>
<tr>
<td><strong>Bold</strong></td>
<td>Bold formatting is used for buttons, menus, page names, and other UI elements.</td>
<td>Click OK.</td>
</tr>
<tr>
<td><strong>Courier font</strong></td>
<td>Courier font is used for commands.</td>
<td>Run the <code>cd /d C:/window</code> command to enter the Windows system folder.</td>
</tr>
<tr>
<td><strong>Italic</strong></td>
<td>Italic formatting is used for parameters and variables.</td>
<td><code>bae log list --instanceid Instance_ID</code></td>
</tr>
<tr>
<td>[] or [a</td>
<td>b]</td>
<td>This format is used for an optional value, where only one item can be selected.</td>
</tr>
<tr>
<td>Style</td>
<td>Description</td>
<td>Example</td>
</tr>
<tr>
<td>---------</td>
<td>-----------------------------------------------------------------------------</td>
<td>------------------------</td>
</tr>
<tr>
<td>{} or {a</td>
<td>b}</td>
<td>This format is used for a required value, where only one item can be selected.</td>
</tr>
</tbody>
</table>
Contents

Legal disclaimer........................................................................................................... I
Document conventions................................................................................................. I
1 Billing overview........................................................................................................ 1
2 Comparison of billing methods................................................................................ 7
3 Subscription................................................................................................................ 10
4 Pay-as-you-go........................................................................................................... 19
5 No Fees for Stopped Instances (VPC-Connected).................................................. 27
6 Renew instances........................................................................................................ 33
   6.1 Renewal overview................................................................................................ 33
   6.2 Manually renew an instance............................................................................... 41
   6.3 Enable auto-renewal........................................................................................... 42
   6.4 View auto-renewal status.................................................................................... 44
   6.5 Disable auto-renewal.......................................................................................... 45
   6.6 Downgrade the configurations of an instance during renewal............................ 47
7 Switch the billing method from pay-as-you-go to subscription........................................ 50
8 Switch the billing method from Subscription to Pay-As-You-Go................................. 52
9 Change the billing method of a subscription disk..................................................... 54
10 Snapshot billing........................................................................................................ 56
11 Billing methods of public bandwidth......................................................................... 58
12 Reserved instance billing.......................................................................................... 62
13 Billing FAQ................................................................................................................ 65
1 Billing overview

This topic describes items related to ECS billing, such as billable resources, billing methods, and payment methods.

The price of an ECS resource may vary depending on regions. For more information about ECS resource prices, see Pricing.

Billable resources

ECS comprises the following major components: instances, images, Block Storage devices, snapshots, security groups, and networks. For more information, see What is ECS?

The following table describes billable ECS resources.

<table>
<thead>
<tr>
<th>Resource</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECS instance</td>
<td>You are billed based on the instance type that you choose. The instance type determines the number of vCPUs and the size of memory that you can use.</td>
</tr>
</tbody>
</table>

**Note:**
If you select an instance type that is equipped with local disks, the price of the instance type contains the price of local disks.
<table>
<thead>
<tr>
<th>Resource</th>
<th>Description</th>
</tr>
</thead>
</table>
| Image     | Images are classified into the following types:  
  • Public image  
    - Windows Server: The price is subject to the instance type that you choose. For more information, see the buy page.  
    - Red Hat Enterprise Linux: These images incur fees. For more information, see the buy page.  
    - Other images: free of charge.  
  • Alibaba Cloud Marketplace image: The price is subject to the pricing standards of image providers.  
  • Custom image  
    - If a custom image is obtained from a free public image or Alibaba Cloud Marketplace image, the image fee is the fee incurred by the snapshot used to create the custom image. Snapshots are charged based on storage space usage.  
    - If a custom image is obtained from a paid public image or Alibaba Cloud Marketplace image, the image fee is the fee incurred by the snapshot used to create the custom image. Snapshots are billed based on storage space usage. If you use a custom image to create an ECS instance, you are also charged for the image.  
  • Shared image  
    - If a shared image is obtained from a free public image or Alibaba Cloud Marketplace image, the shared image is free of charge.  
    - If a shared image is obtained from a paid public image or Alibaba Cloud Marketplace image, you are also charged for the shared image if you use it to create an ECS instance. If you never use the image, you are not billed. |
| Block Storage device | Alibaba Cloud provides the following types of Block Storage devices:  
  • Cloud disks: Cloud disks are billed based on their storage capacity. You can use cloud disks as system disks or data disks.  
  • Local disks: Local disks are billed based on their storage capacity. You can use local disks only as data disks. You cannot purchase a separate local disk. Local disks created together with an ECS instance have the same billing method as the ECS instance.  
  Instance families that are equipped with local disks include d1ne, d1, i2, i2g, i1, gn5, and ga1. For information about instance families, see #unique_5. |
<table>
<thead>
<tr>
<th>Resource</th>
<th>Description</th>
</tr>
</thead>
</table>
| Public bandwidth | An ECS instance can access the Internet through the following methods:  
  • Use the public IP address allocated by the system: Retained public IP addresses do not incur fees. You are only charged for public bandwidth. For more information, see [Billing methods of public bandwidth](#).  
  • Use the Elastic IP Address (EIP): EIP is an independent service. For more information, see [Billing overview](#).  
  • Use the NAT gateway: NAT Gateway is an independent service. For more information, see [Billing method](#). |
| Snapshot         | Snapshots are billed based on the storage space usage.                                                                                       |

**Billing methods**

ECS instances mainly support the following billing methods: subscription and pay-as-you-go.

- **Subscription**: a billing method that allows you to use an instance only after you pay for the instance. Subscription is applicable to the services that run for 24 hours a day and 7 days a week, such as web services. For more information, see [Subscription](#).
- **Pay-as-you-go**: a billing method that allows you to pay for an instance after you use the instance. Pay-as-you-go is applicable to scenarios where traffic spikes occur, such as temporary scaling, interim testing, and scientific computing. For more information, see [Pay-as-you-go](#).

For more information about the difference between subscription and pay-as-you-go, see [Comparison of billing methods](#).
<table>
<thead>
<tr>
<th>Resource</th>
<th>Billing method</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECS instance</td>
<td>• Subscription&lt;br&gt;• Pay-as-you-go&lt;br&gt; If you plan to make a long-term commitment with pay-as-you-go ECS instances, you can purchase reserved instances to offset your bill. This method is more flexible and cost-effective. For more information, see #unique_12. For more information about the billing details of reserved instances, see Reserved instance billing.&lt;br&gt;• Preemptible instance&lt;br&gt; Preemptible instances are a type of on-demand instances that reduce overall ECS instance costs. Preemptible instances may be reclaimed. You can use auto provisioning groups to alleviate the instability caused by reclaiming preemptible instances. For more information, see #unique_14.</td>
</tr>
<tr>
<td>Image</td>
<td>• Subscription&lt;br&gt;• Pay-as-you-go&lt;br&gt; Images can only be used along with ECS instances. Windows-based reserved instances can be used to offset image bills.</td>
</tr>
<tr>
<td>Disk</td>
<td>• Subscription&lt;br&gt;• Pay-as-you-go&lt;br&gt; The billing methods of cloud disks depend on how they are created.&lt;br&gt;• Cloud disks created along with an ECS instance have the same billing method as the ECS instance.&lt;br&gt;• Cloud disks created for a subscription ECS instance use the subscription billing method.&lt;br&gt;• Cloud disks created on the Disks page of the ECS console support only pay-as-you-go.&lt;br&gt;• Cloud disks created from snapshots support only pay-as-you-go.&lt;br&gt;You can change the billing methods of your cloud disks based on your needs. For more information, see #unique_15.</td>
</tr>
</tbody>
</table>
Elastic Compute Service
Pricing / 1 Billing overview

<table>
<thead>
<tr>
<th>Resource</th>
<th>Billing method</th>
</tr>
</thead>
</table>
| Public bandwidth  | If your ECS instance accesses the Internet by using a public IP address, the billing methods are as follows:  
  - Pay-by-bandwidth
    Fees are calculated based on the bandwidth that you specified. Based on the billing methods of ECS instances, the following billing methods for network usage are supported:  
    - Subscription  
    - Pay-as-you-go  
  - Pay-by-traffic
    You are billed based on the traffic that you actually used on an hourly basis.  
You can enable public bandwidth when you create an ECS instance, or enable public bandwidth by using the upgrade or downgrade feature after you create an ECS instance. For more information, see [Billing methods of public bandwidth](#). |
| Snapshot          | Pay-as-you-go.                                                                   |
|                   | For more information, see [Snapshot billing](#).                               |

**Payment methods**

You can use the following methods to pay for ECS resources:

- Bank card
- PayPal

  Alibaba Cloud pre-authorizes your PayPal account after your pay-as-you-go resources start to incur fees.
- Paytm (India)

  Only for users in India. Alibaba Cloud pre-authorizes your Paytm account after your pay-as-you-go resources start to incur fees.

**Note:**

Coupons are used to pay for your resource usage before bills are issued. No actual payments are involved.
Before you purchase ECS resources, you must bind a bank card, PayPal account, or Paytm (India) account to your Alibaba Cloud account. For more information, see in Account Management Add a payment method.

If you want to purchase ECS resources in mainland China, you must complete real-name verification. For more information, see of Account Management in Real-name registration FAQs the How can I complete real-name registration? section.
This topic compares the features and billing rules of subscription and pay-as-you-go instances.

**Feature comparison**

Subscription ECS instances and pay-as-you-go ECS instances support different features. The following table lists the differences. For more information about the two billing methods, see **Subscription** and **Pay-as-you-go**.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Subscription</th>
<th>Pay-as-you-go</th>
</tr>
</thead>
<tbody>
<tr>
<td>Renew the instance</td>
<td>Supported.</td>
<td>Not supported.</td>
</tr>
<tr>
<td></td>
<td>For more information, see Renewal</td>
<td></td>
</tr>
<tr>
<td></td>
<td>overview.</td>
<td></td>
</tr>
<tr>
<td>Release the instance at any</td>
<td>Not supported.</td>
<td>Supported.</td>
</tr>
<tr>
<td>time</td>
<td>After an ECS instance expires, it</td>
<td>Release pay-as-you-go ECS instances that you no longer need as soon as</td>
</tr>
<tr>
<td></td>
<td>is automatically released if it is</td>
<td>possible. If you do not release them, the ECS resources are continuously</td>
</tr>
<tr>
<td></td>
<td>not renewed within the specified</td>
<td>charged until the instances are stopped and released due to overdue</td>
</tr>
<tr>
<td></td>
<td>period of time.</td>
<td>payments. For more information, see <strong>#unique_18</strong>.</td>
</tr>
<tr>
<td>Change instance types</td>
<td>Supported.</td>
<td>Supported.</td>
</tr>
<tr>
<td></td>
<td>For more information, see #unique_19 and #unique_20.</td>
<td>For more information, see <strong>#unique_21</strong>.</td>
</tr>
<tr>
<td>Change bandwidth configuration</td>
<td>Supported.</td>
<td>Supported.</td>
</tr>
<tr>
<td></td>
<td>For more information, see #unique_19 and Downgrade the configurations of an instance during renewal.</td>
<td>For more information, see <strong>#unique_23</strong>.</td>
</tr>
<tr>
<td>Feature</td>
<td>Subscription</td>
<td>Pay-as-you-go</td>
</tr>
<tr>
<td>----------------------------------------------</td>
<td>-------------------------------------</td>
<td>--------------------------------------</td>
</tr>
<tr>
<td>Change billing methods</td>
<td>Supported.</td>
<td>Supported.</td>
</tr>
<tr>
<td></td>
<td>For more information, see Switch the billing method from Subscription to Pay-As-You-Go and #unique_19.</td>
<td>For more information, see Switch the billing method from pay-as-you-go to subscription.</td>
</tr>
<tr>
<td>Use a subscription image from Alibaba Cloud Marketplace</td>
<td>Supported.</td>
<td>Not supported.</td>
</tr>
<tr>
<td></td>
<td>For more information, see the &quot;FAQ about subscription Alibaba Cloud Marketplace images&quot; section in Image FAQ.</td>
<td></td>
</tr>
<tr>
<td>Apply for ICP filings for websites that are deployed on ECS instances in mainland China</td>
<td>Supported.</td>
<td>Not supported.</td>
</tr>
<tr>
<td></td>
<td>Only ECS instances that have a subscription period of at least three months can be used for ICP filings. For more information about ICP filing, see #unique_27.</td>
<td></td>
</tr>
<tr>
<td>Create instances through calls to API operations</td>
<td>Supported.</td>
<td>Supported.</td>
</tr>
<tr>
<td></td>
<td>Payment by bank cards or PayPal is not supported.</td>
<td></td>
</tr>
<tr>
<td>Use Alibaba Cloud Security, CloudMonitor, and SLB for free</td>
<td>Supported.</td>
<td>Supported.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Billing rule comparison**

Billing rules for subscription and pay-as-you-go ECS resources have the following differences:

- Subscription resources can be used only after the payment is made. You must pay the bills of subscription resources to use them.
- You can activate and use pay-as-you-go resources before you pay for them. The system generates a bill in each settlement cycle and deducts the corresponding fee from your account.
To view the payment records of ECS resources, log on to the ECS Management console. In the top navigation bar, choose Billing > User Center. Then, go to the Bill Details page to view the payment records within a specific month.
3 Subscription

Subscription is a billing method that allows you to use resources only after you pay for them. With subscription, you can reserve resources in advance and reduce your costs with the discounted rates. This topic describes the billing rules for subscription ECS resources.

Overview

Before you use subscription resources, you must create a subscription ECS instance. The following figure shows subscription durations that you can choose for your ECS instance.

<table>
<thead>
<tr>
<th>Duration</th>
<th>1 Month</th>
<th>2 Months</th>
<th>3 Months</th>
<th>6 Months</th>
<th>1 Year</th>
</tr>
</thead>
</table>

During instance creation, resources are billed separately to generate the total price. You can use subscription resources only after you pay the total price. For more information about how prices are calculated, see Billing.

After a subscription ECS instance is created, you can change its specifications or resize subscription cloud disks attached to the instance. For more information, see #unique_28 and #unique_29.

After a subscription period expires, you can renew your ECS instance to continue to use it. For more information, see Renewal overview.

Applicable resources

When you create an ECS instance, you must configure the instance type, Block Storage devices, image, and network type. The following table describes the ECS resources that support the subscription billing method.

<table>
<thead>
<tr>
<th>Resource</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECS instance</td>
<td>When you create an ECS instance, you must specify whether to use the subscription billing method.</td>
</tr>
<tr>
<td>Image</td>
<td>Images created along with subscription ECS instances also use the subscription billing method.</td>
</tr>
</tbody>
</table>
### Resource Description

<table>
<thead>
<tr>
<th>Resource</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Block Storage</td>
<td>Block Storage devices created along with subscription ECS instances also use the subscription billing method. After a subscription ECS instance is created, you can create subscription disks for the instance or attach pay-as-you-go disks that are separately created to the instance. For more information, see #unique_30 and #unique_31.</td>
</tr>
<tr>
<td>Public bandwidth (pay-by-bandwidth)</td>
<td>If you select pay-by-bandwidth as the billing method for network usage when you create a subscription ECS instance, the bandwidth is also billed on a subscription basis. For more information, see Billing methods of public bandwidth.</td>
</tr>
</tbody>
</table>

You can view the total price of the preceding resources in the lower-left part of the instance buy page, as shown in the following figure.

- **Total** price is the price of the following resources:
  - ECS instance
  - Cloud disks
  - Public bandwidth (pay-by-bandwidth)

**Note:**
If you select pay-by-traffic as the billing method for network usage, the total price does not include the price for public bandwidth. For more information, see Billing methods of public bandwidth.

- **Image Fees** indicates that you selected a paid image when you create the instance.

You can use the ECS TCO Calculator to analyze your cloud migration costs.

### Billing

The billing cycle is the time commitment you made when you purchased the subscription instance (based on UTC+8:00). The cycle starts from the time when the purchased subscription resources are activated or renewed (accurate to seconds) and ends at 00:00:00 the next day after the expiration date.
For example, you created a subscription ECS instance at 13:00:00 on August 9, 2019. Related resources include the ECS instance, image, and cloud disk (system disk). You select a subscription duration of one month and manually renew the instance with another one-month commitment. The subscription periods are as follows:

- The first billing cycle is from 13:00:00 on August 9, 2019 to 00:00:00 on September 10, 2019.
- The second billing cycle is from 00:00:00 on September 10, 2019 to 00:00:00 on October 10, 2019.

ECS resources are billed separately. You must pay these fees before you can use the resources. You can calculate the total price based on the configurations that you choose. The following table provides the formulas used to calculate the fee of each ECS resource.

<table>
<thead>
<tr>
<th>Resource</th>
<th>Formula</th>
<th>Unit price</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECS instance</td>
<td>Unit price of an instance type × Subscription duration</td>
<td>For more information, see <a href="#">Instance Fee</a> on the ECS Pricing tab.</td>
</tr>
<tr>
<td></td>
<td></td>
<td><img src="#" alt="Note" />: Local disks attached to an instance are billed together with the instance.</td>
</tr>
<tr>
<td>Image</td>
<td>Unit price of an image × Subscription duration</td>
<td>For more information about the price, see the buy page or Alibaba Cloud Marketplace.</td>
</tr>
<tr>
<td>Cloud disk (system disk)</td>
<td>Unit price of a disk × Disk capacity × Subscription duration</td>
<td>For more information, see <a href="#">Storage Fee &gt; System Disk</a> on the ECS Pricing tab.</td>
</tr>
<tr>
<td></td>
<td></td>
<td><img src="#" alt="Note" />: The price on the page is displayed in the USD/100 GiB/hour format. Divide it by 100 to obtain the unit price per GiB.</td>
</tr>
</tbody>
</table>
### Elastic Compute Service

#### Pricing / 3 Subscription

<table>
<thead>
<tr>
<th>Resource</th>
<th>Formula</th>
<th>Unit price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cloud disk (data disk)</td>
<td>Unit price of a disk × Disk capacity × Subscription duration</td>
<td>For more information, see <a href="#">Storage Fee &gt; Data Disk</a> on the ECS Pricing tab.</td>
</tr>
<tr>
<td><strong>Note:</strong></td>
<td></td>
<td>The price on the page is displayed in the USD/100 GiB/hour format. Divide it by 100 to obtain the unit price per GiB.</td>
</tr>
<tr>
<td>Public bandwidth (pay-by-bandwidth)</td>
<td>Unit price of bandwidth × Bandwidth value × Subscription duration</td>
<td>The bandwidth uses a tiered billing model. You can select a bandwidth value on the buy page to view the changes in fees.</td>
</tr>
<tr>
<td><strong>Note:</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

For example, you created a subscription ECS instance in China (Qingdao) with a subscription duration of three months. The following figure shows the process for calculating the price of the subscription ECS instance.

**Note:**

The price is only for reference. For more information about the exact price, visit the links in the preceding table.

![Subscription instance in China (Qingdao)](image-url)
Changes in resource status after expiration

Notice:
After an ECS instance expires, the instance may be stopped. The system may send you notifications that you have overdue payments. In this case, renew your instance to ensure service availability. If you still have problems, submit a ticket.

If the auto-renewal feature is not enabled for a subscription ECS instance, the instance stops to provide service at any time from 00:00:00 on the expiration date to 00:00:00 the next day.

Note:
You cannot enable the auto-renewal feature for an expired subscription ECS instance.

The following table describes the resource status of an ECS instance after expiration.

<table>
<thead>
<tr>
<th>Resource</th>
<th>Within 15 days after expiration</th>
<th>More than 15 days after expiration</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECS instance</td>
<td>The ECS instance is retained but cannot be used.</td>
<td>The ECS instance is released.</td>
</tr>
<tr>
<td></td>
<td><strong>Note:</strong> After an ECS instance becomes stopped, you cannot connect to the instance remotely, or access websites deployed on the instance. Service errors may occur.</td>
<td></td>
</tr>
<tr>
<td>Image</td>
<td>The image is unavailable.</td>
<td>The image is unavailable.</td>
</tr>
</tbody>
</table>
### Elastic Compute Service

#### Pricing / 3 Subscription

<table>
<thead>
<tr>
<th>Resource</th>
<th>Within 15 days after expiration</th>
<th>More than 15 days after expiration</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Block Storage</strong></td>
<td>• Cloud disks and data on the disks are retained, but the cloud disks cannot be used.</td>
<td>• Subscription disks are released and data on the disks cannot be restored.</td>
</tr>
<tr>
<td></td>
<td>• Local disks and data on the disks are retained, but the local disks cannot be used.</td>
<td><strong>Note:</strong> If you manually attach a pay-as-you-go cloud disk to a subscription instance and do not set the release mode to Release with Instance, the pay-as-you-go cloud disk stops to work.</td>
</tr>
<tr>
<td></td>
<td>• Share Block Storage devices and data on them are retained, but the devices cannot be used.</td>
<td>• Local disks are released and data on the disks cannot be restored.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Shared Block Storage devices are automatically detached.</td>
</tr>
<tr>
<td><strong>Public IP address</strong></td>
<td>• In the classic network: The public IP address is retained.</td>
<td>• In the classic network: The public IP address is released.</td>
</tr>
<tr>
<td></td>
<td>- In a VPC:</td>
<td>- In a VPC:</td>
</tr>
<tr>
<td></td>
<td>- The public IP address is retained.</td>
<td>- The public IP address is released.</td>
</tr>
<tr>
<td></td>
<td>- The EIP associated with the instance is not affected.</td>
<td>- The EIP is disassociated from the instance.</td>
</tr>
</tbody>
</table>

If the auto-renewal feature is enabled for a subscription ECS instance, but the renewal fails, the instance automatically stops to provide service at any time from 00:00:00 on the 15th day after expiration to 00:00:00 on the 16th day after expiration.

The following table describes the resource status of an ECS instance after expiration.
<table>
<thead>
<tr>
<th>Resource</th>
<th>Within 15 days after expiration</th>
<th>More than 15 days after expiration</th>
<th>More than 30 days after expiration</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECS instance</td>
<td>The ECS instance is retained and works properly.</td>
<td>The ECS instance is retained but cannot be used.</td>
<td>The ECS instance is released.</td>
</tr>
<tr>
<td></td>
<td><strong>Note:</strong> When an ECS instance works properly, you can start or stop the instance, and connect to the instance remotely from the ECS console or by using other connection methods.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Image</td>
<td>The image is available.</td>
<td>The image is unavailable.</td>
<td>The image is unavailable.</td>
</tr>
<tr>
<td></td>
<td><strong>Note:</strong> After an ECS instance becomes stopped, you cannot connect to the instance remotely, or access websites deployed on the instance. Service errors may occur.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resource</td>
<td>Within 15 days after expiration</td>
<td>More than 15 days after expiration</td>
<td>More than 30 days after expiration</td>
</tr>
<tr>
<td>-----------------</td>
<td>-------------------------------------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Block Storage</td>
<td>• Cloud disks and data on the disks are retained. The cloud disks can work properly.</td>
<td>• Cloud disks and data on the disks are retained, but the cloud disks cannot be used.</td>
<td>• Subscription disks are released and data on the disks cannot be restored.</td>
</tr>
<tr>
<td></td>
<td>• Local disks and data on the disks are retained. The local disks can work properly.</td>
<td>• Local disks and data on the disk are retained, but the local disks cannot be used.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Share Block Storage devices and data on them are retained. The devices can work properly.</td>
<td>• Share Block Storage devices and data on them are retained, but the devices cannot be used.</td>
<td></td>
</tr>
<tr>
<td>Public IP address</td>
<td>• In the classic network: The public IP address is retained.</td>
<td>• In the classic network: The public IP address is retained.</td>
<td>• In the classic network: The public IP address is released.</td>
</tr>
<tr>
<td></td>
<td>• In a VPC:</td>
<td>• In a VPC:</td>
<td>• In a VPC:</td>
</tr>
<tr>
<td></td>
<td>- The public IP address is retained.</td>
<td>- The public IP address is retained.</td>
<td>- The public IP address is released.</td>
</tr>
<tr>
<td></td>
<td>- The EIP associated with the instance is not affected.</td>
<td>- The EIP associated with the instance is not affected.</td>
<td>- The EIP is disassociated from the instance.</td>
</tr>
</tbody>
</table>
Overdue payments

If you have overdue payments under your account, the subscription ECS resources can be used properly, but you cannot purchase, renew, or upgrade instances.
4 Pay-as-you-go

This topic describes the billing and settlement rules for pay-as-you-go ECS resources. Pay-as-you-go allows you to pay for the amount of resources you actually use. You can purchase and release resources on demand, and scale up as your business grows. Pay-as-you-go helps reduce your costs by 30% to 80% compared with the investment of a traditional host.

Overview

Pay-as-you-go resources are billed based on the billing cycle and paid each hour. If you have a quota agreement with Alibaba Cloud, fees are deducted when the cumulative consumption of your account exceeds the quota. You must settle the payment at least once a month.

After creating a pay-as-you-go ECS resource, you can change its configurations. For more information, see #unique_21 and #unique_23.

You can change the billing method of pay-as-you-go ECS resources you created. For more information, see Switch the billing method from pay-as-you-go to subscription.

You can view your bills by using the following methods:

- To view the fee calculation method, see Billing.
- To understand how ECS resource status affects the billing duration, see Billing duration.

Note:

If you stop an ECS instance but do not release related resources, fees continue to generate.

- For information about settlement, see Settlement period.

Applicable resources

Currently, the pay-as-you-go billing method is available for the following ECS resources:

- ECS instances
- Images
- Disks
- Internet bandwidth (Pay-By-Bandwidth)
- Snapshots
In addition to the instance type, you must also configure the block storage, image, and network type when you create an instance. The images and cloud disks created along with the pay-as-you-go ECS instance also use the pay-as-you-go billing method. However, you can select the billing method for network usage.

Note:
After creating a pay-as-you-go ECS instance, you can attach a separately created pay-as-you-go cloud disk to the instance. For more information, see #unique_31.

Snapshots start to incur fees after you create them.

You can view the total price of the preceding resources in the lower-left part of the instance creation page.

**Billing duration**

If a pay-as-you-go ECS instance is out of service due to overdue payment, the billing of its resources is suspended. The billing resumes after you settle the overdue payment and reactivate the instance.

The following table describes the billing duration of each resource type on the prerequisite that you have no overdue payments.
<table>
<thead>
<tr>
<th>Resource</th>
<th>Billing duration</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ECS instances</strong></td>
<td>The billing duration is affected by the network type of the instance.</td>
</tr>
<tr>
<td></td>
<td>• For an ECS instance in a classic network, billing starts when the instance is created and stops when the instance is released.</td>
</tr>
<tr>
<td></td>
<td>• For an ECS instance in a VPC, the billing duration depends on whether the No Fees for Stopped Instances (VPC-Connected) feature is enabled.</td>
</tr>
<tr>
<td></td>
<td>- If this feature is not enabled, billing starts when the instance is created and stops when the instance is released.</td>
</tr>
<tr>
<td></td>
<td>- If this feature is enabled, billing starts when the instance is created or is restarted in the ECS console and stops when the instance is stopped by using the ECS console or when the instance is released. For more information, see <a href="#unique_22">No Fees for Stopped Instances (VPC-Connected)</a>.</td>
</tr>
<tr>
<td><strong>Images</strong></td>
<td>The billing starts when the instance is created and stops when the instance is released.</td>
</tr>
<tr>
<td><strong>Cloud disks (system disks)</strong></td>
<td>The billing starts when the instance is created and stops when the instance is released.</td>
</tr>
<tr>
<td><strong>Cloud disks (data disks)</strong></td>
<td>The billing starts when the data disk is created and stops when the data disk is released.</td>
</tr>
<tr>
<td><strong>Internet bandwidth (Pay-By-Bandwidth)</strong></td>
<td>The billing starts when Internet bandwidth (Pay-By-Bandwidth) is enabled and stops when Internet bandwidth is disabled or the ECS instance is released.</td>
</tr>
<tr>
<td></td>
<td>For information about how to disable Internet bandwidth, see <a href="#unique_23">#unique_23</a>.</td>
</tr>
<tr>
<td><strong>Snapshots</strong></td>
<td>The billing starts when a snapshot is created and stops when the snapshot is deleted.</td>
</tr>
</tbody>
</table>

**Notice:**

If you stop the instance by switching off its operating system, you cannot enjoy the benefits provided by the No Fees for Stopped Instances (VPC-Connected) feature.

You can purchase reserved instances to reduce your costs. For more information, see [unique_12](#unique_12).
If the fee for a pay-as-you-go ECS instance is less than USD 0.01 for the entire lifecycle of the instance, USD 0.01 is charged.

To avoid unexpected fees incurred when the active duration is exceeded, we recommend that you enable the automatic release feature. If automatic release is enabled, the billing stops when the resources are released. The stop time is accurate to seconds.

**Billing**

Pay-as-you-go ECS resources start to generate fees after being created. The resources are billed separately. You can calculate the total fee you need to pay for a certain period of time based on the configurations you choose. The following table describes the billing cycle of each ECS resource and the formula used to calculate their fees.

<table>
<thead>
<tr>
<th>Resource</th>
<th>Billing cycle</th>
<th>Formula</th>
<th>Unit price</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECS instances</td>
<td>Second</td>
<td>Unit price of the instance type × Billing duration</td>
<td>For more information, see Instance Fee on ECS Pricing.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Note: Local disks attached to an instance are billed together with the instance.</td>
</tr>
<tr>
<td>Images</td>
<td>Second</td>
<td>Image unit price × Billing duration</td>
<td>You can view the price on the purchase page and in the Alibaba image marketplace.</td>
</tr>
<tr>
<td>Cloud disks (system disks)</td>
<td>Second</td>
<td>Disk unit price × Disk capacity × Billing duration</td>
<td>For more information, choose Storage Fee &gt; System Disk on ECS Pricing.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Note: The price on the page is USD/100 GiB/hour. Divide it by 100 to obtain the unit price per GiB.</td>
</tr>
<tr>
<td>Resource</td>
<td>Billing cycle</td>
<td>Formula</td>
<td>Unit price</td>
</tr>
<tr>
<td>---------------------------</td>
<td>---------------</td>
<td>-------------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Cloud disks (data disks)</td>
<td>Second</td>
<td>Disk unit price × Disk capacity × Billing duration</td>
<td>For more information, choose Storage Fee &gt; Data Disk on ECS Pricing.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Note: The price for a pay-as-you-go disk on the page is USD/100 GiB/hour. Divide it by 100 to obtain the unit price per GiB.</td>
</tr>
<tr>
<td>Internet bandwidth</td>
<td>Second</td>
<td>Bandwidth unit price × Bandwidth value × Billing duration</td>
<td>Tiered pricing is used for fixed bandwidth. You can select a bandwidth value on the purchase page to view the changes in fees.</td>
</tr>
<tr>
<td>(Pay-By-Bandwidth)</td>
<td></td>
<td></td>
<td>For more information, see Billing methods of public bandwidth.</td>
</tr>
<tr>
<td>Snapshots</td>
<td>Hour</td>
<td>Snapshot unit price × Snapshot capacity × Billing duration</td>
<td>For more information, see Snapshot Fee on ECS pricing.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Note: For more information, see Snapshot billing.</td>
</tr>
</tbody>
</table>

**Note:**
- If the billing cycle is one second, the fee generated each second is added on to the bill. If an hourly price is displayed, you can divide the price by 3600 to obtain the price per second.
- If the billing cycle is one hour, the fee generated every hour is added on to the bill. A usage duration less than an hour is calculated as an hour.

Assume that you created a pay-as-you-go ECS instance in the China (Qingdao) region and the resource usage duration is from 11:00:00 to 12:00:00 on August 8, 2019. with a subscription duration of three months.

**Note:**
The price is only for reference. For the exact price, visit the links in the preceding table.
## Settlement period

The fees for pay-as-you-go resources are paid each hour. These fees are paid together with the fees incurred by other postpaid products under your account. If you have a quota agreement with Alibaba Cloud, fees are deducted when the cumulative consumption of your account exceeds the quota. In the case that the cumulative monthly consumption of your account is less than the quota, fees are deducted on the first day of the following month.

- If your default payment method is bank card, the quota is USD 1,000.
- If your default payment method is PayPal or Paytm (India) account, the quota depends on your ECS resource usage.

Fee deduction occurs on three days: due date (T), T+7, and T+14. In fee deduction fails on the due date (T), the system attempts to deduct fees again on the day T+7 and day T+14. If fee deduction fails for these three times, the instance goes out of service on the day T+15.

The resource status changes as follows in the event of an overdue payment:

1. Within 15 days after the overdue payment, you can use existing ECS resources but cannot purchase new ECS instances, upgrade the instance, or renew the instance.
2. Within 15 days after the instance is out of service, you must submit a ticket to settle the overdue payment and then reactivate the instance. Otherwise, the instance will be automatically released. For information about resource status, see Resource status when an ECS instance is out of service.
3. More than 15 days after the instance is out of service, the pay-as-you-go ECS instances are released.
Resource status when an ECS instance is out of service

⚠️ Notice:
The system may send you notifications that you have overdue payments. When this occurs, please clear all overdue payments to avoid instances being released. Please note that your instances may be released at a system-selected time after the payment due date. If you still have problems, submit a ticket.

If all three deductions fail, the ECS instance is out of service. The following table describes the resource status if your ECS instance is out of service.

<table>
<thead>
<tr>
<th>Resource</th>
<th>Within 15 days after out-of-service</th>
<th>More than 15 days after out-of-service</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECS instances</td>
<td>The ECS instance is retained but it is out of service. When a pay-as-you-go ECS instance is Out of service, it enters the Expired state and the billing stops. After the instance stops providing services, you cannot remotely connect to the instance, or access websites deployed on the instance. Service errors will occur.</td>
<td>The ECS instance is released. Note: If your ECS instance is released due to overdue payment, Alibaba Cloud will send you an email notification.</td>
</tr>
<tr>
<td>Images</td>
<td>Images are unavailable.</td>
<td>Images are unavailable.</td>
</tr>
<tr>
<td>Resource</td>
<td>Within 15 days after out-of-service</td>
<td>More than 15 days after out-of-service</td>
</tr>
<tr>
<td>--------------------</td>
<td>-----------------------------------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Block storage</td>
<td>• Cloud disks and data on them are retained, but the cloud disks cannot be used.</td>
<td>• Cloud disks are released and data on them cannot be restored.</td>
</tr>
<tr>
<td></td>
<td>• Local disks and data on them are retained, but the local disks cannot be used.</td>
<td><strong>Note:</strong> Cloud disks (data disks) created with pay-as-you-go ECS instances and pay-as-you-go cloud disks (data disks) created separately on the Disks page of the ECS console are released, regardless whether they are attached to the instance.</td>
</tr>
<tr>
<td></td>
<td><strong>Note:</strong> If the performance of cloud disks or local disks is limited, they cannot properly process I/O read and write requests. This affects the normal running of the ECS instance mounted to these disks, such as excessive time needed to perform operations and unpredictable power-off or restart failures for some operating systems.</td>
<td>• Local disks are released and data on them cannot be restored.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Shared block storage devices are automatically detached, but data on them is retained.</td>
</tr>
<tr>
<td>IP addresses</td>
<td>• Instances in classic networks: Public IP addresses are retained.</td>
<td>• Instances in classic networks: Public IP addresses are released.</td>
</tr>
<tr>
<td></td>
<td>• Instances in a VPC</td>
<td>• Instances in a VPC</td>
</tr>
<tr>
<td></td>
<td>- Public IP addresses are retained.</td>
<td>- Public IP addresses are released.</td>
</tr>
<tr>
<td></td>
<td>- EIPs associated with the instances are not affected.</td>
<td>- EIPs are disassociated from instances.</td>
</tr>
<tr>
<td>Snapshots</td>
<td>All snapshots are retained but automatic snapshots cannot be created.</td>
<td>All snapshots will be deleted except for those used to create cloud disks or custom images.</td>
</tr>
</tbody>
</table>
5 No Fees for Stopped Instances (VPC-Connected)

The No Fees for Stopped Instances (VPC-Connected) feature allows some ECS resources to be recycled while retaining ECS instances, reducing upkeep costs. It does not stop billing for all resources.

Prerequisites

The No Fees for Stopped Instances (VPC-Connected) feature is applicable to ECS instances that meet the following requirements:

• The network type of the instances is VPC.
• The instances are pay-as-you-go instances.

You can change the billing method of an instance from subscription to pay-as-you-go. For more information, see Switch the billing method from Subscription to Pay-As-You-Go.

• The instance family is not bound with local disks.

Instance families that are bound with local disks, such as d1, d1ne, i1, i2, i2g, and gn5, do not support No Fees for Stopped Instances (VPC-Connected). For more information, see the Local storage (GiB) column in #unique_5.

The No Fees for Stopped Instances (VPC-Connected) feature is disabled by default. For information about how to enable this feature, see the Enable the No Fees for Stopped Instances (VPC-Connected) feature section.

Applicable resources

This feature recycles some resources while retaining ECS instances to reduce the overall costs.

• The No Fees for Stopped Instances (VPC-Connected) feature is applicable to the following resources:
  - ECS instances (including vCPUs and memory)
  - Fixed public IP addresses and bandwidth
The No Fees for Stopped Instances (VPC-Connected) feature is not applicable to some ECS resources. The following list provides some examples of these resources:

- System disks
- Data disks attached to ECS instances
- Elastic IP addresses (EIPs) and bandwidth
- Images
- Snapshots

**Triggering conditions**

After the No Fees for Stopped Instances (VPC-Connected) feature is enabled, it is triggered only when the instance is stopped by one of the following methods:

- Operations in the ECS console. For more information, see #unique_33.
- API requests initiated by using Alibaba Cloud CLI or SDKs. For more information, see #unique_34.
- Overdue payments.

**Notice:**

If you stop an ECS instance by running a command from within the operating system, the No Fees for Stopped Instances (VPC-Connected) feature is not triggered.

If an ECS instance is in the start period, the No Fees for Stopped Instances (VPC-Connected) feature cannot be triggered. The start period is the time it takes for a new instance that is started for the first time to enter the Running state from the Stopped state. For more information, see #unique_35.

**Impacts**

After the No Fees for Stopped Instances (VPC-Connected) feature is triggered for an ECS instance, the ECS instance (including vCPUs and memory) and its fixed public IP address are recycled. These resources no longer incur fees. However, the following risks exist:

- The resources that are stopped are recycled. The instance may fail to restart due to insufficient resources. In this case, you can try again later or switch to another instance type. For more information, see #unique_21.

**Note:**
We recommend that you start the instance in advance to avoid service interruptions due to insufficient resources.

- Because the fixed public IP address has been recycled, the public IP address may change after the instance is restarted. However, the private IP address remains unchanged.

**Note:**
If your application depends on a specific public IP address, we recommend that you disable the No Fees for Stopped Instances (VPC-Connected) feature or convert the fixed public IP address to an EIP. For more information, see Disable the No Fees for Stopped Instances (VPC-Connected) feature or #unique_36.

- For burstable instances, the current CPU credit balance is cleared and the instances stop earning CPU credits. After you restart the burstable instances, they begin to earn CPU credits again. For more information about CPU credits of burstable instances, see #unique_37/unique_37_Connect_42_section_h4n_jgr_6b4.

In some cases, you may need to restart your instances multiple times in a short amount of time. We recommend that you disable the No Fees for Stopped Instances (VPC-Connected) feature to ensure that the instances can be started and run normally. The scenarios are as follows:

- **Replace the system disk (#unique_39)**
- **#unique_40 (#unique_41)**
- **#unique_42 (#unique_43)**

For an instance that is stopped due to an overdue payment, if you clear the overdue payment within the specified time and reactivate the ECS instance, whether the fixed public IP address is retained based on the status of the No Fees for Stopped Instances (VPC-Connected) feature:

- When the feature is enabled: After the instance is stopped due to an overdue payment, it enters the No Fees for Stopped Instances state. Its vCPUs, memory, and fixed public IP address are automatically released and the fixed public IP address may change after the instance is reactivated.
- When the feature is disabled: After the instance is stopped due to an overdue payment, the billing of the instance is stopped. But the fixed public IP address is retained and remains unchanged after the instance is reactivated.

**Note:**
Enable the No Fees for Stopped Instances (VPC-Connected) feature

The No Fees for Stopped Instances (VPC-Connected) feature is disabled by default to avoid unexpected impacts on your applications. Enable the No Fees for Stopped Instances (VPC-Connected) feature after you make sure that it is suitable for your applications. For more information, see Impacts.

The following operations describe how to enable the No Fees for Stopped Instances (VPC-Connected) feature for all applicable instances under your account and the instances will enter the No Fees for Stopped Instances state after they are stopped. For more information, see Prerequisites.

1. Log on to the ECS console.

2. In the Common Settings section of the Overview page, click Custom Settings.

3. Turn on No Fees for Stopped Instances (VPC-Connected).

4. In the message that appears, read the note and click OK.

5. In the Custom Settings dialog box, click OK.

Disable the No Fees for Stopped Instances (VPC-Connected) feature

The following operations describe how to disable the No Fees for Stopped Instances (VPC-Connected) feature for all applicable instances under your account and the instances will not enter the No Fees for Stopped Instances state after they are stopped.

If an ECS instance is in the No Fees for Stopped Instances state, its vCPUs, memory, and fixed public IP address are already recycled. Therefore, after the No Fees for Stopped Instances (VPC-Connected) feature is disabled, no fees are charged for the vCPUs and memory until these resources are reassigned after the instance is restarted. The status of the IP address is subject to the type of the IP address.
• If the instance uses a fixed public IP address before it is stopped, a new public IP address is assigned to the instance.
• If the ECS instance is associated with an EIP before it is stopped, the EIP remains unchanged.

1. Log on to the ECS console.

2. In the Common Settings section of the Overview page, click Custom Settings.

3. Turn off No Fees for Stopped Instances (VPC-Connected).

4. In the message that appears, read the note and click OK.

5. In the Custom Settings dialog box, click OK.

Configure a single instance to stop incurring fees after it is stopped

Regardless of whether the No Fees for Stopped Instances (VPC-Connected) feature is enabled, you can still configure the Stop mode when you stop a single instance. For more information, see #unique_33.

• If you select Retain Instance and Continue Charging After Instance Is Stopped, the instance enters the Keep Stopped Instances and Continue Billing state.
• If you select No Charges After Instance Is Stopped, the instance enters the No Fees for Stopped Instances state.
### Stop Instance

The operation will be performed on the selected **1 Instances**. Are you sure you want to proceed?

**Stop Mode:**
- Stop
- Force Stop

**Stopped By:**
- Retain Instance and Continue Charging After Instance Is Stopped
- No Charges After Instance Is Stopped

The operation will be performed on the selected **1 Instances**. The instances will not be billed after being stopped.

---

**Reference**

You can also use the scheduled startup and shutdown feature of Operation Orchestration Service (OOS) to automatically manage the startup and shutdown time of multiple ECS instances. You can combine this feature with the No Fees for Stopped Instances (VPC-Connected) feature to reduce costs. For more information, see #unique_44.
6 Renew instances

6.1 Renewal overview

When a subscription instance expires, its operation may be affected. To continue using the instance, you must renew it within the designated period. Otherwise, instance resources such as vCPUs, memory, and disks are released and their stored data lost permanently. This topic describes the renewal feature of ECS instances.

Overview

The renewal feature is applicable only to subscription instances. Pay-as-you-go instances do not need to be renewed, but you must ensure that you have sufficient balance in your linked bank card, PayPal, or Paytm (India) account to cover the related costs.

If you renew the instance before it expires, the instance continues to work normally and retains all of its resources. For information about statuses of a subscription instance after it expires, see Subscription.

You cannot cancel a renewal order for a subscription instance after the payment is made. The following section describes functions related to instance renewal.

- Manual renewal: You can manually renew the instance in the ECS console at any time before the instance is automatically released. For more information, see Manually renew an instance.

- Auto-renewal: After the auto-renewal feature is enabled, the instance is automatically renewed before it expires. You can enable this feature to reduce management costs and prevent instances from being automatically released. For more information, see Enable auto-renewal.

- Renewal and configuration downgrade: If current configurations of the ECS instance exceed your requirements, you can downgrade configurations when you renew the instance to minimize costs. New configurations take effect starting from the next billing cycle. For more information, see Downgrade the configurations of an instance during renewal.

- Non-renewal: You can choose not to renew an instance upon expiration. In this case, the instance is stopped upon expiration and you will receive an expiration notification only once. You can modify the renewal settings at any time before the instance is stopped.
The following table lists the differences among three renewal methods.

<table>
<thead>
<tr>
<th>Renewal method</th>
<th>Configuration change</th>
<th>Renewal time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manual renewal</td>
<td>Not supported</td>
<td>Before the ECS instance is automatically released.</td>
</tr>
<tr>
<td>Auto-renewal</td>
<td>Not supported</td>
<td>From the third day before the instance expires.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>If automatic payment deduction fails on the first attempt, Alibaba Cloud will continue to deduct the payment until the deduction succeeds or the instance expires. Alibaba Cloud renews the instance on the following days:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• The third day and the first day before expiration</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• The expiration day</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• The seventh day and fifteenth day after expiration</td>
</tr>
<tr>
<td>Renewal method</td>
<td>Configuration change</td>
<td>Renewal time</td>
</tr>
<tr>
<td>----------------</td>
<td>----------------------</td>
<td>--------------</td>
</tr>
</tbody>
</table>
| Renewal and configuration downgrade | Supported. | • Within the 15 days before the ECS instance expires.  
• Within the 15 days after the ECS instance expires but before it is automatically released.  
For example, if you have a subscription instance that is set to expire on April 30, 2019, you can renew the instance and downgrade the instance configurations from April 16, 2019 to April 30, 2019. If you fail to renew the instance during this period, the instance enters the Expired and Being Recycled state upon expiration. You can still renew the instance and downgrade the instance configurations from May 1, 2019 to May 15, 2019. If you do not renew the instance during this period, it is automatically released on May 16, 2019. |

### Manual renewal

Manual renewal only renews the base public bandwidth of an instance and not its temporarily upgraded public bandwidth. For information about how to upgrade the base public bandwidth, see #unique_19.

You can select one of the following renewal cycles when you manually renew an instance:

- One month, two months, three months, four months, five months, six months, seven months, eight months, and nine months
- One year
The status of a subscription ECS instance after expiration depends on whether the auto-renewal feature is enabled. The following table describes the effect of manual renewal on instances in different instance statuses:

<table>
<thead>
<tr>
<th>Auto-renewal enabled</th>
<th>Time period after expiration</th>
<th>Instance status</th>
<th>Effect of manual renewal</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>Within the 15 days after expiration</td>
<td>The instance is stopped.</td>
<td>If an instance is manually renewed, its next billing cycle starts from the day that the instance is renewed. For example, if your instance was stopped at 00:00:00 on May 10, 2017, but you renewed it for one month at 08:09:35 on May 23, 2017, the new billing cycle of the instance is from 08:09:35 on May 23, 2017 to 00:00:00 on June 24, 2017.</td>
</tr>
<tr>
<td></td>
<td>15-29 days after expiration</td>
<td>The instance and its resources are released or unbound.</td>
<td>Manual renewal cannot be performed.</td>
</tr>
<tr>
<td></td>
<td>30 days after expiration</td>
<td>The instance and its resources were released or unbound.</td>
<td>Manual renewal cannot be performed.</td>
</tr>
<tr>
<td>Auto-renewal enabled</td>
<td>Time period after expiration</td>
<td>Instance status</td>
<td>Effect of manual renewal</td>
</tr>
<tr>
<td>----------------------</td>
<td>-----------------------------</td>
<td>----------------</td>
<td>--------------------------</td>
</tr>
<tr>
<td>Yes</td>
<td>Within the 15 days after expiration</td>
<td>The instance is working properly.</td>
<td>If an instance is manually renewed, its next billing cycle starts from the day that it expired. For example, if your instance is set to expire at 00:00:00 on April 25, 2017, but you renewed it for one month on May 9, 2017, the new billing cycle of the instance is from 00:00:00 on April 25, 2017 to 00:00:00 on May 25, 2017.</td>
</tr>
<tr>
<td></td>
<td>15-29 days after expiration</td>
<td>The instance is stopped.</td>
<td>If an instance is manually renewed, its next billing cycle starts from the day that the instance is renewed. For example, if your instance was stopped at 00:00:00 on May 10, 2017, but you renewed it for one month at 08:09:35 on May 23, 2017, the new billing cycle of the instance is from 08:09:35 on May 23, 2017 to 00:00:00 on June 24, 2017.</td>
</tr>
<tr>
<td></td>
<td>30 days after expiration</td>
<td>The instance and its resources are released or unbound.</td>
<td>Manual renewal cannot be performed.</td>
</tr>
</tbody>
</table>

**Auto-renewal**

You can enable auto-renewal on the Create Instance, Instances, or Renew page. Auto-renewal cannot be enabled for subscription ECS instances that expired. A subscription
instance will be automatically renewed for a specific period of time if auto-renewal is enabled for the instance on one of the following pages:

- When you enable auto-renewal on the Create Instance page:
  - If the instance subscription is one month, two months, three months, or six months long, ECS automatically renews the instance for one month when the subscription ends until you disable auto-renewal.
  - If the instance subscription is one year long, ECS automatically renews the instance for one year when the subscription ends until you disable auto-renewal.
- When you enable auto-renewal for existing instances on the Instances page, you can set the auto-renewal duration to one month or one year. You can also modify the auto-renewal duration for an existing instance on the Instances page.
- When you enable auto-renewal for existing instances on the Renew page, you can set the auto-renewal duration to one month, two months, three months, six months, one year, two years, or three years. You can also modify the auto-renewal duration for an existing ECS instance on the Renew page.

When the subscription period ends, ECS will renew the instance for the period that you selected until you disable auto-renewal. For example, if you select three months, ECS will renew the instance for three months each time before it expires until you disable auto-renewal.

After auto-renewal is enabled, the instance will be automatically renewed before it expires.

- Alibaba Cloud sends an email reminder on the seventh day before the instance expires (T-7).
- Alibaba Cloud deducts the payment for the next billing cycle from your bank card, PayPal, or Paytm (India) account on the third day before the instance expires (T-3). If the payment deduction fails, Alibaba Cloud will attempt to deduct the payment again up to four times on the following days until the deduction succeeds: the first day before
the instance expires (T-1), the day the instance expires (T), the seventh day after the instance expires (T+6), and the fifteenth day after the instance expires (T+14).

- Starting from 08:00:00 (UTC+8) on the deduction day, Alibaba Cloud performs auto-renewal in succession on all ECS instances that are set to expire. This means that the actual renewal time can be anytime between 08:00:00 (UTC+8) and 18:00:00 (UTC+8).
- If the payment is deducted before T+14, the next billing cycle of the instance starts on the day the instance is renewed.
- If the instance fails to be renewed during the five preceding deduction attempts, the instance will enter the Stopped state on T+15. After the instance enters the Stopped state, you cannot log on to or connect to the instance. In this case, you must manually renew the instance. If the instance is not manually renewed within the 15 days after it enters the Stopped state, the instance is released and its data lost permanently.
- If the auto-renewal payment deduction fails, Alibaba Cloud will send you an email reminder. To avoid instances being unexpectedly stopped, check whether you have received a reminder.
- If you have completed manual renewal before auto-renewal payment deduction is made, auto-renewal will not be performed for the current billing cycle.

Assume that you purchased an instance at 10:00:00 on November 8, 2017, with a subscription period of one month and auto-renewal enabled. The instance is set to expire at 00:00:00 on December 9, 2017. The following figure shows the actions performed in the first auto-renewal round. For information about status changes that occur after subscription resources expire, see Subscription.
Renewal and configuration downgrade

You can use the renewal and configuration downgrade feature to complete the following tasks:

- Downgrade the instance type of a subscription instance.
- Change the billing method of data disks from subscription to pay-as-you-go.
- Change the billing method for Internet usage.
- Adjust the public bandwidth.

You can select one of the following renewal durations when you renew and downgrade configurations of an instance:

- One month, two months, three months, four months, five months, six months, seven months, eight months, and nine months
- One year

When you use the renewal and configuration downgrade feature, take note of the following items:

- After the instance is renewed and its configurations are downgraded, the new configurations take effect starting from the next billing cycle. Current configurations continue until the end of the current billing cycle.
If you perform the following operations during the renewal and configuration downgrade, you must restart the instance within the first seven days of the next billing cycle for new configurations to take effect. If you restart the instance on the seventh day of the new billing cycle, the instance continues to use the original configurations for the first six days.

![Notice]
Notice:
You must restart an ECS instance by using the ECS console or by calling the RebootInstance operation. Restarting the instance from within the operating system will not work.

- Change the instance type.
- Change the public bandwidth value of a classic network-type instance from 0 Mbit/s to a non-zero value for the first time.

After you renew an instance and downgrade the instance configurations, you cannot perform the following operations within the rest of the current billing cycle:

- #unique_19
- #unique_29
- #unique_48
- #unique_49

### 6.2 Manually renew an instance

This topic describes how to manually renew a subscription instance. Before a subscription instance is automatically released, you can manually renew the instance to extend its service duration.

**Context**

Manual renewal only renews the basic Internet bandwidth of an instance, but not its temporarily upgraded Internet bandwidth. For information about how to upgrade the basic Internet bandwidth, see #unique_19.

Options for renewal duration vary based on the number of instances that you select for renewal. For more information, see the purchase page.

**Renew one instance**

1. Log on to the ECS console.
2. In the left-side navigation pane, choose **Instances & Images > Instances**.

3. In the top navigation bar, select a region.

4. Find the instance you want to renew and click **Renew** in the **Actions** column.

5. Select a value for the renewal duration.

6. Select ECS Terms of Service and click **Create Order**.

7. Follow the instructions to complete the payment.

### Renew multiple instances

1. Log on to the **ECS console**.

2. In the left-side navigation pane, choose **Instances & Images > Instances**.

3. In the top navigation bar, select a region.

4. Select multiple ECS instances you want to renew.

5. At the bottom of the page, click **Renew**.

6. On the page that appears, click **Batch Change**.

7. Select a renewal duration for the instances, and click **OK**.

8. Select ECS Terms of Service and click **Create Order**.

9. Follow the instructions to complete the payment.

### Related topics

#unique_50

### 6.3 Enable auto-renewal

Compared with manual renewal, auto-renewal helps minimize management costs and prevent service interruptions of ECS instances if you fail to renew the instances. This topic describes how to enable the auto-renewal feature.

**Context**

After auto-renewal is enabled, the instance will be automatically renewed before it expires.

- Alibaba Cloud sends an email reminder on the seventh day before the instance expires (T-7).
- Alibaba Cloud deducts the payment for the next billing cycle from your bank card, PayPal, or Paytm (India) account on the third day before the instance expires (T-3). If the payment deduction fails, Alibaba Cloud will attempt to deduct the payment again up to four times on the following days until the deduction succeeds: the first day before
the instance expires (T-1), the day the instance expires (T), the seventh day after the instance expires (T+6), and the fifteenth day after the instance expires (T+14).

- Starting from 08:00:00 (UTC+8) on the deduction day, Alibaba Cloud performs auto-renewal in succession on all ECS instances that are set to expire. This means that the actual renewal time can be anytime between 08:00:00 (UTC+8) and 18:00:00 (UTC+8).
- If the payment is deducted before T+14, the next billing cycle of the instance starts on the day the instance is renewed.
- If the instance fails to be renewed during the five preceding deduction attempts, the instance will enter the Stopped state on T+15. After the instance enters the Stopped state, you cannot log on to or connect to the instance. In this case, you must manually renew the instance. If the instance is not manually renewed within the 15 days after it enters the Stopped state, the instance is released and its data lost permanently.
- If the auto-renewal payment deduction fails, Alibaba Cloud will send you an email reminder. To avoid instances being unexpectedly stopped, check whether you have received a reminder.
- If you have completed manual renewal before auto-renewal payment deduction is made, auto-renewal will not be performed for the current billing cycle.

For more information about the fund deduction process of auto-renewal, see Renewal overview.

Enable auto-renewal on the Create Instance page

You can enable auto-renewal on the Create Instance page, as shown in the following figure. For more information about how to create an ECS instance, see #unique_51.

Enable auto-renewal on the Instances page

On the Instances page, you can enable auto-renewal for one or more ECS instances or change the renewal period.

1. Log on to the ECS console.
2. In the left-side navigation pane, choose Instances & Images > Instances.
3. In the top navigation bar, select a region.
4. Select a method to enable auto-renewal.

- Enable auto-renewal for one ECS instance: Find the instance and choose More > Instance Settings > Configure Auto-renewal in the Actions column.
- Enable auto-renewal for one or more ECS instances: Select the instances. In the lower part of the instances list, choose More > Instance Settings > Configure Auto-renewal.

5. In the Configure Auto-renewal dialog box that appears, turn on Auto-renewal and set Renewal Duration. Click OK.

**Enable auto-renewal on the Renew page**

On the Renew page, you can enable auto-renewal for one or more ECS instances or change the renewal period.

1. Log on to the ECS console.
2. In the top navigation bar, choose Billing > Renew.
3. In the left-side navigation pane, click Elastic Compute Service.
4. Click the Manual tab.

If the nonrenewal option is set for some instances, click the Nonrenewal tab to modify the configuration.

5. Select a method to enable auto-renewal.

- Enable auto-renewal for one ECS instance: Find the instance and click Enable Auto Renewal in the Actions column.
- Enable auto-renewal for one or more ECS instances: Select the instances. In the lower part of the instances list, click Enable Auto Renew.


Click the Auto tab. The previously selected instances are displayed in the list, indicating that auto-renewal is enabled.

**6.4 View auto-renewal status**

If the auto-renewal is enabled for a subscription instance, the instance is automatically renewed before it expires. This topic describes how to view the auto-renewal status of an ECS instance.

**View the auto-renewal status of an ECS instance on the Instances page**

1. Log on to the ECS console.
2. In the left-side navigation pane, choose **Instances & Images > Instances**.

3. In the top navigation bar, select a region.

4. Find the ECS instance and view its auto-renewal status in the **Automatic Renewal** column.

   If a renewal period (such as **1 month**) is displayed in the **Automatic Renewal** column, auto-renewal is enabled for the instance.

**Note:**

If the **Automatic Renewal** column is not displayed, click in the upper-right corner, select **Automatic Renewal**, and click **OK**.

**View the auto-renewal status of an ECS instance on the Billing Management page**

1. Log on to the **ECS console**.
2. In the top navigation bar, choose **Billing Management > Renew**.
3. In the left-side navigation pane, click **Elastic Compute Service**.
4. Click the **Auto-Renew** tab.

   If the ECS instance is listed on the **Auto-Renew** tab, the auto-renewal feature is enabled for the instance.

**6.5 Disable auto-renewal**

If you do not need the instance to be automatically renewed when its current billing cycle ends, we recommend that you disable the auto-renewal feature in advance. If auto-renewal is enabled, the system automatically attempts to deduct fees from your account from the third day before the instance expires. Disable auto-renewal before the fund deduction if needed.

**Context**

When you disable auto-renewal, you can set the Nonrenewal function.

- If you do not select Nonrenewal for an instance, the instance is manually renewed through **Manual Renewal**.
- If you select **Nonrenewal** for an instance, the instance will not be renewed upon expiration. You can manually renew the ECS instance before it expires. However, the ECS
instance is stopped immediately after it expires. Before that, you will be reminded only once to change your selection.

Disable auto-renewal on the Instances page

1. Log on to the ECS console.
2. In the left-side navigation pane, choose Instances & Images > Instances.
3. In the top navigation bar, select a region.
4. Select a method to disable auto-renewal.
   - Disable auto-renewal for one ECS instance: Find the instance and choose More > Instance Settings > Configure Auto-renewal in the Actions column.
   - Disable auto-renewal for one or more ECS instances: Select the instances. In the lower part of the instances list, choose More > Instance Settings > Configure Auto-renewal.
5. In the Configure Auto-renewal dialog box that appears, turn off Auto-renewal and choose whether to select Not Renew. Click OK.

Enable manual renewal on the Renew page

1. Log on to the ECS console.
2. In the top navigation bar, choose Billing > Renew.
3. In the left-side navigation pane, click Elastic Compute Service.
4. Click the Auto-Renew tab.
5. Select a method to enable manual renewal.
   - Enable manual renewal for one ECS instance: Find the instance and click Modify Auto-Renew in the Actions column.
   - Enable manual renewal for one or more ECS instances: Select the instances. In the lower part of the instances list, click Edit Auto Renewal.
6. Select Disable Auto-Renew. Click OK.
   Click the Manual tab. The previously selected instances are displayed in the list, indicating that manual renewal is enabled.
6.6 Downgrade the configurations of an instance during renewal

This topic describes how to downgrade the configurations of a subscription instance when you renew the instance. The new configurations take effect starting from the next billing cycle. The original configurations remain unchanged for the rest of the current billing cycle.

Context

You can use the renewal and configuration downgrade feature to complete the following tasks:

- Downgrade the instance type of a subscription instance.
- Change the billing method of data disks from subscription to pay-as-you-go.
- Change the billing method for Internet usage.
- Adjust the public bandwidth.

When you use the renewal and configuration downgrade feature, take note of the following items:

- After the instance is renewed and its configurations are downgraded, the new configurations take effect starting from the next billing cycle. Current configurations continue until the end of the current billing cycle.
- If you perform the following operations during the renewal and configuration downgrade, you must restart the instance within the first seven days of the next billing cycle for new configurations to take effect. If you restart the instance on the seventh day of the new billing cycle, the instance continues to use the original configurations for the first six days.
  - Change the instance type.
  - Change the public bandwidth value of a classic network-type instance from 0 Mbit/s to a non-zero value for the first time.
- After you renew an instance and downgrade the instance configurations, you cannot perform the following operations within the rest of the current billing cycle:
  - #unique_19
  - #unique_29
  - #unique_48
  - #unique_49
Procedure

1. Log on to the ECS console.
2. In the left-side navigation pane, choose Instances & Images > Instances.
3. In the top navigation bar, select a region.
4. Find the target subscription instance. In the Actions column, click Upgrade/Downgrade.
5. In the Upgrade/Downgrade Wizard dialog box, select Renewal and Downgrade and click Continue.
6. On the Renewal and Downgrade page, complete the following operations:
   a) Select an instance type.
      The instance types to which you can downgrade the instance type of the target instance are displayed on the page.
   b) Set the instance restart time.
      This setting is required only when you change instance types. The restart time cannot be later than the seventh day of the next billing cycle. We recommend that you set the restart time to a point in time during off-peak hours.
   c) Optional: Set public bandwidth.

<table>
<thead>
<tr>
<th>Current billing method</th>
<th>Supported operation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pay-By-Bandwidth</td>
<td>• Reduce the bandwidth value.</td>
</tr>
<tr>
<td></td>
<td>Reducing the bandwidth value to 0 Mbit/s has the following impacts on public IP addresses:</td>
</tr>
<tr>
<td></td>
<td>- For classic network-type ECS instances, public IP addresses will not be changed.</td>
</tr>
<tr>
<td></td>
<td>- For VPC-type ECS instances, public IP addresses are released when the next billing cycle begins.</td>
</tr>
<tr>
<td></td>
<td>• Change the billing method to Pay-By-Traffic and set the peak bandwidth.</td>
</tr>
<tr>
<td>Current billing method</td>
<td>Supported operation</td>
</tr>
<tr>
<td>------------------------</td>
<td>-----------------------------------</td>
</tr>
<tr>
<td>Pay-By-Traffic</td>
<td>You can set the peak bandwidth.</td>
</tr>
</tbody>
</table>

d) Optional: Change the billing method of data disks from subscription to pay-as-you-go.

   If the billing method does not change, the data disks and the instance will have the same billing cycle starting on the next billing cycle.

e) Set the renewal duration.

7. Select ECS Service Terms, and then click Create Order.

8. Complete the payment.
7 Switch the billing method from pay-as-you-go to subscription

This topic describes how to switch the billing method of your instance from pay-as-you-go to subscription in the ECS console. After you create a pay-as-you-go instance, you can convert its billing method to subscription to have resource reservation and a discounted rate.

Prerequisites
The ECS instance whose billing method you want to switch must meet the following requirements:

• The instance belongs to your account.
• The instance is of none of the following instance types:
  - Instance types in Generation I instance families: t1, s1, s2, s3, m1, m2, c1, and c2.
  - Instance types in the n1, n2, and e3 instance families.

  Note:
  For more information about these instance types, see #unique_54.

• The instance cannot be a preemptible instance.
• You have no unpaid order to switch the billing method of the instance.

  If you have an unpaid order to switch the billing method of the instance, you must cancel the unpaid order and then place another order to switch the billing method.

• Automatic release is not set for the instance.

  If automatic release has been set for an instance, you must disable the automatic release configuration and then switch the billing method. For more information, see #unique_18/unique_18_Connect_42_section_gj0_lif_7ma.

• The instance is in the Running or Stopped state.

  Example: An order to switch the billing method has been placed when the ECS instance is in the Running or Stopped state. However, the instance status changed when the payment was attempted. The preceding requirement is not met. The order fails and the billing method does not change. You can go to the Billing Management console and pay for the order when the instance is in the Running or Stopped state again.
Context
You can switch the billing method of a maximum of 20 instances from pay-as-you-go to subscription at a time.

Procedure
1. Log on to the ECS console.
2. In the left-side navigation pane, choose Instances & Images > Instances.
3. In the top navigation bar, select a region.
4. Select one or more pay-as-you-go instances. Click Switch to Subscription under the instance list.
5. On the Switch to Subscription page, click Batch Change.
6. In the dialog box that appears, configure the parameters including:
   a) Duration: You can set the length of service time for the subscription instance. Instances whose billing methods are converted at the same time must have the same length of service time.
   b) Data disk: If pay-as-you-go data disks are attached to the selected instances, you can set whether to also switch the billing method of the disks to subscription.
7. Click OK.
8. Complete the payment as prompted.
8 Switch the billing method from Subscription to Pay-As-You-Go

This topic describes how to switch the billing method from Subscription to Pay-As-You-Go. After you create a Subscription instance, you can convert its billing method to Pay-As-You-Go if you want to pay only for the actual usage of your resources.

Prerequisites
The instance whose billing method is to be switched is in the Running or Stopped state.

Context
Whether you can convert the billing method is determined by your ECS instance resource usage.

Before converting the billing method, note that:

- The billing method conversion applies to the following resources:
  - System disk
  - The Subscription data disks created for the instance when the instance is created
  - Manually created Subscription disks for the instance after the instance is created
- The billing method of public bandwidth is unchanged.
- After the billing method is converted, the duration of usage offered for reasons such as the ICP filing, failure, or IDC migration is automatically invalidated.

The conversion of the billing method may result in a refund. Note that:

- Each account is limited by a maximum monthly refund amount. For more information, see the conversion page. If the monthly limit is reached, you cannot claim additional refunds. The remaining amount will be automatically cleared on the first day of the next month.

To calculate the refund amount resulting from billing method conversion, the calculation uses the number of vCPUs and the remaining hours in the current billing cycle. For example, 1 refund unit = 1 vCPU × 1 hour.

Assume that you have purchased a Subscription instance with four vCPUs for six months. Four months later, you convert the billing method to Pay-As-You-Go. In this case, the refund amount for this instance is calculated based on the formula: Refund amount = 4 (vCPUs) × 60 (remaining days) × 24 (hours/day) = 5760 (refund amount).
• If the instance involves renewal or upgrade orders that have not taken effect, a full refund will be made. If orders have already taken effect, only a partial refund will be made.

After conversion, make sure your account has sufficient funds to pay the bill. Otherwise, overdue payments will affect the running of your services. If you no longer require the instance, you can set it to auto release or release it manually. For more information, see #unique_18.

Procedure

1. Log on to the ECS console.
2. In the left-side navigation pane, choose Instances & Images > Instances.
3. In the top navigation bar, select a region.
4. Find the relevant instance. In the Actions column, choose More > Configuration Change > Switch to Pay-As-You-Go.
5. On the conversion page, read the notes and confirm you agree to the ECS Terms of Service.
6. Click Switch.

Result

After the billing method is converted, you can go to the ECS console to view the billing method of the instance:

• On the Instances page, the Billing Method has been changed to Pay-As-You-Go.
• Click the instance ID to go to the Instance Details page. In the left-side navigation pane, click Disks. The Billing Method of the system disk and data disks (if any) of the instance have changed to Pay-As-You-Go.
9 Change the billing method of a subscription disk

You can use the downgrade feature to change the billing method of a disk from subscription to pay-as-you-go.

Prerequisites

- The billing method of a subscription disk can be changed to pay-as-you-go only when it is used as a data disk.
- The subscription instance to which the subscription disk is attached is in the Running or Stopped state.

Context

The downgrade feature has the following limits:

- Whether this feature is supported depends on your ECS usage.
- The configurations of only one subscription instance can be downgraded at a time.
- The interval between two consecutive downgrade operations must be at least 5 minutes.

A configuration downgrade may result in a refund. The refund amount is the calculation result of the following formula: Refund amount = Price of the new configurations - Remaining amount of the purchase price before the downgrade.

Note:

A maximum of three refunds can be made for each instance, including refunds incurred when you downgrade the instance type, downgrade the public bandwidth, or convert subscription disks to pay-as-you-go disks.

Procedure

1. Log on to the ECS console.
2. In the left-side navigation pane, choose Instances & Images > Instances.
3. In the top navigation bar, select a region.
4. Find the target instance and click Upgrade/Downgrade in the Actions column.
5. In the Upgrade/Downgrade Wizard dialog box, choose Configuration Downgrade > Disk charge type to pay-as-you-go, and click Continue.
6. Select a disk and confirm the refund amount.
7. Select ECS Service Terms and click **Downgrade Now**.

**Result**

By default, after the billing method of a disk is changed to pay-as-you-go, the disk is not released together when its attached instance is released. You can configure whether the disk is released with its attached instance in the ECS console. For more information, see #unique_56.

**Related topics**

#unique_57
10 Snapshot billing

ECS snapshots can be billed on a pay-as-you-go basis. Snapshots start to incur charges after they are created.

Pay-as-you-go

When the pay-as-you-go billing method is used, snapshots are billed based on the size of the storage space occupied by the snapshots. The snapshots are billed every hour. A storage duration of less than an hour is calculated as an hour.

- Snapshot size. Unit: GiB.

  The snapshot size is defined as the difference between the amount of storage space occupied by the current snapshot and that occupied by the last snapshot. You have a free storage quota of 5 GiB each month. The first snapshot created for a disk is a full snapshot. Subsequent snapshots are incremental snapshots. The size of a single incremental snapshot is smaller than the disk size. For more information, see #unique_58.

- Snapshot unit price. Unit: USD/GiB/month. You can obtain the price per hour after conversion.

For more information about the list of snapshot prices by Alibaba Cloud region, see the Pricing tab on the Elastic Compute Service page. Scroll down to the Snapshot Fee section to view the price list based on the region. You can also click Download price to download the list of snapshot prices by Alibaba Cloud region in CSV or JSON format.

Example of pay-as-you-go snapshot billing

Note:
The following example is only for reference. You can view your actual snapshot bills in the Billing Management console.

For example, assume that you have three disks in the China (Hangzhou) region under your account. You created a snapshot for each disk at 10:20. The snapshots are 50 GiB, 220 GiB, and 40 GiB in size.

- **Billing conditions**
  - Snapshot size: 50 GiB + 220 GiB + 40 GiB = 310 GiB.
  - Snapshot unit price: Assume that the pay-as-you-go price for snapshots in the China (Hangzhou) region is USD 0.0200/GiB/month, which is equivalent to USD 0.0000277778/GiB/hour.

- **Billing calculation**
  The period from 10:20 to 11:00 is calculated as an hour. After the free storage quota of 5 GiB per month is deducted, you need to pay the following snapshot fee: (310 - 5) GiB × USD 0.0000277778/GiB/hour = USD 0.008472.
  - The actual payable amount shown on the billing page is USD 0.008.
  - The historical bill records the amount as USD 0.0085.

**Overdue payments**

If your payment account balance in the current billing cycle is less than the payable amount of the previous billing cycle, the system sends an SMS or email notification. The snapshot service is suspended 24 hours after the bill becomes overdue. The following section describes the situations when the bill becomes overdue:

- In the first 15 days, all existing snapshots are retained, but no snapshots can be created. All automatic snapshots whose retention period is less than 15 days are deleted.
- After 15 days, all snapshots are deleted, except for those that have been used to create disks or custom images. The automatic snapshot policy is also deleted.

**References**

- #unique_59
- #unique_60
- #unique_61
11 Billing methods of public bandwidth

This topic describes public bandwidth types, billing methods, and examples on how to calculate bandwidth fees.

Types of public IP addresses

An ECS instance can access the Internet by using the following types of public IP addresses:

- **Fixed public IP address**

  To use an allocated public IP address to access the Internet, select Assign Public IP Address when you configure the public bandwidth during instance creation. For more information, see #unique_51.

- **Elastic IP address (EIP)**

  An EIP is a public IP address resource that you can purchase and use independently. It provides higher flexibility for Internet access. For more information about the differences between EIPs and fixed public IP addresses and the billing methods of EIPs, see #unique_62.

  To use an EIP to access the Internet, attach the purchased EIP to an ECS instance. When you configure the public bandwidth, you do not need to select Assign Public IP Address to purchase public bandwidth.

Public bandwidth types

After an ECS instance is assigned a fixed public IP address, you can use the instance to access the Internet and process requests from the Internet. Two types of public bandwidth are used.

<table>
<thead>
<tr>
<th>Public bandwidth type</th>
<th>Charged</th>
<th>Description</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outbound bandwidth</td>
<td>Yes</td>
<td>Bandwidth for outbound traffic from ECS instances</td>
<td>The FTP client downloads resources from ECS instances through public IP addresses.</td>
</tr>
<tr>
<td>Inbound bandwidth</td>
<td>No</td>
<td>Bandwidth for inbound traffic to ECS instances</td>
<td>The FTP client uploads resources to ECS instances through public IP addresses.</td>
</tr>
</tbody>
</table>
For more information about the limits on the public bandwidth of ECS instances, see **Limits**.

**Note:**
Alibaba Cloud does not charge any fees for internal bandwidth usage. Within the same region, no fees are charged for traffic between ECS instances or between ECS instances and other Alibaba Cloud services. For example, communication between Alibaba Cloud services that belong to the same VPC is free. If an ECS instance communicates with other Alibaba Cloud services through the Internet, the outbound bandwidth will be billed. For example, you will be billed for communication between an instance from China (Hangzhou) and an instance from China (Shanghai).

**Billing methods**

Billing methods of public bandwidth include pay-by-bandwidth and pay-by-traffic. Pricing of network bandwidth varies among regions. For more information, see **Pricing**.

**Note:**
You can also purchase a data transfer plan to offset the network traffic. For more information, see **Purchase a data transfer plan with one click**.

- Pay-by-bandwidth: Fees are charged based on the bandwidth that you specify. Your actual outbound bandwidth will not exceed the specified bandwidth.
- Pay-by-traffic: Fees are charged based on your actual traffic usage in the unit of USD/GB. You can configure a bandwidth limit for outbound traffic to avoid unmanageable fees incurred by outbound traffic bursts.

**Billing examples**

The following table describes how public bandwidth is billed on a pay-by-traffic basis. This example uses the China (Hangzhou) region.

**Note:**
The unit price here is for reference only. Visit the Pricing page for price details.
### Bandwidth billing method

<table>
<thead>
<tr>
<th>Pay-by-traffic</th>
<th>Billing example</th>
<th>Fee (USD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>This example assumes that the bandwidth is 0.5 Mbit/s.</td>
<td>The volume of the outbound traffic is ( \frac{0.5 \times 60 \times 60}{1024/8} ) GB = 0.22 GB.</td>
<td></td>
</tr>
<tr>
<td>• Usage period: 1 hour</td>
<td>• Usage period: 1 hour</td>
<td></td>
</tr>
<tr>
<td>• Average bandwidth: 0.5 Mbit/s</td>
<td>• Average bandwidth: 0.5 Mbit/s</td>
<td></td>
</tr>
<tr>
<td>• Unit price: USD 0.1/GB</td>
<td>• Unit price: USD 0.1/GB</td>
<td></td>
</tr>
</tbody>
</table>

#### Note:
In this formula, 1024 is used to convert Mbit into Gbit, and 8 is used to convert Gbit into GB.

You must pay the following amount for the hourly traffic: 0.22 GB × 0.1 USD/GB = USD 0.022.

---

**View billing details**

To view the volume of outbound Internet traffic for a pay-as-you-go ECS instance, you can go to the Billing Management console and click **Usage Records** to download the usage history of Elastic Compute Service (ECS) - Pay-As-You-Go.
### Change billing methods

You must use different methods to change the billing method of public bandwidth based on how an ECS instance is billed.

<table>
<thead>
<tr>
<th>Instance billing method</th>
<th>Conversion of the billing method</th>
<th>Method</th>
<th>Effective time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subscription</td>
<td>From pay-by-traffic to pay-by-bandwidth</td>
<td>#unique_19</td>
<td>Immediately</td>
</tr>
<tr>
<td></td>
<td>From pay-by-bandwidth to pay-by-traffic</td>
<td>#unique_64</td>
<td>Immediately</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Downgrade an instance during renewal</td>
<td>From the next billing cycle</td>
</tr>
<tr>
<td>Pay-as-you-go</td>
<td>From pay-by-traffic to pay-by-bandwidth</td>
<td>#unique_23</td>
<td>Immediately</td>
</tr>
<tr>
<td></td>
<td>From pay-by-bandwidth to pay-by-traffic</td>
<td>#unique_23</td>
<td>Immediately</td>
</tr>
</tbody>
</table>
12 Reserved instance billing

Reserved instances have their separate billing methods. This topic describes the billing methods and billing rules of reserved instances.

Billing methods

The following table lists the billing methods supported by reserved instances.

<table>
<thead>
<tr>
<th>Item</th>
<th>All upfront</th>
<th>Partial upfront</th>
<th>Zero upfront</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qualification</td>
<td>No qualification limits. You can purchase reserved instances if you have an Alibaba Cloud account.</td>
<td>No qualification limits. You can purchase reserved instances if you have an Alibaba Cloud account.</td>
<td>The availability of the zero upfront method depends on your ECS usage.</td>
</tr>
<tr>
<td>Billing method</td>
<td>Full payment is required upfront. No other fees are charged within the validity period.</td>
<td>Partial payment is required upfront. An hourly fee is charged within the validity period.</td>
<td>No upfront payment is required. An hourly fee is charged within the validity period.</td>
</tr>
<tr>
<td>Upfront payment</td>
<td>The upfront payment is deducted in a single transaction. The specific amount is subject to the specifications you selected on the purchase page.</td>
<td>The upfront payment is deducted in a single transaction. The specific amount is subject to the specifications you selected on the purchase page.</td>
<td>No upfront payment.</td>
</tr>
<tr>
<td>Item</td>
<td>All upfront</td>
<td>Partial upfront</td>
<td>Zero upfront</td>
</tr>
<tr>
<td>--------------</td>
<td>--------------------------------------------------</td>
<td>----------------------------------------------------------</td>
<td>--------------------------------------------------------</td>
</tr>
<tr>
<td>Hourly fee</td>
<td>No hourly fee is charged.</td>
<td>Reserved instances are charged for each second, billed every hour, and paid for every month. The specific hourly rate is subject to the specifications you selected on the purchase page. If the payable amount has reached USD 1,000, the amount will be automatically deducted from your account. Any amount less than USD 1,000 is deferred to the monthly bill.</td>
<td>Reserved instances are charged for each second, billed every hour, and paid for every month. The specific hourly rate is subject to the specifications you selected on the purchase page. If the payable amount has reached USD 1,000, the amount will be automatically deducted from your account. Any amount less than USD 1,000 is deferred to the monthly bill.</td>
</tr>
<tr>
<td>Currency</td>
<td>USD</td>
<td>USD</td>
<td>USD</td>
</tr>
</tbody>
</table>

**Billing rules**

The validity period of the reserved instance starts immediately after your purchase. You are charged based on the payment method that you selected regardless of whether pay-as-you-go instances are matched. Selecting the all upfront method can save you the most money.

The reserved instance takes effect and is billed from the top of the hour during which it is purchased. It expires at 00:00:00 on the day after the expiration date. For example, if you purchase a one-year reserved instance at 2019-02-26 13:45:00, the reserved instance takes effect and is billed starting at 2019-02-26 13:00:00 and is set to expire at 2020-02-27 00:00:00. If you purchase a reserved instance that matches your existing pay-as-you-go
instances, the discount is applied to the bills generated for the pay-as-you-go instances starting from 13:00 to 14:00 on February 26, 2019 until the reserved instance expires.
13 Billing FAQ

This topic provides answers to commonly asked questions about ECS billing.

- Account FAQ
  - Why am I unable to purchase pay-as-you-go instances?
  - How are invoices issued for pay-as-you-go instances?
FAQ about instance billing

- Billing of subscription instances
  - What can I do if the billing method of an instance cannot be changed from subscription to pay-as-you-go?

- Billing of pay-as-you-go instances
  - How is the billable time of a pay-as-you-go instance calculated? For example, if I create a pay-as-you-go ECS instance at 2019-12-12 01:30:00 and release it at 2019-12-12 02:00:00, is the instance billed for a period of half an hour or an hour?
  - Will a pay-as-you-go instance still incur fees after it is stopped either manually or due to an overdue payment?
  - What can I do if an order cannot be placed to change the billing method of an instance from pay-as-you-go to subscription?
  - How long after an order is paid does it take to change the billing method of the specified instance from pay-as-you-go to subscription?
  - What can I do if the billing method of an instance cannot be changed from pay-as-you-go to subscription?
  - When I change the billing method of an instance from pay-as-you-go to subscription, will the billing method for network usage of the instance also change?
  - I have an unpaid order to change the billing method of an instance from pay-as-you-go to subscription. If I upgrade the instance, will the order still be valid?
  - Why am I unable to change a pay-as-you-go instance to a subscription one?

- No Fees for Stopped Instances (VPC-Connected) feature
  - To which types of ECS instances is the No Fees for Stopped Instances (VPC-Connected) feature applicable?
  - Can I retain the compute and network resources of a stopped pay-as-you-go instance after I enable the No Fees for Stopped Instances (VPC-Connected) feature?
  - Can ECS instances that are stopped from within their operating systems enter the No Fees for Stopped Instances (VPC-Connected) state?
  - Can ECS instances that use local disks enter the No Fees for Stopped Instances (VPC-Connected) state?
  - When I started an instance immediately after it enters the No Fees for Stopped Instances (VPC-Connected) state, an OperationConflict error was reported. Why?
■ When I called the StartInstance operation to start an instance in the No Fees for Stopped Instances (VPC-Connected) state, an OperationDenied.NoStock error was reported. Why?

■ I set Stop Mode of an instance to No Charges After Instance Is Stopped. The instance was stopped and entered the No Fees for Stopped Instances (VPC-Connected) state. When I restarted this instance, its public IP address changed. How do I prevent the IP address from changing?

- Instance billing

■ Can I release ECS instances on my own?

■ When I try to change the billing method of a disk in an ECS instance, an error message is returned indicating that I have already changed the billing method of the disk three times. What does this mean?

■ Why has a pay-as-you-go bill been generated for my instance? What are the fees on the bill?

■ Why am I unable to change the billing method of instances from pay-as-you-go to subscription?

■ Why am I unable to change the billing method of instances from subscription to pay-as-you-go?
• FAQ about image billing

- Billing of public images
  ■ Do I need to pay for Red Hat images when you use them to create ECS instances?
  ■ How are Windows licenses billed? Are they billed based on countries and the numbers of cores?

- Billing of custom images
  ■ How am I charged when I copy a custom image?
  ■ I am creating an ECS instance. Why is the displayed total instance cost higher when I select a custom image than when I select a public image?

- Billing of Alibaba Cloud Marketplace images
  ■ Are Alibaba Cloud Marketplace images refundable?
  ■ After Alibaba Cloud Marketplace images have become commercially available, are there still any free Alibaba Cloud Marketplace images?
  ■ When I upgrade and renew an instance created from an Alibaba Cloud Marketplace image, do I need to make further payments?
  ■ After an instance created from an Alibaba Cloud Marketplace image is released, can I continue to use that image for free when I purchase a new ECS instance?
  ■ I created an ECS instance from an Alibaba Cloud Marketplace image and then created a custom image from the instance. Do I need to pay for the custom image when I use it to create a new ECS instance?
  ■ If I copy a custom image derived from an Alibaba Cloud Marketplace image to another region to create an ECS instance, do I need to pay for the custom image?
  ■ If I share a custom image derived from an Alibaba Cloud Marketplace image to Account B, does Account B need to pay to use the custom image to create an ECS instance?
  ■ Will I be charged if I use an Alibaba Cloud Marketplace image or a custom image derived from an Alibaba Cloud Marketplace image to replace a system disk?
  ■ Will I be charged if I replace the system disk of an ECS instance that runs an Alibaba Cloud Marketplace image?

- Billing of subscription Alibaba Cloud Marketplace images
  ■ What are yearly, monthly, and weekly subscription Alibaba Cloud Marketplace images?
  ■ In what ECS instances can subscription images be used?
■ How do I purchase a subscription image? Can I purchase it separately?
■ How do I pay for a subscription image?
■ Can I use a subscription image after it expires? How do I continue to use an expired subscription image?
■ Can I request a refund if I no longer need a subscription image after purchase?
■ How are fees settled after a refund is made?
■ Can a subscription image be converted to a pay-as-you-go image?
■ Can I replace a subscription image with an image of another type or vice versa? How will I be charged for the image after the replacement?
■ Will I be charged if I use a subscription image to create a custom image? How will the created custom image be affected if the subscription image expires?

• FAQ about Block Storage billing
  - How is an enhanced SSD (ESSD) billed?
  - How do I purchase a standard SSD? What are the pricing options for I/O optimized instances and standard SSDs?
  - When can I purchase a Shared Block Storage device?
  - How is a separately purchased pay-as-you-go data disk billed?

• FAQ about snapshot billing
  - The snapshots from which existing disks or custom images were created will be retained for 15 days after a payment in my account becomes overdue. Will these snapshots continue to incur fees, adding to the amount of the overdue payment?
FAQ about network usage billing

- How is the public bandwidth of ECS instances billed?
- How are inbound traffic and outbound traffic of pay-as-you-go instances billed?
- What is the difference between pay-by-bandwidth and pay-by-traffic?
- Can I adjust the specified peak bandwidth?
- Will traffic generated by ECS instances under attack incur fees?
- Pay-by-traffic billing of public bandwidth for subscription instances
  - Can I select the pay-by-traffic billing method for network usage when I purchase a subscription instance?
  - How are you charged when you select the pay-by-traffic billing method for network usage?
  - Can I change the billing method for network usage of a subscription instance from pay-by-bandwidth to pay-by-traffic?
  - Can I adjust the peak bandwidth for traffic for an ECS instance at any time?
  - When I renewed a subscription instance, I upgraded or downgraded the instance and changed its billing method for network usage from pay-by-traffic to pay-by-bandwidth. Why is the public bandwidth service of the instance still stopped after the change?
  - If the pay-by-traffic billing method is used for a subscription instance, can the instance continue to use the public bandwidth service when a payment becomes overdue for the instance due to insufficient account balance?
  - If the pay-by-traffic billing method is used for a subscription instance, will I be notified when a payment becomes overdue for the instance in my account?
  - If the pay-by-traffic billing method is used for a subscription instance, can I upgrade the instance after a payment becomes overdue for the instance in my account?
  - If the pay-by-traffic billing method is used for a subscription instance, is the public bandwidth service of the instance automatically resumed after I settle overdue payments?
  - How is traffic priced after I change the billing method for network usage of a subscription instance from pay-by-bandwidth to pay-by-traffic?
Why am I unable to purchase pay-as-you-go instances?

You may be unable to purchase pay-as-you-go instances due to one of the following reasons:

- You have not passed real-name verification. To purchase ECS instances within any regions in mainland China, you must pass real-name verification.
- The number of vCPUs consumed by the selected pay-as-you-go instance type exceeds the vCPU quota for pay-as-you-go instances of your account.
- Resources of the selected instance type are unavailable for purchase within the selected region. Try again later or go to the ECS Instance Types Available for Each Region page to view instance types available in each region.

How are invoices issued for pay-as-you-go instances?

You can apply for invoices for your pay-as-you-go instances. Only one invoice is provided based on your monthly statement. Go to the Billing Management console to apply for invoices.

What can I do if the billing method of an instance cannot be changed from subscription to pay-as-you-go?

You may be unable to change the billing method of an instance from subscription to pay-as-you-go due to one of the following reasons:

- The instance is in a state that does not support changes to the billing method. For example, the instance has an unpaid order.
- Changes to the billing method are not allowed because the instance is in the Expired state.
- Changes to the billing method are not allowed because the instance information has changed. For example, the bandwidth of the instance has been temporarily upgraded.

If one of the preceding errors is reported, adjust the instance accordingly. If the problem persists, submit a ticket.

How is the billable time of a pay-as-you-go instance calculated? For example, if I create a pay-as-you-go ECS instance at 2019-12-12 01:30:00 and release it at 2019-12-12 02:00:00, is the instance billed for a period of half an hour or an hour?

Pay-as-you-go instances are billed on one second increments. Payments are made at the top of each hour. The billable time of pay-as-you-go instances is automatically calculated. For example, if you create a pay-as-you-go instance at 2019-12-12 01:30:00 and release
it at 2019-12-12 02:00:00, the hour from 01:00:00 to 02:00:00 is a billing cycle. The billable time is 1,800 seconds, which is calculated with the following formula: (30 minutes) \times 60 = 1800 seconds.

**Will a pay-as-you-go instance still incur charges after it is stopped either manually or due to an overdue payment?**

**Stopped due to an overdue payment**: A pay-as-you-go instance will be automatically stopped when a payment becomes overdue for it, and stop incurring charges. Instances will not always stay in the Stopped state after they are stopped due to overdue payments. For more information, see Pay-as-you-go.

**Manually stopped**: You can stop a running pay-as-you-go instance from the ECS console or by calling the StopInstance operation. When the instance is stopped, its status changes to Stopped. Billing of stopped pay-as-you-go instances depends on their network types.

- **VPC**: You can enable the No Fees for Stopped Instances (VPC-Connected) feature.
  - After the feature is enabled, billing of pay-as-you-go instances in VPCs will start when the instances are created, stop when the instances enter the Stopped state, and resume when the instances are started again. When a pay-as-you-go instance enters the Stopped state, the No Fees for Stopped Instances (VPC-Connected) feature stops only the vCPUs, memory, and public IP address of the instance from incurring charges. Other resources such as disks and EIP of the instance will continue to incur charges. For more information, No Fees for Stopped Instances (VPC-Connected).
  - If the No Fees for Stopped Instances (VPC-Connected) feature is not enabled, pay-as-you-go instances continue to incur charges when they are stopped.

- **Classic network**: ECS instances in the classic network will be billed regardless of whether they are in the Stopped state.

**What can I do if an order cannot be placed to change the billing method of an instance from pay-as-you-go to subscription?**

You may be unable to place the order due to one of the following reasons:

- The instance is in a state that does not support changes to the billing method. For example, the instance has an unpaid order.
- Changes to the billing method are not allowed due to an upcoming scheduled automatic release.
Changes to the billing method are not allowed because the instance information has changed.

A previous order to change the billing method of the instance has not been paid.

If one of the preceding errors is reported, adjust the instance accordingly.

**How long after an order is paid does it take to change the billing method of an instance from pay-as-you-go to subscription?**

The billing method of your ECS instance will be changed after the order is paid. It can take up to 4 seconds to change the billing method of 20 instances. After the change is completed, you can see that the billing method of your instance has been changed to **Subscription** in the console.

**What can I do if the billing method of an instance cannot be changed from pay-as-you-go to subscription?**

Submit a ticket.

**When I change the billing method of an instance from pay-as-you-go to subscription, will the billing method for network usage of the instance also change?**

No, the billing method for network usage of the instance will not change. Only the billing method of instances and disks can be changed from pay-as-you-go to subscription. For information about how to change the billing method for network usage, see #unique_28.

**I have an unpaid order to change the billing method of an instance from pay-as-you-go to subscription. If I upgrade the instance, will the order still be valid?**

An order is created when you change the billing method of your instance from pay-as-you-go to subscription. You must pay for the order to complete the change. If you upgrade the instance before the order is paid, the order payment cannot be completed because the instance components are different and the original order no longer matches. If you still want to change the billing method, you must cancel the unpaid order and place a new order.

**Why am I unable to change a pay-as-you-go instance to a subscription one?**

The ECS instance whose billing method you want to change must meet the following requirements:

- The instance belongs to your account.
• The instance is of none of the following instance types:
  - Instance types in Generation I instance families: t1, s1, s2, s3, m1, m2, c1, and c2.
  - Instance types in the n1, n2, and e3 instance families.

  **Note:**
  For more information about these instance types, see #unique_54.

• The instance cannot be a preemptible instance.

• You have no unpaid order to switch the billing method of the instance.

  If you have an unpaid order to switch the billing method of the instance, you must cancel the unpaid order and then place another order to switch the billing method.

• Automatic release is not set for the instance.

  If automatic release has been set for an instance, you must disable the automatic release configuration and then switch the billing method. For more information, see #unique_18/unique_18_Connect_42_section_gj0_lif_7ma.

• The instance is in the **Running** or **Stopped** state.

  Example: An order to switch the billing method has been placed when the ECS instance is in the Running or Stopped state. However, the instance status changed when the payment was attempted. The preceding requirement is not met. The order fails and the billing method does not change. You can go to the Billing Management console and pay for the order when the instance is in the Running or Stopped state again.

To which types of ECS instances is the No Fees for Stopped Instances (VPC-Connected) feature applicable?

The No Fees for Stopped Instances (VPC-Connected) feature is applicable to ECS instances that meet the following requirements:

• The network type of the instances is VPC.

• The instances use the pay-as-you-go billing method.

• The instances do not use local disks.

For more information, see No Fees for Stopped Instances (VPC-Connected).

Can I retain the compute and network resources of a stopped pay-as-you-go instance after I enable the No Fees for Stopped Instances (VPC-Connected) feature?

With the No Fees for Stopped Instances (VPC-Connected) feature enabled, you still can configure whether a pay-as-you-go instance enters the No Fees for Stopped Instances (VPC
-Connected) state by setting the Stop Mode parameter when you stop the instance. If the instance does not enter the No Fees for Stopped Instances (VPC-Connected) state after it is stopped, its compute and network resources will not be released.

If you only need to stop an instance for a few minutes before it is restarted, we recommend that you configure the instance not to enter the No Fees for Stopped Instances (VPC-Connected) state by performing one of the following operations: Call the StopInstance operation with StoppedMode set to KeepCharging, or set Stop Mode to Retain Instance and Continue Charging After Instance Is Stopped when you stop the instance from the ECS console.

**Can ECS instances that are stopped from within their operating systems enter the No Fees for Stopped Instances (VPC-Connected) state?**

No, ECS instances that are stopped from within their operating systems cannot enter the No Fees for Stopped Instances (VPC-Connected) state. Only ECS instances that are stopped by one of the following methods can enter the No Fees for Stopped Instances (VPC-Connected) state:

- Use the ECS console.
- Use ECS API.

**Can ECS instances that use local disks enter the No Fees for Stopped Instances (VPC-Connected) state?**

No, ECS instances that use local disks cannot enter the No Fees for Stopped Instances (VPC-Connected) state.

**When I started an instance immediately after it enters the No Fees for Stopped Instances (VPC-Connected) state, an OperationConflict error was reported. Why?**

When an instance enters the No Fees for Stopped Instances (VPC-Connected) state, its compute resources (CPUs and memory) and public IP address are recycled. If you only need to stop an instance for a few minutes before it is restarted, we recommend that you set StoppedMode to KeepCharging to disallow the instance from entering the No Fees for Stopped Instances (VPC-Connected) state.

**When I called the StartInstance operation to start an instance in the No Fees for Stopped Instances (VPC-Connected) state, an OperationDenied.NoStock error was reported. Why?**

When an instance enters the No Fees for Stopped Instances (VPC-Connected) state, its compute resources are recycled. If instance resources are insufficient, an OperationDenied.
NoStock error is reported when you attempt to start the instance. We recommend that you try again later.

I set Stop Mode of an instance to No Charges After Instance Is Stopped. The instance was stopped and entered the No Fees for Stopped Instances (VPC-Connected) state. When I restarted this instance, its public IP address changed. How do I prevent the IP address from changing?

When an instance enters the No Fees for Stopped Instances (VPC-Connected) state, its public IP address is released. When the instance is restarted, it is assigned a new public IP address.

To retain the original public IP address of the instance, you can convert this IP address to an Elastic IP address (EIP) before you stop the instance. For more information, see #unique_36 and ConvertNatPublicIpToEip.

Notice:

After the IP address is converted to an EIP, you will be charged for the EIP while the instance is in the No Fees for Stopped Instances (VPC-Connected) state. For more information, see Billing method of the EIP documentation.

Can I release ECS instances on my own?

Yes, you can manually release or schedule the automatic release of pay-as-you-go instances, but you cannot release subscription instances on your own.

If you have further questions, submit a ticket.

When I try to change the billing method of a disk in an ECS instance, an error message is returned indicating that I have already changed the billing method three times. What does this mean?

Each ECS instance can only be downgraded a maximum of three times. Downgrade operations include downgrades of instance specifications, bandwidth downgrades, and the change of the disk billing method from subscription to pay-as-you-go.

Why has a pay-as-you-go bill been generated for my instance? What are the fees on the bill?

You can copy your instance ID and perform the following steps to view the bill details:

1. Log on to the ECS console.
2. In the top navigation bar, choose Billing > User Center.
3. In the left-side navigation pane, choose Spending Summary > Instance Spending Detail.

4. Set the search criteria.

Why am I unable to change the billing method of instances from pay-as-you-go to subscription?

The billing method of instances of the following instance types cannot be changed from pay-as-you-go to subscription:

- Instance types of Generation One: t1, s1, s2, s3, m1, m2, c1, and c2
- Instance types in the n1, n2, and e3 instance families

Note:
For more information about the preceding instance types, see #unique_54.

If your pay-as-you-go instances are not of the preceding instance types, ensure that the instances meet the requirements to change their billing method to subscription. For more information, see Switch the billing method from pay-as-you-go to subscription.

Why am I unable to change the billing method of instances from subscription to pay-as-you-go?

Whether the billing method of subscription instances can be changed to pay-as-you-go depends on your ECS usage. Before you change the billing method of subscription instances, ensure that the instances are in the Running or Stopped state.

Do I need to pay for Red Hat images when you use them to create ECS instances?

Yes, you must pay for Red Hat images when you use them to create ECS instances. Red Hat images are paid images. For pricing details, see the ECS pricing page.
How are Windows licenses billed? Are they billed based on countries and the numbers of cores?

Windows licenses are free of charge within regions in mainland China but are charged in regions outside of mainland China. The charges for Windows licenses vary with countries, regions, and the numbers of vCPUs. For pricing details, see the ECS pricing page.

How am I charged when I copy a custom image?

You must perform the following operations to copy a custom image:

1. Copy the snapshot from which the custom image was created from the source region to the destination region.
2. Create a custom image from the snapshot in the destination region.

The preceding operations may incur the following fees:

• Fees for traffic between the two regions. Alibaba Cloud does not currently charge for cross-region traffic. For the latest billing details, see the official Alibaba Cloud website for announcements.
• The copied snapshot consumes snapshot capacity. Currently, snapshot capacity is billed. For more information, see Snapshot billing.

I am creating an ECS instance. Why is the total instance cost displayed when I select a custom image higher than that displayed when I select a public image?

This situation may occur in the following circumstances:

• The custom image contains data disks. When such an image is selected, the costs of the data disks cause the total cost of the instance to be higher than that of an instance created using a public image.
• The custom image was created based on a paid public image such as Windows Server or Red Hat Enterprise Linux (RHEL).

Are Alibaba Cloud Marketplace images refundable?

Alibaba Cloud Marketplace images support money-back guarantee refunds within a certain period of time based on the Alibaba Cloud Marketplace rules. However, you will be ineligible for a refund in the following situations:

• You have deployed the purchased image to an ECS instance within the money-back guarantee period.
• You have deployed the purchased image to an ECS instance before your application for a refund for this image is approved.
• You can receive refunds only for images that have not been used.

Will any free Alibaba Cloud Marketplace images be available after Alibaba Cloud Marketplace images are commercially available?

A certain number of free Alibaba Cloud Marketplace images are still available. However, you must purchase them at a price of USD 0.00 before you can use them.

My ECS instance was created from an Alibaba Cloud Marketplace image. Do I need to make further payments when I upgrade or renew my ECS instance?

No, you do not need to make any further payments. You can use a purchased image to create as many instances as you like.

My ECS instance is created from an Alibaba Cloud Marketplace image. After my ECS instance is released, can I continue to use that image free of charge when I purchase a new ECS instance?

Yes, you can continue to use that image free of charge when you purchase a new ECS instance.

I created an ECS instance from an Alibaba Cloud Marketplace image and then created a custom image from the instance. Do I need to pay for the custom image when I use it to create an ECS instance?

Yes, you must pay the original price of the Alibaba Cloud Marketplace image.

If I copy an Alibaba Cloud Marketplace image that I bought to another region to create an ECS instance, do I need to pay for the image?

Yes, you must pay the original price of the Alibaba Cloud Marketplace image.

I created an ECS instance from an Alibaba Cloud Marketplace image and then created a custom image from that instance. If I share the custom image to Account B, does Account B need to pay for the custom image when it uses the image to create an ECS instance?

Yes, Account B must pay the original price of the Alibaba Cloud Marketplace image.

Is a fee charged if I replace a system disk by using an Alibaba Cloud Marketplace image or an image that derives from an Alibaba Cloud Marketplace image?

It depends. If the current image of your ECS instance is a different version of the replacement image, no fees are charged. Otherwise, a fee is charged.
My ECS instance is using an Alibaba Cloud Marketplace image. Is a fee charged if I replace the system disk of the instance?

No, no fees are charged if you replace the system disk of the instance.

What are yearly, monthly, and weekly subscription Alibaba Cloud Marketplace images?

Yearly, monthly, or weekly subscription Alibaba Cloud Marketplace images are images that are purchased from Alibaba Cloud Marketplace and billed on a subscription basis. These images are developed and maintained by image providers, who are responsible for both pre-sales consultation and after-sales services. In this topic, these images are collectively referred to as subscription images.

In which ECS instances can I use a subscription image?

A subscription image can only be used in a subscription instance with the same subscription period.

How do I purchase a subscription image? Can I purchase it separately?

No, you cannot purchase a subscription image separately.

You can purchase a subscription image in one of the following ways:

• When you create an ECS instance, set Billing Method to Subscription, select an image from Alibaba Cloud Marketplace, and then set Duration.

  Note:
  Then, you must pay for both the instance and image. The instance is created upon successful payment for both the image and instance.

• If you want to use a subscription image in an existing subscription ECS instance, you can use this image to replace the operating system of the instance. In this case, you must set the image subscription period to be the same as the instance subscription period. For more information, see #unique_67.

  Note:
  In this case, you only need to pay for the image.

How do I pay for subscription images?

Subscription images require payment upfront. The subscription period of a subscription image must be the same as that of the subscription instance in which the image is used.

Image prices are set by the image providers.
Can I use a subscription image after it expires? How do I continue to use it?

When a subscription image expires, it cannot be used unless it is renewed in a timely manner.

You cannot renew a subscription image. If you want to continue using the image, you must renew the image with the corresponding ECS instance. You can resume use of the image after it is renewed.

After I purchase a subscription image, can I request a refund if I no longer want to use it?

The image provider will determine whether to make a refund. You can consult the image provider before your purchase the image.

What can I expect when a refund is made?

If a refund is available, the image provider will make the refund based on your usage.

Can a subscription image be converted to a pay-as-you-go image?

Subscription images cannot be converted to pay-as-you-go images. This function is currently under development for release in the future. Stay updated on the official Alibaba Cloud website.

Can I replace a subscription image with an image of another type or vice versa? How is the fee calculated?

Yes, you can replace images when you replace system disks of ECS instances. You can make the following replacements:

• Replace an image of another type (such as public image, custom image, or shared image) with a subscription image. After the image is replaced, the system will calculate the actual cost based on the image cost and the remaining subscription period of the ECS instance.

• Replace a subscription image with an image of another type (such as public image, custom image, or shared image). If the image provider allows for refunds, a refund will be made based on your actual usage.

• Replace Subscription Image A with Subscription Image B. If a refund is available after the image is replaced, the refund will be made based on the refund policy. The actual cost of Image B will be calculated based on the image price and the remaining subscription period of the ECS instance.
Is a fee charged for a custom image created based on a subscription image? How will the custom image be affected if the subscription image expires?

When you use a custom image created based on a subscription image to create an instance or replace a system disk, you are re-ordering the subscription image on Alibaba Cloud Marketplace. The custom image will not be affected regardless of whether the original subscription image expires.

How are ESSDs billed?

ESSDs support both subscription and pay-as-you-go billing methods. For more information, visit the Pricing page.

How do I purchase a standard SSD? What are the pricing options for I/O optimized instances and standard SSDs?

For the pricing details, visit the Pricing page.

How is a separately purchased pay-as-you-go data disk billed?

A pay-as-you-go data disk is billed by the hour. Note that if your account balance is insufficient, the services of the data disk will be suspended.

The snapshots from which existing disks or custom images were created will be retained for 15 days after a payment in my account becomes overdue. Will these snapshots continue to incur fees, adding to the amount of the overdue payment?

No, the snapshots will not continue to incur fees.

For example, your account has an overdue payment of USD 0.1. After the 15-day retention period, the snapshots from which no existing disks or custom images were created will be deleted. The snapshots from which existing disks or custom images were created will be retained and will not incur additional charges. To use these retained snapshots, you must settle the overdue payment first but you do not have to pay for them again.

How is the Internet usage of ECS instances billed?

For more information, see Billing methods of public bandwidth.

How are inbound traffic and outbound traffic of pay-as-you-go instances billed?

Traffic between ECS instances or between ECS instances and other Alibaba Cloud services within the same local area network (LAN) is free of charge. Traffic between ECS instances and the Internet is billed based on the following rules:
• Inbound Internet traffic is free of charge. Inbound Internet traffic refers to the traffic from the Internet to ECS instances, such as traffic that is generated when you download resources from the Internet to your ECS instances or when your users upload resources to your ECS instances by using the FTP client.

• Outbound Internet traffic is billed. Outbound Internet traffic refers to the traffic from ECS instances to the Internet, such as the traffic that is generated when your ECS instances provide external access or when your users download internal resources from your ECS instances by using the FTP client.

For more information about bandwidth billing, see Billing methods of public bandwidth.

What is the difference between pay-by-bandwidth and pay-by-traffic?

If you select pay-by-bandwidth as the billing method for network usage, you are charged based on the specified bandwidth. Your actual outbound bandwidth will not exceed the specified bandwidth.

If you select pay-by-traffic as the billing method for network usage, you are charged based on the actual volume of traffic. To prevent unmanageable fees incurred from traffic bursts, you can set a peak bandwidth for outbound Internet traffic.

For more information, see Billing methods of public bandwidth.

Can I adjust the specified peak bandwidth?

Yes, you can adjust the specified peak bandwidth. For more information, see #unique_28.

Will traffic generated by ECS instances under attack incur fees?

The inbound Internet traffic generated by ECS instances under attack will not incur fees, but the outbound Internet traffic will.

We recommend that you use Alibaba Cloud Security services such as Server Guard to reinforce the security of your ECS instances.

Can I select the pay-by-traffic billing method for network usage when I purchase a subscription instance?

Yes, you can select the pay-by-traffic billing method for network usage when you purchase a subscription instance. For more information, see #unique_51.

For more information about pay-by-traffic billing method, see the Elastic Compute Service page.
How are you charged when you select the pay-by-traffic billing method for network usage?

Pay-by-traffic is a pay-as-you-go billing method in which fees are charged based on the volume of traffic consumed. Payments are settled at the top of each hour. To keep services running properly, ensure that your account balance is sufficient. To prevent unmanageable fees incurred from traffic bursts, you can set a peak bandwidth for traffic.

Can I change the billing method for network usage of a subscription instance from pay-by-bandwidth to pay-by-traffic?

Yes, you can change the billing method for network usage of a subscription instance from pay-by-bandwidth to pay-by-traffic by using the bandwidth downgrade feature. However, you can make this change a limited number of times. For more information, see #unique_64.

You can also use the renewal and upgrade or downgrade feature to change the billing method for network usage. The new configurations do not take effect until the next subscription period starts. For more information, see Downgrade the configurations of an instance during renewal.

Can I adjust the peak bandwidth for traffic for an ECS instance at any time?

Yes, you can adjust the peak bandwidth for traffic for an ECS instance by using the bandwidth downgrade feature at any time. After you set the peak bandwidth to a smaller value, the new value takes effect immediately. A maximum of three refunds can be made for each instance. Exercise caution when you downgrade an instance.

If you upgraded or downgraded a subscription instance when it was renewed, you cannot upgrade or downgrade the instance again until the new subscription period starts.

When I renewed a subscription instance, I upgraded or downgraded the instance and changed its billing method for network usage from pay-by-traffic to pay-by-bandwidth. Why is the public bandwidth service of the instance still stopped after the change?

If you upgrade or downgrade a subscription instance and change its billing method for network usage when you renew the instance, the new configurations will not take effect until the new subscription period starts. Although you paid for the new subscription period, if payments become overdue for the instance before the new subscription period starts, the pay-by-traffic public bandwidth service of the instance will be stopped.
If payments remain overdue, the public bandwidth service will remain stopped even after
the new subscription period starts. To keep the service running properly, ensure that your
account balance is sufficient.

If the pay-by-traffic billing method is used for a subscription instance, can the instance
continue to use the public bandwidth service when a payment becomes overdue for the
instance due to insufficient account balance?

Overdue payments do not affect the running of subscription instances, but do cause the
pay-by-traffic public bandwidth service to be stopped, preventing the instances from
accessing the Internet. You can continue to use the public bandwidth service only after you
settle the overdue payment. To keep the service running properly, ensure that your account
balance is sufficient.

If the pay-by-traffic billing method is used for a subscription instance, will I be notified when a
payment becomes overdue for the instance in my account?

Yes, you will be notified by SMS. To keep services running properly, ensure that your
account balance is sufficient.

If the pay-by-traffic billing method is used for a subscription instance, can I upgrade the
instance after a payment becomes overdue for the instance in my account?

No, you can upgrade the instance only after you settle the overdue payment.

If the pay-by-traffic billing method is used for a subscription instance, is the public bandwidth
service of the instance automatically resumed after I settle overdue payments?

If the public bandwidth service was stopped due to an overdue payment, the service will
automatically resume when the overdue payment is settled.

How is traffic priced after I change the billing method for network usage of a subscription
instance from pay-by-bandwidth to pay-by-traffic?

When you change the billing method for network usage of your subscription instance from
pay-by-bandwidth to pay-by-traffic, you are billed for network usage based on the actual
volume of traffic. Payments are settled at the top of each hour. For pricing details, see the
Elastic Compute Service page.