## Flexus L Instance

# **Service Overview**

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# What Is Huawei Cloud FlexusL?

#### Introduction

Huawei Cloud Flexus, a next-generation out-of-the-box cloud service product, is designed for small- and medium-sized enterprises (SMEs) and developers. Huawei Cloud Flexus L Instance (FlexusL) is a cloud server product in the Huawei Cloud Flexus family.

FlexusL is a next-generation lightweight cloud server product designed for SMEs and developers. FlexusL provides a range of images for you to choose from and is suitable for medium- and light-load scenarios such as website setup, development and testing environment, enterprise applications, website analysis, and audio and video scenarios. It is secure, cost-effective, and easy-to-use.

FlexusL is suitable for new users of cloud computing services, individual developers, and small and medium-sized enterprises that want to deploy simple applications on cloud servers.

## FlexusL Advantages

- Multiple high-quality application images with templates preconfigured are provided for easy application deployment.
- A one-stop resource management console makes O&M easy. Visualized management centrally displays all your resources, from the global to the region, for easy O&M.
- Huawei Cloud QingTian architecture with hardware-software synergy and top-flight AI algorithms ensures that there is no freezing and the latency is extremely low when users are playing games and audios or videos.
- You can also purchase service packages to enjoy great performance at lower prices compared with the services you have purchased separately.

## **Application Scenarios**

FlexusL is designed for lightweight and light-load scenarios, such as small websites, web applications, blogs, forums, and cloud development environments.

• E-commerce store management: quickly setting up and managing e-commerce stores and providing stable, high-quality services for customers around the globe

- Website setup: using application templates to quickly build websites, such as enterprise official websites, news, blogs, forums, and e-commerce websites
- Mini game development: quickly rolling out standalone PC games and casual games with stable performance
- Development and testing: running development and testing projects and scheduled and automatic tasks on the cloud
- Cloud-based learning: conducting experiments, writing papers, and studying on the cloud
- Blog and forum setup: creating blogs and forums for individual developers easily and cost-effectively

#### Resources

A FlexusL instance is a package of resources that include cloud servers, EVS disks, EIPs, CBR vaults, and HSS. They can provide compute, network, storage, image installation, and backup capabilities. Resources that can be packaged in a FlexusL instance are listed in the following table. For details about instance specifications, see Instance Specifications.

Resource	Description
Cloud servers	A cloud server uses the x86 architecture and KVM virtualization. It uses the same underlying hardware resources and delivers the same compute performance as an ECS with the same specifications.
Images	FlexusL provides OS images, application images, and private images for you to choose from.
Networks	<ul> <li>A fixed elastic IP address (EIP) is assigned to a FlexusL instance and a monthly data package is provided by default.</li> <li>By default, a fixed private IP address is allocated to a FlexusL instance.</li> </ul>
Elastic Volume Service (EVS) disks	EVS provides storage space for FlexusL instances.
Cloud Backup and Recovery (CBR) vaults	You can use CBR to back up all EVS disks (including system and data disks) and restore data from backups.
Host Security Service (HSS)	With intrusion detection, vulnerability management, baseline inspection, and asset management functions, HSS makes it easier to control host security risks.
Cloud Eye	After you purchase a FlexusL instance, Cloud Eye is enabled by default. It can monitor the cloud servers, EVS disks, and CBR vaults packaged in the FlexusL instances.

#### Billing

A FlexusL instance is actually a package of resources. Resources in the package cannot be disassociated from the FlexusL instance. They have the same lifecycle as the FlexusL instance and cannot be renewed or unsubscribed from separately.

#### □ NOTE

Resources packaged in a FlexusL instance only refer to the resources purchased on the FlexusL console. Resources purchased on other service consoles (such as CBR or HSS console) can be disassociated from FlexusL instances and can be deleted or unsubscribed from separately.

FlexusL only supports the yearly/monthly billing mode. Any traffic usage in excess of the package is billed by traffic. For details, see **Overview**.

#### **Differences Among Cloud Server Products**

Huawei Cloud Flexus provides the following cloud server products for you to choose from:

- A FlexusL instance is a package of resources that include cloud servers, EVS disks, EIPs, CBR vaults, and HSS. Resources in the package are created and managed together. FlexusL instances provide various featured application images to help you quickly set up service environments. FlexusL instances are easy to use and friendly to beginners in cloud computing.
- FlexusX is a next-generation flexible compute cloud server service designed for small- and medium-sized enterprises (SMEs) and developers. FlexusX provides functions similar to what ECS provides. It also supports flexible vCPU/ memory ratios. Compared with FlexusL, FlexusX offers more public images and more flexible specifications, and can bear higher workloads.
- An ECS instance is a server that supports high-load applications. It provides multiple billing modes, flavor types, image types, and disk types. You can customize ECS configurations for different service scenarios.

For details among their differences, see What Are the Differences Among FlexusL, FlexusX, and ECS?

#### **Access Modes**

You can access FlexusL instances using a web-based management console.

If you have signed up for Huawei Cloud, log in to the management console, choose **Compute** > **Huawei Cloud Flexus** and click **Flexus L Instance** to access the FlexusL console.

If you have not signed up for Huawei Cloud, see **Registering a HUAWEI ID and Enabling Huawei Cloud Services**.

# 2 Instance Specifications

This section describes the resources contained in a FlexusL service package.

## **Instance Specifications**

#### ■ NOTE

A cloud server packaged in a FlexusL instance uses the x86 architecture, KVM virtualization, and the same underlying hardware resources as an ECS. It delivers the same compute performance as an ECS with the same vCPUs and memory.

You can associate EVS disks, HSS, or CBR vaults with your FlexusL instance as needed. After a FlexusL instance is created, a fixed elastic IP address (EIP) is assigned by default. Multiple instance specifications are available. For details, see Table 2-1.

Table 2-1 Instance specifications

vCPUs   Memory	System Disk Capacity   Type	Peak Bandwidth   Data Package	(Optional) Associated Service Resource
2 vCPUs   0.5 GiB	20 GiB   General Purpose SSD	30 Mbit/s   1,024 GB	The following service resources can be
2 vCPUs   1 GiB	40 GiB   General Purpose SSD	30 Mbit/s   2,084 GB	<ul> <li>purchased together</li> <li>with FlexusL instances:</li> <li>Data disk: General</li> <li>Purpose SSD V2  </li> <li>Custom capacity</li> </ul>
2 vCPUs   2 GiB	60 GiB   General Purpose SSD	30 Mbit/s   3,072 GB	
2 vCPUs   4 GiB	80 GiB   General Purpose SSD	30 Mbit/s   4,096 GB	HSS: Basic edition     CBR: Server backup
2 vCPUs   8 GiB	160 GiB   General Purpose SSD	30 Mbit/s   5,120 GB	Custom vault capacity
4 vCPUs   8 GiB	240 GiB   General Purpose SSD	30 Mbit/s   6,144 GB	

vCPUs   Memory	System Disk Capacity   Type	Peak Bandwidth   Data Package	(Optional) Associated Service Resource
4 vCPUs   16 GiB	320 GiB   General Purpose SSD	30 Mbit/s   7,168 GB	

#### 

For details about the peak bandwidth and data packages, see **Peak Bandwidth** and **Data Packages**.

#### Peak Bandwidth

The peak bandwidth in a FlexusL package is the peak outbound bandwidth of the public network, that is, the maximum bandwidth for a FlexusL instance to access the Internet.

#### ∩ NOTE

- The peak bandwidth is not used as a service commitment and is only used as a
  reference for the bandwidth upper limit. If resource contention occurs, the peak
  bandwidth may be limited. The peak bandwidth cannot be used in scenarios that require
  high public network quality. If you have such requirements, purchase an ECS billed
  based on the fixed public network bandwidth.
- Inbound peak bandwidth
  - If the outbound peak bandwidth of a package is not greater than 10 Mbit/s, the inbound peak bandwidth is 10 Mbit/s.
  - If the outbound peak bandwidth of a package is greater than 10 Mbit/s, the inbound peak bandwidth is the same as the outbound peak bandwidth.

## **Data Packages**

Rules for using data packages provided by FlexusL are as follows:

- A data package provided by FlexusL is a monthly package. A monthly data package starts on the date of purchase and ends at 23:59:59 on the same day of the next month. For example, if you purchase a FlexusL instance at 10:00:00 on June 5, the expiration time of the package is at 23:59:59 (the last second of the day) on July 5. The package for the next month starts from 23:59:59 on July 5 to 23:59:59 on August 5.
- Only outbound traffic (originating from your server) will be billed. FlexusL instance data packages indicate the **outbound** data packages.
- Service traffic is preferentially deducted from the data package. Any traffic
  usage in excess of the package is billed by traffic. The excess traffic is billed in
  tiered pricing mode, and the unit price varies in different regions.
- The traffic quota is reset each month. Any unused portion of a data package cannot be rolled over to the next month.
- After you unsubscribe from or stop a FlexusL instance, no excess traffic will be generated.

# $\mathbf{3}_{\mathsf{Billing}}$

## 3.1 Overview

This section describes the sales mode, billing modes, billing items, package pricing, expiration or arrears, renewal, and unsubscription of FlexusL.

#### Sales Mode

A FlexusL instance is actually a package of resources. Resources in the package cannot be disassociated from the FlexusL instance. They have the same lifecycle as the FlexusL instance and cannot be renewed or unsubscribed from separately.

#### □ NOTE

Resources packaged in a FlexusL instance only refer to the resources purchased on the FlexusL console. Resources purchased on other service consoles (such as CBR or HSS console) can be disassociated from FlexusL instances and can be deleted or unsubscribed from separately.

## **Billing Modes**

FlexusL instances only support the yearly/monthly billing mode. Yearly/Monthly is a prepaid mode. You pay upfront for the amount of time you expect to use the FlexusL for. You will need to make sure you have a top-up account with a sufficient balance or have a valid payment method configured first.

## **Billing Items**



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

Billing Item	Description	Billin g Mode	Price
* Instance	Compute, storage, and networking capabilities vary by instance specifications. You can choose desired specifications based on your service requirements.	Yearly / Mont hly	Monthly package price × Required
	Billing factors: vCPU/memory, system disk, and data package  NOTE  Only outbound traffic (originating from your server) will be billed.		duration
* Image	Images supported by FlexusL instances are free of charge. Billing factor: image	-	Free
Data disk	If you have additional storage requirements, you can purchase data disks. Billing factor: data disk capacity	Yearly / Mont hly	EVS disk unit price × Required duration
Host Security Service (HSS)	You can enable HSS to protect your FlexusL instances. Billing factor: HSS basic edition	Yearly / Mont hly	HSS unit price × Required duration
CBR	You can purchase a backup vault to store backups of your FlexusL instance. Billing factor: vault capacity	Yearly / Mont hly	Vault capacity unit price × Required duration
Cloud Eye	Cloud Eye basic functions, such as viewing dashboards, creating alarm rules, and adding monitoring items, are free of charge. Cloud Eye may interconnect with other cloud services to provide you with value-added services such as monitoring data file dump and alarm notification. These value-added services may incur extra fees, which are settled by services that provide such functions.	-	Basic function s are free of charge. Value-added services may incur extra fees.

Billing Item	Description	Billin g Mode	Price
Excess traffic (optional)	Service traffic is preferentially deducted from the data package. Any traffic usage in excess of the package is billed by traffic. The excess traffic is billed based on a tiered pricing model, and the unit price varies in different regions.	Pay- per- use	Unit price of traffic × Excess traffic volume For details about the unit price of traffic, see Price Calculat or. The routing type is dynamic BGP.

## **Expiration and Arrears**

- Yearly/Monthly FlexusL instances will expire after their validity periods end.
- The pay-per-use resources are settled periodically by referring to Bill Run for Pay-per-Use Resources. If you do not have a valid payment method configured or your account balance is insufficient, your account will fall into arrears

Pay-per-use resources involved in a FlexusL instance are as follows:

- Excess traffic. A FlexusL instance provides a fixed data package which service traffic can be deducted from by default. Any traffic usage in excess of the package is billed by traffic (on a pay-per-use basis).
- Other pay-per-use resources associated with the FlexusL instance.

The following describes the impacts if your FlexusL instances expire or if your account is in arrears.

Phase	Impact
Grace period	If your yearly/monthly FlexusL resources are not renewed upon expiration or the pay-per-use resources are in arrears, Huawei Cloud provides a grace period for you to renew or pay for the resources. Resources can be used within the grace period.

Phase	Impact
Retention period	If you do not renew the yearly/monthly FlexusL instance resources or pay off the arrears for the pay-per-use resources after the grace period expires, the resources will enter the retention period. During the retention period, the resource cannot be used but is retained.

After a FlexusL instance enters a grace period or retention period, Huawei Cloud will notify you of this by email or text message. If you do not complete the renewal or pay off the arrears before the retention period ends, your instance will be released. To avoid impact on your services, **renew your subscription or top up your account** in a timely manner.

#### Renewal and Repayment

Renewal

FlexusL instances cannot be used after they expire. If you want to continue using them, renew them before the **retention period** ends. Otherwise, your resources will be released and cannot be recovered.

FlexusL is provided as a package. Resources in the package are renewed together. The pricing for renewal is the same as that of a new purchase.

Repayment

If your account is in arrears, your resources cannot be used properly. Pay off the expenditures generated by the pay-per-use resources before **the retention period** expires.

For details about repayment, see **Making Payments (Postpaid Direct Customers)**.

## Unsubscription

A FlexusL instance is actually a package of resources. Resources in the package are unsubscribed together. If you unsubscribe from a FlexusL instance, all resources including the EVS disks, cloud backup vault, HSS, and EIP associated with the instance will be released and data cannot be recovered.

Unsubscription includes unsubscribing from resources and unsubscribing from renewal periods. After the unsubscription is successful, you will get a refund.

- Unsubscribing from resources: You can unsubscribe from FlexusL instances (including the renewal period) that are no longer needed. For details, see Unsubscribing from Resources.
- Unsubscribing from a renewal period: If you have renewed a FlexusL instance, you can unsubscribe from the renewal period. When you unsubscribe from a renewal period, you can only unsubscribe from the renewal period that has not yet taken effect. To unsubscribe from the renewal period that has taken effect, you can only unsubscribe from the FlexusL instance. For details, see Unsubscribing from a Renewal Period.

## 3.2 Renewing a FlexusL Instance

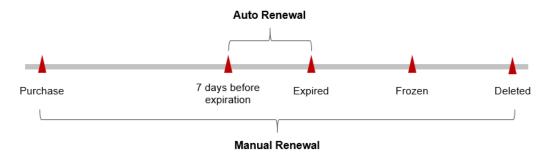
#### **Scenarios**

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

Only yearly/monthly FlexusL subscriptions can be renewed. The traffic usage in excess of the data package does not need to be renewed. Ensure that your account has a valid payment method configured or a top-up account with a sufficient balance.

You can select a method to renew a yearly/monthly FlexusL instance based on the phase it is currently in. For details, see **Figure 3-1**.

**Figure 3-1** Selecting a renewal method based on the FlexusL instance's current phase



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

#### **Notes**

- If a resource is renewed when it is in a **grace period or retention period**, the renewal for this resource starts from the time when the resource expired instead of the current time.
- A FlexusL instance is actually a package of resources. Resources in the package can only be renewed together, not separately.
- Unsubscribed or released resources are not renewable.
- Orders being processed are not renewable.

### **Manually Renewing FlexusL Instances**

You can renew a yearly/monthly FlexusL instance on the console anytime before it is automatically deleted. FlexusL supports batch renewal.

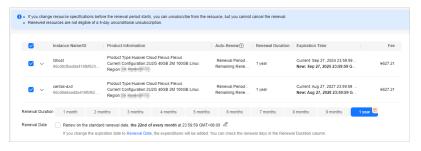
### **Batch Renewing FlexusL Instances on the Console**

- 1. Log in to the FlexusL console.
- 2. Enable **Batch operation**, select the FlexusL instances to be renewed, and click **Renew**.

You can also use this method to renew just one FlexusL instance.



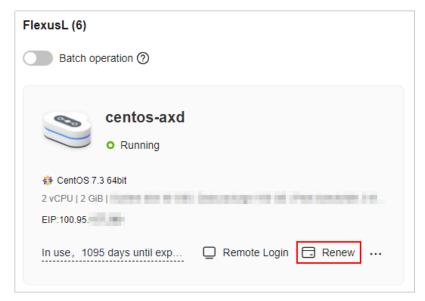
- 3. View the FlexusL instances to be renewed and click **OK**.
- 4. Set the renewal configurations, confirm the expected expiration date and price and click **Pay**.



- Select a renewal duration.
- Select Renew on the standard renewal date. For details, see Setting the Same Renewal Day for Yearly/Monthly Resources.
- 5. Select a payment method and complete the payment. Once the order is paid for, the renewal is complete.

## Renewing a Single FlexusL Instance on the Console

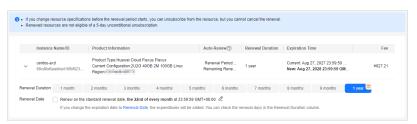
- 1. Log in to the FlexusL console.
- 2. Renew a FlexusL instance in either of the following two ways:
  - Method 1: Locate the target instance and click Renew.



Method 2: Click the target instance name. On the displayed page, click
 Renew in the upper right corner.



3. Set the renewal configurations, confirm the expected expiration date and price and click **Pay**.



- Select a renewal duration.
- Select Renew on the standard renewal date. For details, see Setting the Same Renewal Day for Yearly/Monthly Resources.
- 4. Select a payment method and complete the payment. Once the order is paid for, the renewal is complete.

## Renewing FlexusL Instances in Billing Center

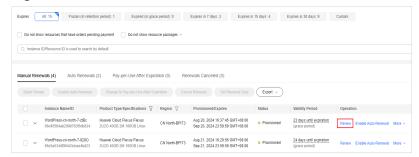
- 1. Log in to the FlexusL console.
- 2. In the upper-right corner of the console, choose **Billing** > **Renewal**.
- 3. Set the search criteria.

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

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

- 4. Manually renew resources.
  - Individual renewal: Click **Renew** in the **Operation** column for the desired resource.

Figure 3-2 Individual renewal

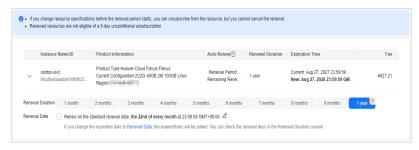


 Batch renewal: Select the desired resources and click Batch Renew in the upper left corner.

Figure 3-3 Batch renewal



5. Set the renewal configurations, confirm the expected expiration date and price and click **Pav**.



- Select a renewal duration.
- Select Renew on the standard renewal date. For details, see Setting the Same Renewal Day for Yearly/Monthly Resources.
- 6. Select a payment method and make your payment. Once the order is paid for, the renewal is complete.

#### **Auto-renewing a FlexusL Instance**

You can enable auto-renew to automatically renew a FlexusL instance before it expires. This prevents resources from being deleted in case you forget to renew a subscription.

## **Enabling Auto-Renew on the Purchase Page**

You can enable auto-renew for your FlexusL instance on the purchase page, as shown in **Figure 3-4**. For details about how to purchase a FlexusL instance, see **Purchasing a FlexusL Instance**.

If you select **Auto renew**, monthly subscription is auto-renewed for one month every time and yearly subscription is auto-renewed for one year every time. For example, if you set **Required Duration** to **3 months** and enable auto-renew, your subscription will be automatically renewed for one month before it expires. For more information about auto-renewal rules, see **Auto-Renewal Rules**.

Figure 3-4 Enabling auto-renew



#### **Enabling Auto-Renew for an Existing FlexusL Instance**

- 1. Log in to the FlexusL console.
- 2. Enable auto-renew in either of the following ways:
  - a. Locate the target instance and choose \*\*\* > Enable Auto-Renew.
  - b. Click the target instance name. On the displayed page, choose > **Enable Auto-Renew** in the upper right corner.

#### **◯** NOTE

After auto-renew is enabled, you can choose > **Modify Auto-Renew** to modify the auto-renewal rules.

3. Select a renewal period, specify the auto-renewal times, and click OK.
If auto-renew is enabled on the Renewals page, the auto-renew period is subject to the selected renewal period and auto-renew times. For example, if you set New Auto-Renew Period to 3 months and Auto-renewals to Unlimited, your subscription will be automatically renewed for three months before it expires. For more information about auto-renewal rules, see Auto-Renewal Rules.

#### □ NOTE

- When the number of times a resource has been auto-renewed reaches the preset value, the resource will be automatically changed to manual renewal upon expiration.
- Manual renewal does not affect the number of remaining auto-renew times.

## Setting the Same Renewal Day for Yearly/Monthly Resources

If the FlexusL instances have different expiry dates, you can set the same renewal day to make it easier to manage renewals.

In Figure 3-5, a user sets the same renewal day for two resources that will expire at different dates.

 Configure a renewal date. 2. Select resources for operations. 3. Renew to the renewal date. Procedure For example, the renewal date is the 1 day of each month. Resource A Additional renewal Renewal for 1 month Expiration: for 14 days April 17 Rules Additional renewal for 24 Resource B Renewal for 1 month Expiration: May 08

Figure 3-5 Setting the same renewal day for resources with different expiry dates

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

## 3.3 Unsubscribing from FlexusL Instances

#### **Scenarios**

If you no longer need a FlexusL instance, you can unsubscribe from it at any time.

A FlexusL instance is actually a package of resources. Resources in the package are unsubscribed together. If you unsubscribe from a FlexusL instance, all resources including the EVS disks, cloud backup vault, HSS, and EIP associated with the instance will be released and data cannot be recovered.

Unsubscription includes unsubscribing from resources and unsubscribing from renewal periods. After the unsubscription is successful, you will get a refund.

- Unsubscribing from resources: You can unsubscribe from FlexusL instances (including the renewal period) that are no longer needed. For details, see Unsubscribing from Resources.
- Unsubscribing from a renewal period: If you have renewed a FlexusL instance, you can unsubscribe from the renewal period. When you unsubscribe from a renewal period, you can only unsubscribe from the renewal period that has not yet taken effect. To unsubscribe from the renewal period that has taken effect, you can only unsubscribe from the FlexusL instance. For details, see Unsubscribing from a Renewal Period.

#### **Notes**

- Before unsubscription, ensure that data on the cloud resources to be unsubscribed from has been backed up or migrated. After unsubscription, resources will be deleted and data cannot be recovered. Exercise caution during unsubscription.
- If an order is paid using the Huawei Cloud account balance or a third-party online payment platform (such as Alipay, WeChat, or e-banking), the refund will be returned to your Huawei Cloud account balance.

#### **Constraints**

Newly purchased FlexusL instances cannot be unsubscribed from immediately.
 Try later.

- FlexusL instances that are in the **grace period or retention period** due to arrears cannot be unsubscribed from. To unsubscribe from such instances, pay off the arrears first. If you still do not pay off the arrears after the retention period has ended, all of your resources will be released.
- FlexusL instances that are frozen due to illegal issues cannot be unsubscribed from.

For more details, see Unsubscription Not Allowed.

#### Procedure

You can unsubscribe from just one FlexusL instance or batch unsubscribe from FlexusL instances.

### **Batch Unsubscribing from FlexusL Instances**

- Log in to the FlexusL console.
- 2. Enable **Batch operation**, select the FlexusL instances to be unsubscribed, and choose **More** > **Unsubscribe**.

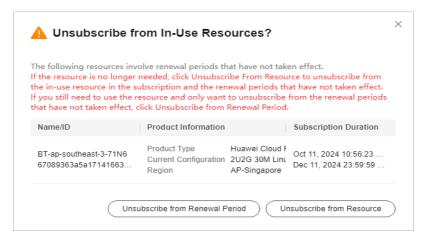
You can also use this method to unsubscribe just one FlexusL instance.



- 3. View the FlexusL instances to be unsubscribed and click **OK**.
- 4. (Optional) Unsubscribe from a resource or a renewal period.

You can unsubscribe from a renewal period only when your FlexusL instances have a renewal period.

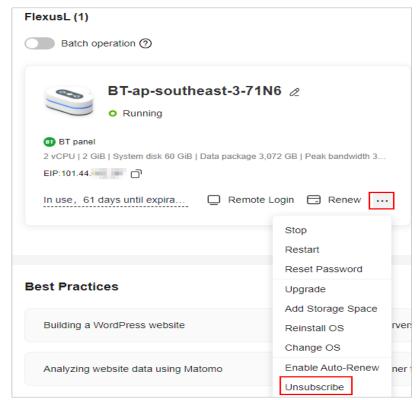
- Unsubscribing from resources: You can unsubscribe from FlexusL instances (including the renewal period) that are no longer needed. A FlexusL instance is actually a package of resources. If you unsubscribe from a FlexusL instance, all resources including the EVS disks, cloud backup vault, HSS, and EIP associated with the instance will be released and data cannot be recovered.
- Unsubscribing from a renewal period: If you have renewed a FlexusL instance, you can unsubscribe from the renewal period. When you unsubscribe from a renewal period, you can only unsubscribe from the renewal period that has not yet taken effect. To unsubscribe from the renewal period that has taken effect, you can only unsubscribe from the FlexusL instance.



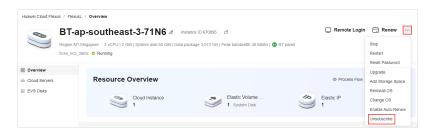
5. Confirm the unsubscription details and click **Confirm**.

### Unsubscribing from a Single FlexusL Instance

- 1. Log in to the FlexusL console.
- 2. Unsubscribe from a FlexusL instance using any of the following methods.
  - Method 1: Locate the target instance and choose > Unsubscribe in the instance card.



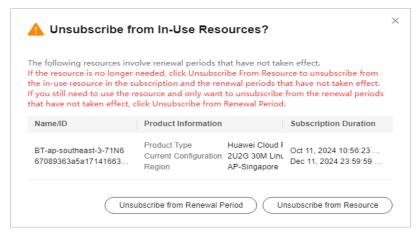
Method 2: Click the target instance name. On the displayed page, choose
 > Unsubscribe in the upper right corner.



3. (Optional) Unsubscribe from a resource or a renewal period.

You can unsubscribe from a renewal period only when your FlexusL instances have a renewal period.

- Unsubscribing from resources: You can unsubscribe from FlexusL instances (including the renewal period) that are no longer needed. A FlexusL instance is actually a package of resources. If you unsubscribe from a FlexusL instance, all resources including the EVS disks, cloud backup vault, HSS, and EIP associated with the instance will be released and data cannot be recovered.
- Unsubscribing from a renewal period: If you have renewed a FlexusL instance, you can unsubscribe from the renewal period. When you unsubscribe from a renewal period, you can only unsubscribe from the renewal period that has not yet taken effect. To unsubscribe from the renewal period that has taken effect, you can only unsubscribe from the FlexusL instance.



4. Confirm the unsubscription details and click **Confirm**.

# 4 Permissions

If you need to grant your enterprise personnel permission to access your FlexusL resources, use Identity and Access Management (IAM). IAM provides identity authentication, fine-grained permissions management, and access control. IAM helps you securely access your cloud resources.

With IAM, you can create IAM users and grant them permissions to access only specific resources. For example, if you want some software developers in your enterprise to be able to use FlexusL resources but do not want them to be able to delete FlexusL or perform any other high-risk operations, you can create IAM users and grant permission to use FlexusL but not permission to delete them.

If your account does not need individual IAM users for permissions management, skip this section.

IAM can be used free of charge. You pay only for the resources in your account. For more information about IAM, see **What Is IAM?** 

#### **FlexusL Instance Permissions**

New IAM users do not have any permissions assigned by default. You need to first add them to one or more groups and then attach policies or roles to these groups. The users then inherit permissions from the groups and can perform specified operations on cloud services based on the permissions they have been assigned.

FlexusL is a global service. When you set the authorization scope to **Global services**, users have permission to access FlexusL resources in all regions.

Table 4-1 lists the system-defined policies of FlexusL instances.

Table 4-1 System-defined policies for FlexusL instances

Policy Name	Description	Policy Content
CORS FullAccess	Administrator permissions. Users with these permissions can perform all operations on resources packaged in FlexusL instances, including creating, deleting, querying, and modifying service resources.	CORS FullAccess Policy Content
CORS ReadOnlyAccess	Common user permissions. Users with these permissions can only perform query operations.	CORS ReadOnlyAccess Policy Content

**Table 4-2** lists the common operations supported by system-defined permissions for FlexusL.

**Table 4-2** Common operations supported by system-defined permissions

Operation	CORS FullAccess	CORS ReadOnlyAccess
Creation	√	x
Remote login to FlexusL instances on the management console	✓	x
Resource card checking	√	√
Details query	√	√
Modification	√	x
Start	√	х
Stop	√	х
Restart	√	x
Unsubscription	√	x
OS reinstallation	√	х
OS change	√	х
Specification modification	√	Х

## **Helpful Links**

What Is IAM?

## **CORS FullAccess Policy Content**

## **CORS ReadOnlyAccess Policy Content**

# 5 Constraints

This section describes the constraints on using FlexusL.

#### **Precautions**

- Do not use FlexusL instances as unauthorized servers for any illegal or violation activities, such as gambling or cross-border VPN.
- Do not use FlexusL instances for fraudulent transactions, such as click farming on e-commerce websites.
- Do not use FlexusL instances to initiate network attacks, such as DDoS attacks, CC attacks, web attacks, and brute force cracking, or to spread viruses and Trojan horses.
- Do not use FlexusL instances for traffic transit.
- Do not use FlexusL instances for web crawling.
- Do not use FlexusL instances to detect other systems like scanning or penetration unless otherwise being authorized.
- Do not deploy any illegal websites or applications on FlexusL instances.
- Do not use FlexusL to send spams or engage in activities that violate personal privacy.

### Quotas

Table 5-1 Quotas

Item	Description
FlexusL	By default, you can create a maximum of 100 FlexusL instances in total in a region. To increase the quota, submit a service ticket.
	<ul> <li>The number of FlexusL instances you can purchase may not reach 100 because of the quota limits of resources (EIPs, cloud servers, and vCPUs). To increase quotas of resources, submit a service ticket as prompted on the console.</li> </ul>
ICP filing	You can apply for up to five ICP filings for a FlexusL instance.

## **Package Management**

**Table 5-2** FlexusL package management

Item	Description
Renewal/ Unsubscription	A FlexusL instance is actually a package of resources. Resources in the package are unsubscribed and renewed together. The EVS disk, backup vault, HSS, and data package included in the package cannot be unsubscribed separately.  NOTE  Resources packaged in a FlexusL instance only refer to the resources purchased on the FlexusL console. Resources purchased on other service consoles (such as CBR or HSS console) can be disassociated from FlexusL instances and can be deleted or unsubscribed from separately.
Resource configuration	A FlexusL instance package can have only one data disk, one CBR vault, and one HSS.
Package expansion	Currently, only data disks can be separately purchased and added to FlexusL instances. The system disk, CBR vaults, HSS, and data packages cannot be separately purchased and added to the package.
Package reduction	The EVS disk, CBR vault, HSS, and data package included in a FlexusL instance package cannot be disassociated or unsubscribed separately.
Specification changes	The capacity of the data disk and CBR vault packaged in a FlexusL instance can be expanded separately, but the vCPUs, memory, peak bandwidth, and data package of a FlexusL instance cannot be expanded or reduced separately.

## **Private Images**

**Table 5-3** Restrictions on private images of FlexusL instances

Item	Description
Region	A FlexusL instance must use a private image that is in the <a href="mailto:same region"><u>same region</u></a> as the instance, or the image cannot be selected.
Cloud server architecture	Only x86 is supported.

Item	Description
Image type	Only system disk private images are supported. Data disk private images and full-server private images are not supported.
	• Linux system disk images only support the following image sources: free Huawei Cloud public Linux images, images created from FlexusL instances that are created using application images, and third-party private images you have imported. Other billed Linux images created from KooGallery images are not supported.
	Windows system disk images with the Bring Your Own License (BYOL) are supported.
	NOTE  FlexusL instances do not support full-server images. If you want to migrate an entire server to a FlexusL instance, use Server Migration Service (SMS).
	For details, see Migrating Servers Using Server Migration Service (SMS).
Password reset plug-in	If a private image is created from a server on another cloud platform or downloaded from a third party, the private image may fail to be used to create a FlexusL instance or change the OS of an instance because the password reset plug-in is not installed on the image or the onekey_resetpasswd tag is missing. For details, see What Should I Do If a Private Image Cannot Be Used to Create a FlexusL Instance or Change the OS of an Instance Because the Password Reset Plug-in Is Not Installed on the Image or the onekey_resetpasswd Tag Is Missing?

#### Network

Table 5-4 Restrictions on networks of FlexusL instances

Item	Description
Public network	<ul> <li>By default, an EIP is assigned for a FlexusL instance. It cannot be changed and will not be retained after the instance is released.</li> </ul>
	FlexusL instances do not support IPv6 addresses.
	The peak bandwidth cannot be upgraded separately.
	<ul> <li>Data packages cannot be purchased or upgraded separately.</li> <li>If the data package in a FlexusL instance does not meet your service requirements, you can buy a shared data package to reduce traffic costs. (Compared with the pay- per-use billing mode, a shared data package is more cost- effective.) For details, Can I Purchase a Data Package Separately?</li> </ul>
Private network	The VPC cannot be changed after a FlexusL instance is created.
	<ul> <li>By default, a private IP address is assigned for a FlexusL instance. The assigned private IP address cannot be changed and will not be retained after the instance is released.</li> </ul>

## **EVS Disks**

Table 5-5 Restrictions on EVS disks of FlexusL instances

Item	Description
System disk	<ul> <li>Only General Purpose SSD disks are supported.</li> <li>System disks cannot be added.</li> <li>An existing system disk cannot be attached.</li> <li>System disks cannot be expanded separately. You can expand the system disk capacity by upgrading the instance specifications. For details, see Upgrading a FlexusL Instance.</li> <li>System disks in FlexusL instances cannot be detached.</li> </ul>

Item	Description
Data disk	<ul><li>Only General Purpose SSD V2 disks are supported.</li><li>Only one data disk can be added.</li></ul>
	Existing data disks cannot be attached to FlexusL instances.
	The capacity of data disks only can be expanded. It cannot be reduced.
	Data disks in FlexusL instances cannot be detached.

## **Backups**

Table 5-6 Restrictions on backups of FlexusL instances

Item	Description
CBR	FlexusL instances only support server backup vaults.
Snapshot	FlexusL instance data cannot be rolled back using EVS disk snapshots on the FlexusL console. To back up and restore server data, use CBR. For details, see Backing Up and Restoring a FlexusL Instance.

## **Other Constraints**

- FlexusL instances do not support nested virtualization.
- Do not install external hardware devices, such as encryption dongles or USB flash drives on FlexusL instances.