# Flexus X Instance

# FAQs

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HUAWEI CLOUD COMPUTING TECHNOLOGIES CO., LTD.

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# 1 Product Consulting

## 1.1 What Are the Differences Between FlexusL, FlexusX, and ECS?

- 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 about the differences among them, see **Table 1-1**.

**Table 1-1** Differences among FlexusL, FlexusX, and ECS

| Item | FlexusL | FlexusX | ECS |
| --- | --- | --- | --- |
| Target customer | Small- and medium-sized enterprises and developers with low service loads and requiring fast deployment | Small- and medium-sized enterprises and developers with medium service loads and requiring flexible configurations | High-load and full-service scenarios, such as website applications, enterprise e-commerce, graphics rendering, data analysis, and high-performance computing. |

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| Item | FlexusL | FlexusX | ECS |
| --- | --- | --- | --- |
| Feature | Various built-in solutions and images, quick environment setup, easy service management | Custom specifications, stable and robust performance, and flexible pay-per-use billing | Flexible vCPU, memory, and bandwidth configuration; reliable, secure, and efficient application environments |
| CPU architecture | x86 | x86 | x86 or Arm |
| Billing mode | Yearly/Monthly<br>FlexusL instances are sold and managed as packages. Resources created with FlexusL instances cannot be renewed or unsubscribed from separately. | • Pay-per-use<br>• Yearly/Monthly | • Yearly/Monthly<br>• Pay-per-use<br>• Spot pricing |
| Specifications | • Multiple instance specifications are available.<br>• Instance specifications can only be upgraded. | • vCPU to memory ratios can be customized. For details, see **Instance Specifications**.<br>• Instance specifications can be upgraded or degraded. | • Multiple instance specifications are available.<br>• Instance specifications can be upgraded or degraded. |

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| Item | FlexusL | FlexusX | ECS |
| --- | --- | --- | --- |
| Disk | Each FlexusL instance has a system disk with a fixed capacity by default and supports one data disk at most. Data on FlexusL instances cannot be restored using snapshots on the console.<br>• System disk: General Purpose SSD<br>• Data disk: General Purpose SSD V2 | System disk specifications can be customized.<br>Supported disk types:<br>• System disk: common I/O, high I/O, General Purpose SSD, ultra-high I/O, and General Purpose SSD V2<br>• Data disk: common I/O, high I/O, General Purpose SSD, ultra-high I/O, and General Purpose SSD V2 | System disk specifications can be customized.<br>• System and data disks: All disk types are supported.<br>For details about disk types supported by ECS, see **Disk Types and Performance**. |
| Network | • A fixed EIP is assigned by default.<br>• EIP bandwidth is billed by traffic. A FlexusL instance comes with a monthly data package.<br>• The VPC, private IP address, and public IP address of a FlexusL instance cannot be changed. | • You can choose whether to bind an EIP.<br>• You can select an EIP type.<br>• Bandwidth is billed by bandwidth, traffic, or shared bandwidth. | • You can choose whether to bind an EIP.<br>• You can select an EIP type.<br>• Bandwidth is billed by bandwidth, traffic, or shared bandwidth. |
| Advantage | Easy setup and O&M, cost-effective, and secure | • Easy setup and O&M, cost-effective, and secure<br>• FlexusX instances that use the Huawei Cloud EulerOS 2.0 public image support Nginx, Redis, and MySQL application acceleration. | Stable, reliable, scalable, secure, and hardware-software synergy |

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| Item | FlexusL | FlexusX | ECS |
| --- | --- | --- | --- |
| Image | • Five types of mainstream OS images provided<br>• Various application images provided<br>• Private system disk images supported | • Various public images provided<br>• Private images and shared images supported | • Various public images provided<br>• Private images, shared images, and KooGallery images supported |
| Login mode | Password | Password or key pair | Password or key pair |
| Combined purchase | • HSS (basic edition)<br>• CBR | • HSS (all editions)<br>• Cloud Eye<br>• CBR | • HSS (all editions)<br>• Cloud Eye<br>• CBR |

# 1.2 What Processor Does FlexusX Use and What Are the Base and Turbo Frequencies?

The processor and base and turbo frequencies of a FlexusX instance are different in performance mode and non-performance mode.

- In non-performance mode:
  - Processor: 3rd Generation Intel® Xeon® Scalable Processor
  - Basic/Turbo frequency: 2.8 GHz/3.5 GHz
- In performance mode, the base frequency and turbo frequency are 2.45 GHz and 3.5 GHz, respectively.

# 1.3 What Regions Does FlexusX Support?

FlexusX can be used in CN North-Beijing4, CN North-Ulanqab1, CN East-Shanghai1, CN South-Guangzhou, CN Southwest-Guiyang1, CN-Hong Kong, AP-Bangkok, AP-Singapore, AP-Jakarta, TR-Istanbul, ME-Riyadh, LA-Mexico City2, LA-Sao Paulo1, LA-Santiago, and AF-Johannesburg.

# 1.4 What Is Flexible Compute Provided by FlexusX?

FlexusX allows you to flexibly customize the CPU and memory specifications based on service requirements. ECS does not offer this level of flexibility.

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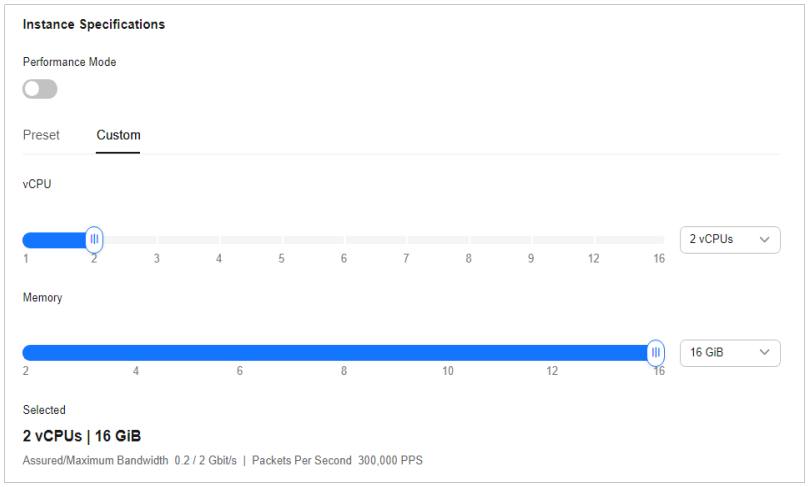
**Figure 1-1** Customizing CPU and memory specifications

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# 2 Billing

## 2.1 What Billing Modes Does FlexusX Support?

FlexusX instances support the yearly/monthly and pay-per-use billing modes to meet your requirements in different scenarios. You can change the billing mode from yearly/monthly to pay-per-use, and vice versa. For more information, see **Billing**.

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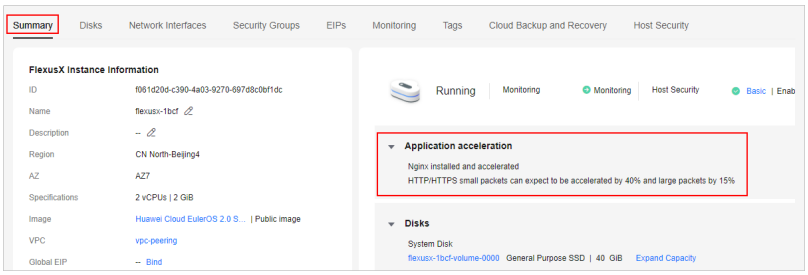
# 3 OS and Image

## 3.1 How Do I Check Whether Application Acceleration Is Enabled for a FlexusX Instance?

After application acceleration is enabled, the information about the enhanced performance is displayed on the FlexusX console. If the application acceleration information is displayed after you perform the following steps, the application is accelerated.

1. Log in to the FlexusX **console**, in the upper left corner, click , and select a region.
2. Click the name of the FlexusX instance. On the **Summary** tab, view the accelerated application and performance improvement.




## 3.2 What Images Does FlexusX Support?

FlexusX instances can be created from public, private, and shared images.

- FlexusX supports the following public images:

  Huawei Cloud EulerOS, CentOS, SUSE, Ubuntu, EulerOS, Debian, OpenSUSE, Fedora, AlmaLinux, Rocky Linux, CentOS Stream, CoreOS, openEuler, FreeBSD, and SUSESAP.
- Shared images and private images can be system disk images, data disk images, and full-server images. In addition, private images and shared images have the following constraints:

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- Images are regional resources. FlexusX instances can only use private images that are in the same region as them.
- Only private images created using x86 servers are supported in FlexusX.
- For Windows private images, FlexusX instances only support Windows Server 2022/2019/2016/2012 R2 Standard Edition and Data Center Edition images purchased from Huawei Cloud KooGallery, as well as Windows private images with the Bring Your Own License (BYOL).
- When you use a private image to create a FlexusX instance or change the OS, ensure that the instance specifications (vCPUs, memory, and system disk capacity) meet the requirements of that private image. Otherwise, the private image cannot be used.

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# 4 Specification Modification FAQ

## 4.1 What Is Live Change?

Live change is only supported by the Huawei Cloud EulerOS 2.0 image. It allows you to upgrade the vCPU or memory specifications of a FlexusX instance without stopping the instance. After the upgrade is complete, you can use the new specifications without interrupting services.

Live change has the following constraints:

- It is supported only when the FlexusX instance uses the Huawei Cloud EulerOS 2.0 image.
- The vCPUs and memory can only be upgraded in live change.
- Live change is supported only between FlexusX specifications.
- Live change is supported only when both the specifications before and after the change support live change.
- A maximum of 12 memory live changes can be performed.
- Live changes cannot be performed in batches.

## 4.2 How Do I Use Live Change?

Live change option is displayed on the console during specification modification only when the live change conditions are met. Live change is in the open beta testing (OBT) phase. Apply for OBT as prompted before using live change.

Live change option is not displayed on the console during specification modification when the live change conditions are not met. For details about the constraints on live change, see **What Is Live Change?**.

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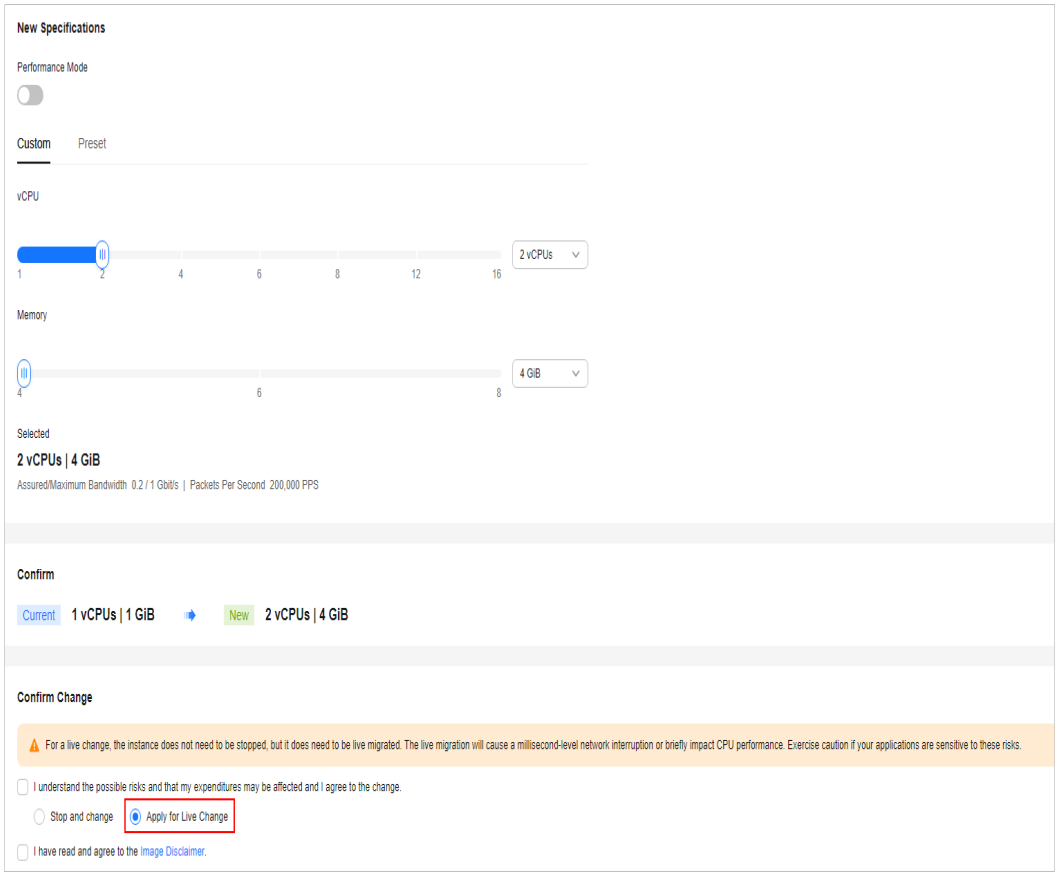
**Figure 4-1** Live change

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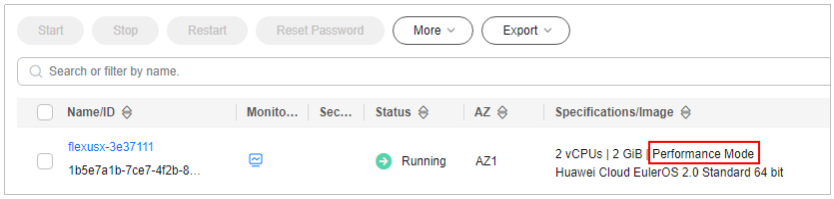
# 5 Performance Mode

## 5.1 How Do I Know Whether Performance Mode Is Enabled for a FlexusX Instance?

If performance mode is enabled for your Flexus X instance, **Performance Mode** is displayed in the **Specifications/Image** column on the FlexusX console. If **Performance Mode** is not displayed, the performance mode is not enabled for your FlexusX instance.

**Figure 5-1** A FlexusX instance with performance mode enabled




## 5.2 How Much Can Performance Be Improved If Performance Mode Is Enabled for a Flexus X Instance?

FlexusX provides flexible compute resources with QoS-guaranteed performance. FlexusX instances perform as well as exclusive instances most of the time but may occasionally underperform. To meet the strict performance requirements of certain workloads, such as rendering and HPC applications, FlexusX has a performance mode option. If this option is enabled, your FlexusX instances are bound with the underlying CPU cores, so they can provide stable, ultimate QoS-guaranteed performance.

Enabling performance mode guarantees the performance but does not improve the performance.

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# 5.3 Do I Need to Stop My FlexusX Instance If I Want to Enable or Disable Performance Mode for It?

To enable or disable performance mode for a FlexusX instance, whether you need to stop the instance is determined by the images and other factors. If the following conditions are met, you do not need to stop the instance. Otherwise, you need to stop the instance.

- It is supported only when the FlexusX instance uses the Huawei Cloud EulerOS 2.0 image.
- The vCPUs and memory can only be upgraded in live change.
- Live change is supported only between FlexusX specifications.
- Live change is supported only when both the specifications before and after the change support live change.
- A maximum of 12 memory live changes can be performed.
- Live changes cannot be performed in batches.

# 5.4 Can I Enable Performance Mode After a FlexusX Instance Is Created?

Yes. You can enable performance mode for an existing FlexusX instance using the **Modify Specifications** option. For more information, see **Modifying the Specifications of a FlexusX Instance**.

During this process, you may also need to modify the instance specifications together if there are insufficient underlying resources.

**Figure 5-2** Enabling performance mode during purchase

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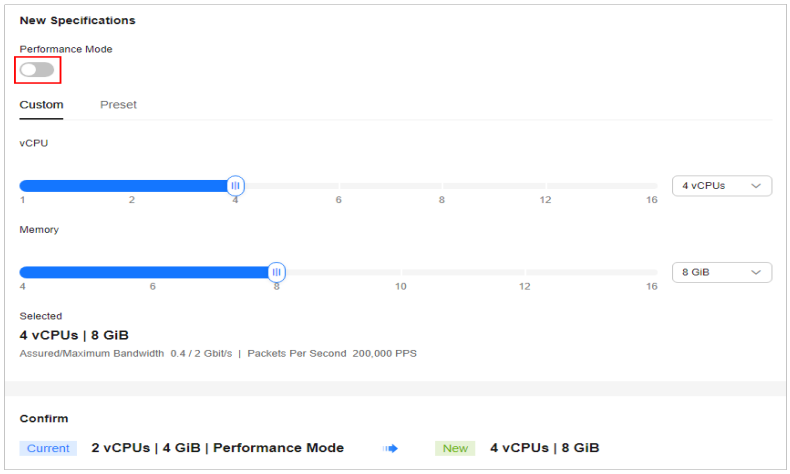
# 5.5 Will I Continue to Be Billed If I Disable Performance Mode for My FlexusX Instance?

You can disable performance mode using the **Modify Specifications** option. For more information, see **Modifying the Specifications of a FlexusX Instance**.

- If your FlexusX instance is billed in pay-per-use billing mode, disabling performance mode takes effect immediately, and you will be billed based on the specifications after performance mode is disabled.
- If your FlexusX instance is billed in yearly/monthly billing mode, disabling performance mode takes effect immediately, and any additional fees pre-paid for performance mode will be refunded based on the remaining subscription period.

**Figure 5-3** Disabling performance mode using the **Modify Specifications** option

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# 6 Password

## 6.1 What Are the Username and Password for Remotely Logging In to a FlexusX Instance?

The default username for logging in to a Windows FlexusX instance is **Administrator**, and that for a Linux FlexusX instance is **root**.

If you have set a password when purchasing a FlexusX instance, enter the password for remote login. If you forget the password, reset it and use the new one for login. For more information, see **Resetting the Password of a FlexusX Instance**.

## 6.2 What Can I Do If I Forget the Login Password of a FlexusX Instance?

You can reset the password and use the new one to log in to the FlexusX instance. For more information, see **Resetting the Password of a FlexusX Instance**.

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