# Flexus L Instance

# **Getting Started**

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# Huawei Cloud Computing Technologies Co., Ltd.

Address: Huawei Cloud Data Center Jiaoxinggong Road

Qianzhong Avenue Gui'an New District Gui Zhou 550029

People's Republic of China

Website: <a href="https://www.huaweicloud.com/intl/en-us/">https://www.huaweicloud.com/intl/en-us/</a>

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# Before You Start

Flexus L Instance (FlexusL) is the next-generation out-of-the-box lightweight cloud server designed for small- and medium-sized enterprises (SMEs) and developers. FlexusL provides a range of images for you to choose from and is suitable for 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.

This section helps you quickly understand and use FlexusL.

## **Product Basics**

- What Is FlexusL?
- Resource Configuration for FlexusL Instances
- Notes and Constraints on Using FlexusL Instances

# **Billing Modes**

A FlexusL instance is actually a package of resources. Resources in the package are unsubscribed or renewed together. FlexusL only supports the yearly/monthly billing mode. Any traffic usage in excess of the package is billed by traffic.

For details, see **Billing**.

# **Usage Process**

1. Make preparations.

Before purchasing a FlexusL instance, sign up for a HUAWEI ID, enable Huawei Cloud services, and top up your account. For details, see **Preparations**.

- 2. Purchase and configure a FlexusL instance.
  - Go to the FlexusL console and select a region, image, package, required duration, and quantity. For details, see **Purchasing a FlexusL Instance**.
- Log in to the FlexusL instance and deploy applications on it.
   Log in to the instance and set up applications such as e-commerce websites, web applications, applets, and learning or development and testing environments.

- For login details, see Login Modes.
- For details about how to use the WordPress application image to quickly create a website, see Setting Up a Website Using the WordPress Application Image.
- For details about how to use the CentOS image to deploy the Nginx server, see Creating an Nginx Server Using the CentOS Image.

For details about FlexusL best practices, see **Best Practices for FlexusL**.

#### **Console Overview**

Console entry

On the Huawei Cloud management console, choose **Compute** > **Huawei Cloud Flexus** > **Flexus L Instance** to access the FlexusL console.



• FlexusL instance homepage

The instance homepage displays your resources in all regions and resource details, including resource names, statuses, images, specifications, and validity periods. On the FlexusL instance homepage, you can purchase, renew, and unsubscribe from resources, remotely log in to servers, and reset passwords.



Resource management page

You can click a resource card to view and manage instance details. On the resource management page, you can view all resource details and perform related operations.



# **FAQs**

- How Do I Find My Purchased FlexusL Instances on the Management Console?
- What Are the Differences Among FlexusL, FlexusX, and ECS?
- Does a FlexusL Instance Have an EIP?
- How Will the Traffic in Excess of the Data Package Be Billed?

For more FAQs, see FAQs.

# Feedback and Suggestions

If you have any questions or suggestions when purchasing or using FlexusL instances, provide feedback in any of the following ways. We will provide professional technical support and high-quality product experience.

- Service ticket: The service ticket system provides 24/7 services. You can submit a service ticket, search for "FlexusL", and report technical issues or faults to get technical help.
- After-sales hotline: The after-sales hotline provides 24/7 support. If you have any questions about account, finance, and billing, dial 4000-955-988 or 4000-950-808 and then dial 3.
- Document feedback: If you find any problem with the product documentation, such as incorrect links or content, you can provide feedback by either of the following:
  - Select the document content and click Feedback.
  - Click Provide feedback at the bottom of the page.

# 2 Setting Up a Website Using the WordPress Application Image

FlexusL provides a wide range of high-quality application images for you to choose from. This section uses the WordPress application image as an example to describe how to set up a website in three steps.

## **Process Flow**

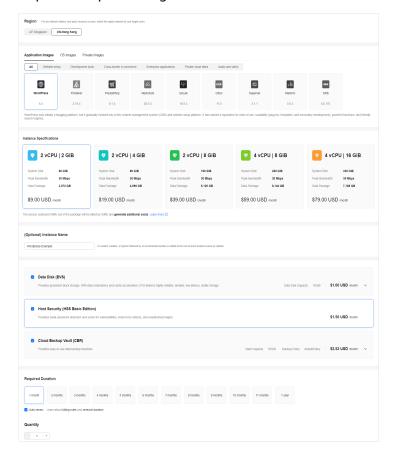
Procedure	Description
Preparations	Sign up for a HUAWEI ID, enable Huawei Cloud services, and top up your account.
Step 1: Purchase and Configure a FlexusL Instance	Purchase and configure a FlexusL instance, including setting the login password, logging in to the server, configuring the security group, and adding and resolving a domain name.
Step 2: Initialize WordPress	Go to the image application dashboard, set the username and password, and install WordPress.
Step 3: Deploy a Website	Access the image application dashboard, design your homepage, install plug-ins, and configure the email address.

# **Preparations**

- Before purchasing a FlexusL instance, sign up for a HUAWEI ID and enable Huawei Cloud services. For details, see Signing Up a HUAWEI ID and Enabling Huawei Cloud Services and Completing Real-Name Authentication.
  - If you have enabled Huawei Cloud services and completed real-name authentication, skip this step.
- 2. Ensure that your account has sufficient balance. If not, top up your account.

# **Step 1: Purchase and Configure a FlexusL Instance**

- 1. Purchase a FlexusL instance.
  - a. On the **Flexus L Instance** page, click **Buy FlexusL** and specify parameters required for purchasing a FlexusL instance.



□ NOTE

For details, see **Purchasing a FlexusL Instance**.

Parame ter	Example	Description
Region	CN-Hong Kong	For low network latency and quick resource access, select the region nearest to your target users. After a FlexusL instance is created, the region cannot be changed. Exercise caution when selecting a region.
		NOTE  By default, all FlexusL instances created by the same account in the same region are located in the same VPC. They can communicate with each other over a private network. FlexusL instances that are created by different accounts or located in different regions cannot communicate with each other over a private network.

Parame ter	Example	Description
lmage	WordPress applicatio n image	Application image: includes applications, initialization data, runtime environment, and OS. You can use the WordPress application image to quickly set up a website.  For details, see Images Supported by FlexusL Instances.
Instanc e specific ations	2 vCPUs   2 GiB memory and 60 GiB system disk	Select instance specifications based on your service requirements. Outbound traffic exceeding the traffic package is billed. For details, see Billing.
(Option al) Instanc e name	Wordpress -Example	You can customize your instance name.  If this parameter is left blank, the instance name is in the default format: image name-region-random number. In a batch creation, a hyphen followed by an incremental number is added to the end of each instance name by default.
(Option al) Associat ed service resourc es	<ul> <li>Data disk: 10 GiB</li> <li>Host security</li> <li>Cloud backup vault: 70 GiB</li> </ul>	You can associate other services (EVS, HSS, and CBR) with your FlexusL instance as needed.
Require d duratio n	<ul><li>1 month</li><li>Autorenew</li></ul>	The minimum duration of a purchase is one month and the maximum duration is three years.  Auto-renew is enabled by default, which means the purchased FlexusL instances will be automatically renewed before they expire. If you do not enable auto-renew during the purchase process, you can still enable it later after the instances are created. Monthly subscription allows you to renew the subscription for one month every time. The number of renewal times is not limited.  For more information about auto-renewal rules, see Auto-Renewal Rules.

Parame ter	Example	Description
Quantit y	1	Set the number of FlexusL instances to be purchased. One instance is created by default. A maximum of five instances can be created in the same region.  To increase the quota, submit a service ticket.

### b. Click Buy Now.

On the displayed page, confirm the order details, read and select the agreement, and click **Submit**.

- c. Select a payment method and complete the payment.
- d. Go back to the FlexusL console and view the purchased FlexusL instance. Check that the instance status is running and go to the next step.
- 2. Configure security group rules.
  - a. On the **FlexusL console**, click the purchased instance.
  - b. In the navigation pane on the left, choose **Cloud Servers** and then click the server name.



c. On the **Security Groups** tab, click **Add Rule**. In the displayed dialog box, add rules displayed in the following figure and click **OK**.

The following figure only displays common rules. You can add more rules as needed.

**Table 2-1** Security group rules

Prior ity	Act ion	Туре	Protoc ol & Port	Source	Description
100	Allo w	IPv4	TCP: 3306	0.0.0.0/0	Allows access to MySQL databases

Prior ity	Act ion	Туре	Protoc ol & Port	Source	Description
100	Allo w	IPv4	TCP: 80	0.0.0.0/0	Allows access to the FlexusL instance via HTTP
100	Allo w	IPv4	TCP: 443	0.0.0.0/0	Allows access to the FlexusL instance via HTTPS
100	Allo w	IPv4	TCP: 9001	0.0.0.0/0	Allows external access to the application dashboard.

3. (Optional) Add and resolve a domain name.

If you want your users to access the website through a domain name, add and resolve a domain name for the server. If the website is only used for personal development or testing, there is no need to add a domain name and you can skip this step.

- a. In the navigation pane on the left, choose **Cloud Servers** and then click the server name.
- b. On the **Server Details** page, click the **Domain Names** tab and click **Add Domain Name**.

Parameter	Example Value	Description
Domain Name	wpwebsite.c om	Enter a domain name that will be added for the instance,
		NOTE  A domain name that is not registered can be added. After the domain name is added, it must be registered and licensed. To ensure that a domain name can be used normally, register the domain name and complete ICP licensing before adding the domain name.
Enterprise Project	default	Select an enterprise project from the drop-down list.
		Enterprise projects are associated with public zones. You can manage public zones by enterprise project.
		NOTE  This parameter is displayed only when your account is an enterprise account.

- c. Click **OK**.
- d. In the row containing the **wpwebsite.com** domain name, click **Configure Record Set**.



Parameter	Example Value	Description
Domain Name Prefix	www	If you enter a prefix, a subdomain is used for website access. Either the domain name or its subdomains can be resolved to the EIP of the instance.
		Suppose the domain name is wpwebsite.com.
		<ul> <li>If the domain name prefix is left empty, wpwebsite.com is resolved to the EIP.</li> </ul>
		If the domain name prefix is www, the subdomain www.wpwebsite.com is mapped to the EIP.
EIP	Retain the default value.	The EIP bound to the instance is displayed here automatically.

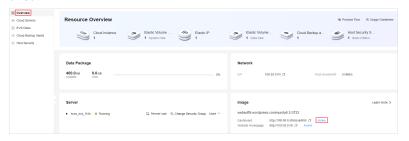
- e. On the **Domain Names** tab, view the domain name resolution details.
- f. Apply for ICP licensing for the domain name.

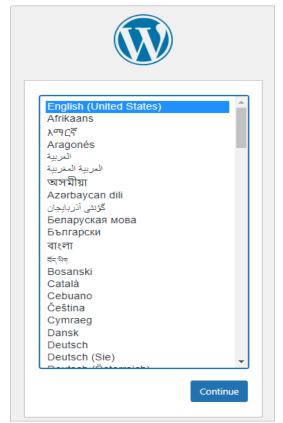
  To successfully access the server using a domain name, you must file the domain name. Domain name filing in the Huawei Cloud ICP license center is free of charge. For details, see ICP Filing Process.
- (Optional) Apply for and install an SSL certificate for your instance.
   Install an SSL certificate if you need to enable HTTPS on your server. For details, see About SCM and SSL Certificate Usage.

# **Step 2: Initialize WordPress**

The image application dashboard needs to be initialized only when you log in for the first time.

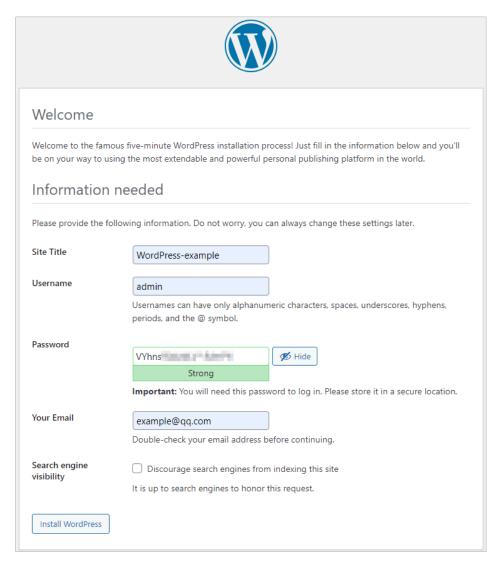
 On the Overview page, click Access in the Dashboard field in the Image area.



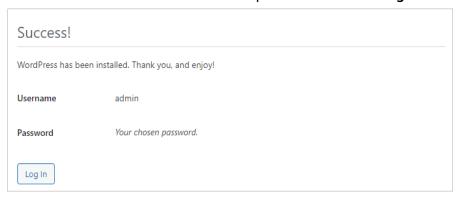


2. Select the WordPress language and continue.

- Set the website title, WordPress administrator username, password, and email, and click Install WordPress.
  - Keep your website administrator username, password, and email secure. If you forgot the password, you can use this email to reset the password.



4. Enter the administrator username and password and click **Log In**.



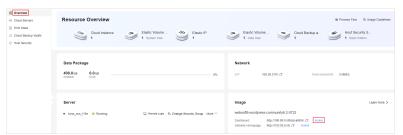
Then, you have obtained a WordPress hosting server.

# Step 3: Deploy a Website

Log in to the WordPress dashboard and deploy a website based on your service requirements.

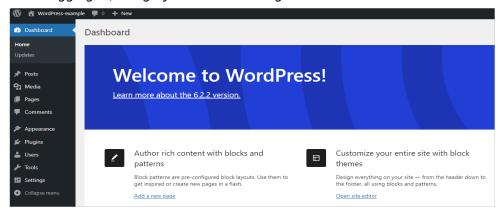
• Set up a website with WordPress.

a. On the **Overview** page, click **Access** in the **Dashboard** field in the **Image** area.

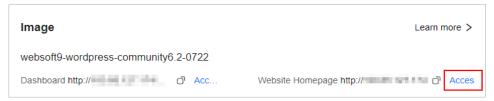


b. Enter the username and password set in step **3** to log in to the dashboard.

After logging in, design your website using WordPress.



- Preview the created website page.
  - During the website deployment, you can preview the website homepage at any time.
  - a. On the **Overview** page, click **Access** in the **Website Homepage** field in the **Image** area.





# **Related Information**

For details about FlexusL best practices, see Best Practices for FlexusL.

# Creating an Nginx Server Using the CentOS Image

Nginx is a lightweight web server, reverse proxy server, and email (IMAP/POP3) proxy server. FlexusL provides mainstream Linux OS images for you to create a pure, secure, and stable runtime environment. This section uses the CentOS image as an example to describe how to create an Nginx server from an OS image.

### **Process Flow**

Procedure	Description
Preparations	Sign up for a HUAWEI ID, enable Huawei Cloud services, and top up your account.
Step 1: Purchase a FlexusL Instance	Purchase a FlexusL instance using the CentOS image.
Step 2: Log In to the Cloud Server	Set the login password and log in to the server.
Step 3: Configure the Nginx Server	Install Nginx and configure it to automatically start upon system startup.
(Optional) Step 4: Add and Resolve a Domain Name	If you want your users to access the website through a domain name, add and resolve a domain name for the server. If the website is only used for personal development or testing, there is no need to add a domain name and you can skip this step.
(Optional) Step 5: Apply for and Install an SSL Certificate for Your Instance	Install an SSL certificate if you need to enable HTTPS on your server.

# **Preparations**

 Before purchasing a FlexusL instance, sign up for a HUAWEI ID and enable Huawei Cloud services. For details, see Signing Up a HUAWEI ID and Enabling Huawei Cloud Services and Completing Real-Name Authentication.

If you have enabled Huawei Cloud services and completed real-name authentication, skip this step.

2. Ensure that your account has sufficient balance. If not, top up your account.

# **Step 1: Purchase a FlexusL Instance**

1. On the **Flexus L Instance** page, click **Buy FlexusL** and specify parameters required for purchasing a FlexusL instance.

### **◯** NOTE

For details, see **Purchasing a FlexusL Instance**.

Parame ter	Example	Description
Region	CN-Hong Kong	For low network latency and quick resource access, select the region nearest to your target users. After a FlexusL instance is created, the region cannot be changed. Exercise caution when selecting a region.  NOTE  By default, all FlexusL instances created by the same account in the same region are located in the same VPC. They can communicate with each other over a private network. FlexusL instances that are created by different accounts or located in different regions cannot communicate with each other over a private network.
Image	CentOS 7.9	OS image: only includes the necessary OSs to launch servers, without any application data or environment configurations. After a server is created from an OS image, the server runs on an OS without any applications installed. You can install applications based on your service requirements.  For details, see Images Supported by FlexusL Instances.
Instance Specifica tions	2 vCPUs   2 GiB memory and 60 GiB system disk	Select instance specifications based on your service requirements. Outbound traffic exceeding the traffic package is billed. For details, see Billing.

Parame ter	Example	Description
(Option al) Instance Name	Nginx	You can customize your instance name.  If this parameter is left blank, the instance name is in the default format: image name-region-random number. In a batch creation, a hyphen followed by an incremental number is added to the end of each instance name by default.
(Option al) Associat ed Services	<ul> <li>Data disk: 10 GiB</li> <li>Host security</li> <li>Cloud backup vault: 70 GiB</li> </ul>	You can associate other services (EVS, HSS, and CBR) with your FlexusL instance as needed.
Require d Duration	1 month     Auto-renew	The minimum duration of a purchase is one month and the maximum duration is three years.  Auto-renew is enabled by default, which means the purchased FlexusL instances will be automatically renewed before they expire. If you do not enable auto-renew during the purchase process, you can still enable it later after the instances are created. Monthly subscription allows you to renew the subscription for one month every time. The number of renewal times is not limited. For more information about auto-renewal rules, see Auto-Renewal Rules.
Quantity	1	Set the number of FlexusL instances to be purchased. One instance is created by default. A maximum of five instances can be created in the same region.  To increase the quota, submit a service ticket.

# 2. Click **Buy Now**.

On the displayed page, confirm the order details, read and select the agreement, and click **Submit**.

- 3. Select a payment method and complete the payment.
- 4. Go back to the FlexusL console and view the purchased FlexusL instance.

# **Step 2: Log In to the Cloud Server**

- 1. Locate the purchased instance and choose ··· > Reset Password.
- 2. Set and confirm a new password as prompted.

If you reset the password for a running server, the password change is applied only after the next restart. **Auto Restart** is selected by default.

3. Click OK.

The server status is **Restarting**. Wait until the status changes to **Running** and go to the next step.

- 4. Locate the purchased instance and click **Remote Login**.
- 5. Enter the username and password as prompted to log in to the server. The username is **root**, and the password is the one set in step **2**.

# **Step 3: Configure the Nginx Server**

1. Add the Nginx yum repository of CentOS 7.

sudo rpm -Uvh http://nginx.org/packages/centos/7/noarch/RPMS/nginx-release-centos-7-0.el7.ngx.noarch.rpm

# **!** CAUTION

The command may fail to be executed because the Nginx version is continuously updated. In this case, obtain the latest Nginx software package from <a href="http://nginx.org/packages/centos/7/noarch/RPMS">http://nginx.org/packages/centos/7/noarch/RPMS</a> and use it to replace the <a href="majnx-release-centos-7-0.el7.ngx.noarch.rpm">nginx-release-centos-7-0.el7.ngx.noarch.rpm</a> field.

2. Install Nginx.

sudo yum install -y nginx

3. Start Nginx.

sudo systemctl start nginx.service

4. Configure automatic startup for Nginx.

sudo systemctl enable nginx.service

- 5. Obtain the EIP of the purchased instance.
- 6. Enter the EIP in the address bar of a local browser to preview the default Nginx server page.

If the page can be previewed properly, the Nginx server is successfully deployed.

Figure 3-1 Default Nginx server page

# Welcome to nginx!

If you see this page, the nginx web server is successfully installed and working. Further configuration is required.

For online documentation and support please refer to <a href="nginx.org">nginx.org</a>. Commercial support is available at <a href="nginx.com">nginx.com</a>.

Thank you for using nginx.

# (Optional) Step 4: Add and Resolve a Domain Name

If you want your users to access the website through a domain name, add and resolve a domain name for the server. If the website is only used for personal development or testing, there is no need to add a domain name and you can skip this step.

- 1. In the navigation pane on the left, choose **Cloud Servers** and then click the server name.
- On the Server Details page, click the Domain Names tab and click Add Domain Name.

Parameter	Example Value	Description
Domain Name	wpwebsite.co m	Enter a domain name that will be added for the instance,
		NOTE  A domain name that is not registered can be added. After the domain name is added, it must be registered and licensed. To ensure that a domain name can be used normally, register the domain name and complete ICP licensing before adding the domain name.
Enterprise Project	default	Select an enterprise project from the drop-down list.
		Enterprise projects are associated with public zones. You can manage public zones by enterprise project.
		NOTE  This parameter is displayed only when your account is an enterprise account.

- 3. Click OK.
- 4. In the row containing the **wpwebsite.com** domain name, click **Configure Record Set**.



Parameter	Example Value	Description
Domain Name Prefix	www	If you enter a prefix, a subdomain is used for website access. Either the domain name or its subdomains can be resolved to the EIP of the instance.
		Suppose the domain name is wpwebsite.com.
		<ul> <li>If the domain name prefix is left empty, wpwebsite.com is resolved to the EIP.</li> </ul>
		<ul> <li>If the domain name prefix is www, the subdomain www.wpwebsite.com is mapped to the EIP.</li> </ul>
EIP	Retain the default value.	The EIP bound to the instance is displayed here automatically.

- 5. On the **Domain Names** tab, view the domain name resolution details.
- Apply for ICP licensing for the domain name.
   To successfully access the server using a domain name, you

To successfully access the server using a domain name, you must file the domain name. Domain name filing in the Huawei Cloud ICP license center is free of charge. For details, see ICP Filing Process.

# (Optional) Step 5: Apply for and Install an SSL Certificate for Your Instance

Install an SSL certificate if you need to enable HTTPS on your server. For details, see **About SCM and SSL Certificate Usage**.

# **Related Information**

If you want to deploy your FlexusL instance by yourself, refer to the instructions in **Setting Up Websites**.

#### 

When you set up the environment by referring to **Setting Up Websites**, ensure that the image version used by the FlexusL instance is the same as that in the tutorial to prevent command execution failures caused by version incompatibility.